FORM S-1

General form of registration statement for all companies including face-amount certificate companies

Filing Date: **1998-07-22**
SEC Accession No. 0001032210-98-000785

FILER

METAWAVE COMMUNICATIONS CORP

CIK:**1028361**| IRS No.: **911673152** | State of Incorp.:**DE** | Fiscal Year End: **1231**
Type: **S-1** | Act: **33** | File No.: **333-59621** | Film No.: **98669918**

Mailing Address
10735 WILLOWS ROAD NE
P O BOX 97069
REDMOND WA 98073-9769

Business Address
10735 WILLOWS ROAD NE
P O BOX 97069
REDMOND WA 98073-9769
4257025648

AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON JULY 22, 1998
REGISTRATION NO. 333-

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

METAWAVE COMMUNICATIONS CORPORATION
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

<TABLE>
<S> <C> <C>

DELAWARE	3663	91-1673152
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(PRIMARY STANDARD INDUSTRIAL CLASSIFICATION CODE NUMBER)	(I.R.S. EMPLOYER IDENTIFICATION NUMBER)

</TABLE>

10735 WILLOWS ROAD NE
P.O. BOX 97069
REDMOND, WA 98073-9769
(425) 702-5600
(ADDRESS, INCLUDING ZIP CODE AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES)

ROBERT H. HUNSBERGER
PRESIDENT AND CHIEF EXECUTIVE OFFICER
10735 WILLOWS ROAD NE
P.O. BOX 97069
REDMOND, WA 98073-9769
(425) 702-5600
(NAME, ADDRESS INCLUDING ZIP CODE AND TELEPHONE NUMBER INCLUDING AREA CODE, OF AGENT FOR SERVICE)

COPIES TO:

WILLIAM W. ERICSON SONYA F. ERICKSON JOHN W. ROBERTSON VENTURE LAW GROUP A PROFESSIONAL CORPORATION 4750 CARILLON POINT KIRKLAND, WA 98033-7355 (425) 739-8700	JEFFREY D. SAPER PATRICK J. SCHULTHEIS ROBERT G. DAY WILSON SONSINI GOODRICH & ROSATI PROFESSIONAL CORPORATION 650 PAGE MILL ROAD PALO ALTO, CA 94304-1050 (650) 493-9300

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC:

As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. [_]

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [_]

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [_]

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. [_]

CALCULATION OF REGISTRATION FEE

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TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED(1)	PROPOSED MAXIMUM OFFERING PRICE PER SHARE(2)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(2)	AMOUNT OF REGISTRATION FEE
<S>	<C>	<C>	<C>	<C>
Common Stock, par value $0.0001.....	5,750,000 Shares	$11.50	$66,125,000	$19,507

</TABLE>

(1) Includes 750,000 shares of Common Stock issuable upon exercise of the Underwriters' over-allotment option.

(2) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(a) under the Securities Act.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THIS REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

+INFORMATION CONTAINED HEREIN IS SUBJECT TO COMPLETION OR AMENDMENT. A REGISTRATION STATEMENT RELATING TO THESE SECURITIES HAS BEEN FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. THESE SECURITIES MAY NOT BE SOLD NOR MAY OFFERS TO BUY BE ACCEPTED PRIOR TO THE TIME THE REGISTRATION STATEMENT BECOMES EFFECTIVE. THIS PROSPECTUS SHALL NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY NOR SHALL THERE BE ANY SALE OF THESE SECURITIES IN ANY STATE IN WHICH SUCH OFFER, SOLICITATION OR SALE WOULD BE UNLAWFUL PRIOR TO REGISTRATION OR QUALIFICATION UNDER THE SECURITIES LAWS OF ANY SUCH STATE.+

SUBJECT TO COMPLETION
JULY 22, 1998

5,000,000 SHARES

[LOGO OF METAWAVE COMMUNICATIONS CORPORATION]

COMMON STOCK

All of the 5,000,000 shares of Common Stock offered hereby are being sold by Metawave Communications Corporation ("Metawave" or the "Company"). Prior to this offering, there has been no public market for the Common Stock of the Company. It is currently estimated that the initial public offering price will be between $9.50 and $11.50 per share. See "Underwriting" for information relating to the method of determining the initial public offering price. The Company has applied to have the Common Stock listed on the Nasdaq National Market under the symbol MTWV.

THE SHARES OFFERED HEREBY INVOLVES A HIGH DEGREE OF RISK.
SEE "RISK FACTORS" COMMENCING ON PAGE 6.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

<TABLE>
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	PRICE TO PUBLIC	UNDERWRITING DISCOUNTS AND COMMISSIONS(1)	PROCEEDS TO COMPANY(2)
<S>	<C>	<C>	<C>
Per Share.....	$	$	$
Total(3).....	$	$	$

</TABLE>

(1) See "Underwriting" for information relating to indemnification of the Underwriters.

(2) Before deducting estimated expenses payable by the Company estimated at $825,000.

(3) The Company has granted to the Underwriters a 30-day option to purchase up to 750,000 additional shares of Common Stock solely to cover over-allotments, if any. To the extent that the option is exercised, the Underwriters will offer the additional shares at the Price to Public shown above. If the option is exercised in full, the total Price to Public, Underwriting Discounts and Commissions and Proceeds to Company will be $, $ and $, respectively. See "Underwriting."

The shares of Common Stock are offered by the several Underwriters subject to prior sale, when, as and if delivered to and accepted by them, receipt and subject to the right of the Underwriters to reject any order in whole or in part and certain other conditions. It is expected that delivery of the shares of Common Stock will be made, at the offices of BT Alex. Brown Incorporated, Baltimore, Maryland, on or about , 1998.

BT ALEX. BROWN

MERRILL LYNCH & CO.

NATIONSBANC MONTGOMERY SECURITIES LLC

, 1998

[Inside front cover and gatefold graphics:

The global communications infrastructure including wireless communications is enabling the worldwide evolution to the digital information age.

The number of worldwide wireless users in 1997 was over 194 million and is expected to grow to approximately 550 million by the year 2001.

Metawave is dedicated to providing spectrum management solutions to enable this growth to continue operations to increase capacity, coverage and cell quality.

Graphic of frequency spectrum and artwork using a depiction of cellular telephones and the cellular Block A frequency illustrating the Company's current and potential technology, products and markets.]

The Company's current product offerings are for AMPs and AMPs/CDMA dual-mode networks. The Company is also developing solutions for GSM and may in the future undertake product development for TDMA.]

The Company intends to distribute to its stockholders annual reports containing financial statements audited by its independent auditors and will make available copies of quarterly reports for the first three quarters of each fiscal year containing unaudited financial information.

CERTAIN PERSONS PARTICIPATING IN THIS OFFERING MAY ENGAGE IN TRANSACTIONS THAT STABILIZE, MAINTAIN, OR OTHERWISE AFFECT THE PRICE OF THE COMMON STOCK OF THE COMPANY, INCLUDING OVER-ALLOTMENT, ENTERING STABILIZING BIDS, EFFECTING SYNDICATE COVERING TRANSACTIONS OR IMPOSING PENALTY BIDS, IN CONNECTION WITH THE OFFERING, FOR A DESCRIPTION OF THESE ACTIVITIES, SEE "UNDERWRITING."

Metawave, Metawave Communications, SpotLight 2000, LampLighter, SiteNet and Metawave's stylized cube logo are trademarks and service marks of the Company. All other trademarks or service marks appearing in this prospectus are the property of their respective owners.

PROSPECTUS SUMMARY

The following summary is qualified in its entirety by the more detailed information and the Financial Statements and Notes thereto appearing elsewhere in this Prospectus. See "Risk Factors." Unless otherwise indicated, the information in this Prospectus assumes (i) no exercise of the Underwriters' over-allotment option, (ii) no exercise of outstanding warrants, (iii) the filing of the Company's Amended and Restated Certificate of Incorporation (the "Restated Certificate") authorizing a class of 15,000,000 shares of undesignated Preferred Stock upon completion of this offering and (iv) the automatic conversion of all outstanding shares of Series A, Series B, Series C and Series D Preferred Stock into Common Stock upon completion of this offering. See "Description of Securities" and "Underwriting." Each of the Company's fiscal quarters is the 13-week period that ends on the Sunday nearest the end of the last calendar month of such 13-week period. For convenience of presentation, all fiscal periods in these financial statements are treated as ending on a calendar month end. This Prospectus contains forward-looking statements that involve risks and uncertainties. Actual events or results could differ materially from those expressed in or implied by these forward-looking statements as a result of a number of factors, including those set forth under "Risk Factors" and elsewhere in this Prospectus.

THE COMPANY

Metawave Communications Corporation ("Metawave" or the "Company") designs,

develops, manufactures and markets spectrum management solutions for the wireless communications industry. Metawave's spectrum management solutions, consisting of smart antenna systems, applications software and engineering services, enable cellular network operators to increase overall network capacity, reduce network operation costs, better manage network infrastructure and stimulate end user demand through improved system quality.

The Company's smart antenna systems utilize fixed beam-switching hardware and software algorithms to reduce system interference in order to enable more efficient utilization of finite radio frequency spectrum or "wireless bandwidth." The Company's products offer highly integrated system solutions that can reduce the need for costly infrastructure upgrades and additional cell site deployments, thereby enabling cellular network operators to reduce otherwise capital intensive outlays and to keep pace with subscriber growth. The Company's technology is designed to be leveraged across a variety of the market segments in the wireless communications industry, including the AMPS, CDMA, GSM, PCS, TDMA and wireless local loop ("WLL") segments. The Company's customers include ALLTEL Communications Inc. ("ALLTEL"), 360(degrees) Communications Company ("360(degrees) Communications") and Millicom International Cellular S.A. ("Millicom") affiliates, Telefonica Celular del Paraguay S.A. ("Telefonica Celular") and OJSC St. Petersburg Telecom ("St. Petersburg Telecom"). The Company has completed a field trial with AirTouch Communications, Inc. ("AirTouch") and is currently conducting a field trial with GTE Corporation ("GTE").

The worldwide demand for wireless communications services has grown significantly, largely as a result of technological advancements, deregulation and economies of scale that have substantially reduced the cost and improved the quality and reliability of wireless services for the business and consumer mass market. Increased demand for wireless services places a significant strain on wireless network operators which have a fixed amount of radio frequency spectrum or wireless bandwidth available to deliver wireless services. Unlike traditional data and telephony communications bandwidth, which is an expandable physical medium, wireless spectrum is generally allocated in fixed amounts by governments in U.S. and foreign markets. Thus, the fundamental challenge for wireless network operators is to increase capacity, coverage and call quality within a fixed amount of wireless spectrum.

To address capacity, coverage and call quality issues, cellular network operators have begun to deploy more spectrum-efficient digital technologies. However, because analog and digital technologies share the same fixed amount of spectrum in a cellular network, cellular network operators must remove analog channels to implement digital technologies, while simultaneously providing analog cellular service to increasing numbers of subscribers. Traditionally, cellular network operators have addressed capacity, coverage and call quality problems by building new cell sites or adopting variations on antenna design such as sectorized antennas.

Metawave's spectrum management platform, the Spotlight 2000 system, is a multibeam smart antenna technology that enables the transition from traditional wireless network infrastructure design to an architecture which actively optimizes finite spectrum or wireless bandwidth. The SpotLight 2000 system is compatible with the Motorola, Inc. ("Motorola") HDII and Lucent Technologies Inc. ("Lucent") Series II base stations and AMPS and CDMA air interface protocols. Metawave's spectrum management solutions provide cost-effective capacity expansion, efficient conversion to digital network capability and improved network performance. Metawave's SpotLight 2000 system is currently deployed in cellular networks in North America, South America and Europe.

Metawave's objective is to be a leading provider of spectrum management solutions to the worldwide wireless communications market. Key elements of the Company's strategy include: (i) identifying rapidly growing wireless markets and developing highly integrated solutions to their spectrum management problems; (ii) building and expanding strategic customer relationships; (iii)

leveraging its proprietary core technology, which includes eight issued U.S. patents and 25 pending patent applications, by investing substantial resources in the research and product development necessary to address additional markets; and (iv) offering system level solutions, including pre-sales system planning, configurable products and on-site installation and optimization, that enhance the performance of cellular operators' networks.

Metawave sells its products through a technical direct sales force supported by systems engineers. Direct sales personnel are assigned on a customer account basis and are responsible for generating product sales and providing product and customer support. As of June 30, 1998, the Company had 200 employees, including 43 in sales, marketing and customer support, located in the Company's Redmond, Washington, Washington, D.C. and Dallas, Texas offices.

The Company's principal executive offices are located at 10735 Willows Road NE, Redmond, Washington 98073-9769, and its telephone number is (425) 702-5600. The Company was originally incorporated in the state of Washington in January 1995 and was reincorporated in the state of Delaware in July 1995.

THE OFFERING

Common Stock offered by the Company.....	5,000,000 shares
Common Stock to be outstanding after the offering.....	21,166,277 shares(1)
Use of proceeds.....	Repayment of approximately $16.2 million of outstanding debt for working capital and general corporate purposes. See "Use of Proceeds."
Proposed Nasdaq National Market symbol.....	MTWV

SUMMARY FINANCIAL DATA
(IN THOUSANDS, EXCEPT PER SHARE DATA)

	PERIOD FROM JANUARY 19, 1995 (INCEPTION) TO DECEMBER 31,	YEAR ENDED DECEMBER 31,		SIX MONTHS ENDED JUNE 30,	
	1995	1996	1997	1997	1998
STATEMENT OF OPERATIONS DATA:					
Net revenue.....	$ --	$ 1,291	$ 1,450	$ 392	$ 6,501
Gross profit (loss).....	--	194	(278)	(124)	105
Total operating expenses.....	1,135	11,324	22,228	8,976	14,541
Loss from operations....	(1,135)	(11,130)	(22,506)	(9,100)	(14,436)
Other income (expense), net.....	135	335	402	173	(1,747)
Net loss.....	$(1,000)	$(10,795)	$ (22,104)	$(8,927)	$ (16,183)
Pro forma net loss per share(2).....			$ (1.54)		$ (1.01)
Weighted average common shares and equivalents					

pro forma(2).....	14,383,284	16,060,815

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	JUNE 30, 1998	
	ACTUAL	AS ADJUSTED(4)
<S>	<C>	<C>
BALANCE SHEET DATA:		
Cash and cash equivalents.....	$ 20,311	$ 52,111
Working capital.....	3,787	51,787
Total assets.....	46,557	78,357
Senior Secured Bridge Notes(3).....	29,708	13,508
Other debt, including capital lease obligations.....	5,392	5,392
Convertible and redeemable preferred stock.....	49,282	--
Convertible and redeemable preferred stock warrants....	4,423	--
Accumulated deficit.....	(50,082)	(50,082)
Stockholders' equity (deficit).....	$(48,797)	$ 52,908

</TABLE>

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(1) Based on the number of shares outstanding on June 30, 1998. Excludes as of June 30, 1998, (i) 3,277,760 shares issuable upon exercise of outstanding options at a weighted average exercise price of $1.49 per share (ii) 657,005 shares issuable upon exercise of outstanding warrants at a weighted average exercise price of $0.60 per share and (iii) an aggregate of 2,010,639 shares available for future issuance of such options under the Company's Amended and Restated 1995 Stock Option Plan (the "1995 Stock Option Plan"), 1998 Stock Option Plan (the "1998 Stock Option Plan"), 1998 Directors' Stock Option Plan (the "Directors' Plan") and 1998 Employee Stock Purchase Plan (the "Purchase Plan"). See "Management--Stock Plans," "Certain Relationships and Related Transactions," "Description of Securities" and Notes 4 and 6 of Notes to Financial Statements.

(2) See Note 1 of Notes to Financial Statements for an explanation of the method employed to determine the number of shares used to compute per share amounts.

(3) In April 1998, the Company issued $29.0 million in aggregate principal 13.75% Senior Secured Bridge Notes due April 28, 2000 (the "13.75% Senior Secured Bridge Notes"). In connection with the 13.75% Senior Secured Bridge Notes, the Company issued warrants to purchase an aggregate of 537,500 shares of Series D Preferred Stock at a purchase price of $0.01 per share (the "Note Warrants"). See "Certain Relationships and Related Transactions," "Description of Securities" and Note 4 of Notes to Financial Statements.

(4) Adjusted to reflect (i) the sale and issuance of the shares of Common Stock offered by the Company hereby at an assumed initial public offering price of $10.50 per share and the application of the estimated net proceeds therefrom; (ii) the conversion of convertible and redeemable Preferred Stock into Common Stock and the conversion of Preferred Stock warrants into Common Stock warrants, and (iii) the application of the estimated net proceeds of the offering including the repayment of approximately $16.2 million of outstanding principal and the estimated accrued interest on the Company's 13.75% Senior Secured Bridge Notes. See "Use of Proceeds" and "Capitalization."

RISK FACTORS

An investment in the shares offered hereby involves a high degree of risk. The following risk factors should be considered carefully in addition to the other information in this Prospectus before purchasing the shares of Common Stock offered hereby. The discussion in this Prospectus contains certain forward-looking statements that involve risks and uncertainties, such as statements of the Company's plans, objectives, expectations and intentions. The cautionary statements made in this Prospectus should be read as being

applicable to all related forward-looking statements wherever they appear in this Prospectus. The Company's actual results could differ materially from those discussed herein. Factors that could cause or contribute to such differences include those discussed below as well as those discussed elsewhere herein.

Limited Operating History; Accumulated Deficit; Anticipated Losses. The Company was incorporated in 1995 and was in the development stage until late 1997, when it commenced shipments for commercial sale of its first spectrum management system. From inception through June 30, 1998, the Company generated total revenues of approximately $9.2 million, of which $6.5 million, or 70.6%, was generated in the six months ended June 30, 1998. For the quarters ended March 31, 1998 and June 30, 1998, the Company's net losses were $7.0 million and $9.2 million, respectively and, at June 30, 1998, the Company had a cumulative net loss of approximately $50.1 million. The revenue and profit potential of the Company's business is unproven and the Company's limited operating history makes its future operating results difficult to predict. The Company believes that its growth and future success will be dependent upon the widespread acceptance of the SpotLight 2000 system by cellular network operators. Because the SpotLight 2000 system was only recently introduced, the Company is unable to predict with any degree of certainty whether the system will achieve market acceptance. There can be no assurance that the Company will ever achieve profitability or significant revenues on a quarterly or an annual basis. The Company intends to continue to make significant investments in its operations, particularly to support product development, to increase manufacturing capacity and to market new products. Accordingly, the Company expects to continue to generate losses for the foreseeable future, even if revenues increase. In view of the Company's limited production history, an investment in the Common Stock offered hereby must be considered in light of the problems, expenses, complications and delays frequently encountered in connection with the development of new technologies, products, markets and operations. As a result of the Company's net losses and limited operating history, period-to-period comparisons of operating results may not be meaningful and operating results from prior periods may not be indicative of future performance. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Significant Fluctuations in Operating Results. The Company will likely experience significant fluctuations in its operating results on a quarterly and an annual basis in the future. In connection with its efforts to increase production of its recently introduced SpotLight 2000 system, the Company expects to continue to make substantial investments in capital equipment, to recruit and train additional personnel and to invest in facilities and management information systems. These expenditures may be made in advance of, and in anticipation of, increased sales and, therefore, gross profits may be adversely affected by short-term inefficiencies associated with the addition of equipment, personnel or facilities, and costs may increase as a percentage of revenues from time-to-time on a periodic basis. As a result, the Company's operating results will vary from period to period. Because of the limited size of the Company's customer base and the large size of customer orders, revenues derived from a small number of customers will likely represent a significant portion of revenue in any given period. Accordingly, a decrease in demand for the Company's systems from any customer for any reason is likely to result in significant periodic fluctuations in revenue. In addition, most of the Company's contracts contain conditional acceptance provisions for certain product sales and the Company delays recognition of revenues that are subject to such contingencies until all such conditions are satisfied. If the Company could not satisfy conditions in such

contracts or satisfaction of conditions were delayed for any reason, revenues in any particular period could fall significantly below the Company's expectations.

A delay in a shipment or customer acceptance of the Company's product near the end of a particular quarter, due to, for example, an unanticipated

shipment rescheduling, cancellation or deferral by a customer, competitive or economic factors, unexpected manufacturing, installation or other difficulties, failure to satisfy customer acceptance conditions, unavailability or delays in deliveries of components, subassemblies or services by suppliers, or the failure to receive an anticipated order, may cause revenue in a particular period to fall significantly below the Company's expectations and may materially adversely affect the Company's business and operating results for such period. A significant portion of the Company's expenses are fixed in advance and based in large part on revenue forecasts. If revenues do not meet the Company's expectations in any given period, the adverse impact on operating results of such a shortfall may be magnified by the Company's inability to adjust spending to compensate for the shortfall. In addition, the Company plans to increase operating expenses to fund additional research and development, sales and marketing and general and administrative activities. To the extent that these expenses are not accompanied by an increase in revenues, the Company's business and operating results would be materially adversely affected.

Other factors that may cause the Company's revenue, gross profits and results of operations to vary significantly from period to period include: gain or loss by the Company of significant customers; delays in, or prohibition of, installing the Company's systems due to topological or zoning issues or customer installation schedules; the Company's ability to reduce costs; existing and new product development; market acceptance and the timing of availability of new products by the Company or its customers; changes in pricing by the Company, its customers or suppliers; introduction and enhancement of products by the Company and its competitors; increases in warranty and customer support expenses; limitations on manufacturing capacity; inventory obsolescence; introduction of new distribution and sales channels; fluctuations in foreign currency exchange rates; delays or changes in regulatory approval of the Company's systems or those of its customers; natural disasters or adverse weather; and general economic and political conditions. In addition, the Company's results of operations have been, and will continue to be, influenced significantly by competitive factors including the pricing and availability of, and demand for, competitive or substitute products. It is likely that, in a future period, the Company's operating results will not meet the expectations of public market analysts and investors. In such event, the price of the Company's Common Stock could be materially adversely affected. See "Management's Discussion and Analysis of Financial Condition and Results of Operations." In addition, while the Company's revenues have not been impacted by seasonality to date, the telecommunications industry historically has been subject to some degree of seasonality, with lower sales in the first calendar quarter. There can be no assurance that the Company's business and operating results will not be adversely affected by such seasonal fluctuations in the future.

The Company's current backlog consists of a relatively small number of orders for its SpotLight 2000 system. Purchase orders are received and accepted in advance of shipment and are generally cancelable prior to shipment. As a result, backlog may not result in revenues and, as of any particular date, may not be a reliable indicator of sales for any future period. Furthermore, the Company intends to increase production capacity in order to reduce the period of time between receipt and shipment of orders. Thus, the Company does not expect backlog will remain at current levels as a percentage of sales. Furthermore, due to the many factors affecting decisions by customers to place orders and the impact of a small number of large orders, backlog at any given time may fluctuate significantly. Such fluctuations may adversely affect the Company's business and operating results. See "Business--Sales, Marketing and Customer Support."

Significant Customer Concentration. The Company has derived a substantial portion of its revenue from sales of the SpotLight 2000 system to a limited number of cellular network operators, and the

Company expects this customer concentration to continue for the foreseeable

future. To date, four customers have accounted for all of the Company's product sales. For the six months ended June 30, 1998, three customers, St. Petersburg Telecom, Telefonica Celular and ALLTEL, accounted for approximately 27.4%, 24.0% and 44.2%, respectively, of the Company's net revenues. Due to the highly concentrated nature of the cellular industry and industry consolidation, the Company believes that the number of potential customers for future products, if any, will be small. In this regard, on July 1, 1998, ALLTEL completed the acquisition of 360(degrees) Communications, another customer of the Company. Failure by the Company to capture a significant number of the cellular network operators as customers could have a material adverse effect on the Company's business and operating results. The Company expects that a small number of customers will continue to represent a significant percentage of its total revenues for the foreseeable future, although the companies that comprise the largest percentage of sales in any given quarter may change from quarter to quarter. Because of the small size of the Company's customer base, the loss of any customer or reduced demand for systems from any customer, could have a material adverse effect on the Company's business and operating results. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business--Customers."

Uncertainty of Market Acceptance; Lengthy Sales Cycle. The Company's future success will depend upon the degree of market acceptance of the Company's spectrum management solutions. The Company believes that substantially all of its revenues in the foreseeable future will be derived from sales of its SpotLight 2000 system. In light of the recent introduction of the SpotLight 2000 system and the rapidly evolving nature of the wireless communications industry, the Company is unable to predict with any degree of assurance whether its current or future products will achieve market acceptance. There can be no assurance that the Company will be able to reduce its reliance on sales of its SpotLight 2000 system by developing interfaces to other wireless protocols or base stations manufactured by vendors other than Motorola or Lucent, or that if developed, such new system versions will achieve market acceptance. If the SpotLight 2000 system fails to achieve broad market acceptance, the Company's business and operating results would be materially adversely affected. See "Business--Metawave Products."

In order for its spectrum management solutions to achieve market acceptance, the Company must demonstrate to cellular network operators that the systems provide a spectrum management solution that addresses the cellular network operators' challenges of capacity, coverage and call quality in a cost-effective manner. The Company must demonstrate product performance to a cellular network operator based on such operator's unique network configuration and specifications. The Company's ability to optimize its product in any given cell site varies greatly depending on such operator's specifications and the local geographical terrain. Typically, performance of the Company's product must be accepted in an initial cell site or cluster of cell sites prior to completing any additional sales to such cellular network operator. If the Company's spectrum management solutions are not accepted by cellular network operators in a timely manner, or at all, the Company's business and operating results could be materially adversely affected. See "--Risks Related to Base Station Manufacturers," "--Competition" and "Business--Metawave Products."

Because the SpotLight 2000 system represents a new approach to increasing network capacity and affects the key function of a cellular operator's network, purchase of the SpotLight 2000 system is typically a strategic decision that requires approval at senior levels of customers' organizations, significant technical evaluation and a substantial commitment of customers' personnel, financial and other resources. Historically, the Company has conducted field trials and has been required to satisfy performance conditions prior to the completion of a sale. For these and other reasons, the sales process associated with the purchase of the Company's systems is typically complex, lengthy and subject to a number of significant risks, including changes in customers' budgets and approval at senior levels of customers' organizations and approval by governmental agencies. In addition, given the regional divisions of many cellular networks, an order from one region does not necessarily result in subsequent orders from other regions of the same

cellular network without additional trials and substantial selling efforts by the

Company. The Company's sales cycle can last up to 18 months or more and varies substantially from customer to customer. Because of the lengthy sales cycle and the dependence of the Company's quarterly revenues upon a small number of orders that represent large dollar amounts, if revenues from any order forecasted for a particular quarter are not received in that quarter, the Company's business and operating results could be materially adversely affected. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business--Sales, Marketing and Customer Support."

Dependence on Cellular Network Operator Capital Spending. The Company expects that it will derive substantially all of its revenues for the foreseeable future from sales of its SpotLight 2000 system to cellular network operators. These operators are located in the United States and foreign markets. Demand for the Company's products will depend to a significant degree upon the magnitude and timing of capital spending by cellular network operators for constructing, rebuilding or upgrading their systems. The capital spending patterns of cellular network operators depend on a variety of factors, including access to financing, the status of federal, local and foreign government regulation and deregulation, changing standards for cellular technology, overall demand for analog and digital cellular services, competitive pressures and general economic conditions. In addition, capital spending patterns in the cellular industry can be subject to some degree of seasonality, with lower levels of spending in the first calendar quarter, based on annual budget cycles. Capital spending levels in the U.S. cellular industry have fluctuated significantly in the past, and there can be no assurance that such fluctuations will not occur in the future. Any substantial decrease or delay in capital spending by cellular network operators in the United States or abroad would have a material adverse effect on the Company's business and operating results.

Risk of Declining Prices; No Assurance of Cost Reductions. The Company believes that for its systems to achieve broad market acceptance and to compete effectively with alternative systems, the Company's average selling prices must decline. The Company may be subject to price competition from base station manufacturers which could lower base station prices thereby making the addition of new base stations a more cost-effective alternative for cellular network operators seeking increased capacity. In order to achieve lower average selling prices without adversely affecting gross margins, the Company must successfully reduce the manufacturing costs of its product through engineering improvements and economies of scale in production and purchasing. There can be no assurance that the Company will achieve cost savings at a rate needed to keep pace with competitive pricing pressures. In addition, if the cellular industry does not shift to digital protocols that yield higher product margins for the Company, the Company's gross margins could be adversely affected in future periods. To the extent that the Company is unable to reduce costs sufficiently to offset declining average selling prices or the mix of the Company's sales is comprised substantially of analog-based technologies, the Company may not achieve positive gross margins. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business--Research and Development."

Risks Related to Base Station Manufacturers. The Company's product strategy relies on ensuring the compatibility of the Company's systems with base stations sold by cellular equipment manufacturers. The Company's product strategy is competitive in some respects with such manufacturers, and it may be difficult or impossible for the Company to obtain technical cooperation from such manufacturers, which may be required to make the Company's systems compatible with their base stations. The initial version of the SpotLight system relied on analog technologies and did not require significant cooperation from such base station manufacturers. As the cellular industry continues the conversion to digital technologies, increased signal and connection complexity may require the Company, at a minimum, to obtain

customer or manufacturer cooperation on technical specifications and may possibly require the Company to obtain manufacturer cooperation to embed the Company's systems in the base station equipment. There can be no assurance that the Company will be able to obtain cooperation to make the Company's products compatible with manufacturers' base stations on reasonable terms, or at all, and the failure to do so could materially and adversely affect the Company's business and operating results.

Competition. The market for spectrum management solutions is relatively new but is expected to become increasingly competitive. The Company's products compete with other smart antenna systems and alternative wireless infrastructure devices such as repeaters, cryogenic filters and tower-top amplifiers. The Company believes the principal competitive factors are the cost-effective delivery of increased capacity, expanded coverage and improved call quality to cellular network operators. There can be no assurance that the Company will compete favorably with respect to the foregoing factors.

The Company believes that base station manufacturers, who provide cellular network capacity through sales of additional base stations, represent a significant competitive threat to the Company. These manufacturers, including Ericsson LM Telephone Co. ("Ericsson"), Lucent, Motorola, Nokia Corporation ("Nokia"), Northern Telecom, Ltd. ("Northern Telecom") and Siemens Corporation ("Siemens"), have long-term, established relationships with the cellular network operators. Deployment of the Company's SpotLight 2000 system by cellular network operators can improve base station performance, and therefore may result in fewer sales opportunities for base station manufacturers. Smart antenna technology represents an area of opportunity for such manufacturers. The Company believes that certain of these manufacturers are developing smart antenna systems and are likely to offer smart antenna capabilities in the future. In addition to having more established relationships with cellular network operators, these manufacturers have significantly greater financial, technical, manufacturing, sales, marketing and other resources than the Company and have significantly greater name recognition for their existing products and technologies than has the Company.

The Company's current primary direct competitors for spectrum management solutions are Celwave (a division of Radio Frequency Systems Inc., which is an affiliate of Alcatel Alsthom S.A.), ArrayComm, Inc. and GEC-Marconi Hazeltine Corporation. In addition, other companies, such as Raytheon E-Systems, Watkins-Johnson Company, Texas Instruments Incorporated and ARGOSystems, Inc. (a subsidiary of The Boeing Company), offer systems that utilize digital signal processing and interference cancellation techniques to extend cell site coverage and improve call quality. Several companies offer alternative technologies such as cryogenic filters, tower-top low noise amplifiers and repeaters that can be used to provide service in network coverage holes and improve call quality. The Company may also face competition in the future from new market entrants offering competing technologies.

The Company believes that its ability to compete in the future will depend in part on a number of competitive factors outside its control, including the development by others of products that are competitive with the Company's products and the price at which others offer comparable products. To be competitive, the Company will need to continue to invest substantial resources in engineering, research and development and sales and marketing. There can be no assurance that the Company will have sufficient resources to make such investments or that the Company will be able to make the technological advances necessary to remain competitive. Accordingly, there can be no assurance that the Company will be able to compete successfully in the future. See "Business--Competition."

Management of Growth; New Management Team. The growth of the Company's operations has placed, and is expected to continue to place, a significant strain on the Company's financial and management resources as well as its product design, manufacturing, sales and customer support capabilities. In May 1998, the Company moved to significantly larger facilities to accommodate the

Company's expanded research and development and manufacturing needs. As the Company expands its operations to multiple locations, including internationally, management of the Company's operations will become increasingly complex. To manage its anticipated growth, the Company must, among other things, continue to implement and improve its operational, financial and management information systems, hire and train additional qualified personnel, continue to expand and upgrade core technologies and effectively manage multiple relationships with various customers, suppliers and other third parties. The Company recently upgraded its financial and accounting software to an enterprise resource planning software package that integrates manufacturing, finance and sales order management. The Company anticipates that additional upgrades to its management information systems will be required in the near future to address

the expected increased volume and complexity of the Company's transactions. There can be no assurance that the Company will successfully integrate the newly purchased software with its existing systems or that the integration of the new systems will not cause unanticipated system disruptions, slower response times, degradation in levels of performance or reliability, impaired quality of production, and delays in reporting accurate financial information. Failure to successfully implement and integrate these systems, procedures and controls to effectively manage the Company's growth in operations in a timely manner could have a material adverse effect on the Company's business and operating results.

From January 1, 1997 to June 30, 1998, the Company expanded from 91 to 200 employees. A majority of the Company's executive officers joined the Company within the last 18 months and many of these officers have no prior experience as executive officers of publicly traded companies. The Company's new employees include the Chief Executive Officer and Chief Financial Officer as well as a number of other key managerial, technical and operations personnel who have not yet been fully integrated into the Company, and the Company expects to add additional key personnel in the near future. There can be no assurance that the Company's current and planned personnel will be adequate to support the Company's future operations, that management will be able to hire, train, retain, motivate and manage required personnel or that Company management will be able to successfully identify, manage and exploit existing and potential market opportunities. If the Company is unable to manage growth effectively, its business and operating results will be materially adversely affected.

Rapid Technological Change and Requirement for Frequent New Product Introductions. The Company's future success will depend in large part on its ability to develop new products designed to operate with different digital technologies such as CDMA and GSM as well as across other principal manufacturer base stations. There can be no assurance that the Company will successfully develop and introduce such products in a timely manner. In this regard, the Company is currently conducting trials of its recently developed dual-mode AMPS/CDMA based SpotLight 2000 system. There can be no assurance that the trials will be successful or that the cellular network operators will accept the product.

The market for the Company's current products and planned future products is subject to rapid technological change, frequent new product introductions and enhancements, product obsolescence, changes in customer requirements and evolving industry standards. To be competitive, the Company must successfully develop, introduce and sell new products or product enhancements that respond to changing customer requirements on a timely and cost-effective basis. The Company's success in developing new and enhanced products will depend on a variety of factors, many of which are beyond the Company's control. Such factors include the timely and efficient completion of system design; the timely and efficient implementation of assembly, calibration and test processes; sourcing of components; the development and completion of related software; the reliability, cost and quality of new products; the degree of market acceptance; and the development and introduction of competitive

products by competitors. The Company has experienced and may continue to experience delays in development and introduction of products. In addition, the Company may be required to obtain licenses to intellectual property rights held by third parties to develop new products or product enhancements and there can be no assurance that such licenses will be available on acceptable terms, if at all. The inability of the Company to introduce in a timely manner new products or product enhancements that contribute to sales could have a material adverse effect on the Company's business and operating results. In addition, changes in manufacturing operations to incorporate new products and processes could cause disruptions in production of existing products, which, in turn, could adversely affect customer relationships and the market's acceptance of the Company's products, and have a material adverse effect on the Company's business and operating results. See "Business--Research and Development" and "--Manufacturing."

Limited Manufacturing Experience; No Assurance of Successful Expansion of Operations. The Company's manufacturing operations consist primarily of supplier and commodity management and assembling finished goods from components and subassemblies purchased from outside suppliers.

Because the Company configures each SpotLight 2000 system to meet customer specifications, the Company's ability to achieve manufacturing efficiencies by assembling products before orders are received is limited. The Company intends to expand its manufacturing capacity by purchasing additional equipment, hiring additional personnel, further developing its proprietary test software to improve productivity, increasing the efficiency of its production processes, and, in certain instances, subcontracting additional assembly, calibration and testing processes. If the Company is to achieve its objectives, it will also be required to significantly expand its sales, marketing and customer support capabilities. The Company intends to subcontract a significant portion of its field installation work to third parties. There can be no assurance that the Company will be successful in identifying subcontractors with adequate experience or will be able to retain experienced subcontractors on acceptable terms, if at all, or that the Company will effectively manage multiple subcontractors working on multiple installation projects. Due to the Company's limited experience with large scale operations, there can be no assurance that the Company will be able to develop internally, or contract with third parties for, additional manufacturing capacity and field support on acceptable terms, that it will be able to maintain the quality of its products as production increases, or that it will develop the administrative and other structures necessary to support expanded operations. The Company's success depends on its ability to significantly increase its production capacity and field support.

The Company's arrangements with its customers typically require that orders be shipped not more than 90 days after the order. There can be no assurance that the Company will be able to increase its production capacity at an acceptable cost or rapidly enough to fill its orders. The failure to assemble and ship products on a timely basis could damage relationships with customers and result in cancellation of orders or lost orders, which would have a material adverse effect on the Company's business and operating results. See "Business--Manufacturing."

The Company currently manufactures all of its products in a single facility in Redmond, Washington. If the Company's facilities or the facilities of its suppliers were incapable of operating, even temporarily, or were unable to operate at or near full capacity for any extended period, the Company's business and operating results could be materially adversely affected. In connection with its capacity expansion, the Company may seek to develop one or more additional manufacturing facilities, including, possibly, facilities located outside the Redmond, Washington area. Although there can be no assurance that such a facility will be added, the operation of any such facility would significantly increase the complexity of the Company's operations.

No Assurance of Product Quality, Performance and Reliability. Manufacturing and installing the Company's SpotLight 2000 system is a complex process and requires significant expertise. Because of the Company's limited operating history and the short time that the SpotLight 2000 system has been in production, the Company's personnel have limited experience in installing and integrating the Company's systems. If the Company were unable to successfully and efficiently deploy its systems in the field, or were unable to attract and retain the required trained technicians to deploy products in the field, the Company's business and operating results would be materially adversely affected.

The Company's ability to achieve future revenue growth will depend in significant part upon its ability to obtain and fulfill orders from, maintain good relationships with and provide support to existing and new customers, and to manufacture products on a timely and cost-effective basis to meet stringent customer performance requirements and shipment and delivery dates. Because of the Company's limited operating history and the short time that the SpotLight 2000 system has been in production, there can be no assurance that problems will not occur with respect to the integration, quality, performance and reliability of the Company's systems. If such problems occur, the Company could experience significant warranty claims or increased costs or delays in, cancellations of, or rescheduling of orders or shipments, any of which could have a material adverse effect on the Company's business and operating results.

Dependence on Attraction and Retention of Key Personnel. The Company's future operating results depend in significant part upon the continued contributions of each of its key technical and senior

management personnel, including Douglas O. Reudink, the Company's founder and Chief Technical Officer, each of whom would be difficult to replace, as there is a limited number of people with the necessary skills and experience to develop and manufacture the Company's products. The Company has not entered into employment agreements with any of its employees other than severance arrangements with Richard Henderson, Robert H. Hunsberger, Vito E. Palermo and Dr. Reudink. See "Management--Severance Arrangements." Except for Dr. Reudink, the Company has not entered into any non-competition agreements with any of its employees. The Company does not maintain key-man life insurance on any of its key technical or senior management personnel. In addition, the Company anticipates that it will need additional management personnel if it is to be successful in increasing production capacity and the scale of its operations. There can be no assurance that it will be able to obtain and retain such personnel on acceptable terms.

The Company's future operating results also depend in significant part upon its ability to attract and retain qualified engineering, manufacturing, quality assurance, sales, marketing and customer support personnel. Competition for such personnel, particularly qualified engineers, is intense. The Company has experienced difficulties in recruiting sufficient numbers of qualified engineers, and there can be no assurance that the Company will be successful in attracting or retaining such personnel. There may be only a limited number of persons with the requisite skills to serve in these positions, particularly in the market where the Company is located, and it may be increasingly difficult for the Company to hire such personnel over time. As the Company's product development efforts relate to cellular standards that are widely deployed in foreign countries, the Company may be required to recruit foreign engineers who have expertise in such standards. Current U.S. immigration laws restrict the Company's ability to hire foreign employees, which could have a material adverse effect on the Company's product development efforts. The loss of any key employee, the failure of any key employee to perform in his or her current position, the Company's inability to attract and retain skilled employees as needed or the inability of the officers and key employees of the Company to expand, train and manage the Company's employee base could materially adversely affect the Company's business and operating results. See "Business--Employees" and "Management."

Sole Source Suppliers; Dependence on Key Suppliers. Certain parts and components used in the Company's products, including linear power amplifiers supplied by Powerwave Technologies, Inc. ("Powerwave") are presently only available from a sole source. In addition, the Company is currently dependent upon Sanmina Corporation ("Sanmina") as the primary source for the supply of the Company's printed circuit board assemblies. Certain other parts and components used in the Company's products are available from a limited number of sources. The Company's reliance on these sole or limited source suppliers involves certain risks and uncertainties, including the possibility of a shortage or the discontinuation of certain key components and reduced control over delivery schedules, manufacturing capability, quality and cost. Any reduced availability of such parts or components when required could materially impair the Company's ability to manufacture and deliver its products on a timely basis and result in the cancellation of orders, which could have a material adverse effect on the Company's business and operating results. In addition, the purchase of certain key components involves long lead times and, in the event of unanticipated increases in demand for the Company's products, the Company may be unable to obtain such components in sufficient quantities to meet its customers' requirements. The Company does not have guaranteed supply arrangements with any of its sole or limited source suppliers, does not maintain an extensive inventory of parts or components and customarily purchases sole or limited source parts and components pursuant to purchase orders. Business disruptions, quality issues, production shortfalls or financial difficulties of a sole or limited source supplier could materially and adversely affect the Company by increasing product costs, or eliminating or delaying the availability of such parts or components. In such event, the inability of the Company to develop alternative sources of supply quickly and on a cost-effective basis could materially impair the Company's ability to manufacture and deliver its products on a timely basis and could have a material adverse effect on its business and operating results. See "Business--Manufacturing."

Dependence on Growth of Cellular Communications Market. The future operating results of the Company will depend to a significant extent upon the continued growth and increased availability and acceptance of cellular communications services internationally and in the United States. There can be no assurance that the volume and variety of cellular services or the markets for and acceptance of such services will grow, or that such services will create a demand for the Company's systems. If the cellular communications market fails to grow, or grows more slowly than anticipated, the Company's business and operating results may be materially adversely affected.

The cellular communications industry has developed different technologies and standards based on the type of service provided and geographical region. There is uncertainty as to whether all existing cellular technologies will continue to achieve market acceptance in the future. If a digital technology for which the Company develops a product is not widely adopted, the potential size of the market for the Company's product will be limited, and the Company may not recover the cost of development of such product. Further, the Company may not be able to re-direct its development efforts toward digital cellular technologies that do sustain market acceptance in a timely manner, which would have a material adverse effect on the Company's business and operating results.

Need for Additional Capital. The Company requires substantial working capital to fund its business and expects to use a portion of the net proceeds of this offering to fund its operating losses. The Company has experienced negative cash flow from operations since inception and expects to continue to experience significant negative cash flow from operations for the foreseeable future. The Company's future capital requirements will depend upon many factors, including the success or failure of the Company's efforts to expand its production, sales and marketing efforts, the status of competitive products, and the requirements of the Company's efforts to develop new products and product enhancements. The Company believes that current capital

resources, together with the estimated net proceeds from this offering, are adequate to fund its operations for at least twelve months. Thereafter, the Company may be required to raise additional capital. There can be no assurance that additional financing will be available to the Company on acceptable terms, if at all, or that such financing may not result in further dilution to existing stockholders. The Company may be required to obtain funds through its arrangements with partners or others that may require the Company to relinquish rights to certain of its technologies or potential products or other assets. If adequate funds are not available, the Company may be required to delay, scale back or eliminate expansion of its production, administration or research and development programs. Any inability to obtain needed financing by the Company could have a material adverse effect on its business and operating results. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Risks Associated with International Markets. Approximately 51.5% of net revenue for the six months ended June 30, 1998 was from sales of the Company's SpotLight 2000 system to customers located outside of the U.S. For the quarter ended June 30, 1998, 39.0% of net revenue was related to the sale of the SpotLight 2000 system to a single customer in Paraguay.

Although the Company believes that international sales will decline as a percentage of net revenues over time, the Company anticipates that international sales will continue to account for a significant portion of its revenue for the foreseeable future. To date, the Company's international sales have been denominated in U.S. dollars; however, in the future a portion of the Company's international sales may be denominated in foreign currencies. The Company does not currently engage in foreign currency hedging transactions as all sales to date have been in U.S. dollars. However, if a material amount of future sales are denominated in foreign currency, a decrease in the value of foreign currencies relative to the United States dollar could result in losses from such transactions. In such event, the Company might seek to limit its exposure to foreign currency transactions by engaging in hedging activities. There can be no assurance that any such activity would be successful in avoiding exchange-related losses. With respect to the Company's international sales that are United States dollar denominated, an increase in the relative value of the U.S. dollar could make the Company's systems less price-competitive, or could cause

customers to renegotiate prices for subsequent purchases, both of which could have a material adverse effect upon the Company's business and operating results. Additional risks inherent in the Company's international business activities include delays due to customs inspections and procedures, changes in regulatory requirements, tariffs and other trade barriers, political and economic instability in developing countries, difficulties in staffing and managing foreign operations, difficulties in managing distributors, potentially adverse tax consequences, the burden of complying with a wide variety of complex foreign laws and treaties, difficulties in obtaining necessary equipment authorizations and the possibility of difficulty in accounts receivable collections. Distribution and sales agreements entered into with foreign customers may be governed by foreign laws which may differ significantly from U.S. laws. Therefore, the Company may be limited in its ability to enforce its rights under such agreements and to collect damages, if awarded. There can be no assurance that any of these factors will not have a material adverse effect on the Company's business and operating results.

To date, the Company has sold its products directly to cellular network operators. In the future, it may be desirable to establish distribution relationships in the international market. The Company has not established any distribution relationships and there can be no assurance that the Company will be able to establish such distribution relationships on acceptable terms, if at all. The failure to establish any distribution relationships, or the failure to implement an alternative distribution strategy in a cost-effective manner, or any delays in establishing such channels, could reduce or eliminate the Company's opportunity to sell its systems in foreign markets, which could

have a material adverse effect on the Company's business and operating results. Further, if the Company is unable to produce and sell its systems at margins that permit it to provide distribution partners with a sufficient financial incentive to distribute the Company's systems without adversely affecting the Company's profitability, the Company's distribution strategy could adversely affect the Company's business and operating results.

Risks Associated with Potential Acquisitions. The Company intends to review acquisition prospects that would complement its existing product offerings, augment its market coverage or enhance its technological capabilities. Although the Company has no current agreements or negotiations underway with respect to any material acquisitions, the Company may make acquisitions of businesses, products or technologies in the future. However, there can be no assurance that the Company will be able to locate suitable acquisition opportunities. Future acquisitions by the Company could result in potentially dilutive issuances of equity securities, large write-offs, the incurrence of debt and contingent liabilities or amortization expenses related to goodwill and other intangible assets, any of which could materially adversely affect the Company's operating results or the price of the Company's Common Stock. Further, acquisitions entail numerous operational risks, including difficulties in the assimilation of operations, potential loss of key employees, technologies, products and the information systems of the acquired companies, diversion of management's attention from other business concerns and risks of entering geographic and business markets in which the Company has no or limited prior experience. Since the Company has not made any material acquisitions in the past, no assurance can be given as to the ability of the Company to successfully integrate any businesses, products, technologies or personnel that might be acquired in the future, and the failure of the Company to do so could have a material adverse effect on the Company's business and operating results.

Government Regulation. Wireless communications are subject to extensive regulation by foreign and U.S. laws and international treaties. The Company's systems must conform to certain international and domestic regulations established to, among other things, avoid interference among users of frequencies. In order for the Company's products to be used, regulatory approval must be obtained. This governmental approval process frequently involves substantial delay which could result in the cancellation, postponement or rescheduling of orders by the Company's customers, which in turn may have a material adverse effect on the sale of systems by the Company to such customers. The Company believes that its SpotLight 2000 system currently complies with all applicable U.S. and foreign regulations in countries in which its sales are material. However, changes in these regulations, the need to comply with regulations

in additional countries in the event of sales to cellular network operators in those countries, or a failure to obtain necessary approvals or permits in connection with sales to cellular network operators in a country could preclude sales of the Company's products to such operators or could require the Company to change the features of its SpotLight 2000 system and thereby incur substantial costs and experience delays in system installation or operation.

The regulatory environments in which the Company operates are subject to significant change. Regulatory changes, which are affected by political, economic and technical factors, could significantly affect the Company's operations by increasing or reallocating the amount of spectrum available to wireless operators, restricting network development efforts by the Company's customers or end users, making current systems obsolete, increasing the opportunity for additional competition or requiring the Company's products to comply with new regulations. Any such regulatory changes could have a material adverse effect on the Company's business and operating results. The Company might deem it necessary or advisable to modify its systems to operate in compliance with such regulations. Such modifications could be expensive and time-consuming. See "--Risks Associated with International Markets" and

"Business--Government Regulation."

Uncertainty Regarding Protection of Intellectual Property. The Company relies on a combination of patent, trade secret, copyright and trademark protection, nondisclosure agreements and other measures to protect its proprietary rights. The Company currently has eight issued U.S. patents and 25 pending U.S. patent applications. The Company's future success will depend in large part on its ability to obtain patent protection in the U.S. and foreign markets, to defend patents once obtained, to maintain trade secrets and to operate without infringing upon the patents and proprietary rights of others. The patent positions of companies in the worldwide wireless communications industry, including the Company, are generally uncertain and involve complex legal and factual questions. There can be no assurance that any issued patents owned by or licensed to the Company will not be challenged, invalidated or circumvented, or that the rights granted thereunder will provide competitive advantages to the Company. Further, there can be no assurance that patents will issue from any patent applications or that, if patents do issue, the claims allowed would be sufficiently broad to protect the Company's technology. In addition, there can be no assurance that patents issued in the U.S. will receive corresponding patent protection in foreign markets or that the Company will pursue similar patent protection in all foreign markets.

Patents and patent applications relating to products used in the wireless communications industry are numerous and current and potential competitors and other third parties may have filed or may in the future file applications for, or may have been issued or in the future may be issued, patents or may obtain additional proprietary rights relating to products used or proposed to be used by the Company. The Company may not be aware of all patents or patent applications that may materially affect the Company's ability to make, use or sell any current or future products. From time to time, third parties have asserted patent, copyright and other intellectual property rights to technologies that are important to the Company. The Company expects that it will increasingly be subject to infringement claims as the number of products and competitors in the spectrum management market grows and the functionality of products overlaps. Third parties may assert infringement claims against the Company in the future, and such assertions could result in costly litigation or require the Company to obtain a license to intellectual property rights of such parties. There can be no assurance that any such licenses would be available on terms acceptable to the Company, if at all. Any failure to obtain a license from any third party asserting claims in the future or defense of any third party lawsuit could have a material adverse effect on the Company's business and operating results.

The Company also relies on unpatented trade secrets to protect its proprietary technology, and there can be no assurance that others will not independently develop or otherwise acquire the same or substantially equivalent technologies or otherwise gain access to the Company's proprietary technology or disclose such technology or that the Company can ultimately protect its rights to such unpatented

proprietary technology. Further, third parties may obtain patent rights to such unpatented trade secrets, which patent rights could be used to assert infringement claims against the Company. The Company also relies on confidentiality agreements with its employees, suppliers, consultants and customers to protect its proprietary technology. There can be no assurance that these agreements will not be breached, that the Company would have adequate remedies for any breach or that the Company's trade secrets will not otherwise become known to or be independently developed by competitors. Failure to obtain or maintain patent and trade secret protection, for any reason, could have a material adverse effect on the Company's business and operating results. See "Business--Intellectual Property."

Year 2000 Compliance. Many existing computer systems and applications, and other control devices, use only two digits to identify a year in the date field, without considering the impact of the upcoming change in the century.

As a result, such systems and applications could fail or create erroneous results unless corrected so that they can process data related to the year 2000. The Company relies on its systems, applications and devices in operating and monitoring all major aspects of its business, including financial and accounting systems, customer services, networks and telecommunications equipment and end products. The Company also relies, directly and indirectly, on external systems of business enterprises such as customers, suppliers, creditors, financial organizations, and of governmental entities, both domestic and international, for accurate exchange of data. The Company's current estimate is that the costs associated with the year 2000 issue, and the consequences of incomplete or untimely resolution of the year 2000 issue, will not have a material adverse effect on the result of operations or financial position of the Company in any given year. However, despite the Company's efforts to address the year 2000 impact on its internal systems, the Company has not fully identified such impact or whether it can resolve it without disruption of its business and without incurring significant expense. In addition, even if the internal systems of the Company are not materially affected by the year 2000 issue, the Company could be affected through disruption in the operation of the enterprises with which the Company interacts.

No Prior Public Market; Possible Volatility of Stock Price. Prior to this offering, there has been no public market for the Common Stock. The initial public offering price of the Common Stock will be determined by negotiations between the Company and the Representatives of the Underwriters and may not be indicative of the market price for the Common Stock in the future. See "Underwriting" for a discussion of the factors considered in determining the initial public offering price. There can be no assurance that an active trading market will develop or be sustained after this offering. The Company believes that factors such as announcements of developments related to the Company's business, announcements of technological innovations or new products or enhancements by the Company or its competitors, sales by competitors, including sales to the Company's customers, sales of the Company's Common Stock into the public market, including by members of management, developments in the Company's relationships with its customers, partners, distributors and suppliers, shortfalls or changes in revenues, gross profits, earnings or losses or other financial results from analysts' expectations, regulatory developments, fluctuations in results of operations, and general conditions in the Company's market, of the markets served by the Company's customers, or the economy could cause the price of the Company's Common Stock to fluctuate, perhaps substantially. In addition, in recent years the stock market, in general, and the market for shares of small capitalization and technology stocks in particular, have experienced extreme price fluctuations, which have often been unrelated to the operating performance of affected companies. There can be no assurance that the market price of the Company's Common Stock will not experience significant fluctuations in the future, including fluctuations that are unrelated to the Company's performance. Such fluctuations could materially adversely affect the market price of the Company's Common Stock.

Broad Discretion of Management to Allocate Offering Proceeds. The Company will use approximately $16.2 million to repay one-half of the outstanding principal and estimated interest on its 13.75% Senior Secured Bridge Notes and the remaining $31.8 million for working capital and other general corporate purposes including working capital to fund anticipated operating losses and capital

expenditures. The Company may, when and if the opportunity arises, use a portion of the proceeds to acquire or invest in complimentary business, products or technologies. The Company's management will have broad discretion to allocate the remaining proceeds of this offering, and the amounts actually expended for each use listed above may vary significantly depending on a number of factors, including the amount of future revenues, the amount of cash generated or used by the Company's operations, the progress of the Company's product development efforts, technological advances, and the status of competitive products. There can be no assurance that the proceeds will be

utilized in a manner that the stockholders deem optimal, or that the proceeds can or will be invested to yield a significant return.

Shares Eligible for Future Sale After the Offering. Sales of substantial amounts of Common Stock in the public market after this offering or the anticipation of such sales could materially affect then prevailing market prices. All of the 5,000,000 shares offered hereby may be resold immediately in the public market. Beginning 90 days after the date of this Prospectus, approximately 298,155 additional shares may be resold in the public market. Beginning 180 days after the date of this Prospectus, upon expiration of pre-existing lock-up agreements and lock-up agreements between the representatives of the Underwriters and officers, directors and certain stockholders of the Company, approximately 915,774 total shares will be eligible for sale without restriction under Rule 144(k) or Rule 701 under the Securities Act of 1933, as amended (the "Securities Act"), and 14,941,348 shares will be eligible for sale subject to compliance with the restrictions of Rule 144 and, under certain circumstances, Rule 701 under the Securities Act. Any early release of the lock-up agreement by the Underwriters, which, if granted, could permit sales of a substantial number of shares and could adversely affect the trading price of the Company's shares, may not be accompanied by an advance public announcement by the Company. Holders of approximately 15,338,305 shares of Common Stock and the holders of the Note Warrants (the "Registrable Securities") also will have the right to include such shares in any future registration of securities effected by the Company and to require the Company to register their shares for future sale, subject to certain exceptions. See "Description of Securities--Registration Rights of Certain Holders" and "Shares Eligible for Future Sale."

Control by Existing Stockholders. Following the completion of this offering, members of the Board of Directors and the officers of the Company, together with entities that may be deemed affiliates of or related to such persons or entities, will beneficially own approximately 58.4% (approximately 56.5% on a fully diluted basis, assuming the exercise of all warrants and vested and unvested options held by such persons and outstanding at June 30, 1998) of the outstanding shares of Common Stock of the Company. Accordingly, these stockholders are able to significantly influence the election of the members of the Company's Board of Directors and significantly influence the outcome of corporate actions requiring stockholder approval, such as mergers and acquisitions. This level of ownership may have a significant effect in delaying, deferring or preventing a change in control of the Company and may adversely affect the voting and other rights of other holders of Common Stock. See "Management--Directors and Executive Officers," "--Principal Stockholders" and "Description of Capital Stock."

Effect of Certain Charter and Bylaw Provisions. Certain provisions of the Company's Restated Certificate of Incorporation and Bylaws may have the effect of making it more difficult for a third party to acquire or of discouraging a third party from attempting to acquire, control of the Company. Such provisions could limit the price that certain investors might be willing to pay in the future for shares of the Company's Common Stock. Certain of these provisions allow the Company to issue up to 15,000,000 shares of Preferred Stock and fix the rights and preferences thereof without any vote or further action by the stockholders, eliminate the right of stockholders to act by written consent without a meeting and eliminate cumulative voting in the election of directors. The rights of holders of Common Stock will be subject to, and may be adversely affected by, the rights of holders of any Preferred Stock that may be issued in the future. These provisions may make it more difficult for stockholders to take certain corporate actions and could have the effect of delaying or preventing a change in control of the Company. Certain provisions of Delaware law and Washington law applicable to the Company could also delay or make more difficult a merger, tender offer or proxy contest involving the Company. Such provisions include Section

203 of the Delaware General Corporation Law, which prohibits a Delaware corporation from engaging in any business combination with any interested

stockholder for a period of three years unless certain conditions are met, and Chapter 23B.19 of the Washington Business Corporation Act, which prohibits a corporation operating in Washington from engaging in certain significant business transactions with a person or group of persons who beneficially own 10% of the voting securities of such corporation for a period of five years unless certain conditions are met. After the five-year period, such significant business transaction must still comply with certain fair price provisions of such statute. See "Management" and "Description of Securities--Anti-Takeover Provisions of Delaware and Washington Law and Charter Documents."

Immediate and Substantial Dilution. Investors in Common Stock in this offering will experience immediate dilution in the net tangible book value of their shares. At the initial public offering price of $10.50 per share, dilution to new investors will be $8.00 per share. Additional dilution will occur upon exercise of outstanding stock options and warrants. If the Company seeks additional capital in the future, the issuance of shares or convertible debt to obtain such capital may lead to further dilution. See "Dilution."

USE OF PROCEEDS

The net proceeds to the Company from the sale and issuance of the 5,000,000 shares of Common Stock offered hereby, at an assumed initial public offering price of $10.50 per share, are estimated to be $48.0 million ($55.3 million if the Underwriters' over-allotment option is exercised in full). The Company will use approximately $16.2 million of the net proceeds to repay one-half of the outstanding principal and estimated accrued interest on its 13.75% Senior Secured Bridge Notes and the remaining proceeds for general corporate purposes, including working capital to fund anticipated operating losses and capital expenditures. The Company may, when and if the opportunity arises, use a portion of the proceeds to acquire or invest in complimentary business, products or technologies. The Company's management will have broad discretion to allocate the remaining proceeds of this offering, and the amounts actually expended for each use listed above may vary significantly depending on a number of factors, including the amount of future revenues, the amount of cash generated or used by the Company's operations, the progress of the Company's product development efforts, technological advances, and the status of competitive products. Pending such uses, the Company intends to invest such funds in short-term, investment grade, interest-bearing obligations. See "Management's Discussion and Analysis of Financial Condition and Results of Operations--Liquidity and Capital Resources."

DIVIDEND POLICY

The Company has never declared or paid any cash dividends on its capital stock or other securities. The Company currently anticipates that its will retain all of its future earnings for use in the expansion and operation of its business and does not anticipate paying cash dividends in the foreseeable future. See Note 5 of Notes to Financial Statements.

CAPITALIZATION

The following table sets forth the capitalization of the Company as of June 30, 1998 (i) on an actual basis the conversion of convertible and redeemable Preferred Stock to Common Stock and the conversion of Preferred Stock warrants to Common Stock warrants, and the receipt by the Company of the net proceeds from the sale of the 5,000,000 shares of Common Stock offered by the Company hereby at an assumed initial public offering price of $10.50 per share, (ii) and as adjusted to give effect to the sale by the Company of the 5,000,000 shares of Common Stock offered hereby at an assumed offering price of $10.50 per share, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by the Company, and the

application of the estimated proceeds therefrom as set forth in "Use of Proceeds." This table should be read in conjunction with the Financial Statements and the Notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Prospectus.

<TABLE>
<CAPTION>

	AS OF JUNE 30, 1998	
	ACTUAL	AS ADJUSTED
	(IN THOUSANDS)	
<S>	<C>	<C>
13.75% Senior Secured Bridge Notes	$29,708	$13,508
Other debt, including capital lease obligations	5,392	5,392
Convertible and redeemable preferred stock	49,282	--
Convertible and redeemable preferred stock warrants	4,423	--
Stockholders' equity:		
Preferred stock, 20,000,000 shares authorized, 13,130,350 shares which have been designated as convertible and redeemable, actual; 15,000,000 shares authorized, none issued or outstanding, as adjusted	--	--
Common stock, 40,000,000 shares authorized, 3,035,927 shares issued and outstanding, actual; 150,000,000 shares authorized, 21,166,277 shares issued and outstanding, as adjusted(1)	2,162	103,867
Deferred stock compensation	(877)	(877)
Accumulated deficit	(50,082)	(50,082)
Total stockholders' equity (deficit)	(48,797)	52,908
Total capitalization	$40,008	$71,808

</TABLE>

(1) Based on the number of shares outstanding on June 30, 1998. Excludes as of June 30, 1998 (a) 3,277,760 shares issuable upon exercise of outstanding options at a weighted average exercise price of $1.49 per share as of June 30, 1998, (b) 657,005 shares issuable upon exercise of outstanding warrants at a weighted average exercise price of $0.60 per share as of such date and (c) an aggregate of 2,010,639 shares available for future issuance of stock options under the 1995 Stock Option Plan, the 1998 Stock Option Plan, the Directors' Plan and the Purchase Plan. See "Management--Stock Plans" and Note 6 of the Notes to Financial Statements.

DILUTION

As of June 30, 1998, the Company had a pro forma net tangible book value of approximately $4.9 million, or $0.30 per share of Common Stock. Pro forma net tangible book value represents total tangible assets less total liabilities divided by the pro forma number of shares of Common Stock outstanding, assuming the conversion of convertible and redeemable Preferred Stock to Common Stock and the conversion of Preferred Stock warrants to Common Stock warrants. Without taking into account any other changes in the pro forma net tangible book value after June 30, 1998, other than to give effect to the receipt by the Company of the net proceeds from the sale of the 5,000,000 shares of Common Stock offered by the Company hereby at an assumed initial public offering price of $10.50 per share, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by the Company, the pro forma net tangible book value at June 30, 1998 would have been approximately $52.9 million, or $2.50 per share. This represents an immediate increase in net tangible book value of $2.20 per share to existing

stockholders and an immediate dilution of $8.00 per share to new investors purchasing shares in this offering. The following table illustrates this per share dilution:

	<C>	<C>
Assumed initial public offering price per share.....		$10.50
Pro forma net tangible book value per share as of June 30, 1998.....	$0.30	
Increase per share attributable to new investors.....	2.20	
Pro forma net tangible book value per share after the offering.		2.50
Dilution per share to new investors.....		$ 8.00

The following table summarizes, on a pro forma basis, as of June 30, 1998, the number of shares of Common Stock purchased from the Company, the total consideration paid and the average price per share paid by (i) existing stockholders and (ii) new investors (before deducting estimated underwriting discounts and commissions and offering expenses payable by the Company):

	SHARES PURCHASED		TOTAL CONSIDERATION		AVERAGE PRICE PER
	NUMBER	PERCENT	AMOUNT	PERCENT	SHARE
<S>	<C>	<C>	<C>	<C>	<C>
Existing stockholders(1)....	16,166,277	76.4%	$ 49,562,804	48.6%	$ 3.07
New investors.....	5,000,000	23.6	52,500,000	51.4%	10.50
Total.....	21,166,277	100.0%	$102,062,804	100.0%	

(1) Based on the pro forma number of shares outstanding on June 30, 1998. Excludes as of June 30, 1998 (a) 3,277,760 shares issuable upon exercise of outstanding options at a weighted average exercise price of $1.49 per share as of June 30, 1998, (b) 657,005 shares issuable upon exercise of outstanding warrants at a weighted average exercise price of $0.60 per share as of such date and (c) an aggregate of 2,010,639 shares available for future issuance under the 1995 Stock Option Plan, the 1998 Stock Option Plan, the Directors' Plan and the Purchase Plan. See "Management--Stock Plans" and Note 6 of Notes to Financial Statements.

SELECTED FINANCIAL DATA

The statement of operations data for the period from January 19, 1995 (inception) to December 31, 1995, and for the years ended December 31, 1996 and 1997 and the balance sheet data as of December 31, 1996 and 1997, have been derived from the audited financial statements of the Company included elsewhere in this Prospectus that have been audited by Ernst & Young LLP, independent auditors. The balance sheet data as of December 31, 1995 have been derived from the audited financial statements of the Company not included herein. The statement of operations data for the six months ended June 30, 1997 and 1998 and the balance sheet data at June 30, 1998 are derived from unaudited financial statements included elsewhere in this Prospectus and contain all adjustments, consisting of normal recurring accruals, necessary for a fair presentation of the financial position and results of operations for such periods. The results of operations for the six months ended June 30, 1998 are not necessarily indicative of results to be expected for the full fiscal year. The data set forth below should be read in conjunction with the

financial statements of the Company, including the notes thereto, and with "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Prospectus.

<TABLE>
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	PERIOD FROM JANUARY 19, 1995 (INCEPTION) TO DECEMBER 31,	YEAR ENDED DECEMBER 31,		SIX MONTHS ENDED JUNE 30,	
	1995	1996	1997	1997	1998
	(IN THOUSANDS, EXCEPT PER SHARE DATA)				
<S>	<C>	<C>	<C>	<C>	<C>
STATEMENT OF OPERATIONS DATA:					
Net revenue	$ --	$ 1,291	$ 1,450	$ 392	$ 6,501
Cost of sales	--	1,097	1,728	516	6,396
Gross profit (loss)	--	194	(278)	(124)	105
Operating expenses:					
Research and development	883	7,186	13,083	5,365	8,025
Sales and marketing	84	1,704	5,383	2,244	4,087
General and administrative	168	2,434	3,762	1,367	2,429
Total operating expenses	1,135	11,324	22,228	8,976	14,541
Loss from operations	(1,135)	(11,130)	(22,506)	(9,100)	(14,436)
Other income (expense), net	135	335	402	173	(1,747)
Net loss	$(1,000)	$(10,795)	$(22,104)	$(8,927)	$(16,183)
Pro forma net loss per share(1)			$ (1.54)		$ (1.01)
Weighted average common shares and equivalents pro forma(1)			14,383		16,061

</TABLE>

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	DECEMBER 31,			JUNE 30, 1998	
	1995	1996	1997	ACTUAL	PRO FORMA(2)
	(IN THOUSANDS)				(UNAUDITED)
<S>	<C>	<C>	<C>	<C>	<C>
BALANCE SHEET DATA:					
Cash and cash equivalents	$ 1,422	$ 19,092	$ 13,334	$ 20,311	20,311
Working capital	4,280	17,722	15,677	3,787	3,787
Total assets	6,135	21,747	22,575	46,557	46,557
13.75% Senior Secured Bridge Notes	--	--	--	29,708	29,708
Other debt	128	2,319	4,147	5,392	5,392
Convertible and redeemable preferred stock	5,500	30,100	49,282	49,282	--
Convertible and redeemable preferred stock warrants	--	--	128	4,423	--
Accumulated deficit	(1,000)	(11,795)	(33,899)	(50,082)	(50,082)

Stockholders' equity (deficit).....	(990)	(11,785)	(33,136)	(48,797)	4,908

</TABLE>

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(1) See Note 1 of Notes to Financial Statements for an explanation of the method employed to compute per share amounts to determine the number of shares used in computing pro forma net loss per share.

(2) Adjusted to reflect the conversion of convertible and redeemable Preferred Stock into Common Stock and the conversion of Preferred Stock warrants to Common Stock warrants. See "Description of Securities."

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with "Selected Financial Data" and the Company's Financial Statements and Notes included elsewhere in this Prospectus. The discussion in this Prospectus contains forward-looking statements that involve risks and uncertainties, such as statements of the Company's plans, objectives, expectations and intentions. The cautionary statements made in this Prospectus should be read as being applicable to all related forward-looking statements wherever they appear in this Prospectus. The Company's actual results could differ materially from those discussed here. Factors that could cause or contribute to such differences include those discussed in "Risk Factors," as well as those discussed elsewhere herein. See "Risk Factors."

OVERVIEW

Metawave designs, develops, manufactures and markets spectrum management solutions for the wireless communications industry. Metawave's spectrum management solutions, consisting of smart antenna systems, applications software and engineering services, enable cellular network operators to increase overall network capacity, reduce network operation costs, better manage network infrastructure and stimulate end user demand through improved system quality. Using its proprietary technologies, the Company has developed products that address the capacity, coverage, and call quality problems faced by cellular network operators.

The Company was incorporated in January 1995. Net revenue since inception has been attributable to an engineering consulting contract in 1996, services rendered by the Company's Network Services division during 1997 and sales of the SpotLight 2000 system during the six months ended June 30, 1998. The Company's Network Services division was discontinued during the first quarter of 1998. Since inception, the Company has incurred significant losses and as of June 30, 1998, had an accumulated deficit of $50.1 million.

From inception through June 30, 1998, the Company's operating activities related primarily to conducting research and development, building market awareness, recruiting management and technical personnel and building an operating infrastructure. In 1997, the Company hired a new Chief Executive Officer and a new Chief Financial Officer and added managerial personnel in the engineering, product management, sales and administrative areas. Shipment for commercial sale of the SpotLight 2000 system began late in the fourth quarter of 1997. Since launching its SpotLight 2000 system, the Company has increased operating expenditures in an effort to increase sales and expand manufacturing capacity. In light of the progression of the Company from a development stage to an operating stage during the past two years, the Company believes that period to period comparisons of its financial results should not be relied upon as an indicator of future performance.

There are two components of net revenue attributable to the SpotLight 2000 system, product revenue and service revenue. Product revenue is comprised of both the sale of hardware and the licensing of software. Service revenue is derived from installation, consulting services and maintenance contracts. The Company believes that substantially all of its revenues in the foreseeable

future will be derived from sales of its SpotLight 2000 system. Sales cycles can be lengthy and the related contracts typically include performance specifications and customer acceptance conditions in connection with the initial sale of each system to each customer. The Company recognizes net revenue when the product has been shipped and all customer acceptance conditions have been satisfied. The Company recognizes service revenue when the services have been performed. If the Company does not satisfy conditions in such contracts or satisfaction of conditions is delayed, revenues in any particular period could fall significantly below the Company's expectations. Contract terms, including pricing and acceptance criteria, will typically vary depending upon the order, and the nature and extent of installation and consulting services. Consequently, net revenue may vary from quarter to quarter depending on the length of the sales cycle

and the applicable contract terms. If anticipated sales and shipments in any quarter do not occur when expected, expenses and inventory levels could be disproportionately high.

Cost of sales typically consists of material components, manufacturing assembly and test, and overhead expenses. The Company believes that for its SpotLight 2000 system to achieve broad market acceptance and compete effectively with alternative systems, the Company's average selling prices must decline. In order to achieve lower average selling prices without adversely affecting gross profits, the Company must successfully reduce the manufacturing costs of its product through engineering improvements and economies of scale in production and purchasing. There can be no assurance, however, that the Company will be able to achieve cost savings at a rate necessary to keep pace with competitive pricing pressures. The Company expects that its gross margins will continue to be affected by a variety of other factors, including increased investment in manufacturing facilities and equipment, changes in labor costs, changes in product mix due to a shift from analog-only to analog/CDMA dual-mode system sales, changes in warranty expense or inventory obsolescence, increased sourcing and changes in prices of components and subassemblies from third party manufacturers and increased price competition.

The Company's manufacturing operations consist primarily of supplier and commodity management and assembling finished goods from components and subassemblies purchased from outside suppliers. In May 1998, the Company moved to significantly larger facilities to accommodate the Company's current research, development and manufacturing needs in the near term. The Company plans to further expand its manufacturing capacity in the future if and to the extent the Company's products achieve market acceptance and demand increases. If such expansion occurs, substantial investments in additional capital equipment and the recruiting and training of additional personnel will be required, which may include increased sourcing of components from third parties as well as increased system integration and full-configuration testing or investment in additional manufacturing facilities. See "Risk Factors--Limited Manufacturing Experience; No Assurance of Successful Expansion of Operations."

The Company recently upgraded its financial and accounting software to an enterprise resource planning software package that integrates manufacturing, finance and sales order management. The Company anticipates that additional upgrades to its management information systems will be required in the near future to address the expected increased volume and complexity of the Company's transactions. See "Risk Factors--Management of Growth; New Management Team."

Research and development expense consists principally of salaries and related personnel expenses, consultant fees and prototype expenses related to the design, development, testing and enhancement of the Company's SpotLight 2000 system. As of June 30, 1998, all research and development costs had been expensed as incurred. The Company believes that continued investment in research and development is critical to attaining its strategic product and

cost reduction objectives and, as a result, expects these expenses to increase significantly in absolute dollars in the future. Sales and marketing expense consists of salaries, sales commissions and related expenses for personnel engaged in marketing, sales and field service support functions, as well as promotional expenditures. The Company expects sales and marketing expense to increase significantly in absolute dollars in the future. General and administrative expense consists primarily of salaries and personnel related expenses, recruiting expenses, professional fees and other general corporate expenses. The Company expects general and administrative expense to increase in absolute dollars as the Company adds personnel and incurs additional costs related to the growth of its business and operation as a public company.

The revenue and profit potential of the Company's business is unproven and the Company's limited operating history makes its future operating results difficult to predict. The Company believes that its growth and future success will be dependent upon the broad acceptance of the SpotLight 2000 system by cellular network operators. Because the SpotLight 2000 system was only recently introduced, the Company is unable to predict with any degree of certainty whether it will achieve market acceptance.

There can be no assurance that the Company will ever achieve profitability or significant revenues on a quarterly or an annual basis. Because of the limited size of the Company's customer base and the large size of customer orders, revenues derived from a small number of customers will likely represent a significant portion of revenue in any given period. Thus, a decrease in demand for the Company's systems from any customer for any reason is likely to result in significant periodic fluctuations in revenue. Due to the highly concentrated nature of the cellular industry, the Company believes that the number of potential customers for future products, if any, will be small. Failure by the Company to capture a significant number of the cellular network operators as customers could have a material adverse effect on the Company's business and operating results. See "Risk Factors--Limited Operating History; Accumulated Deficit; Anticipated Losses," "--Significant Fluctuations in Operating Results," "--Significant Customer Concentration" and "--Uncertainty of Market Acceptance; Lengthy Sales Cycle."

RESULTS OF OPERATIONS

SIX MONTHS ENDED JUNE 30, 1998 AND 1997

Net Revenue. Net revenue for the six months ended June 30, 1998 was $6.5 million, substantially all of which was derived from sales of the Motorola HDII analog version of the Spotlight 2000 system to three customers. Net Revenue for the six months ended June 30, 1997 was $392,000 all of which was service revenue. International sales were 51.5% of net revenue for the six months ended June 30, 1998. Although the Company anticipates that international sales will continue to account for a significant portion of its sales, the Company expects international sales to decrease as a percentage of net revenue.

Gross Profit (Loss). Cost of sales was $6.4 million and gross profit was $105,000 for the six months ended June 30, 1998. Gross profit was adversely affected by unabsorbed fixed manufacturing overhead costs due to the expansion of manufacturing capacity in advance of unit sales volume increases. Additionally, increases to the warranty and inventory obsolescence reserves negatively impacted gross profit. Cost of sales was $516,000 and gross profit (loss) was $(124,000) for the six months ended June 30, 1997. Cost of sales in this period reflected the direct costs of the Network Services division related supplies and expenses, and gross profit (loss) was adversely affected by these relatively high fixed costs.

Research and Development. For the six months ended June 30, 1998, research and development expense was $8.0 million, of which $5.0 million was payroll and benefits. For the six months ended June 30, 1997, research and development expense was $5.4 million, of which $3.4 million was payroll and benefits. The

increase in research and development expense was primarily attributable to increased staffing, prototype material costs and other associated expenses relating to enhancing the features and functionality of the SpotLight 2000 system.

Sales and Marketing. For the six months ended June 30, 1998, sales and marketing expense was $4.1 million, of which $2.2 million was payroll and benefits. For the six months ended June 30, 1997, sales and marketing expense was $2.2 million, of which $1.4 million was payroll and benefits. The increase in sales and marketing expense was primarily attributable to expansion of the Company's direct sales force, as well as increased public relations and other promotional expenditures.

General and Administrative. For the six months ended June 30, 1998, general and administrative expense was $2.4 million, of which $1.8 million was payroll, $360,000 was in connection with certain patent license agreements and $255,000 was stock compensation charges. For the six months ended June 30, 1997, general and administrative expense was $1.4 million, of which $1.2 million was payroll and related expenses. The increase in general and administrative expense was primarily attributable to increased personnel and facility expenses necessary to support the Company's growth. The stock compensation charge for the six months ended June 30, 1998 also contributed to the increase over the prior year.

Deferred Stock Compensation. In connection with the grant of certain stock options during 1997, the Company recorded aggregate deferred stock compensation of approximately $1.9 million,

representing the difference between the deemed value of the Common Stock for accounting purposes and the option exercise price of such options at the date of grant. Such amount is recorded as deferred stock compensation and amortized ratably over the vesting period as stock compensation expense. For the six months ended June 30, 1998, stock compensation expense was $328,000. For the six months ended June 30, 1997, the Company recorded deferred stock compensation of $224,000 and amortized a stock compensation expense of $22,000. For the year ended December 31, 1997, the aggregate stock compensation expense was $676,000.

Interest Expense and Net Other Income. Interest expense increased to $2.2 million for the six months ended June 30, 1998, compared to $236,000 for the six months ended June 30, 1997. The increase was primarily attributable to the $2.0 million interest expense and associated fees to secure the $29.0 million of 13.75% Senior Secured Bridge Notes. Net other income consists primarily of earnings on the Company's cash and cash equivalents and short-term investments. Net other income increased to $484,000 for the six months ended June 30, 1998, from $409,000 for the six months ended June 30, 1997. The increase was attributable to higher average cash and cash equivalent balances.

Income Taxes. The Company has had a net loss for each period since inception. As of June 30, 1998, the Company had approximately $39.3 million of net operating loss carryforwards and $1.0 million of research and development credit carryforward for federal income tax purposes, which begin to expire in 2009. The Company has provided a full valuation allowance on the deferred tax asset, consisting primarily of net operating loss carryforward, because of uncertainty regarding its realizability. See Note 7 of Notes to Financial Statements.

YEARS ENDED DECEMBER 31, 1997, 1996 AND 1995 (INCEPTION PERIOD)

Net Revenue. Net revenue for 1997 and 1996 was $1.5 million and $1.3 million, respectively, and was attributable to services provided by the Network Services division in 1997 and a one-time engineering consulting contract in 1996. During 1995, the Company was primarily engaged in product development and accordingly, recorded no revenue. The Network Services division was discontinued in March 1998.

Gross Profit (Loss). Cost of sales was $1.7 million and gross profit (loss) was $(278,000) for the year ended December 31, 1997. Gross profit (loss) in 1997 was adversely affected by the high fixed cost of the Network Services division during its initial year of operation. Cost of sales in this period consists primarily of direct labor and materials related to services rendered in generating the revenue for the period. Cost of sales was $1.1 million and gross profit was $194,000 for the year ended December 31, 1996. Gross profit in 1996 was attributable to a one-time engineering consulting contract.

Research and Development. Research and development expense was $13.1 million, $7.2 million and $883,000 in 1997, 1996 and 1995, respectively. The increases in research and development expense were primarily attributable to increased staffing and associated costs related to product development. During 1997, research and development expense also included the design and development of manufacturing infrastructure that was initially used for prototyping activities.

Sales and Marketing. Sales and marketing expense was $5.4 million, $1.7 million and $84,000 in 1997, 1996 and 1995, respectively. The increases in sales and marketing expense were primarily attributable to expansion of the Company's direct sales force and costs associated with initial field trials of the SpotLight 2000 system.

General and Administrative. General and administrative expense was $3.8 million, $2.4 million and $168,000 in 1997, 1996 and 1995, respectively. The increases in general and administrative expense were primarily attributable to increased payroll and related expenses in hiring additional personnel and increased occupancy expenses necessary to support the Company's growth.

Interest Expense and Net Other Income. Interest expense was $449,000, $150,000 and $22,000 in 1997, 1996 and 1995, respectively. The increases in interest expense were primarily attributable to increased capital lease obligations and notes payable. Net other income was $851,000, $485,000 and

$157,000 in 1997, 1996 and 1995, respectively. The increases in net other income were primarily attributable to interest income resulting from higher cash and cash equivalent balances and short-term investments.

QUARTERLY RESULTS OF OPERATIONS

The following table sets forth certain unaudited quarterly statement of operations data for the six quarters ended June 30, 1998. In the opinion of management, this information has been prepared substantially on the same basis as the audited financial statements appearing elsewhere in this Prospectus, and all necessary adjustments, (consisting only of normal recurring adjustments) have been included in the amounts stated below to present fairly the unaudited quarterly results. The quarterly data should be read in conjunction with the audited financial statements of the Company and the notes thereto appearing elsewhere in this Prospectus. Such quarterly operating results are not necessarily indicative of the operating results for any future period.

<TABLE>
<CAPTION>

	THREE MONTHS ENDED					
	MARCH 31, 1997	JUNE 30, 1997	SEPT. 30, 1997	DEC. 31, 1997	MARCH 31, 1998	JUNE 30, 1998
	(IN THOUSANDS)					
<S>	<C>	<C>	<C>	<C>	<C>	<C>
Net revenue.....	$ 129	$ 263	$ 547	$ 511	$ 2,538	$ 3,963
Cost of sales.....	114	402	557	655	2,910	3,486

Gross profit (loss).....	15	(139)	(10)	(144)	(372)	477
Operating expenses:						
Research and development.....	2,693	2,672	3,559	4,159	3,575	4,450
Sales and marketing...	922	1,322	1,753	1,385	1,996	2,091
General and administrative.....	655	712	1,073	1,322	1,044	1,385
Total operating expenses.....	4,270	4,706	6,385	6,866	6,615	7,926
Operating loss.....	(4,255)	(4,845)	(6,395)	(7,010)	(6,987)	(7,449)
Other income, net.....	204	205	191	250	165	319
Interest expense.....	(99)	(136)	(90)	(124)	(152)	(2,079)
Net loss.....	$(4,150)	$(4,776)	$(6,294)	$(6,884)	$(6,974)	$(9,209)
Pro forma net loss per share.....	$ (0.31)	$ (0.36)	$ (0.43)	$ (0.43)	$ (0.44)	$ (0.57)

</TABLE>

The Company's net revenue for the quarters in 1997 consisted primarily of service revenue. Net revenue for the quarters ended March 31, 1998 and June 30, 1998 was primarily attributable to sales of the Company's SpotLight 2000 system.

The significant fluctuations in the Company's historical quarterly operating results are principally a function of the fact that the Company was a development stage company through the latter part of the fourth quarter of 1997. These fluctuations are largely explained by significant increases and large variations in expenses incurred in connection with the transition from development stage to operating stage. Operating expense increased in each quarter, primarily reflecting the increased expenditures related to the Company's product development and its expanding workforce.

The Company will likely experience significant fluctuations in its operating results on a quarterly and an annual basis in the future. In connection with its efforts to increase production of its recently introduced SpotLight 2000 system, the Company expects to continue to make substantial investments in capital equipment, to recruit and train additional personnel and to invest in facilities and management information systems. These expenditures may be made in advance of, and in anticipation of, increased sales and, therefore, gross profits may be adversely affected by short-term inefficiencies associated with the addition of equipment, personnel or facilities and costs may increase as a percentage of revenues from time to time on a periodic basis. As a result, the Company's operating results will vary from period to

period. Because of the limited size of the Company's customer base and the large size of customer orders, revenues derived from a small number of customers will likely represent a significant portion of revenue in any given period. Accordingly, a decrease in demand for the Company's systems from any customer for any reason is likely to result in significant periodic fluctuations in revenue. In addition, most of the Company's contracts contain conditional acceptance provisions for certain product sales and the Company delays recognition of revenues that are subject to such contingencies until all such conditions are satisfied. If the Company could not satisfy conditions in such contracts or satisfaction of conditions were delayed for any reason, revenues in any particular period could fall significantly below the Company's expectations. Many other factors may affect the Company's business and operating results in future periods. See "Risk Factors--Limited Operating History; Accumulated Deficit; Anticipated Losses" and "--Significant Fluctuations in Operating Results."

YEAR 2000 COMPLIANCE

Many currently installed computer systems and software products are coded to accept only two-digit entries in the date code field. Beginning in the year 2000, these date code fields will need to accept four-digit entries to distinguish 21st century dates from 20th century dates. As a result, in less than two years, computer systems and software used by many companies may need to be upgraded to comply with such year 2000 requirements. In 1998 the Company installed an enterprise resource planning system that the vendor warrants is year 2000 compliant. The Company's current estimate is that the costs associated with the year 2000 issue, and the consequences of incomplete or untimely resolution of the year 2000 issue, will not have a material adverse effect on the result of operations or financial position of the Company in any given year. However, despite the Company's efforts to address the year 2000 impact on its internal systems, the Company has not fully identified such impact or whether it can resolve it without disruption of its business and without incurring significant expense. In addition, even if the internal systems of the Company are not materially affected by the year 2000 issue, the Company could be affected through disruption in the operation of the enterprises with which the Company interacts. See "Risk Factors--Year 2000 Compliance."

LIQUIDITY AND CAPITAL RESOURCES

Since inception, the Company has financed its operations primarily through private sales of Preferred Stock and Common Stock, the issuance of debt instruments, capital leases arrangements and borrowings under various lines of credit. Net proceeds from these transactions totaled $85.8 million as of June 30, 1998.

For the six months ended June 30, 1998, net cash used in operating activities was $20.8 million resulting from a net loss of $16.2 million and increases of $8.1 million in inventories offset by decreases of $4.9 million in accounts payable, accrued liabilities and other liabilities. Net cash used in operating activities was $23.6 million, $10.2 million and $309,000 in 1997, 1996 and 1995, respectively. For 1997, cash used in operating activities resulted from a net loss of $22.1 million and increases of $4.1 million in inventories, $1.3 million in accounts receivable and $34,000 in prepaid expenses and deposits partially offset by increases of $926,000 in accounts payable, accrued liabilities and other liabilities and $1.8 million in depreciation and amortization. For 1996, cash used in operating activities resulted from a net loss of $10.8 million and increases of $67,000 in accounts receivable and $222,000 in prepaid expenses partially offset by increases of $906,000 in accounts payable, accrued liabilities and other liabilities and $520,000 in depreciation and amortization. Cash used in operating activities in 1995 was attributable to a net loss of $1.0 million and an increase of $55,000 in prepaid expenses partially offset by an increases of $206,000 in accounts payable, accrued liabilities and other liabilities and $19,000 in depreciation and amortization.

Net cash provided by (used in) investing activities of $(504,000), $(621,000), $3.1 million and $(3.8 million) for the six months ended June 30, 1998 and the years ended December 31, 1997, 1996 and 1995, respectively, was primarily related to purchases of property and equipment and purchases of short term investments offset by maturities of short term investments. The large increases in working capital on a period-to-period basis are a direct result of the rapid growth of the Company in support of the product development and sales and marketing efforts as well as the development of an operational infrastructure to

support the sales of product in the recent quarters. Such growth has required the Company to purchase additional equipment and software and increase purchase of materials, which resulted in corresponding increases in inventories and

accounts payable.

Cash provided by (used in) financing activities of $28.2 million for the six months ended June 30, 1998 consisted of $29.0 million in proceeds from issuance of 13.75% Senior Secured Bridge Notes offset by $130,000 in payments on debt securities and $717,000 in principal payments on capital lease obligations. Cash provided by financing activities of $18.4 million in 1997 consisted primarily of $19.2 million in net proceeds from the issuance of Series D Preferred Stock. Cash provided by financing activities of $24.8 million in 1996 was primarily from net proceeds of $24.6 million from the issuance of Series B and C Preferred Stock and $500,000 of proceeds from the issuance of a note payable. Cash provided by financing activities of $5.5 million in 1995 consisted primarily of $5.5 million in net proceeds from the issuance of Series A Preferred Stock.

In April 1998, the Company issued $29.0 million in aggregate principal 13.75% Senior Secured Bridge Notes due April 28, 2000 to certain institutional and corporate investors. The 13.75% Senior Secured Bridge Notes are secured by the Company's personal property and intellectual property. The Company is required to comply with certain covenants and certain reporting requirements determined by the noteholders. On April 28, 1999 and each 180-day period thereafter until the 13.75% Senior Secured Bridge Notes are repaid in full, the interest rate will increase by 200 basis points up to a maximum of 18.0%. In addition, the Company issued the Note Warrant to purchase an aggregate of 537,500 shares of Series D Preferred Stock at a purchase price of $0.01 per share. The Note Warrants expire on April 28, 2000. Pursuant to the terms of the 13.75% Senior Secured Bridge Notes, upon the closing of this offering, the Company is obligated to repay one-half of the aggregate principal amount of the 13.75% Senior Secured Bridge Notes outstanding, together with accrued but unpaid interest thereon. The remaining outstanding 13.75% Senior Secured Bridge Notes are redeemable at the Company's option at any time prior to the maturity date. Upon the closing of this offering, the Company has the right to redeem all of the 13.75% Senior Secured Bridge Notes, Note Warrants and to repurchase any stock issued upon exercise of the Note Warrants for an aggregate redemption price of $40.6 million.

The Company has a credit facility with a commercial bank, which provides for a revolving credit line of $7.5 million to support working capital with a $3.0 million sublimit for issuance of trade-related commercial and standby letters of credit, which matures on October 14, 1999. Outstanding balances on the credit line bear interest at the bank's prime rate and are secured by the Company's accounts receivable and inventory. As of the date hereof, no amounts were outstanding under this revolving credit line secured by accounts receivable and $2.5 million is outstanding related to issuance of a standby letter of credit. See Note 4 of Notes to Financial Statements.

The Company has several capital leases with terms ranging from 36 to 48 months. At June 30, 1998, the Company's outstanding capital lease obligations were $5.1 million, accruing interest at rates ranging from 7.25% to 14.50%. On April 17, 1998, the Company entered into an additional $3,500,000 capital lease line with a 36 month term. See Note 8 of Notes to Financial Statements.

As of June 30, 1998, the Company had $20.3 million of cash and cash equivalents. As of June 30, 1998, the Company's principal commitments consisted of accounts payable, current debt payable, convertible and redeemable preferred stock and obligations outstanding under operating and capital leases. Although the Company has no material commitments for capital expenditures, management anticipates a substantial increase in its capital expenditures and lease commitments consistent with anticipated growth in operations, infrastructure and personnel. The Company may establish additional field service and customer support locations, which would require it to commit to additional lease obligations. In the future, the Company may support larger inventories in order to provide shorter lead times to customers and achieve purchasing efficiencies.

The Company will use approximately $16.2 million of the net proceeds

received from this offering to repay one-half of the outstanding principal and estimated accrued interest on the 13.75% Senior Secured Bridge Notes and the remaining proceeds of $31.8 million will be used for general corporate purposes, including working capital to fund anticipated operating losses and capital expenditures. See "Use of Proceeds." Following the expected application of the estimated net proceeds of this offering together with repayments of debt prior to this offering the Company will have $14.5 million in outstanding principal 13.75% Senior Secured Bridge Notes.

The Company believes that the net proceeds from this offering, together with its cash and cash equivalents, will be sufficient to meet its capital requirements for at least twelve months. The Company's future capital requirements will depend upon many factors, including the success or failure of the Company's efforts to expand its production, sales and marketing efforts, the status of competitive products and the requirements of the Company's efforts to develop new products and product enhancements. To the extent that the funds generated by this offering, together with existing resources and future earnings, are insufficient to fund the Company's future activities, the Company may need to raise additional funds through public or private financing. There can be no assurance that additional financing will be available to the Company on acceptable terms, or at all, or that such financing would not result in further dilution to existing stockholders. See "Use of Proceeds."

BUSINESS

OVERVIEW

Metawave designs, develops, manufactures and markets spectrum management solutions for the wireless communications industry worldwide. Metawave's spectrum management solutions, consisting of smart antenna systems, applications software and engineering services, enable cellular network operators to increase overall network capacity, reduce network operation costs, better manage network infrastructure and stimulate end user demand through improved system quality. Using its proprietary technologies, the Company has developed products that address the capacity, coverage and call quality problems faced by cellular network operators.

The Company's smart antenna systems utilize fixed beam-switching hardware and software algorithms to reduce system interference in order to enable more efficient utilization of finite radio frequency spectrum or "wireless bandwidth." The Company's products offer highly integrated system solutions that can reduce the need for costly infrastructure upgrades and additional cell site deployments, thereby enabling cellular network operators to reduce otherwise capital intensive outlays and to keep pace with subscriber growth. The Company's technology is designed to be leveraged across a variety of the market segments in the wireless communications industry, including the AMPS, CDMA, GSM, PCS, TDMA and WLL segments.

The Company's customers include ALLTEL, 360(degrees) Communications and Millicom affiliates, Telefonica Celular and St. Petersburg Telecom. The Company has completed a field trial with AirTouch and is currently conducting a field trial with GTE.

INDUSTRY BACKGROUND

The worldwide demand for wireless communications services has grown significantly in recent years, largely as a result of technological advancements and economies of scale that have substantially reduced the cost and improved the quality and reliability of wireless services for the business and consumer mass market. In addition, worldwide deregulation of the wireless communications industry and increased government allocation of spectrum have resulted in wider availability of wireless radio frequency and increased competition among existing and new wireless network operators, further reducing cost to the end user and stimulating demand. According to Dataquest, the number

of cellular and PCS subscribers increased 45% in 1997, from 134 million to 194 million, and is projected to be approximately 550 million by 2001.

The demand for wireless communications services is expected to continue to grow rapidly, as communications technology is driving the evolution of the digital information age. The convergence of data communications, telephony and wireless communications is straining public and private networks worldwide and requiring the development of new technologies in order to enable the rate of change to continue. Devices with wireless access such as mobile phones and palm computers and the combination of wireless and internet protocol-based LAN infrastructure may enable mobile customers to access services such as web initiated telephony, unified messaging and advanced conferencing.

The need for mobile communications ubiquity places a significant strain on wireless service providers given the fixed amount of radio frequency spectrum or wireless bandwidth available to deliver wireless services. Unlike traditional data and telephony communications bandwidth, which is a physical medium, wireless spectrum is an invisible medium and is generally allocated in fixed amounts by governments in U.S. and foreign markets. Traditional methods used in data and telephony networks for increasing available bandwidth through the adoption of new technologies, such as frame or cell based switching or dense wave division multiplexing, generally do not apply in wireless networks. Thus, the fundamental challenge for wireless network operators is to increase capacity, coverage and call quality within a fixed amount of wireless spectrum.

To address capacity, coverage and call quality issues, wireless operators have begun to deploy more spectrum-efficient digital technologies such as CDMA, GSM and TDMA since the late 1980s. However, because analog and digital cellular networks share the same fixed amount of spectrum, cellular network operators must remove analog channels to implement digital technology. To install one CDMA carrier into a network, an operator must clear 15 percent of its existing analog spectrum. Removal of analog spectrum creates additional capacity constraints within an existing analog network that is already nearing capacity limits from the growing demand for analog minutes of use. As digital traffic grows within analog systems, additional digital carriers must be added, requiring more analog channels to be cleared. According to the Cahners In-Stat Group, clearing analog spectrum to accommodate digital growth is expected to continue for the next five to seven years as demand for digital capacity increases.

The need to provide analog cellular service to increasing numbers of subscribers while simultaneously clearing fixed spectrum for digital deployment creates numerous challenges for cellular network operators. Traditionally, operators of 800 MHz cellular networks addressed capacity, coverage and call quality problems by building new cell sites. According to the Cellular Telecommunication Industry Association ("CTIA"), wireless network operators added approximately 21,000 new cell sites worldwide in 1997. However, constructing a new site, including land, building and equipment, can cost up to $1,000,000, and technical factors such as frequency reuse limitations diminish the marginal benefits of adding cell sites to networks. For example, building cell sites closer together increases interference and noise in the network, which reduces capacity and call quality, exacerbating the very problems the additional cell sites are intended to resolve. Cellular network operators also face significant community resistance arising from environmental concerns and aesthetic objections to the appearance of cell site towers.

In addition to building more cell sites, cellular network operators have adopted variations on antenna design. Traditionally, operators used omni-directional (360(degrees)) antennas, which receive and transmit in all directions around a cell site. This has the advantage of making all radio channels available to any cellular caller, but has the disadvantage of being susceptible to interference from all directions. In areas where interference is a problem, cellular network operators have often installed sectorized antennas, usually consisting of a suite of three antennas, each covering a different 120(degrees) sector around a cell site. While sectorized antennas reject

signals from outside their sector, decreasing the overall level of interference within a cell site, they can also reduce cell site capacity because each radio channel is permanently allocated to a specific sector, and therefore cannot be reused to cover other sectors.

The growing demand for wireless services and the difficulties encountered by cellular network operators in building additional cell sites and implementing digital technologies contribute to the need for a cost-effective solution to capacity, coverage and call quality problems. Cellular network operators need solutions that work within the framework of intense wireless service competition and reduced capital budgets. As they seek to provide ubiquitous wireless service and support increased subscriber demand, cellular network operators must address the fundamental challenge of achieving maximum capacity from finite spectrum resources. Metawave believes that the growing demand for wireless services as well as the set of technological problems and economic constraints imposed by finite spectrum resources presents an attractive market opportunity for providers of spectrum management solutions.

THE METAWAVE SOLUTION

Metawave's spectrum management solutions, consisting of smart antenna systems, applications software and engineering services, enable cellular network operators to increase overall network capacity, reduce network operation costs, better manage network infrastructure and stimulate end user demand through improved system quality. The Company's initial spectrum management platform, the SpotLight 2000 system, is a multibeam smart antenna technology that is compatible with the Motorola HDII and Lucent Series II base stations and AMPS and CDMA air interface protocols. The SpotLight 2000 system divides the cell site coverage pattern into 12 fixed beams and incorporates electronics and software to

create the optimum signal for each radio in the cell site. The Company's spectrum management solutions provide cellular network operators with the following benefits:

Cost-Effective Capacity Expansion. The SpotLight 2000 system enables cellular network operators to increase the capacity of their networks without the increased network complexity and expenses associated with new cell site development. The SpotLight 2000 system integrates narrow-beam antennas with RF signal-processing hardware and beam-switching algorithms to provide stronger signal reception and reduced interference. This enables cellular network operators to more efficiently allocate radio frequencies and thereby increase network capacity. The SpotLight 2000 system can be installed in a single cell site or in multiple sites in a network. The system can be used to increase analog capacity only or can be deployed in a dual-mode configuration to simultaneously increase both analog and CDMA capacity. Based on field trials, the Company estimates that the SpotLight 2000 system, when installed in a network of cell sites, can improve analog capacity by as much as 100% and, when used in a dual-mode system, can improve CDMA capacity by up to 40%.

Efficient Conversion to Digital Network Capability. The SpotLight 2000 system enables cellular network operators to use existing cell site infrastructure to support current traffic levels with less of their allocated spectrum and fewer channels. As a result, the SpotLight 2000 system facilitates the transition from frequency-intensive analog service to more spectrum-efficient digital service. Operators can use the SpotLight 2000 system to clear spectrum for the first and each subsequent CDMA carrier while maintaining analog capacity and service quality.

Improved Network Performance. By providing a stronger signal and by reducing interference, the SpotLight 2000 system can improve coverage in certain portions of a cell site's geographic footprint, such as the interior of buildings, where coverage is often insufficient. This stronger signal and reduced interference can improve network quality. In addition, the SpotLight 2000 system provides RF engineers with the ability to measure and report

performance statistics in 30(degrees) increments around the cell site. Using this data, engineers can better isolate specific network performance metrics and determine optimum sector configurations.

STRATEGY

The Company's objective is to be a leading provider of spectrum management solutions to the worldwide wireless communications market. The Company's strategy to achieve this objective incorporates the following key elements:

Provide Solutions to High-Growth Wireless Communications Markets. The Company seeks to identify rapidly growing wireless markets and to develop highly integrated solutions to spectrum management problems in those markets. The Company designed the SpotLight 2000 system initially for use in AMPS cellular networks. In order to address the capacity and system quality problems facing AMPS operators implementing CDMA digital technologies, the Company has leveraged the SpotLight 2000 system technology to develop a dual-mode solution that incorporates CDMA and AMPS protocols. The Company intends to explore other high-growth markets such as GSM, PCS, TDMA and WLL and, if appropriate, to develop similar solutions for such markets.

Build and Expand Strategic Customer Relationships. Metawave is dedicated to serving those cellular network operators which the Company believes are most likely to adopt and promote the Company's solution across their networks. The Company uses a direct sales model and has established significant field engineering expertise that enables the Company to install and optimize its equipment within customers' cell sites. The Company's system engineers work closely with the Company's direct sales personnel and customers to ensure that the Company's product performance is optimized for each operator's network. In addition, the Company has developed expertise in assisting cellular network operators in planning and improving overall network performance.

Leverage Proprietary Core Technology. The Company seeks to continue to build its core technology, which includes eight issued and 25 pending patents, and to invest substantial resources in technology research and product development. The Company has leveraged its core technology and expanded its customer base by modifying its SpotLight 2000 system for use with the Lucent Series II base station in addition to the Motorola HDII base station for which it was initially developed. The Company is currently modifying the SpotLight 2000 system to interface with equipment made by other manufacturers, such as the Ericsson 882 and Motorola SC2450 and SC9600 base stations, and intends to expand into new technology markets by developing spectrum management solutions for the GSM, PCS, TDMA and WLL markets, as appropriate. To facilitate the adoption and deployment of the Company's spectrum management solutions, the Company intends to develop stand-alone products and applications that are readily installed in existing or new cell sites. The Company may establish strategic relationships both to develop new technologies and to expand into new markets.

Focus on Highly Integrated System Solutions. The Company seeks to offer system level products that enhance the performance of cellular network operators' base station equipment. The Company will provide highly integrated solutions that include pre-sales system planning, products configurable to specific base station requirements and on-site installation and optimization services to ensure a high level of system performance. The Company's highly integrated system approach differentiates it from the component level product offerings currently available in the market.

MARKETS

Today's wireless communications industry is characterized by several protocols that divide the industry into broad markets. Currently, networks based on the AMPS and GSM protocols have the greatest number of subscribers and, correspondingly, the largest number of cell sites. The Company expects digital technologies to grow rapidly and account for increased levels of

infrastructure spending. Many analog cellular network operators are migrating their analog networks to digital to increase capacity and improve their competitive position relative to emerging PCS providers. Regardless of the protocol adopted or the frequency band used, the Company believes wireless network operators worldwide will need to address capacity, coverage or call quality issues.

Analog Cellular Market. The analog cellular market consists of operators that provide cellular service within the 800 MHz and 900 MHz frequency bands using analog technology. The predominant analog protocol is AMPS, which according to the Strategis Group serves 71.0% of total analog subscribers worldwide. In areas of the world where digital technology has not yet been introduced, AMPS networks are growing to serve continued subscriber demand. In areas where deployment of digital service is underway or planned, maintaining analog capacity, coverage and call quality during this transition is essential. In addition to currently serving the majority of subscribers and minutes of use in North America, AMPS technology will also serve digital customers in cases where they roam to other networks, in areas where digital service is not yet in place and in circumstances where digital capacity is not sufficient to carry the level of traffic. AMPS cellular phones also remain significantly less expensive than digital and dual-mode phones. For these reasons, the Company believes the migration to digital service will be an extended process. Moreover, the Company believes that cellular network operators may be reluctant to allow AMPS service quality to deteriorate during this process due to the presence of significant competition from other cellular and emerging PCS operators. The Company's SpotLight 2000 system enables cellular network operators to provide enhanced capacity, coverage and call quality to facilitate this transition to digital service.

CDMA Digital Cellular Market. The CDMA digital cellular market consists of operators overlaying CDMA technology onto existing AMPS technology in the 800 MHz frequency band. To deploy a single CDMA carrier, cellular network operators must clear a portion of spectrum (approximately 15% in North and South America) that was previously utilized for AMPS service. This involves taking analog channels off the air, exacerbating capacity shortages and deteriorating network quality. Approximately half of the

cellular networks in North America are ultimately expected to migrate to CDMA technology as are many cellular network operators in South America. Cellular network operators must separately optimize the CDMA portion of their network in order to achieve the necessary capacity and performance. The Company's SpotLight 2000 system provides additional analog capacity facilitating spectrum clearing without adversely affecting capacity or network quality. The SpotLight 2000 system also provides additional CDMA capacity to manage the transition from analog-only networks to dual-mode networks.

GSM Market. The GSM market consists of networks that operate at 900 MHz and 1800 MHz. GSM was the first widely implemented digital technology and is deployed in 110 countries, predominantly in Europe and Asia. As the most widely deployed digital technology, GSM served 48.5 million subscribers at the end of 1997, according to the Strategis Group, and Allied Business Intelligence estimates that GSM will account for over 50% of worldwide wireless subscribers by 2000. GSM is not as spectrally efficient as other digital technologies. Consequently, GSM networks are beginning to experience capacity constraints, particularly in heavily subscribed areas. The Company believes that these capacity shortfalls will become more common. The Company is currently developing a product to provide cost-effective spectrum management solutions for GSM network operators.

TDMA Market. The TDMA digital cellular market consists of operators overlaying TDMA technology onto existing AMPS technology in the 800 MHz frequency band. The TDMA market represented approximately 50% of the North American digital cellular market, as well as a significant portion of the South American market at the end of 1997, according to the Strategis Group. TDMA operates on analog channels, and therefore can reduce analog capacity. As

subscriber growth continues on these networks, the capacity gains of TDMA may not be sufficient to accommodate subscriber growth. Although the Company currently has no TDMA solution under development, the Company believes that its technology is applicable to the issues facing TDMA operators. The Company continues to evaluate the economic viability of a TDMA solution and may in the future undertake product development for TDMA.

PCS Market. In 1995 and 1996, the U.S. government auctioned new licenses at frequencies of 1900 MHz, known as PCS. These licenses represent 120 MHz of new spectrum compared to 50 MHz of spectrum held by the existing cellular network operators. In doing so, the government opened up each wireless market to new competitors. These new PCS operators represent a significant competitive threat to cellular network operators. Since entering the market in 1997, deployed PCS networks currently provide coverage to geographic regions covering approximately 75% of the U.S. population and, according to The Yankee Group, PCS accounted for 20% of all new wireless accounts in the United States in 1997. PCS operators deploy digital networks, using CDMA, TDMA or GSM technology, which offer enhanced services, better security and more capacity than analog networks. In addition, customer churn has intensified as a result of new consumer choices. As these networks grow, it is expected that they will experience capacity and optimization issues similar to cellular networks. The Company continues to evaluate potential spectrum management solutions for PCS.

The following table presents a summary of the principal wireless protocols, geographic markets and estimated subscribers as of December 31, 1997.

<TABLE>
<CAPTION>

MARKET	PROTOCOL	PREDOMINANT GEOGRAPHIC REGIONS	ESTIMATED SUBSCRIBERS WORLDWIDE, 1997(2)
<S>	<C>	<C>	<C>
Analog Cellular	AMPS (Advanced Mobile Phone Services)(1)	North America Latin America Asia	68,421,482
	TACS/ETACS (Total Access Communications System)	Europe Asia	21,366,610
	NMT (Nordic Mobile Telephone)	Europe Asia	4,933,956
Digital Cellular	CDMA (Code Division Multiple Access)(1)	North America Latin America Asia	3,963,162
	TDMA (Time Division Multiple Access)	North America Latin America Asia	6,721,635
	GSM (Global System for Mobile Communications)	Europe Asia	48,495,238
	PDC (Pacific Digital Cellular)	Japan	21,959,350
PCS/Other	PCN/DCS-1800 (Digital Communications System)	Europe Asia	5,065,119
	PCS 1900	North America	1,319,138
	TDMA (1.9 GHz)	North America	834,141
	CDMA (1.9 GHz)	North America	2,197,355

		Asia	
PHS (Personal Handyphone System)		Asia	8,161,656

</TABLE>

(1) Indicates markets the Company's products currently address. There can be no assurance that the Company will be successful in developing products for other markets. See "Risk Factors--Rapid Technological Change and Requirement for Frequent New Product Introductions."

(2) As reported by the Strategis Group, 1997.

METAWAVE PRODUCTS

The Company has developed spectrum management solutions, consisting of smart antenna systems, applications software and engineering services, that enable cellular network operators to increase overall network capacity, reduce network operation costs, better manage network infrastructure and stimulate end user demand through improved system quality. The Company's initial spectrum management platform, the SpotLight 2000 system, is a multibeam smart antenna technology that interfaces with Motorola HDII and Lucent Series II base stations and is compatible with AMPS and CDMA air interface protocols.

Metawave's proprietary spectrum management solutions enable the transition from traditional wireless network infrastructure designs to an architecture which actively optimizes finite spectrum or wireless bandwidth, thereby enhancing the performance and increasing overall network capacity of the cellular

operator's network. The architecture, shown in the figure below, adds smart antenna performance to the cellular operator's network.

[GRAPHIC APPEARS HERE]

SpotLight Platform. The Company's SpotLight 2000 smart antenna system was initially designed for use in AMPS networks and was first shipped for commercial sale in November 1997. The second generation SpotLight 2000 system was designed as a dual-mode system and is currently in field trials. The SpotLight 2000 system divides cell site antennas into 12 beams and incorporates electronics and software to optimize the signal for each radio in the cell site, resulting in increased network capacity and improved call quality. Designed for 800 MHz networks, the SpotLight 2000 system currently provides solutions for AMPS networks or dual-mode AMPS and CDMA networks.

Based on field trials, the Company estimates that the SpotLight 2000 system, when installed in a network of cell sites, can improve analog capacity by as much as 100% and, when used in a dual-mode system, can improve CDMA capacity by up to 40% without increasing the number of cell sites. Accordingly, the SpotLight 2000 system is a cost-effective tool for clearing spectrum of analog use to accommodate the transition of networks to digital service. Capacity is increased by allowing for tighter re-use of frequency or by obtaining increased trunking efficiency or a combination of both.

The Spotlight 2000 system interfaces with base stations by coupling directly to the I/O ports of base station radios and by processing transmit and receive signals through its smart antenna spectrum management system. The Company provides all necessary hardware and software to process transmit and receive signals, including Spectrum Management Units ("SMUs"), linear power amplifiers, filters and other equipment, including base station antennas.

As the SpotLight 2000 system reduces interference in a network through implementation of smart antennas, more channels can be added to each cell site because frequencies can be reused more times over a given area, thereby

increasing network capacity. In areas where interference is a problem, cellular network operators have often installed sectorized antennas, usually consisting of a suite of three antennas, each covering a 120(degrees) sector around a cell site. Sectorization reduces the amount of interference received by a given cell site radio. The SpotLight 2000 system's 12 beam smart antenna has four times the interference rejection potential of a three-sector antenna. As shown in the figure below, the 12 beam antenna rejects potential signal interference that is outside the caller's narrow 30(degrees) beam, reducing network interference. This enables a cellular network operator to reuse the same frequencies more often over a given service area, thereby adding more channels to each cell site.

INTERFERENCE ISOLATION

[GRAPHIC APPEARS HERE]

Trunking efficiency represents a statistical measure of the call carrying capacity of a set of channels. Trunking efficiency is increased whenever a greater number of channels is made available for use by a group of subscribers at a given location and time. Conventional three-sector antennas tend to reduce capacity because they restrict the callers in any given sector to the cell site radio channels assigned to that sector. In contrast, the SpotLight 2000 system's SMU's permit any caller in any beam to be assigned to any cell site radio, thereby increasing the trunking efficiency and the cell site's capacity. The primary interface between the SpotLight 2000 system and the cell site is the set of RF connections between the transmit and receive terminals on cell site radios and the SpotLight 2000 system's SMUs, which contain the core of SpotLight's smart antenna capability. While any call is active, the SMUs continuously measure call quality and make adjustments in beam assignment to maintain the best possible call quality.

Through the SpotLight 2000 system, cellular network operators deploying dual-mode smart antenna systems can use a single set of antennas for both their analog and CDMA networks, and can optimize each network's performance independently.

The SpotLight 2000 system also increases CDMA capacity because it allows operators to manage and distribute traffic loading more effectively. The geographic distribution of traffic loading across a CDMA network or within a single cell varies considerably. In a typical three-sector cell, the traffic density in the most heavily loaded sector is often significantly higher than the least-loaded sector. As a result, some cells may have sectors that are fully loaded with cellular traffic while other sectors of the same cell are well below peak loading and have spare capacity. On a network scale, high cellular traffic areas, such as highway interchanges, urban centers and shopping centers, can become "hot spots" that strain network capacity even as network resources go unused in low cellular traffic areas. This variability in traffic density creates network inefficiencies and lower network capacity, particularly in CDMA networks.

To address traffic loading, the SpotLight 2000 system controls the transmission and reception of CDMA radio signals by base stations through a process called sector synthesis. The SpotLight 2000 system

adapts the sector coverage of the base stations' CDMA radios to the local traffic patterns around cell sites. The system's phased-array antenna makes it possible to create custom sector antenna patterns of varying degrees though an embedded software-driven process. Optimization of the SpotLight 2000 system for CDMA requires information about the CDMA signals on the network, which the CDMA equipment within the system gathers through the antennas. Sector synthesis occurs through software algorithms, which can be modified remotely to respond to changing local traffic patterns in real time. Through sector synthesis, cellular network operators also optimize their CDMA networks with increased flexibility and precision, enhancing network capacity and performance in response to changing traffic patterns as well as local terrain and variable RF

conditions, as illustrated in the following diagram.

SECTOR SYNTHESIS

[GRAPHIC APPEARS HERE]

Other Spectrum Management Products. The SpotLight 2000 system can be administered and monitored locally or remotely through LampLighter, SpotLight 2000's system configuration product. LampLighter, a Windows-based software tool, configures the SpotLight 2000 system for optimal cell site performance. In addition, LampLighter allows real time monitoring of system performance through graphical displays and log files.

In addition to the configuration capabilities of LampLighter, the Company offers networked access to the SpotLight 2000 system configuration with its SiteNet software product. SiteNet also provides a means for centralized collection and analysis of RF performance statistics in analog and CDMA networks. Cellular network operators can use the networked configuration capability, as well as networked RF performance statistics, to attain remote control of antenna operations across a network of SpotLight 2000 systems.

CORE TECHNOLOGY

The Company believes that one of its key competitive advantages is its investment and expertise in the core technologies that enable efficient spectrum management of wireless communications networks. Spectrum management encompasses a number of technical components, including advanced antenna concepts, radiowave propagation models, network performance monitoring tools, common air interface knowledge and communications systems hardware implementations. These core competencies, when applied in combination, allow cellular network operators to optimize capacity, coverage and quality across their networks. The Company has developed, and continues to expand upon, the following four fundamental technical elements:

Phased-Array Antenna Systems. The Company has developed phased-array antenna systems that provide compact beam-forming within a single structure. The antenna systems make use of uniform linear

or cylindrical arrays with a combination of both ground-based and tower-based feed networks. The Company has designed antennas to synthesize multiple narrow fixed-beams, which can be used to track individual users within a cell site. In addition, the Company has developed beam-forming techniques to allow the coverage area of a cell site to be customized. The phased-array antenna technology can be scaled to a variety of gains and to span a broad range of frequencies. The basic implementations are protocol independent, and as such can be applied to analog, TDMA and CDMA and other wireless networks. The phased-array technology is extendible to as many as 128 simultaneous narrow fixed-beams for high density applications or high bit rate services. Phased-array antenna technology has potential applications in ground-based mobile radio (cellular, PCS, enhanced specialized mobile radio ("SMR")), two-way paging, local multipoint distribution service ("LMDS") as well as in emerging satellite-based wireless services.

Multibeam Hardware Architectures. The Company has developed cost-effective hardware implementations of the complex circuitry necessary to support the operation of multibeam systems on high-traffic cell sites. The hardware architecture can be organized into several key subsystems: beam switching matrices, ultra-linear amplification, beam-forming feed structures, array calibration circuitry and performance measuring receivers. The Company has designed compact high-density RF switch matrices for use in fast beam-switching applications. The Company's beam-switching technology is modular, reliable and readily adaptable to both TDMA and analog protocols, where rapid beam switching is required. The Company holds proprietary technology for the implementation of modular, scalable architectures that support beam-switching and beam-forming. The Company has developed proprietary hardware techniques

for feeding and calibrating phased-arrays integrated into existing cell site configurations. To monitor the radio environment, the Company has developed high-speed, frequency-agile scanning receivers designed to accurately operate over various channel bandwidths. The Company's controlled impedance circuit board designs implement low-loss routing of hundreds of microwave signal paths while maintaining low voltage standing wave ratio ("VSWR") and minimal crosstalk. Additionally, the Company has patents related to architectures to implement beam-switching for the CDMA protocol. The Company's spatial technology allows the simultaneous operation of multiple protocols (for example AMPS/CDMA or AMPS/TDMA) through the same physical antenna structure, while maintaining independent optimization of the performance for each protocol.

Real-Time Network Control Algorithms. The Company has developed algorithms to control beam switching hardware based upon extensive drive testing, data gathering, statistical analysis and propagation modeling in complex, real-world radio environments. These algorithms make real-time decisions about which beams best serve each user, how often to update beam selections and how to mitigate interference from other users on the same or adjacent channels. The Company has patents related to cellular beam spectrum management and forward-looking interference cancellation technology. In addition, the Company has developed expertise in the optimization of cellular network performance for AMPS/NAMPS and CDMA protocols. Such expertise allows network control algorithms to be customized based on the specific protocol and network deployment scenario. The Company has also developed internal software tools for performance modeling cellular networks. These proprietary tools allow evaluation of new algorithms for spectrum management on mixed analog and digital cellular networks.

Adaptive Beam-Forming Techniques. The Company designs and builds antenna systems with a broad range of standard and custom beam types and shapes using adaptive beam-forming technology. With respect to CDMA, the Company's system makes use of the phased-array antenna to create custom sector antenna patterns though an embedded software-driven process known as sector synthesis. Under software control, independent selection of sector azimuth pointing angles, beamwidths and per-beam gains can provide flexibility to fine-tune network performance. With sector synthesis, cellular network operators can create completely different sector mappings for AMPS and CDMA, thus allowing independent network optimization while sharing the cell site's equipment, including antennas. Adaptive beam-forming systems can monitor traffic loading and interference levels and then respond by implementing changes designed to equalize traffic loads and reduce interference.

CUSTOMERS

Metawave works closely with its customers to establish long-term relationships and to provide opportunities to expand the delivery of its spectrum management solutions to these customers. Since 1996, the Company has conducted field trials with a number of cellular network operators to test its technology and to demonstrate the SpotLight 2000 system's capability to these customers. These trials are an essential element in the Company's sales cycle. Late in the fourth quarter of 1997, the Company began commercial shipment of the Motorola HD-II analog-only version of its SpotLight 2000 system. In early 1998, the Company began field trials to demonstrate the capability of its SpotLight 2000 Lucent Series II system for both analog and CDMA.

The following table sets forth a list of companies that have purchased or are evaluating the purchase of the SpotLight 2000 system as of June 30, 1998.

<TABLE>
<CAPTION>

CUSTOMER OR PROSPECTIVE CUSTOMER	LOCATION	SALES STATUS
<S>	<C>	<C>
ALLTEL(1)	Augusta, Georgia	Commercial Sale

	Columbia, South Carolina	Commercial Sale(2)
	Savannah, Georgia	Commercial Sale
	Springfield, Missouri	Commercial Sale
360(degrees) Communications(1)	Ft. Walton, Florida	Commercial Sale(2)
Millicom--Telefonica Celular	Paraguay	Commercial Sale
Millicom--St. Petersburg Telecom	St. Petersburg, Russia	Commercial Sale
AirTouch	San Diego, California	Field Trial Completed 1997
GTE	Fremont, California	Field Trial In Process

</TABLE>

(1) On July 1, 1998, ALLTEL completed the acquisition of 360(degrees) Communications.

(2) These sales are conditional upon the achievement of certain performance criteria set forth in the sales contracts. No revenue is recognized by the Company until all customer acceptance conditions have been met.

There can be no assurance that successful completion of a given field trial will result in a system sale. The sale of the Company's products is subject to numerous risks and uncertainties. In order for its products to achieve market acceptance, the Company must demonstrate to cellular network operators that the products provide a spectrum management solution that addresses the cellular network operators' challenges of capacity, coverage and call quality in a cost-effective manner. The Company must demonstrate product performance to a cellular network operator based on such operator's needs and specifications and the difficulty in optimizing the Company's product in any given cell site varies greatly depending on such operator's specifications and the geographical terrain. Typically, performance of the Company's product must be accepted in an initial cell site or cluster of cell sites prior to completing any additional sales to such cellular network operator. If the Company's products are not accepted by cellular network operators in a timely manner, or at all, the Company's business and operating results will be materially adversely affected. See "Risk Factors--Uncertainty of Market Acceptance; Lengthy Sales Cycle," "--Dependence on Cellular Network Operator Capital Spending" and "--Competition."

During the six months ended June 30, 1998, sales to St. Petersburg Telecom, Telefonica Celular and ALLTEL accounted for 95.7% of net revenue. Sales to these three customers are expected to continue to account for a substantial majority of sales through the remainder of fiscal 1998. The loss of any of these customers, or a significant loss, reduction or rescheduling of orders from any of these customers, could have a material adverse effect on the Company's business and operating results. See "Risk Factors--Significant Customer Concentration" and "--Dependence on Growth of Cellular Communications Market."

SALES, MARKETING AND CUSTOMER SUPPORT

Metawave sells its products through a technical direct sales force supported by systems engineers. Direct sales personnel are assigned on a customer account basis and are responsible for generating product sales, providing product and customer support and soliciting customer feedback for product development. In addition, sales personnel receive support from the Company's marketing organization.

The Company's marketing efforts are primarily focused on establishing and developing long-term relationships with potential customers. As is customary

in the industry, sales are made through standard purchase orders which can be subject to cancellation, postponement or other types of delays. While certain customers provide the Company with forecasted needs, they are not bound by such forecasts. Historically, the Company has conducted field trials and has been required to satisfy performance conditions prior to the completion of a sale. For these and other reasons, the sales process associated with the purchase of the Company's systems is typically complex, lengthy (up to 18 months or more) and subject to a number of significant risks, including changes in customers' budgets and approval at senior levels of customers' organizations and approval by governmental agencies. See "Risk Factors--Uncertainty of Market Acceptance; Lengthy Sales Cycle."

International sales of the Company's products accounted for 51.5% for the six-month period ended June 30, 1998. There were no international sales for the years ended December 31, 1995, 1996 and 1997. Foreign sales of the Company products may be subject to national security and export regulations and may require the Company to obtain a permit or license. See "Risk Factors--Government Regulation." The Company has not experienced any material difficulty in obtaining required permits or licenses. Installation and operation of the Company's products may also require approval from governmental agencies in these countries. Foreign sales are also subject to risks related to political instability and economic downturns in foreign nations. The Company's foreign customers typically pay for the Company's products with U.S. dollars. As such, a strengthening of the U.S. dollar as compared to a foreign customers' local currency would effectively increase the price of the Company's products for that customer, thereby making the Company's products less attractive to such customers. See "Risk Factors--Risks Associated with International Markets."

The Company's customer support organization performs network design, product installation, network optimization, training, consulting and repair and maintenance services to support its SpotLight 2000 system. The Company offers consulting services to optimize the network following the SpotLight 2000 system installation. Optimizing a network requires expertise in RF network design, individual network peculiarities and knowledge of the SpotLight 2000 system capabilities. The Company offers repair and maintenance services. The Company's warranties vary by customer and range from 12 to 18 months. Warranty obligations and other maintenance services for the Company's products are performed at the Company's headquarters in Redmond, Washington.

As of June 30, 1998, the Company had approximately $5.0 million of unrecognized revenue for customer sales that are subject to the satisfaction of customer acceptance conditions set forth in the sales agreements related thereto. In addition, the Company's backlog of orders was approximately $802,000 on June 30, 1998, compared to no backlog of orders on June 30, 1997. The Company includes in backlog only customer commitments for which it has received signed purchase orders and scheduled shipment dates within the following six months. The Company intends to increase its manufacturing capacity and believes that backlog will decrease, as a percentage of sales, as the Company becomes able to fill orders on a more timely basis. Moreover, product orders in the Company's current backlog are subject to changes in delivery schedules or to cancellation at the option of the purchaser without significant penalty. Accordingly, although useful for scheduling production, backlog as of any particular date may not be a reliable measure of sales for any future period. See "Risk Factors--Significant Fluctuations in Operating Results."

Because of the limited size of the Company's customer base and the relatively large dollar amount of customer orders, revenues derived from a small number of customers will likely represent a significant

portion of revenue in any given period. A decrease in demand for the Company's systems from any customer for any reason is likely to result in significant periodic fluctuations in revenue. Due to the highly concentrated nature of the cellular industry, the Company believes that the number of potential customers

for future products, if any, will be small. Failure by the Company to capture a significant number of the cellular network operators as customers could have a material adverse effect on the Company's business and operating results. See "Risk Factors--Significant Fluctuations in Operating Results," "--Significant Customer Concentration."

RESEARCH AND DEVELOPMENT

The Company's research and development efforts focus primarily on enhancing the features and functionality, improving the quality and reducing the manufacturing cost of the SpotLight 2000 system. The Company's efforts also focus on using existing product architecture and technology to maintain commonality and minimize time-to-market for new product enhancements and technology platforms. The Company is investing resources in extending the SpotLight 2000 system to other principal manufacturers' base station equipment both in the United States and abroad. The Company is also investing resources in the development of a spectrum management platform for GSM and in early-stage research regarding CDMA for PCS and TDMA.

Research and development expenses were approximately $883,000, $7.2 million and $13.1 million for the fiscal years ended December 31, 1995, 1996 and 1997, respectively, and $8.0 million for the six months ended June 30, 1998. The Company believes that continued investment in research and development is critical to attaining its strategic objectives and, as a result, expects research and development expenses to increase in absolute dollars for the foreseeable future. As of June 30, 1998, 91 employees were engaged in the Company's research, development and product management efforts.

The market for the Company's current product and planned future products is subject to rapid technological change, frequent new product introductions and enhancements, product obsolescence, changes in customer requirements and evolving industry standards. To be competitive, the Company must successfully develop, introduce and sell new products or product enhancements that respond to changing customer requirements on a timely and cost-effective basis. The Company's success in developing new and enhanced products will depend on a variety of factors, many of which are beyond the Company's control. Such factors include the timely and efficient completion of system design; the timely and efficient implementation of assembly, calibration and test processes; sourcing of components; the development and completion of related software; the reliability, cost and quality of new products; the degree of market acceptance; and the development and introduction of competitive products by competitors. The inability of the Company to introduce in a timely manner new products or product enhancements that contribute to sales could have a material adverse effect on the Company's business and operating results. See "Risk Factors--Rapid Technological Change and Requirement for Frequent New Product Introductions."

MANUFACTURING

The Company relies to a substantial extent on outside suppliers to manufacture many of the components and subassemblies used in the SpotLight 2000 system. The Company's manufacturing operations consist primarily of supplier and commodity management and assembling finished goods from components and subassemblies purchased from such outside suppliers. The Company monitors quality at each stage of the production process, including the selection of component suppliers, the assembly of finished goods and final testing, packaging and shipping. The Company considers quality, cost and timing of delivery in selecting its component suppliers. Final assembly, system integration and full-configuration testing operations are performed at the Company's headquarters in Redmond, Washington.

Certain parts and components used in the Company's products, including linear power amplifiers supplied by Powerwave, are presently only available from a sole source. In addition, the Company is

currently dependent upon Sanmina as the primary source for the supply of the Company's printed circuit board assemblies. Certain other parts and components used in the Company's products are available from a limited number of sources. The Company's reliance on these sole source or limited source suppliers involves certain risks and uncertainties, including the possibility of a shortage or discontinuation of certain key components and reduced control over delivery schedules, manufacturing capability, quality and cost. Any reduced availability of such parts or components when required could materially impair the Company's ability to manufacture and deliver its products on a timely basis and result in the cancellation of orders which could have a material adverse effect on the Company's business and operating results. See "Risk Factors--Sole Source Suppliers; Dependence on Key Suppliers."

The Company has had only limited experience manufacturing and arranging for the manufacture of its products, and there can be no assurance that the Company or any manufacturer of the Company's products will be successful in increasing its manufacturing volume. The Company may need to procure additional manufacturing facilities and equipment, adopt new inventory controls and procedures, substantially increase its personnel and revise its quality assurance and testing practices, and there can be no assurance that any of these efforts will be successful. See "Risk Factors--Limited Manufacturing Experience; No Assurance of Successful Expansion of Operations" and "--Risks Associated with International Markets."

COMPETITION

The market for spectrum management solutions is relatively new but is expected to become increasingly competitive. The Company's products compete with other smart antenna systems and alternative wireless infrastructure devices such as repeaters, cryogenic filters and tower-top amplifiers. The Company believes that the principal competitive factors are the cost-effective delivery of increased capacity, expanded coverage and improved system quality to cellular network operators. There can be no assurance that the Company will compete favorably with respect to the foregoing factors.

The Company believes that base station manufacturers, who provide cellular network capacity through sales of additional base stations, represent a significant competitive threat to the Company. These manufacturers, including Ericsson, Lucent, Motorola, Nokia, Northern Telecom and Siemens, have long-term, established relationships with the cellular network operators. Deployment of the Company's SpotLight 2000 system by cellular network operators can improve base station performance, and therefore may result in fewer sales opportunities for base station manufacturers. Smart antenna technology represents an area of opportunity for such manufacturers. The Company believes that certain of these manufacturers are developing smart antenna systems and are likely to offer smart antenna capabilities in the future. In addition to having more established relationships with cellular network operators, these manufacturers have significantly greater financial, technical, manufacturing, sales, marketing and other resources than the Company and significantly greater name recognition for their existing products and technologies than the Company.

The Company's current primary direct competitors for spectrum management solutions are Celwave (a division of Radio Frequency Systems Inc. which is an affiliate of Alcatel Alsthom S.A.), ArrayComm, Inc. and GEC-Marconi Hazeltine Corporation. In addition, other companies, such as Raytheon E-Systems, Watkins-Johnson Company, Texas Instruments Incorporated and ARGOSystems, Inc. (a subsidiary of the Boeing Company), offer systems that utilize digital signaling processing and interference cancellation techniques to extend cell site coverage and improve call quality. Several companies offer alternative technologies such as cryogenic filters, tower-top low noise amplifiers and repeaters that can be used to provide service in network coverage holes and improve call quality. The Company may also face competition in the future from new market entrants offering competing technologies.

The Company believes that its ability to compete in the future will depend in part on a number of competitive factors outside its control, including the

development by others of products that are competitive with the Company's products and the price at which others offer comparable products. To

be competitive, the Company will need to continue to invest substantial resources in research and development and sales and marketing. There can be no assurance that the Company will have sufficient resources to make such investments or that the Company will be able to make the technological advances necessary to remain competitive. Accordingly, there can be no assurance that the Company will be able to compete successfully in the future. See "Risk Factors--Competition."

INTELLECTUAL PROPERTY

The Company relies on a combination of patent, trade secret, copyright and trademark protection, nondisclosure agreements and other measures to protect its proprietary rights. The Company currently has eight issued U.S. patents and 25 pending U.S. patent applications. The Company's future success will depend in large part on its ability to obtain patent protection, in the U.S. and other world markets to defend patents once obtained, to maintain trade secrets and to operate without infringing upon the patents and proprietary rights of others. The patent positions of companies in the worldwide wireless communications industry, including the Company, are generally uncertain and involve complex legal and factual questions. There can be no assurance that any issued patents owned by or licensed to the Company will not be challenged, invalidated or circumvented, or that the rights granted thereunder will provide competitive advantages to the Company. Further, there can be no assurance that patents will issue from any patent applications or that, if patents do issue, the claims allowed would be sufficiently broad to protect the Company's technology. In addition, there can be no assurance that patents issued in the U.S. will receive corresponding patent coverage in foreign markets or that the Company will pursue similar patent coverage in all foreign markets.

Patents and patent applications relating to products used in the worldwide wireless communications industry are numerous and current and potential competitors and other third parties may have filed or may in the future file applications for, or may have been issued or in the future may be issued, patents or may obtain additional proprietary rights relating to products used or proposed to be used by the Company. The Company may not be aware of all patents or patent applications that may materially affect the Company's ability to make, use or sell any current or future products. From time to time, third parties have asserted patent, copyright and other intellectual property rights to technologies that are important to the Company. The Company expects that it will increasingly be subject to infringement claims as the number of products and competitors in the spectrum management market grows and the functionality of products overlaps. Third parties may assert infringement claims against the Company in the future, and such assertions could result in costly litigation or require the Company to obtain a license to intellectual property rights of such parties. There can be no assurance that any such licenses would be available on terms acceptable to the Company, if at all. Any failure to obtain a license from any third party asserting claims in the future or defense of any third party lawsuit could have a material adverse effect on the Company's business and operating results.

The Company also relies on unpatented trade secrets to protect its proprietary technology, and there can be no assurance that others will not independently develop or otherwise acquire the same or substantially equivalent technologies or otherwise gain access to the Company's proprietary technology or disclose such technology or that the Company can ultimately protect its rights to such unpatented proprietary technology. Further, third parties may obtain patent rights to such unpatented trade secrets, which patent rights could be used to assert infringement claims against the Company. The Company also relies on confidentiality agreements with its employees, vendors, consultants and customers to protect its proprietary technology. There can be no assurance that these agreements will not be breached, that the

Company would have adequate remedies for any breach or that the Company's trade secrets will not otherwise become known to or be independently developed by competitors. Failure to obtain or maintain patent and trade secret protection, for any reason, could have a material adverse effect on the Company's business and operating results. See "Risk Factors--Uncertainty Regarding Protection of Intellectual Property."

GOVERNMENT REGULATION

Wireless communications are subject to extensive regulation by foreign and U.S. laws and international treaties. The Company's systems must conform to certain international and domestic regulations established to, among other things, avoid interference among users of frequencies. In order for the Company's products to be used, regulatory approval must be obtained. This governmental approval process frequently involves substantial delay which could result in the cancellation, postponement or rescheduling of products by the Company's customers, which in turn may have a material adverse effect on the sale of systems by the Company to such customers. The Company believes that its SpotLight 2000 system currently complies with all applicable U.S. and foreign regulations in countries in which its sales are material, but changes in these regulations, the need to comply with regulations in additional countries in the event of sales into those countries, or a failure to obtain necessary approvals or permits in connection with sales to service providers in a country could require the Company to change the features of its SpotLight 2000 system and thereby incur substantial costs and experience delays in system installation or operation. Regulatory bodies frequently promulgate new standards and regulations for wireless communications systems and products. To the extent that the Company's customers are delayed in deploying these cellular systems as a result of such new standards or regulations, the Company could experience delays in orders. These delays could have a material adverse effect on the Company's business and operating results.

The regulatory environment in which the Company operates is subject to significant change. Regulatory changes, which are affected by political, economic and technical factors, could significantly affect the Company's operations by restricting network development efforts by the Company's customers or end users, making current systems obsolete or increasing the opportunity for additional competition. Any such regulatory changes could have a material adverse effect on the Company's business and operating results. The Company might deem it necessary or advisable to modify its systems to operate in compliance with such regulations. Such modifications could be expensive and time-consuming. See "Risk Factors--Government Regulation."

EMPLOYEES

As of June 30, 1998, the Company had 200 employees of which 91 were primarily engaged in research, development and product management, 34 in manufacturing, 43 in sales, marketing and customer support and 32 in general and administration. The Company has no collective bargaining agreement with its employees and the Company has never experienced a work stoppage. The Company believes that its employee relations are good. See "Risk Factors--Management of Growth; New Management Team" and "--Dependence on Attraction and Retention of Key Personnel."

FACILITIES

The Company is headquartered in Redmond, Washington, where it leases an aggregate of approximately 96,000 square feet, housing its principal administrative, sales and marketing, customer support and manufacturing facilities. The Company's lease for such facility expires on May 31, 2005 and the Company has an option to renew such lease for two additional five year terms. In addition, the Company has sales and service offices in Dallas and Washington, D.C. that are subject to short-term leases.

EXECUTIVE OFFICERS AND DIRECTORS

The executive officers and directors of the Company and their ages as of June 30, 1998 are as follows:

NAME	AGE	POSITION
Robert H. Hunsberger	51	President, Chief Executive Officer and Director
Douglas O. Reudink	59	Chief Technical Officer and Chairman of the Board
Vito E. Palermo	34	Senior Vice President, Chief Financial Officer and Secretary
Richard Henderson	37	Vice President of Sales and Marketing
Ray K. Butler	40	Vice President of Engineering
Mark P. Johnson	39	Vice President of Manufacturing
Robert N. Shuman	37	Vice President of Product Management
Bandel L. Carano(1)	36	Director
Bruce C. Edwards(2)	44	Director
David R. Hathaway(1)	54	Director
Scot B. Jarvis(1)	37	Director
Jennifer Gill Roberts(2)	35	Director
David A. Twyver	51	Director

(1) Member of the Compensation Committee.
(2) Member of the Audit Committee.

Robert H. Hunsberger has served as President and Chief Executive Officer of Metawave since July 1997. From 1995 to July 1997, Mr. Hunsberger served as Senior Vice President and General Manager of Siemens Business Communications Systems, Inc., a telecommunications company and a wholly owned subsidiary of Siemens Corporation. From 1981 to 1995, Mr. Hunsberger held various executive positions at Northern Telecom Inc. ("Nortel"), a telecommunications company, including Vice President of Sales and Marketing of its wireless networks division from 1993 to 1995 and Vice President of Market Development of its wireless networks division and Vice President of Cellular Systems from 1991 to 1993. Mr. Hunsberger graduated from the University of Virginia with a B.S. in Commerce and received an M.B.A. from Arizona State University.

Douglas O. Reudink co-founded Metawave in 1995 and has served as Chief Technical Officer of the Company since its inception and as Chairman of the Board of Directors of Metawave since April 1997. From 1991 to 1995, Dr. Reudink served as Director of Wireless Planning at US WEST NewVector Group, Inc., a wireless telecommunications company. From 1986 to 1991, he served as Director of Laboratories of the High Technology Center at The Boeing Company, an aerospace company. Prior to 1986, Dr. Reudink served 20 years at the Bell Laboratories division of AT&T Corporation, a telecommunications company ("AT&T"), in various research and management positions. Dr. Reudink holds more than 30 patents and has published more than 50 technical papers. He is currently a Fellow of the Institute of Electrical and Electronics Engineers. Dr. Reudink graduated from Linfield College with a B.S. in Physics and received a Ph.D. in Mathematics from Oregon State University.

Vito E. Palermo has served as Senior Vice President, Chief Financial Officer and Secretary of Metawave since January 1997. From 1992 to 1996, Mr. Palermo served in various positions at Bay Networks, Inc., a networking communications company, most recently serving as Vice President and Corporate Controller and previously serving as Director of Technology Finance, Corporate Financial and Planning Manager, and Manufacturing and Customer Service Controller. From 1986 to 1992, Mr. Palermo held several financial management positions at the Digital Equipment Corporation, a computer hardware and software company. Mr.

Palermo graduated from California State University at Chico with a B.S. in Business Administration and received an M.B.A. from St. Mary's College.

Richard Henderson has served as Vice President of Sales and Marketing of Metawave since December 1997. From 1984 to 1997, Mr. Henderson held various sales and marketing positions at Nortel, most recently serving as Vice President of Marketing Operations from 1996 to 1997 and Sales Account Director from 1992 to 1995. Mr. Henderson graduated from Texas A&M University with a B.S. in Industrial Engineering and received an M.B.A. from the University of Dallas.

Ray K. Butler has served as Vice President of Engineering of Metawave since December 1997 and Director of Systems Engineering and Architecture from January 1997 to December 1997. From 1985 to 1997, Mr. Butler held various management positions at the Bell Laboratories division of AT&T (which division became part of Lucent in 1996), most recently serving as Technical Manager of the Cell Site HW Systems Engineering Group. Mr. Butler graduated from Brigham Young University with a B.S. in Electrical Engineering and received an M.S. in Electrical Engineering from Polytechnic University.

Mark P. Johnson has served as Vice President of Manufacturing of Metawave since 1996 and as Director of Operations from 1995 to 1996. From 1994 to 1995, Mr. Johnson was Director of Manufacturing at NeoPath, Inc., a medical products company. From 1989 to 1994, he served in various management positions at Motorola Inc., a telecommunications company, most recently serving as Operations Manager. From 1980 to 1988, Mr. Johnson held various management positions at Intermec Technologies Corporation, a computer hardware company, most recently serving as Manufacturing Manager. Mr. Johnson graduated from the University of Washington with a B.S. in Mechanical Engineering.

Robert N. Shuman has served as Vice President of Product Management of Metawave since December 1997 and Director of Product Management from March 1997 to December 1997. From 1992 to 1997, Mr. Shuman held various positions at Lucent, most recently serving as Product Team Leader for CDMA. Mr. Shuman graduated from Tufts University with a B.S. in Mechanical Engineering and received an M.S. in Mechanical Engineering from Stanford University.

Bandel L. Carano has served as a director of Metawave since 1995. Mr. Carano has been a general partner of Oak Investment Partners, a venture capital firm ("Oak"), since 1987. Mr. Carano currently serves as a member of the Investment Advisory Board of the Stanford University Engineering Venture Fund. Mr. Carano also serves as a member of the Board of Directors of Netopia, Inc., Polycom, Inc. and PulsePoint Communications, as well as several private companies. Mr. Carano graduated from Stanford University with a B.S. in Electrical Engineering and received an M.S. in Electrical Engineering from Stanford University.

Bruce C. Edwards has served as a director of Metawave since May 1998. Mr. Edwards has served as President, Chief Executive Officer and a member of the Board of Directors of Powerwave since February 1996. Mr. Edwards was Executive Vice President, Chief Financial Officer and a director of AST Research, Inc. ("AST"), a personal computer company, from 1994 to December 1995 and Senior Vice President of Finance and Chief Financial Officer of AST from 1988 to 1994. Mr. Edwards also serves as a member of the Board of Directors of Diamond Multimedia Systems, Inc. and HMT Technology Corporation. Mr. Edwards graduated from Rider University with a B.S. in Commerce and received an M.B.A. from the New York Institute of Technology.

David R. Hathaway has served as a director of Metawave since 1995. Mr. Hathaway has been a general partner of the venture capital firms Venrock Associates ("Venrock") and Venrock Associates II, L.P. since 1980 and 1995, respectively. Mr. Hathaway serves as a member of the Board of Directors of several private companies. Mr. Hathaway graduated from Yale University with a B.A. in American Studies.

Scot B. Jarvis has served as a director of Metawave since February 1998. Mr. Jarvis is a co-founder and managing member of Cedar Grove Partners, LLC, a privately owned investment company. From 1994 to 1997, Mr. Jarvis was Executive Vice President of Nextlink Communications, Inc., a wireless service

operator ("Nextlink"). From 1994 to 1996, Mr. Jarvis was Vice President-Operations of Eagle River, Inc., an investment company. From 1985 to 1994, Mr. Jarvis held several management positions at AT&T Wireless Services, Inc., formerly McCaw Cellular Communications Inc. ("McCaw Cellular"), most recently serving as Vice President of McCaw Development Corporation from 1993 to 1994 and Vice President of McCaw Cellular from 1985 to 1994. Mr. Jarvis serves as a member of the Board of Directors of Nextlink and PulsePoint Communications. Mr. Jarvis graduated from the University of Washington with a B.A. in Business Administration.

Jennifer Gill Roberts has served as a director of Metawave since 1995. Ms. Roberts has been a general partner of Sevin Rosen Funds, a venture capital firm ("Sevin Rosen"), since 1994. From 1993 to 1994, she was a senior associate at Technology Venture Investors, a venture capital firm. Ms. Roberts serves as a member of the Board of Directors of several private companies. Ms. Roberts graduated from Stanford University with a B.S. in Electrical Engineering and received an M.S. in Electrical Engineering from the University of Texas and an M.B.A. from Stanford University.

David A. Twyver has served as a director of Metawave since May 1998. From 1996 to 1997, Mr. Twyver served as Chief Executive Officer of Teledesic Corporation, a satellite telecommunications company. From 1984 to 1996, Mr. Twyver served in several management positions at Nortel, most recently serving as President of the Wireless Networks division from 1993 to 1996. Mr. Twyver serves as a member of the Board of Directors of Innova Corporation. Mr. Twyver graduated from the University of Saskatchewan with a B.S. in Mathematics and Physics.

BOARD COMPOSITION

The Company's Bylaws currently provide for a Board of Directors consisting of nine members. All directors hold office until the next annual meeting of stockholders of the Company and until their successors have been duly elected and qualified. The officers of the Company are appointed annually and serve at the discretion of the Board of Directors.

COMMITTEES OF THE BOARD OF DIRECTORS

The members of the Audit Committee are Mr. Edwards and Ms. Roberts. The Audit Committee reviews the results and scope of the audit and other services provided by the Company's independent accountants.

The members of the Compensation Committee are Messrs. Carano, Hathaway and Jarvis. The Compensation Committee reviews and approves the compensation and benefits for the Company's executive officers, administers the Company's stock purchase and stock option plans and makes recommendations to the Board of Directors regarding such matters.

BOARD COMPENSATION

Except for reimbursement for reasonable travel expenses relating to attendance at Board meetings and the grant of stock options, directors are not compensated for their services as directors, except for Messrs. Jarvis, Edwards and Twyver who each receive $1,000 for each Board meeting attended and $500 for each committee meeting attended. Directors who are employees of the Company are eligible to participate in the 1995 Stock Option Plan, the 1998 Stock Option Plan and the Purchase Plan. Directors who are not employees of the Company are eligible to participate in the Directors' Plan. See "Stock Plans."

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

None of Messrs. Carano, Hathaway or Jarvis has at any time been an officer or employee of the Company or any subsidiary of the Company. See "Certain Relationships and Related Transactions" for a description of certain transactions and relationships between the Company and Messrs. Carano, Hathaway and Jarvis and entities affiliated with them.

LIMITATION OF LIABILITY AND INDEMNIFICATION MATTERS

The Company's Certificate of Incorporation limits the liability of directors to the maximum extent permitted by the Delaware General Corporation Law (the "DGCL"). The DGCL provides that a director of a corporation will not be personally liable for monetary damages for breach of such individual's fiduciary duties as a director except for liability (i) for any breach of such director's duty of loyalty to the Company or to its stockholders, (ii) for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, (iii) for unlawful payments of dividends or unlawful stock repurchases or redemptions or (iv) for any transaction from which a director derives an improper personal benefit.

The Company's Bylaws provide that the Company shall indemnify its directors and officers and may indemnify its other employees and agents to the fullest extent permitted by law. The Company believes that indemnification under its Bylaws covers at least negligence and gross negligence on the part of an indemnified party. The Company's Bylaws also permit the Company to advance expenses incurred by an indemnified party in connection with the defense of any action or proceeding arising out of such party's status or service as a director, officer, employee or other agent of the Company upon an undertaking by such party to repay such advances if it is ultimately determined that such party is not entitled to indemnification, such advancement of expenses is subject to authorization by the Board of Directors in the case of non-executive officers, employees and agents.

The Company has entered into separate indemnification agreements with each of its directors and officers. These agreements require the Company, among other things, to indemnify such director or officer against expenses (including attorney's fees), judgments, fines and settlements (collectively, "Liabilities") paid by such individual in connection with any action, suit or proceeding arising out of such individual's status or service as a director or officer of the Company (other than Liabilities arising from willful misconduct or conduct that is knowingly fraudulent or deliberately dishonest) and to advance expenses incurred by such individual in connection with any proceeding against such individual with respect to which such individual may be entitled to indemnification by the Company. The Company believes that its Certificate of Incorporation and Bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. The Company also maintains directors' and officers' liability insurance.

At present the Company is not aware of any pending litigation or proceeding involving any director, officer, employee or agent of the Company where indemnification will be required or permitted. The Company is not aware of any threatened litigation or proceeding that might result in a claim for such indemnification.

EXECUTIVE COMPENSATION

The following table sets forth certain compensation awarded to, earned by, or paid to the Company's Chief Executive Officer, the Company's four other most highly compensated executive officers, the Company's former Chief Executive Officer and two other former officers whose total cash compensation exceeded $100,000 during the year ended December 31, 1997 (collectively, the

"Named Executive Officers").

SUMMARY COMPENSATION TABLE

<TABLE>
<CAPTION>

NAME AND PRINCIPAL POSITION	ANNUAL COMPENSATION SALARY ($)(1)	ANNUAL COMPENSATION BONUS ($)(2)	LONG-TERM COMPENSATION SECURITIES UNDERLYING OPTIONS (#)	ALL OTHER COMPENSATION ($)(3)
<S>	<C>	<C>	<C>	<C>
Robert H. Hunsberger, President and Chief Executive Officer	$144,918	$ --	900,000	$ 50,660
Douglas O. Reudink, Chairman and Chief Technology Officer	173,545	2,100	--	2,466
Vito E. Palermo, Senior Vice President and Chief Financial Officer	143,794	7,500	200,000	169,633
Ray K. Butler, Vice President of Engineering	108,238	6,900	100,000	40,322
Robert N. Shuman, Vice President of Product Management	67,649	5,600	100,000	60,129
Thomas Huseby, former Chief Executive Officer(4)	7,431	--	--	121,807
James J. Daley, former Vice President(4)	107,953	--	--	137,318
Harold Carey, former Vice President(4)	110,001	32,356	--	63,026

</TABLE>

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(1) Mr. Hunsberger's employment began on July 28, 1997 and his base salary on an annualized basis was $220,000 with additional monthly payments in the aggregate amount of $54,167 for the year ended December 31, 1997. Mr. Palermo's employment began on January 20, 1997 and his base salary on an annualized basis, at year end, was $160,000 with additional monthly payments in the aggregate amount of $7,500 paid in the first six months of 1997. Mr. Butler's employment began on January 27, 1997 and his base salary on an annualized basis, at year-end, was $120,000. Mr. Shuman's employment began on March 31, 1997 and his base salary on an annualized basis, at year-end, was $120,000.

(2) Bonus represents the amount earned by the employee in 1997.

(3) Consists of relocation and temporary living expenses and life insurance premiums paid by the Company, and with respect to Mr. Huseby and Mr. Daley, includes severance payments of $121,281 and $97,268, respectively.

(4) Mr. Huseby resigned as Chief Executive Officer of the Company on January 7, 1997. Mr. Daley resigned from the Company on August 29, 1997. Mr. Carey resigned from the Company on March 17, 1998.

The following table shows certain information regarding stock options granted to the Named Executive Officers during the year ended December 31, 1997. No stock appreciation rights were granted to these individuals during the year.

OPTION GRANTS IN LAST FISCAL YEAR

<TABLE>
<CAPTION>

	NUMBER OF SHARES UNDERLYING	PERCENTAGE OF TOTAL OPTIONS GRANTED TO	EXERCISE	POTENTIAL REALIZABLE VALUE AT ASSUMED ANNUAL RATES OF STOCK PRICE APPRECIATION FOR OPTION TERM(4)

NAME(1)	OPTIONS GRANTED(2)	EMPLOYEES IN 1997(3)	PRICE PER SHARE	EXPIRATION DATE	5%	10%
<S>	<C>	<C>	<C>	<C>	<C>	<C>
Robert H. Hunsberger....	900,000	44.3%	$0.62	7/28/07	$2,374,010	$4,110,736
Vito E. Palermo.....	135,000	6.6%	$0.62	1/20/07	52,638	133,396
	65,000	3.2%	$0.62	5/22/07	171,456	296,887
Ray K. Butler.....	14,000	0.7%	$0.62	1/27/07	5,459	13,834
	18,000	0.9%	$0.62	4/01/07	18,160	35,527
	68,000	3.3%	$3.36	12/16/07	143,690	364,138
Robert N. Shuman.....	15,000	0.7%	$0.62	4/01/07	15,133	29,606
	10,000	0.5%	$1.20	10/21/07	20,578	39,875
	75,000	3.7%	$3.36	12/16/07	158,481	401,623

</TABLE>

(1) None of Dr. Reudink and Messrs. Huseby, Daley and Carey received any stock option grants during the year ended December 31, 1997.

(2) These stock options, which were granted under the 1995 Stock Option Plan, become vested at a rate of 25% of the total number of shares of Common Stock subject to the option on the first anniversary of the date of grant, and 1/48th of the total number of shares subject to the grant each month thereafter, as long as the optionee remains an employee with, consultant to, or director of the Company. The exercise price per share of each option was equal to the fair market value on the date of grant as determined by the Board of Directors at such time.

(3) Based on an aggregate of 2,031,268 options granted by the Company during the year ended December 31, 1997 to employees of the Company, including the Named Executive Officers.

(4) The 5% and 10% assumed annual rates of compounded stock price appreciation are mandated by the Securities and Exchange Commission and do not represent the Company's estimate or projection of future Common Stock prices.

OPTION EXERCISES AND HOLDINGS

There were no option exercises by the Named Executive Officers during fiscal year 1997 other than an exercise by Mr. Daley of options to purchase 49,327 shares with a value realized of $41,928. The following table provides certain summary information concerning the shares of Common Stock represented by outstanding stock options held by each of the Named Executive Officers as of December 31, 1997.

FISCAL YEAR-END OPTION VALUES

<TABLE>
<CAPTION>

NAME(1)	NUMBER OF SHARES UNDERLYING UNEXERCISED OPTIONS AT DECEMBER 31, 1997(2)		VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT DECEMBER 31, 1997 ($)(3)	
	VESTED	UNVESTED	VESTED	UNVESTED
<S>	<C>	<C>	<C>	<C>
Robert H. Hunsberger.....	--	900,000	--	$8,892,000
Douglas O. Reudink.....	--	--	--	--
Vito E. Palermo.....	--	200,000	--	$1,976,000
Ray K. Butler.....	--	100,000	--	$ 801,680
Robert N. Shuman.....	--	100,000	--	$ 776,700
Harold Carey.....	35,578	78,272	$351,511	$ 773,327

</TABLE>

(1) As a result of his separation from the Company, all unexercised options held by Mr. Daley had expired as of December 31, 1997. Mr. Huseby did not hold any options as of December 31, 1997.
(2) All options to be granted under the 1998 Stock Option Plan and all options granted after July 15, 1997 under the 1995 Stock Option Plan may be exercised immediately upon grant and prior to full vesting, subject to the optionee's entering into a restricted stock purchase agreement with the Company with respect to any unvested shares. Under such agreement, the optionee grants the Company an option to repurchase any unvested shares at their original purchase price in the event the optionee's employment or consulting relationship with the Company is terminated. The Company's right of repurchase lapses as the shares vest in a series of equal monthly or annual installments in accordance with the vesting schedule of the exercised options.
(3) Based on an assumed initial public offering price of $10.50 per share, minus the exercise price, multiplied by the number of shares underlying the option.

The Company has not granted options to purchase Common Stock to any of the Named Executive Officers in 1998.

SEVERANCE ARRANGEMENTS

The Company has entered into severance arrangements with Douglas O. Reudink, Chief Technical Officer, Robert H. Hunsberger, President and Chief Executive Officer, Vito E. Palermo, Senior Vice President and Chief Financial Officer, and Richard Henderson, Vice President of Sales and Marketing.

On July 7, 1995, in connection with the Series A Preferred Stock financing, the Company entered into an agreement with Dr. Reudink which provides that if the Company were to terminate his employment without cause after July 7, 1996, the Company would be obligated to make a lump-sum payment to Dr. Reudink equal to six months' of his then-current base salary and to provide benefits for six months following termination. In connection with this agreement, Dr. Reudink entered into a one-year non-competition agreement effective upon the termination of his employment with the Company.

On June 27, 1997, in connection with the employment of Mr. Hunsberger, the Company entered into an arrangement with Mr. Hunsberger which provides that if the Company were to terminate his employment without cause, the Company would be obligated to make a lump-sum payment to Mr. Hunsberger equal to twelve months' of his then-current base salary and provide benefits for twelve months following termination.

On July 23, 1997, in connection with the employment of Mr. Palermo, the Company entered into an agreement with Mr. Palermo which provides that if the Company were to terminate his employment without cause after January 20, 1998, the Company would be obligated to make a lump-sum payment to Mr. Palermo equal to six months' of his then-current base salary and 50% of his target bonus, if any, for the year in which the termination occurs and to provide benefits for six months following termination. In addition, Mr. Palermo's stock options would continue to vest in accordance with the Company's 1995 Stock Option Plan, as amended from time to time, during the period that Mr. Palermo would receive continued benefits from the Company. Mr. Palermo's voluntary resignation will not constitute termination without cause unless Mr. Palermo were to resign for good reason, in which case the Company would be

obligated to make a lump-sum payment to Mr. Palermo equal to nine months' of his then-current base salary and to pay for the reasonable cost of relocating Mr. Palermo back to his primary residence. If the Company were to terminate Mr. Palermo within six months following certain changes in control of the Company, the Company would pay to Mr. Palermo an amount equal to twelve months' of his then-current base salary and 100% of his target bonus for the year in which the change in control transaction occurs. In addition, Mr. Palermo's outstanding unvested stock options would vest during such period in

accordance with the Company's stock option plan as in effect at that time.

On October 29, 1997, in connection with the employment of Mr. Henderson, the Company entered into an agreement with Mr. Henderson which provides that if the Company were to terminate his employment without cause, the Company would be obligated to make a lump-sum payment to Mr. Henderson equal to six months' of his then-current base salary.

STOCK PLANS

1998 Stock Option Plan and 1995 Third Amended and Restated Stock Option Plan. The 1998 Stock Option Plan (the "1998 Stock Option Plan") was adopted by the Board of Directors in May 1998 and is expected to be approved by the stockholders of the Company prior to the completion of this offering. A total of 850,000 shares of Common Stock has been reserved for issuance under the 1998 Stock Option Plan, and, as of June 30, 1998, all such shares remained available for grant under the 1998 Stock Option Plan. On the first trading day of each of the five calendar years beginning in 1999 and ending in 2003, the number of shares reserved for issuance under the 1998 Stock Option Plan shall automatically be increased by an amount equal to three percent (3%) of the Company's outstanding Common Stock, up to a maximum of 1,000,000 shares in any calendar year, or such lower amount as determined by the Board of Directors.

The 1995 Third Amended and Restated Stock Option Plan (the "1995 Stock Option Plan") was originally adopted by the Board of Directors in August 1995 and was approved by the stockholders of the Company in January 1996. The 1995 Stock Option Plan was amended by the Board of Directors in December 1995, February 1997, July 1997 and May 1998 and such amendments were approved by the stockholders in January 1996, February 1997 and July 1997. A total of 4,150,000 shares of Common Stock has been reserved for issuance under the 1995 Stock Option Plan, and, as of June 30, 1998, 435,189 options remain available for grant under such plan.

Both the 1998 Stock Option Plan and the 1995 Stock Option Plan provide for the grant to employees of the Company (including officers and employee directors) of "incentive stock options" within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the "Code") and for the grant of nonstatutory stock options to employees, officers, directors (including non-employee directors) and consultants of the Company. To the extent an optionee would have the right in any calendar year to exercise for the first time one or more incentive stock options for shares having an aggregate fair market value (under all plans of the Company and determined for each share as of the date the option to purchase the share was granted) in excess of $100,000, any such excess options shall be treated as nonstatutory options.

Both the 1998 Stock Option Plan and the 1995 Stock Option Plan are administered by the Board of Directors or a committee of the Board of Directors (the "Administrator"). The Administrator determines the terms of options granted under the 1998 Stock Option Plan and 1995 Stock Option Plan, including the number of shares subject to the option, exercise price, term and exercisability. The exercise price of all incentive stock options granted under either the 1998 Stock Option Plan or 1995 Stock Option Plan must be at least equal to the fair market value of the Common Stock of the Company on the date of grant. The exercise price of any incentive stock option granted to an optionee who owns stock representing more than 10% of the voting power of the Company's outstanding capital stock (a "10% Stockholder") must be at least equal to 110% of the fair market value of the Common Stock on the date of grant. The

exercise price of all nonstatutory stock options cannot be less than 85% of the fair market value of the Common Stock of the Company on the date of grant, except in the case of 10% Stockholders, in which case the exercise price cannot be less than 110% of the fair market value of the Common Stock. Payment of the exercise price, subject to approval by the Administrator, may be made in cash, check, promissory note, delivery of shares of the Company's Common

Stock, subject to certain conditions, net exercise of the option, delivery of an irrevocable subscription agreement that obligates the option holder to take and pay for the shares issuable upon exercise not more than 12 months after the date of delivery of the subscription agreement, any combination of the foregoing, or other consideration approved by the Administrator. The term of options granted under either the 1998 Stock Option Plan or the 1995 Stock Option Plan may not exceed 10 years; provided, however, that the term of an incentive stock option granted to a 10% stockholder may not exceed five years. An option may not be transferred by the optionee other than by will or the laws of descent or distribution. Each option may be exercised during the lifetime of the optionee only by such optionee or by a permitted transferee. Options granted to each employee under either the 1998 Stock Option Plan or the 1995 Stock Option Plan generally become exercisable at the rate of 25% of the total number of shares subject to the options after the first anniversary following the date of grant, with 1/48th vesting monthly thereafter.

The Board of Directors has the authority to amend or terminate both the 1998 Stock Option Plan and the 1995 Stock Option Plan as long as such action does not adversely affect any outstanding option and provided that, to the extent necessary and desirable to comply with Rule 16b-3 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") or Section 422 of the Code, stockholder approval shall be obtained for any amendment to either the 1998 Stock Option Plan or the 1995 Stock Option Plan. If not terminated earlier, the 1998 Stock Option Plan will terminate in 2008 and the 1995 Stock Option Plan will terminate in 2007.

With respect to all options granted under the 1998 Stock Option Plan and those options granted on or after February 12, 1997 under the 1995 Stock Option Plan, in the event of certain changes in control of the Company (a "Corporate Transaction"), an optionee is, provided such optionee is employed at the time such Corporate Transaction occurs, entitled to accelerated vesting of one year if such optionee has been employed by the Company less than two years or accelerated vesting of two years if such optionee has been employed by the Company for two years or more as of the date of the Corporate Transaction; provided, however, this acceleration shall not occur if the Administrator determines that the Board, the acquiring person or the surviving corporation, as the case may be, has made equitable and appropriate provision for the assumption of existing options or substitution of new options on terms which are equivalent to the foregone option.

The Board has the discretion to authorize the issuance of unvested shares of Common Stock pursuant to the exercise of all stock options granted under the 1998 Stock Option Plan and any stock options granted after July 15, 1997 under the 1995 Stock Option Plan. If the optionee ceases to be employed by or provide services to the Company, all shares of Common Stock issued on exercise of a stock option which are unvested at the time of cessation shall be subject to repurchase by the Company at the exercise price paid for such shares (the "Company Repurchase Right"). The terms and conditions upon which the repurchase rights are exercisable by the Company are determined by the Board and set forth in the agreement evidencing such right. The Board has discretionary authority to cancel the Company's outstanding repurchase rights with respect to the shares purchased or purchasable under an option granted pursuant to such plans. In the event of a Corporate Transaction, if vesting of the options accelerates, the repurchase rights of the Company with respect to shares previously acquired on exercise of options granted under such plans shall terminate.

1998 Employee Stock Purchase Plan. The Company's Purchase Plan was adopted by the Board of Directors in May 1998 and will be submitted for approval by the stockholders prior to completion of this offering. A total of 500,000 shares of Common Stock has been reserved for issuance under the Purchase Plan. The Purchase Plan, which is intended to qualify under Section 423 of the Code, generally will be

implemented in a series of offering periods of 12 months duration with new

offering periods (other than the first offering period) commencing on or about February 1 and August 1 of each year. Each offering period will consist of two consecutive purchase periods of six months duration, with the last day of each period being designated a purchase date. However, the first such offering period is expected to commence on the date of this Offering and continue through July 31, 1999, with the first purchase date occurring on January 31, 1999, and subsequent purchase dates to occur every six months thereafter. The Purchase Plan will be administered by the Board of Directors or by a committee appointed by the Board of Directors. Employees (including officers and employee directors) of the Company, or of any subsidiary designated by the Board of Directors, are eligible to participate if they are employed by the Company or any such subsidiary for at least 20 hours per week and more than five months per year. The Purchase Plan permits eligible employees to purchase Common Stock through payroll deductions, which may not exceed 15% of an employee's compensation, at a price equal to the lower of 85% of the fair market value of the Company's Common Stock at the beginning of the offering period or the purchase date; provided, however, an employee shall not be permitted to purchase more than 2,500 shares of Common Stock in any single purchase period. If the fair market value of the Common Stock on a purchase date is less than the fair market value at the beginning of the offering period, a new 12-month offering period will automatically begin on the first business day following the purchase date with a new fair market value. Employees may end their participation in the offering at any time during the offering period, and an employee's participation ends automatically on termination of employment with the Company. In addition, participants may decrease their level of payroll deductions once during an offering period.

The Purchase Plan provides that in the event of a merger of the Company with or into another corporation or a sale of substantially all of the Company's assets, each right to purchase Common Stock under the plan will be assumed or an equivalent right substituted by the successor corporation unless the Board of Directors shortens the offering period so that employees' rights to purchase stock under the plan are exercised prior to the merger or sale of assets. On the first trading day of each of the five calendar years beginning in 1999 and ending in 2003, the number of authorized shares shall automatically increase by an amount equal to two percent (2%) of the Company's outstanding Common Stock, up to a maximum of 375,000 shares in any calendar year, or such lower amount as determined by the Board of Directors. The Board of Directors has the power to amend or terminate the Purchase Plan as long as such action does not adversely affect any outstanding rights to purchase stock thereunder. If not terminated earlier, the Purchase Plan will have a term of 20 years.

1998 Directors' Stock Option Plan. The Directors' Plan was adopted by the Board of Directors in February 1998 and approved by the stockholders on April 20, 1998. A total of 300,000 shares of Common Stock has been reserved for issuance under the Directors' Plan. The Directors' Plan provides for the automatic grant of nonstatutory stock options to nonemployee directors of the Company. The Directors' Plan is designed to work automatically without administration; however, to the extent administration is necessary, it will be performed by the Board of Directors.

The Directors' Plan provides that each person who becomes a nonemployee director of the Company after the date of this offering shall be granted a nonstatutory stock option to purchase 25,000 shares of Common Stock (the "First Option") on the date on which the optionee first becomes a nonemployee director of the Company. However, for individuals already serving as nonemployee directors as of the date of this offering, the First Option shall be an option to purchase 18,000 shares of Common Stock, except in the case of Messrs. Jarvis, Edwards and Twyver who were granted options to purchase 25,000 shares of Common Stock on February 12, 1998, May 19, 1998 and May 19, 1998, respectively. Thereafter, on the date of each annual meeting of the Company's stockholders following which a nonemployee director is serving on the Board of Directors, each nonemployee director (including directors who were not granted a First Option prior to the date of such annual meeting) shall be granted an option to purchase 7,000 shares of Common Stock (a "Subsequent Option") if, on such date, he or she has served on the Company's Board of Directors for at least six months.

The Directors' Plan sets neither a maximum nor a minimum number of shares for which options may be granted to any one nonemployee director, but does specify the number of shares that may be included in any grant and the method of making a grant. No option granted under the Directors' Plan is transferable by the optionee other than by will or the laws of descent or distribution or pursuant to a qualified domestic relations order, or to a family trust or family limited partnership established by the optionee, a member of optionee's immediate family or to a partnership or other entity of which optionee is a general partner or plays a similar role. Each option is exercisable, during the lifetime of the optionee, only by such optionee or by a permitted transferee. Provided an individual remains a director, the Directors' Plan provides that each First Option and Subsequent Option shall become exercisable in installments cumulatively as to 25% of the total number of shares subject to the Option on the first anniversary of the date of grant of the Option and 1/48th of the total number of shares subject to the Option each month thereafter. The exercise price of all stock options granted under the Directors' Plan shall be equal to the fair market value of a share of the Company's Common Stock on the date of grant of the option. The fair market value of any option granted concurrently with the initial effectiveness of the Purchase Plan shall be the Price to Public set forth in the final prospectus relating to this offering. Options granted under the Directors' Plan have a term of ten years.

In the event of a Corporate Transaction, an optionee is, provided such optionee continues to serve as a director until such Corporate Transaction occurs, entitled to accelerated vesting of one year if such optionee has been a director of the Company less than two years or accelerated vesting of two years if such optionee has been a director of the Company for more than two years as of the date of the Corporate Transaction; provided, however, this acceleration shall not occur if the Administrator determines that the Board, the acquiring person or the surviving corporation, as the case may be, has made equitable and appropriate provision for the assumption or substitution of new options on terms which are equivalent to the foregone option. The Board of Directors may amend or terminate the Directors' Plan; provided, however, that no such action may adversely affect any outstanding option, and the provisions regarding the grant of options under the plan may be amended only once in any six-month period, other than to comport with changes in the Code. If not terminated earlier, the Directors' Plan will have a term of ten years.

401(k) Plan. The Company maintains a 401(k) plan that covers all employees who satisfy certain eligibility requirements relating to minimum age, length of service and hours worked. Under the profit-sharing portion of the plan, the Company may make an annual contribution for the benefit of eligible employees in an amount determined by the Board of Directors. The Company has not made any such contribution to date. Under the 401(k) plan, eligible employees may make pretax elective contributions of up to 15% of their compensation, subject to maximum limits on contributions prescribed by law.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

SALES OF EQUITY SECURITIES

Certain stock option grants to directors and executive officers of the Company are described herein under the caption "Management--Executive Compensation."

Since July 1995, the Company has issued, in private placement transactions, shares of Preferred Stock as follows: an aggregate of 5,500,000 shares of Series A Preferred Stock at $1.00 per share beginning in July 1995, an aggregate of 2,740,743 shares of Series B Preferred Stock at $3.375 per share beginning in May 1996, an aggregate of 2,491,880 shares of Series C Preferred

Stock at $6.16 per share beginning in October 1996 and an aggregate of 2,397,727 shares of Series D Preferred Stock at $8.00 per share in August 1997.

Listed below are those directors, executive officers and five percent stockholders who have made equity investments in the Company during the last three fiscal years. The Company believes that the shares issued in these transactions were sold at the then fair market value and that the terms of these transactions were no less favorable than the Company could have obtained from unaffiliated third parties.

<TABLE>
<CAPTION>

INVESTOR(1)	COMMON STOCK	SERIES A PREFERRED STOCK	SERIES B PREFERRED STOCK	SERIES C PREFERRED STOCK	SERIES D PREFERRED STOCK	AGGREGATE CONSIDERATION
<S>	<C>	<C>	<C>	<C>	<C>	<C>
Entities affiliated with Venrock Associates(2)..	--	1,833,334	888,889	324,675	182,790	$ 8,295,652
Entities affiliated with Oak Investment Partners(3).....	--	1,833,333	888,889	324,675	182,790	$ 8,295,651
Entities affiliated with The Sevin Rosen Funds(4).....	--	1,833,333	888,889	324,675	182,790	$ 8,295,651
Entities affiliated with Worldview Technology Partners.....	--	--	--	811,688	46,825	$ 5,374,598
Entities affiliated with Bowman Capital Management.....	--	--	--	--	1,250,000	$10,000,000
Douglas O. Reudink.....	1,650,000	--	--	--	--	$ 16,500
Jennifer Gill Roberts(4).....	--	5,000	7,408	--	--	$ 30,002

</TABLE>

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(1) Shares held by affiliated persons and entities have been aggregated. See "Principal Stockholders."
(2) David R. Hathaway, a director, is a general partner of Venrock.
(3) Bandel L. Carano, a director, is a general partner of Oak.
(4) Jennifer Gill Roberts, a director, is a general partner of the Sevin Rosen. In addition to the equity investment made by entities affiliated with Sevin Rosen, (i) Ms. Roberts purchased 5,000 shares of Series A Preferred Stock and 7,408 shares of Series B Preferred Stock for her own account and (ii) Steven L. Domenik, a general partner of Sevin Rosen, purchased 5,926 shares of Series B Preferred Stock for his own account.

Holders of Preferred Stock and certain holders of Common Stock are entitled to certain registration rights with respect to the Common Stock issued or issuable upon conversion of the Preferred Stock. See "Description of Securities--Registration Rights."

On May 2, 1997, Thomas S. Huseby, the former Chief Executive Officer of the Company, sold a total of 200,000 shares of Common Stock to entities affiliated with Sevin Rosen, Venrock and Oak at a price per share of $2.00. Sevin Rosen and Venrock each purchased 66,666 shares of Common Stock and Oak

purchased 66,668 shares of Common Stock. On May 28, 1997, Douglas O. Reudink, Chairman of the Board and Chief Technical Officer of the Company, sold 55,000 shares of Common Stock to each of Sevin Rosen, Venrock and Oak at a price per share of $2.00.

On October 22, 1997, the Company made an unsecured loan of $75,000 to Vito E. Palermo, Senior Vice President and Chief Financial Officer of the Company

pursuant to a Promissory Note bearing interest at a rate of 5.50% per annum. Fifty thousand dollars of the principal amount of the loan is to be forgiven over a three-year period provided that Mr. Palermo remains employed with the Company with the remaining balance of $25,000 due on the earlier of October 22, 2000 or the date his employment terminates. The maximum indebtedness under the Promissory Note during the six-month period ended June 30, 1998 was $72,602. On October 28, 1997, the Company made a second loan of $162,500 to Mr. Palermo pursuant to a Secured Promissory Note bearing interest at a rate of 5.50% per annum, which is secured by a second deed of trust on his principal residence and a pledge of up to 50,000 shares of Common Stock held by Mr. Palermo. The secured loan is payable in full on October 28, 2002 or earlier based upon certain events specified in the loan agreement. The maximum indebtedness under the Secured Promissory Note during the six-month period ended June 30, 1998 was $168,205.

On January 10, 1998, the Company repurchased 137,775 shares of Common Stock from Mr. Huseby for nominal consideration pursuant to the Company's right of repurchase set forth in a Stock Repurchase Agreement dated July 7, 1995 by and between the Company and Mr. Huseby. The Stock Repurchase Agreement specified that the price per share to be paid by the Company was to be equal to the price per share paid by Mr. Huseby for the shares. The shares repurchased by the Company were subsequently canceled. In addition, the Company repurchased 100,000 shares of Common Stock on May 5, 1997 from Mr. Huseby for nominal consideration.

On April 3, 1998, Dr. Reudink sold 30,770 shares of Common Stock at a price of $6.50 per share to Cedar Grove Investment L.L.C., a limited liability corporation which is managed by Mr. Scot Jarvis, a director of the Company. On April 17, 1998, Dr. Reudink sold 20,000 shares of Common Stock at a price of $6.50 per share to Spinnaker Offshore Founders Fund, an entity affiliated with Bowman Capital Management and related entities which are holders of Series D Preferred Stock.

On April 28, 1998, the Company issued an aggregate principal amount of $29.0 million 13.75% Senior Secured Bridge Notes due April 28, 2000 to certain institutional investors. On April 28, 1999 and at the end of each 180-day period thereafter until the 13.75% Senior Secured Bridge Notes are repaid in full, the interest rate will increase by 200 basis points up to a maximum of 18.0%. In addition, the Company issued Note Warrants to purchase an aggregate of 537,500 shares of Series D Preferred Stock at a purchase price of $0.01 per share. The Note Warrants expire on April 28, 2000. Pursuant to the terms of the 13.75% Senior Secured Bridge Notes, upon the closing of this offering, the Company is obligated to repay one-half of the aggregate principal amount of the 13.75% Senior Secured Bridge Notes outstanding, together with accrued but unpaid interest thereon. The remaining outstanding 13.75% Senior Secured Bridge Notes are redeemable at the Company's option at any time. On or before the closing of this offering, the Company has the right to redeem all of the 13.75% Senior Secured Bridge Notes and Note Warrants and to repurchase any Series D Preferred Stock issued upon exercise of the Note Warrants for an aggregate redemption and repurchase price of $40,600,000.

Bruce Edwards, a director of the Company, is President, Chief Executive Officer and a member of the Board of Directors of Powerwave. Powerwave is currently the Company's sole supplier of linear power amplifiers, a component in the Company's products. From January 1, 1997 to June 30, 1998, the Company purchased a total of $8,015,545 of linear power amplifiers and related components from Powerwave. Powerwave purchased $2,500,000 in aggregate principal amount of the 13.75% Senior Secured Bridge Notes and has been issued a Note Warrant to purchase up to an aggregate of 46,336 shares of Series D Preferred Stock at a purchase price of $0.01 per share.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information with respect to beneficial ownership of the Company's Common Stock as of June 30, 1998, and as

adjusted to reflect the sale of Common Stock offered hereby, as to (i) each person (or group of affiliated persons) known by the Company to own beneficially more than 5% of the outstanding shares of the Company's Common Stock (a "5% Stockholder"), (ii) each of the Company's directors, (iii) each of the Named Executive Officers, and (iv) all directors and executive officers of the Company as a group.

<TABLE>
<CAPTION>

NAME AND ADDRESS	SHARES BENEFICIALLY OWNED(1)	PERCENT OF SHARES BENEFICIALLY OWNED(1) PRIOR TO OFFERING	PERCENT OF SHARES BENEFICIALLY OWNED(1) AFTER OFFERING
<S>	<C>	<C>	<C>
Oak Investment Partners(2) 525 University Avenue, Suite 1300 Palo Alto, CA 94301-1902	3,351,355	20.7%	15.8%
Venrock Associates(3) 30 Rockefeller Plaza New York, NY 10112-0184	3,342,352	20.7%	15.8%
The Sevin Rosen Funds(4) 550 Lytton Avenue, Suite 200 Palo Alto, CA 94301-1542	3,333,020	20.6%	15.7%
Douglas O. Reudink(5)	1,404,230	8.7%	6.6%
Bowman Capital Management(6) 1875 South Grant Street, Suite 600 San Mateo, CA 94402	1,270,000	7.9%	6.0%
Robert H. Hunsberger(7)	900,000	5.3%	4.1%
Worldview Technology Partners(8) 435 Tasso Street, Suite 120 Palo Alto, CA 94301-1546	858,513	5.3%	4.1%
Thomas Huseby(9)	662,225	4.1%	3.1%
Vito E. Palermo(10)	200,000	1.2%	*
Robert N. Shuman(11)	100,000	*	*
Ray K. Butler(12)	79,541	*	*
James J. Daley	49,327	*	*
Harold Carey	42,694	*	*
Bandel L. Carano(2)	3,351,355	20.7%	15.8%
David R. Hathaway(3)	3,342,352	20.7%	15.8%
Jennifer Gill Roberts(13)	3,345,428	20.7%	15.8%
Scot B. Jarvis(14)	55,770	*	*
Bruce C. Edwards(15)	25,000	*	*
David A. Twyver(16)	25,000	*	*
All directors and officers as a group (13 persons)(17)	13,174,135	75.0%	58.6%

</TABLE>

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* Less than 1%.

(1) Applicable beneficial ownership percentage is based on 16,166,277 shares of Common Stock outstanding prior to this offering and 21,166,277 shares outstanding after this offering, and assuming no exercise of the Underwriters' over-allotment option, together with applicable options and warrants for such stockholder. Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission (the "SEC Rules"). The number of shares beneficially owned by a person includes shares of Common Stock subject to options and warrants held by that person that are currently exercisable or exercisable within 60 days of June 30, 1998. Such shares issuable pursuant to such options and warrants are deemed outstanding for computing the percentage ownership of the person holding such options but are not deemed outstanding for the purposes of computing the percentage ownership of each other person. A portion of the shares issued or issuable upon exercise of such stock options is subject to repurchase by the Company at the original exercise price in the event of termination of employment, which repurchase right lapses over time. To the Company's knowledge, the persons named in this

table have sole voting and investment power with respect to all shares of Common Stock shown as owned by them,

subject to community property laws where applicable and except as indicated in the other footnotes to this table. Unless otherwise indicated, the address of each 5% Stockholder is: c/o Metawave Communications Corporation, 10735 Willows Road NE, P.O. Box 97069, Redmond, WA 98073-9769.

(2) Includes 3,274,943 shares held by Oak Investment Partners VI, L.P. and 76,412 shares held by Oak VI Affiliates Fund, L.P. Bandel L. Carano, a director, is a Managing Member of Oak Associates VI, L.L.C., a general partner of Oak Investment Partners VI, L.P., a General Partner of Oak VI Affiliates and a general partner of Oak VI Affiliates Fund, and as such may be deemed to share voting and investment power with respect to such shares. Mr. Carano disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest in such shares.

(3) Includes 2,123,970 shares held by Venrock Associates and 1,218,382 shares held by Venrock Associates II, L.P. David R. Hathaway, a director, is a general partner of Venrock Associates and Venrock Associates II, L.P., and as such, may be deemed to share voting and investment power with respect to such shares. Mr. Hathaway disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest in such shares.

(4) Includes 15,220 shares held by Sevin Rosen Bayless Management Co., 2,573,428 shares held by Sevin Rosen Fund IV L.P., 713,853 shares held by Sevin Rosen Fund V L.P. and 30,519 shares held by Sevin Rosen V Affiliates Fund L.P. Jennifer Gill Roberts, a director, is a general partner of Sevin Rosen Fund IV L.P., Sevin Rosen Fund V L.P. and Sevin Rosen V Affiliates Fund L.P., and as such, may be deemed to share voting and investment power with respect to such shares. Ms. Roberts disclaims beneficial ownership of such shares, except to the extent of her pecuniary interest in such shares.

(5) Includes 15,000 shares held in trust for Matthew Reudink, Dr. Reudink's son.

(6) Includes 43,750 shares held by Spinnaker Clipper Fund, L.P., 400,000 shares held by Spinnaker Founders Fund, L.P., 431,250 shares held by Spinnaker Technology Fund, L.P., 375,000 shares held by Spinnaker Technology Offshore Fund Limited and 20,000 shares held by Spinnaker Offshore Founders Fund Ltd.

(7) Includes 900,000 shares issuable upon the exercise of immediately exercisable options held by Mr. Hunsberger, of which 243,750 shares of which are fully vested within 60 days of June 30, 1998 and 656,250 shares of which remain subject to the Company Repurchase Right.

(8) Includes 50,104 shares held by Worldview Strategic Partners I, L.P., 226,718 shares held by Worldview Technology International I, L.P. and 581,691 shares held by Worldview Technology Partners I, L.P.

(9) Includes 7,900 shares held by Margaret D. Huseby, spouse of Mr. Huseby, and 31,600 shares held in trust for Katheryn Huseby, Max Huseby, Conor Huseby and Devin Huseby, Mr. Huseby's children.

(10) Includes 200,000 shares issuable upon the exercise of outstanding options held by Mr. Palermo, of which 73,749 are exercisable and vested within 60 days of June 30, 1998. In accordance with the SEC Rules, Mr. Palermo is the beneficial owner of 73,749 shares.

(11) Includes 3,750 shares owned by Mr. Shuman, and 96,250 shares issuable upon the exercise of outstanding options held by Mr. Shuman, 85,000 of which are immediately exercisable and subject to the Company Repurchase Right, and an additional 1,250 shares of which are vested and exercisable within 60 days of June 30, 1998. In accordance with the SEC Rules, Mr. Shuman is the beneficial owner of 90,000 shares.

(12) Includes 100,000 shares issuable upon the exercise of outstanding options held by Mr. Butler, 68,000 shares of which are immediately exercisable and subject to the Company Repurchase Right and an additional 11,541 shares of which are vested and exercisable within 60 days of June 30, 1998. In accordance with the SEC Rules, Mr. Butler is the beneficial owner of 79,541 shares.

(13) Includes the shares referenced in footnote (4) and 12,408 shares held by Ms. Roberts. Ms. Roberts disclaims beneficial ownership of the shares referenced in footnote (4), except to the extent of her pecuniary interest in such shares.

(14) Includes 30,770 shares owned by Cedar Grove Investments, LLC ("Cedar Grove") and 25,000 shares issuable upon the exercise of immediately exercisable options held by Mr. Jarvis within 60 days of June 30, 1998, all of which are subject to the Company Repurchase Right. Mr. Jarvis, a managing member of Cedar Grove, disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest in such shares.

(15) Includes 25,000 shares issuable upon the exercise of immediately exercisable options held by Mr. Edwards within 60 days of June 30, 1998, all of which are subject to the Company Repurchase Right.

(16) Includes 25,000 shares issuable upon the exercise of immediately exercisable options held by Mr. Twyver within 60 days of June 30, 1998, all of which are subject to the Company Repurchase Right.

(17) Includes (i) shares referred to in footnotes (2)-(5), (7) and (10)-(16) and (ii) 306,665 shares beneficially owned by two other executive officers.

DESCRIPTION OF SECURITIES

Following the closing of the sale of the shares of Common Stock offered hereby, the authorized capital stock of the Company will consist of 150,000,000 shares of Common Stock, $0.001 par value, and 15,000,000 shares of Preferred Stock, $0.001 par value.

COMMON STOCK

As of June 30, 1998, there were 16,166,277 shares of Common Stock outstanding that were held of record by approximately 41 stockholders. There will be 21,166,277 shares of Common Stock outstanding (assuming no exercise of outstanding options after June 30, 1998) after giving effect to the sale of the shares of Common Stock offered hereby.

The holders of Common Stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Subject to preferences that may be applicable to any outstanding Preferred Stock, the holders of Common Stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by the Board of Directors out of funds legally available therefor. See "Dividend Policy." In the event of a liquidation, dissolution or winding up of the Company, the holders of Common Stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior rights of Preferred Stock, if any, then outstanding. The Common Stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions available to the Common Stock. All outstanding shares of Common Stock are fully paid and non-assessable.

PREFERRED STOCK

The Board of Directors is authorized to issue up to 15,000,000 shares of Preferred Stock in one or more series and to determine the powers, preferences and rights and the qualifications, limitations or restrictions granted to or imposed upon any wholly unissued series of undesignated Preferred Stock, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting any series or the designation of such series, without any further vote or action by the stockholders.

The issuance of Preferred Stock may have the effect of delaying, deferring or preventing a change in control of the Company without further action by the stockholders and may adversely affect the voting and other rights of the holders of Common Stock. In certain circumstances, such issuance could have the effect of decreasing the market price of the Common Stock. As of the closing of this offering, no shares of Preferred Stock will be outstanding and

the Company currently has no plans to issue any shares of Preferred Stock.

WARRANTS

As of June 30, 1998, the Company has warrants outstanding to purchase an aggregate of 65,416 shares of Series A Preferred Stock, 19,999 shares of Series B Preferred Stock, 34,090 shares of Series C Preferred Stock and 541,875 shares of Series D Preferred Stock.

In connection with an equipment lease line entered into in December 1995, the Company issued a warrant to purchase up to an aggregate of 48,750 shares of Series A Preferred Stock to Comdisco, Inc. ("Comdisco") at an exercise price of $2.1875 per share. The warrant expires on the later of December 13, 2002 or three years following the effective date of this offering. In connection with a second equipment lease line entered into in April 1996, the Company issued a warrant to purchase up to an aggregate of 16,666 shares of Series A Preferred Stock to Comdisco at an exercise price of $2.1875 per share. The warrant expires on the later of April 9, 2003 or three years following the effective date of this offering. In connection with a third equipment lease line entered into in August 1996, the Company

issued a warrant to purchase up to an aggregate of 19,999 shares of Series B Preferred Stock to Comdisco at an exercise price of $4.72 per share. The warrant expires on the later of August 20, 2003 or three years following the effective date of this offering. In connection with a fourth equipment lease line entered into in June 1997, the Company issued a warrant to purchase up to an aggregate of 34,090 shares of Series C Preferred Stock to Comdisco at an exercise price of $6.16 per share. The warrant expires on the later of June 9, 2004 or 18 months following the effective date of this offering.

In connection with the issuance of the 13.75% Senior Secured Bridge Notes in April 1998, the Company issued the holders of the 13.75% Senior Secured Bridge Notes warrants to purchase an aggregate of 537,500 shares of Series D Preferred Stock at a purchase price of $0.01 per share (the "Note Warrants"). The Note Warrants expire on April 28, 2000.

In connection with an equipment lease line entered into with Insight Investments Corporation in April 1998, the Company issued a warrant to purchase up to an aggregate of 4,375 shares of Series D Preferred Stock at an exercise price of $8.00 per share. The warrant expires on the closing of this offering and is expected to be net exercised simultaneously therewith.

REGISTRATION RIGHTS OF CERTAIN HOLDERS

The holders of 15,338,305 shares of Common Stock (the "Registrable Securities") or their transferees are entitled to certain rights with respect to the registration of such shares under the Securities Act. These rights are provided under the terms of an agreement between the Company and the holders of Registrable Securities. Subject to certain limitations in the agreement, certain holders of the Registrable Securities may require, on two occasions at any time after six months from the effective date of this offering, that the Company use its best efforts to register the Registrable Securities for public resale, provided that the proposed aggregate offering price is at least $7,500,000. If the Company registers any of its Common Stock either for its own account or for the account of other security holders, the holders of Registrable Securities are entitled to include their shares of Common Stock in the registration. The holders of the Note Warrants are also entitled to include shares issuable upon exercise of the Note Warrants in the registration. A holder's right to include shares in an underwritten registration is subject to the ability of the underwriters to limit the number of shares included in the initial public offering. Subject to certain conditions, all fees, costs and expenses of such registrations must be borne by the Company and all selling expenses (including underwriting discounts, selling commissions and stock transfer taxes) relating to Registrable Securities must be borne by the holders of the securities being registered.

ANTI-TAKEOVER PROVISIONS OF DELAWARE AND WASHINGTON LAW AND CHARTER DOCUMENTS

The Company is subject to the provisions of Section 203 of the DGCL. In general, the statute prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date that the person became an interested stockholder unless (with certain exceptions) the business combination or the transaction in which the person became an interested stockholder is approved in a prescribed manner. Generally, a "business combination" includes a merger, asset or stock sale or other transaction resulting in a financial benefit to the stockholder, and an "interested stockholder" is a person who, together with affiliates and associates, owns (or within three years prior, did own) 15% or more of the corporation's outstanding voting stock. This provision may have the effect of delaying, deferring or preventing a change in control of the Company without further action by the stockholders.

The laws of the State of Washington, where the Company's principal executive offices are located, impose restrictions on certain transactions between certain foreign corporations and significant stockholders. Chapter 23B.19 of the Washington Business Corporation Act (the "WBCA") prohibits a "target corporation," with certain exceptions, from engaging in certain "significant business transactions"

with a person or group of persons who beneficially own 10% or more of the voting securities of the target corporation (an "acquiring person") for a period of five years after such acquisition, unless the transaction or acquisition of such shares is approved by a majority of the members of the target corporation's board of directors prior to the time of acquisition. Such prohibited transactions include, among other things, a merger or consolidation with, disposition of assets to, or issuance or redemption of stock to or from, the acquiring person, termination of 5% or more of the employees of the target corporation as a result of the acquiring person's acquisition of 10% or more of the shares or allowing the acquiring person to receive disproportionate benefit as a stockholder. After the five-year period, a significant business transaction may take place as long as it complies with certain fair price provisions of the statute. A target corporation includes a foreign corporation if (i) the corporation has a class of voting stock registered pursuant to Section 12 or 15 of the Exchange Act, (ii) the corporation's principal executive office is located in Washington, and (iii) any of (a) more than 10% of the corporation's stockholders of record are Washington residents, (b) more than 10% of its shares are owned of record by Washington residents, (c) 1,000 or more of its stockholders of record are Washington residents, (d) a majority of the corporation's employees are Washington residents or more than 1,000 Washington residents are employees of the corporation, or (e) a majority of the corporation's tangible assets are located in Washington or the corporation has more than $50.0 million of tangible assets located in Washington. A corporation may not "opt out" of this statute and, therefore, the Company anticipates this statute will apply to it. Depending upon whether the Company meets the definition of a target corporation, Chapter 23B.19 of the WBCA may have the effect of delaying, deferring or preventing a change in control of the Company.

In addition, upon completion of this offering, certain provisions of the Company's charter documents, including a provision eliminating the ability of stockholders to take actions by written consent, may have the effect of delaying or preventing changes in control or management of the Company, which could have an adverse effect on the market price of the Company's Common Stock. The Company's stock option and purchase plans generally provide that upon a change in control or similar event optionees are entitled to accelerated vesting credit equal to either twelve months or twenty-four months of additional vesting beyond that otherwise scheduled, based on whether he or she has been employed by the Company less than two years, or two years or more, respectively, as of the date of such event unless in connection with the change in control or similar event, outstanding options are assumed or

substituted for equivalent options of a successor corporation. The Board of Directors has authority to issue up to 15,000,000 shares of Preferred Stock and to fix the rights, preferences, privileges and restrictions, including voting rights, of these shares without any further vote or action by the stockholders. The rights of the holders of the Common Stock will be subject to, and may be adversely affected by, the rights of the holders of any Preferred Stock that may be issued in the future. The issuance of Preferred Stock, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, could have the effect of making it more difficult for a third party to acquire a majority of the outstanding voting stock of the Company, thereby delaying, deferring or preventing a change in control of the Company. Furthermore, such Preferred Stock may have other rights, including economic rights senior to the Common Stock, and, as a result, the issuance of such Preferred Stock could have a material adverse effect on the market value of the Common Stock. The Company has no present plan to issue shares of Preferred Stock.

TRANSFER AGENT AND REGISTRAR

The Transfer Agent and Registrar for the Company's Common Stock is ChaseMellon Shareholder Services L.L.C.

LISTING

The Company has applied to list its Common Stock on the Nasdaq National Market under the trading symbol "MTWV."

SHARES ELIGIBLE FOR FUTURE SALE

Upon completion of this offering, the Company will have outstanding 21,166,277 shares of Common Stock, assuming no exercise of options after June 30, 1998. Of these shares, the 5,000,000 shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act unless purchased by "affiliates" of the Company as that term is defined in Rule 144 of the Securities Act.

The remaining 16,166,277 shares outstanding upon completion of this offering will be "restricted securities" as that term is defined under Rule 144 (the "Restricted Shares") and may not be sold publicly unless they are registered under the Securities Act or are sold pursuant to Rule 144 or another exemption from registration. All directors and executive officers and certain other stockholders of the Company, holding in the aggregate 15,838,492 of the shares of Common Stock outstanding prior to this offering, are contractually obligated not to sell or otherwise dispose of any shares of Common Stock for a period of 180 days after the date of this Prospectus (the "Lockup Period") without the prior written consent of BT Alex. Brown Incorporated or the Company (the "Lockup"). See "Underwriting." The number of shares of Common Stock available for sale in the public market is further limited by restrictions under the Securities Act.

Because of the restrictions noted above, on the date of this Prospectus and until 180 days after the date of this Prospectus (assuming no release of the Lockup Period by the Company or by BT Alex. Brown Incorporated), no shares other than the 5,000,000 shares offered hereby will be eligible for sale in the public market and beginning 90 days after the effective date of this offering, approximately 298,155 Restricted Shares will be eligible for sale in the public market. Beginning 180 days after the effective date of this Prospectus, approximately 15,892,122 Restricted Shares (as well as an additional 123,880 shares of Common Stock issuable upon exercise of currently outstanding warrants) will be eligible for sale in the public market, subject in some cases to certain volume limitations.

<TABLE>
<CAPTION>

SHARES

DAYS AFTER DATE OF THIS PROSPECTUS	ELIGIBLE FOR SALE	COMMENT
<C>	<C>	<S>
Upon Effectiveness	5,000,000	Shares sold in offering
Upon Effectiveness	none	Freely tradable shares salable under Rule 144(k) that are not subject to the Lockup
91 days	298,155	Shares salable under Rules 701 and 144 and not subject to the Lockup
181 days	15,857,122	Lockup released; shares salable under Rules 144 and 701

</TABLE>

In general, under Rule 144 as currently in effect, a person (or persons whose shares are aggregated) who has beneficially owned Restricted Shares for at least one year, including persons who may be deemed "affiliates" of the Company, would be entitled to sell within any three-month period a number of shares that does not exceed the greater of 1% of the number of shares of Common Stock then outstanding or the average weekly trading volume of the Common Stock as reported through the Nasdaq National Market during the four calendar weeks preceding the filing of a Form 144 with respect to such sale. Sales under Rule 144 are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about the Company. In addition, a person who is not deemed to have been an affiliate of the Company at any time during the 90 days preceding a sale, and who has beneficially owned for at least two years the shares proposed to be sold, would be entitled to sell such shares under Rule 144(k) without regard to the requirements described above.

In general, Rule 701 permits resales of shares issued pursuant to certain compensatory benefit plans and contracts commencing 90 days after the issuer becomes subject to the reporting requirements of the Exchange Act in reliance upon Rule 144 but without compliance with certain restrictions, including the holding period requirements, contained in Rule 144. During the Lockup Period, the Company intends to register on a registration statement on Form S-8, (i) a total of 3,638,399 shares of Common Stock reserved for issuance under the 1995 Stock Option Plan (assuming no exercise of options after June 30, 1998), (ii) a total of 850,000 shares of Common Stock reserved for issuance under the 1998 Stock Option Plan, (iii) a total of 300,000 shares of Common Stock reserved for issuance under the Directors' Plan and (iv) a total of 500,000 shares of Common Stock reserved for issuance under the Purchase Plan. Such registration will permit the resale of shares so registered by non-affiliates in the public market without restriction under the Securities Act.

Prior to this offering, there has been no public market for securities of the Company. No prediction can be made as to the effect, if any, that market sales of shares or the availability of shares for sale will have on the market price prevailing from time to time. Nevertheless, sales of substantial amounts of Common Stock of the Company in the public market after the lapse of the restrictions described below could adversely affect the prevailing market price and the ability of the Company to raise equity capital in the future at a time and price which it deems appropriate. In addition, after this offering, the holders of 15,338,305 shares of Common Stock (the "Registrable Securities") will be entitled to certain demand and piggyback rights with respect to registration of such shares under the Securities Act. Registration of such shares under the Securities Act would result in such shares becoming freely tradable without restriction under the Securities Act (except for shares purchased by affiliates of the Company) immediately upon the effectiveness of such registration. See "Description of Securities--Registration Rights of Certain Holders." If such holders, by exercising their demand registration rights, cause a larger number of securities to be registered and sold in the public market, such sales could have an adverse effect on the market price for the Company's Common Stock. If the Company were to include in a Company initiated registration any Registrable Securities

pursuant to the exercise of piggyback registration rights, such sales may have an adverse effect on the Company's ability to raise needed capital.

UNDERWRITING

Subject to the terms and conditions of the Underwriting Agreement, the Underwriters named below, through their representatives, BT Alex. Brown Incorporated, Merrill Lynch, Pierce, Fenner & Smith Incorporated and NationsBanc Montgomery Securities LLC (the "Representatives"), have severally agreed to purchase from the Company the following respective numbers of shares of Common Stock at the initial public offering price less the underwriting discounts and commissions set forth on the cover page of this Prospectus:

<TABLE>
<CAPTION>

UNDERWRITER	NUMBER OF SHARES
<S>	<C>
BT Alex. Brown Incorporated	
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
NationsBanc Montgomery Securities LLC	
Total	5,000,000

</TABLE>

The Underwriting Agreement provides that the obligations of the Underwriters are subject to certain conditions precedent and that the Underwriters will purchase all shares of the Common Stock offered hereby if any such shares are purchased.

The Company has been advised by Representatives of the Underwriters that they propose to offer the shares of Common Stock directly to the public at the initial public offering price set forth on the cover page of this Prospectus and to certain dealers at such price less a concession not in excess of $ per share. The Underwriters may allow, and such dealers may reallow, a concession not in excess of $ per share to certain other dealers. After the initial public offering of the shares, the offering price and other selling terms may be changed by the Representatives of the Underwriters.

The Company has granted to the Underwriters an option, exercisable no later than 30 days after the date of this Prospectus, to purchase up to an aggregate of 750,000 additional shares of Common Stock at the public offering price less the underwriting discounts and commissions set forth on the cover page of this Prospectus. To the extent that the Underwriters exercise such option, each of the Underwriters will have a firm commitment to purchase approximately the same percentage of such additional shares as the number set forth next to such Underwriters name in the above table bears to the total number of shares of Common Stock offered hereby, and the Company will be obligated, pursuant to the option, to sell shares to the Underwriters to the extent the option is exercised. The Underwriters may exercise such option only to cover over-allotments made in connection with the sale of shares of Common Stock offered hereby. If purchased, the Underwriters will offer such additional shares on the same terms as those on which the 5,000,000 shares are being offered.

The offering of the shares is made for delivery when, as and if accepted by the Underwriters and subject to prior sale and to withdrawal, cancellation or modification of the offering without notice. The Underwriters reserve the right to reject an order for the purchase of shares in whole or in part.

The Company has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act, and to contribute to payments the Underwriters may be required to make in respect thereof.

All officers and directors of the Company and certain stockholders have agreed with the Underwriters that, until 180 days after the effective date of this Prospectus, they will not directly or indirectly offer, sell, pledge, contract to sell (including any short sale), grant any option to purchase or otherwise dispose of any shares of Common Stock (including, without limitation, shares of Common Stock of the Company which may be deemed to be beneficially owned by the undersigned on the date hereof in accordance with the rules and regulations of the Commission and shares of Common Stock which may be issued upon exercise of a stock option or warrant) or enter into any hedging transaction relating to the Common Stock.

The Company has also agreed not to sell, offer to sell, contract to sell, grant any option to purchase or otherwise dispose of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or any rights to acquire Common Stock for a period of 180 days after the date of this Prospectus without the prior written consent of BT Alex. Brown Incorporated, except that the Company may issue shares upon the exercise of options granted prior to the date hereof, and may grant additional options under its Plans, provided that, without the prior written consent of BT Alex. Brown Incorporated, such additional options shall be exercisable, but not transferable, during such period. The lockup agreements may be released at any time as to all or any portion of the shares subject to such agreements at the sole discretion of BT Alex. Brown Incorporated.

Prior to this offering, there has been no public market for the Common Stock of the Company. Consequently, the initial public offering price for the Common Stock will be determined by negotiation between the Company and the Representatives of the Underwriters. Among the factors to be considered in such negotiations will be prevailing market conditions, the results of operations of the Company in recent periods, the market capitalizations and stages of development of other companies that the Company and the Representatives of the Underwriters believe to be comparable to the Company, estimates of the business potential of the Company and its industry in general and the present state of the Company's development and other factors deemed relevant.

BT Alex. Brown Incorporated acted as the placement agent in the private placement of the Company's 13.75% Senior Secured Bridge Notes and Note Warrants issued on April 28, 1998, and in connection with that placement received cash compensation. BT Holdings (NY), Inc., an affiliate of BT Alex. Brown Incorporated, purchased a 13.75% Senior Secured Bridge Note in the principal amount of $4,500,000 and a Note Warrant to purchase 83,405 shares of Series D Preferred Stock. See "Certain Relationships and Related Transactions" for a description of the terms of the 13.75% Senior Secured Bridge Notes and the Note Warrants.

In view of this relationship, the offering is being made in accordance with Section 2720 of the Conduct Rules of the National Association of Securities Dealers, Inc., which provides, among other things, that the price of the Common Stock can be no higher than that recommended by a "qualified independent underwriter" meeting certain standards. In accordance with this requirement, Merrill Lynch, Pierce, Fenner & Smith Incorporated is serving in such role and will recommend the maximum public offering price of the Common Stock, Merrill Lynch, Pierce, Fenner & Smith Incorporated has also participated in the preparation of this Prospectus and has performed due diligence with respect thereto.

The Company has been advised by the Representatives that during and after this offering, the Underwriters may purchase and sell Common Stock in the open market. These transactions may include over-allotment and stabilizing transactions and purchases to cover syndicate short positions created in connection with this offering. Stabilizing transactions consist of certain bids or purchases for the purpose of preventing or retarding a decline in the market price of the Common Stock; and syndicate short positions involve the

sale by the Underwriters of a greater number of shares of Common Stock than they are required to purchase from the Company in this offering. The Underwriters also may impose penalty bids, whereby selling concessions allowed to the syndicate members or other broker-dealers in respect of the Common Stock sold in this offering for their account may be reclaimed by the syndicate if such securities are repurchased by the syndicate in stabilizing or short-covering transactions. These activities may stabilize, maintain or otherwise affect the market price of the Common Stock, which may be higher than the price that might otherwise prevail in the open market. These transactions may be effected on the Nasdaq National Market or otherwise and these activities, if commenced, may be discontinued at any time.

The Representatives of the Underwriters have advised the Company that the Underwriters do not intend to confirm orders to any account over which they exercise discretionary authority.

LEGAL MATTERS

The validity of the Common Stock offered hereby will be passed upon for the Company by its counsel, Venture Law Group, A Professional Corporation, Kirkland, Washington. Certain legal matters will be passed upon for the Underwriters by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California.

EXPERTS

The financial statements and schedule of Metawave Communications Corporation as of December 31, 1996 and 1997 and the related statements of operations, shareholders' equity (deficit), and cash flows for the years then ended and the period from January 19, 1995 (inception) to December 31, 1995 appearing in this Prospectus and Registration Statement have been audited by Ernst & Young LLP, independent auditors, as set forth in their reports thereon appearing elsewhere herein, and are included in reliance upon such reports, given on the authority of such firm as experts in accounting and auditing.

ADDITIONAL INFORMATION

The Company has filed with the Securities and Exchange Commission (the "Commission") a Registration Statement, of which this Prospectus constitutes a part, under the Securities Act with respect to the shares of Common Stock offered hereby. This Prospectus omits certain information contained in the Registration Statement, and reference is made to the Registration Statement and the exhibits and schedules thereto for further information with respect to the Company and the Common Stock offered hereby. Statements contained herein concerning the provisions of any documents are not necessarily complete, and in each instance reference is made to the copy of such document filed as an exhibit to the Registration Statement. Each such statement is qualified in its entirety by such reference. Copies of the Registration Statement, including exhibits and schedules filed therewith, may be inspected without charge at the Commission's principal office in Washington, D.C. or obtained at prescribed rates from the Public Reference Section of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549. The Commission maintains a World Wide Web site on the Internet at http://www.sec.gov that contains reports, proxy and information statements and other information regarding companies that file electronically with the Commission. The Company has filed the Registration Statement, including the exhibits and schedules thereto, electronically with the Commission via the Commission's EDGAR system. The Company intends to distribute to its stockholders annual reports containing audited financial statements and will make available copies of quarterly reports for the first three quarters of each fiscal year containing unaudited interim financial information.

GLOSSARY OF TECHNICAL TERMS

AMPLIFIER	A device used to increase the signal strength of analog or digital radio frequency (RF) signals.
AMPS (ADVANCED MOBILE PHONE SERVICE)	An analog wireless protocol adopted in North and South America.
ANALOG	The traditional method of modulating radio signals to carry information. The analog method employs a continuous signal that varies the amplitude, frequency or phase of the radio transmission.
ANTENNA	A device for transmitting and/or receiving radiowave signals. Antennas can be designed to offer various radiation patterns. Omni-directional antennas typically radiate equally in all directions. Other antennas are more directional, radiating largely in one area and not in others.
ATTENUATION	The weakening of a signal along some path, often due to partial blocking or absorption.
BANDWIDTH	The total frequency range of spectrum available.
BASE STATION	A transmit and receive station that controls and relays signals between a switch and the remote handset or subscriber unit (fixed or mobile).
BSC (BASE STATION CONTROLLER)	Equipment that manages the radio transmission for a set of base stations by handling radio channel management, message transport and hand-offs.
BEAM	A directed RF signal radiating from an antenna in a narrow pattern which carries cellular phone traffic.
CARRIER TO INTERFERENCE RATIO (C/I)	The ratio of strength in the carrier signal to the total strength of interfering signals, expressed in dB.
CAPACITY	The maximum amount of call traffic that a cellular network can handle.
CDMA (CODE DIVISION MULTIPLE ACCESS)	A digital wireless protocol adopted in North America and Asia. In this protocol, each voice call is labeled with a unique code and transmitted on the same frequency channel with other calls.
CARRIER	A CDMA channel with 1.23 MHz bandwidth.
CELL	The term used to define a geographic area that is served by a cell site.
CELL SITE	The location of the base station equipment servicing the cell.
CELL-SPLITTING	The splitting of one large cell into smaller ones. With proper splitting and allocation of frequencies, channels can be reused more frequently, making it possible to increase capacity.

GLOSSARY OF TECHNICAL TERMS--(CONTINUED)

CELLULAR NETWORK	A network of interconnected low-powered radio transceivers that provides mobile telephone service.
CHANNEL	The communication path which transfers information between elements in a wireless network. This radio channel requires a unique RF frequency that is used for communication between subscriber unit and cell site base station and is assigned by the FCC.
COVERAGE AREA	The geographic area in which the signal strength from a

	cellular network is sufficient to provide service to users of the wireless network.
DB	Abbreviation for decibel, a unit for expressing the relative strength of two signals.
DIGITAL	A method of storing, processing, and transmitting voice and data that uses distinct electronic pulses to represent the information.
DIGITAL CELLULAR	A wireless protocol that breaks up cellular voice or data transmission and sends them in a digital format. Common digital cellular protocols include CDMA, GSM and TDMA.
DUAL-BAND	A mobile or portable phone that is capable of operating in more than one frequency band. An example of a dual-band phone is a unit that operates on both a 900 MHz and 1.9 GHz system.
DUAL-MODE	A mobile or portable phone that is capable of operating using more than one standard. An example of a dual-mode phone is a unit that primarily operates on a digital system and defaults to analog AMPS operation if the digital system is unavailable.
FCC	The Federal Communications Commission; a U.S. government agency which regulates wireless communications services and equipment.
FOOTPRINT	The coverage area of a cell site.
FREQUENCY	The rate at which the electric and magnetic fields of a radio wave oscillate, expressed as the number of cycles per unit of time. Frequency is typically measured in Hertz (Hz), or cycles per second.
GHZ (GIGAHERTZ)	One gigahertz is equal to one billion cycles per second.
GSM (GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS)	A digital wireless protocol which serves as the European standard for digital cellular.
HZ (HERTZ)	A measurement of frequency, equivalent to one "wave" or cycle per second.
INFRASTRUCTURE	All parts of the wireless network, excluding the subscriber's phone. Includes the Mobile Telephone Switching Office, Base Stations, and all links between them.

GLOSSARY OF TECHNICAL TERMS--(CONTINUED)

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INTERFERENCE	Reception of unwanted signals which degrades call quality and limits wireless capacity. Refers to undesired signals from the standpoint of any particular listener.
KHZ (KILOHERTZ)	One kilohertz is equal to one thousand cycles per second.
LAN (LOCAL AREA NETWORK)	A private data communications network linking a variety of data services such as computers and printers within an office or home environment.
LMDS (LOCAL MULTIPOINT DISTRIBUTION SERVICE)	A broadband wireless communications network that uses millimeter wave frequencies around 28 to 38 GHz to transmit video and data over a cellular-like network at distances under a few miles.
LOCAL LOOP	A wired communications channel between the subscriber's location and the subscriber's local central office, also known as the subscriber loop.
MHZ (MEGAHERTZ)	One megahertz is equal to one million cycles per second.
MSC (MOBILE SWITCHING CENTER)	A high-capacity, traffic handling device that routes incoming and outgoing wireless calls by determining which base station will handle each call and also provides inter-system hand-offs.
MTSO (MOBILE TELEPHONE SWITCHING OFFICE)	The hub of a cellular network, which incorporates the mobile

	switching center and the network operating software for the switching, database, and maintenance functions.
NAMPS (NARROW-BAND AMPS)....	An analog wireless protocol which operates in the 800-MHz band in the United States. Developed by Motorola, NAMPS divides traditional 30-MHz channels into three 10-MHz channels to add capacity.
PCS (PERSONAL COMMUNICATIONS SERVICES).....	A two-way, digital, wireless telecommunications system operating in the 1.8 GHz to 2.4 GHz range in the United States.
PHASED-ARRAY.....	A type of antenna design in which the relative phases of the respective signals feeding the group of antennas are varied to vary the radiation pattern of the antenna.
PSTN (PUBLIC SWITCHED TELEPHONE NETWORK).....	Refers to the collection of networks providing public telephone switching service; the wired or landline network.
RECEIVER.....	A device that receives signals.

GLOSSARY OF TECHNICAL TERMS--(CONTINUED)

REUSE/FREQUENCY REUSE.....	The utilization of frequency (channels) more than once in a wireless network. To minimize interference, cells are assigned only a portion of an operator's available frequencies; adjacent cells do not use the identical channels. The reuse pattern determines how many cells the available frequencies are divided among before being reused and therefore how much distance separates cells using the same frequency.
RF (RADIO FREQUENCY).....	The range of electromagnetic frequencies above the audio range and below visible light. All broadcast transmission, from AM radio to microwaves, falls into this range, which is between 30-KHz and 300-GHz.
RF SIGNAL.....	Information transmitted over a communications network by a modulated RF channel.
ROAMING.....	The ability to use a wireless phone to make and receive calls in places outside a user's home coverage area.
SECTORIZING.....	The process of dividing a cell site into sectors by using directional antennas. Sectorizing is typically used as a means of reducing interference in order to increase frequency reuse and therefore network capacity.
SECTOR SYNTHESIS.....	A proprietary method incorporated into Metawave's smart antenna system to better control the transmission and reception of CDMA radio signals by cell sites, thereby reducing interference.
SMART ANTENNA.....	A system that can respond to changes in the radio frequency environment through the use of software algorithms that control an integrated antenna array.
SMR (SPECIALIZED MOBILE RADIO).....	A two-way radio telephony service making use of macrocells that cover an area up to 50 miles in diameter. Widely used in dispatch operations by truck and taxi fleets. SMR systems have much less radio spectrum than cellular systems, but have a much greater range.
SPATIAL DIVERSITY.....	An antenna configuration of two or more elements that are physically spaced (spatially diverse) to combat signal fading and improve signal quality. The desired spacing depends on the frequency band and the RF environment.
SPECTRUM.....	A continuous range of frequencies, ranging from 30 Hz to 3000 GHz, available for radio transmission and reception. The FCC has set aside fixed portions of the spectrum for cellular service, PCS service, television, FM radio, and

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satellite transmissions.
SPECTRUM ALLOCATION..... Federal government designation of a range of frequencies for a category of use or uses.
SPECTRUM MANAGEMENT..... A way to improve a network's capacity, coverage, and call quality by using hardware and software tools for network configuration and RF enhancement.
SUBSCRIBER..... A customer of a wireless service provider or other communications company.
SWITCH..... See MTSO.
</TABLE>

GLOSSARY OF TECHNICAL TERMS--(CONTINUED)

<TABLE>
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TDMA (TIME DIVISION MULTIPLE ACCESS)..... A method of digital wireless communications transmission by which a large number of users can access, in sequence, a single radio frequency channel without interference because each user is allocated a unique time slot within each frequency channel.
TRANSCEIVER..... Equipment that both receives and transmits radio waves.
TRANSMITTER..... A device that generates signals.
TRUNKING..... Allowing a subscriber unit to be connected to any unused channel in a group of channels for an incoming or outgoing call. Trunking efficiency is increased whenever greater numbers of channels can be made available to any group of subscribers at a given location and time.
WIRELESS..... Describing a type of technology using radio-based systems that allows transmission of voice and data signals through radio frequencies without a physical connection.
WLL (WIRELESS LOCAL LOOP)... A type of wireless technology which is used to provide subscribers with standard telephone service. Eliminates the need for a wire, or loop, connecting users to the PSTN by transmitting voice communications over radio waves between the end user and a base station that is connected to the network equipment.
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METAWAVE COMMUNICATIONS CORPORATION

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REPORT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

The Board of Directors and Stockholders
Metawave Communications Corporation

We have audited the accompanying balance sheets of Metawave Communications Corporation as of December 31, 1996 and 1997 and the related statements of operations, stockholders' equity (deficit), and cash flows for the years then ended and the period from January 19, 1995 (inception) to December 31, 1995. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Metawave Communications Corporation at December 31, 1996 and 1997, and the results of its operations and its cash flows for the years then ended and the period from January 19, 1995 (inception) to December 31, 1995, in conformity with generally accepted accounting principles.

ERNST & YOUNG LLP

Seattle, Washington
March 13, 1998, except for Note 13,
as to which the date is April 28, 1998.

METAWAVE COMMUNICATIONS CORPORATION

BALANCE SHEETS

(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)

<TABLE>
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DECEMBER 31,		JUNE 30,	PRO FORMA STOCKHOLDERS' EQUITY AT
1996	1997	1998	JUNE 30, 1998
		(UNAUDITED)	(UNAUDITED)

<S>	<C>	<C>	<C>	<C>
ASSETS				
Current assets:				
Cash and cash equivalents.....	$ 19,092	$ 13,334	$ 20,311	
Accounts and notes receivable, net.....	120	1,444	3,792	
Inventories.....	--	4,080	12,000	
Debt issuance costs, net of amortization of 1,275.....	--	--	4,545	
Prepaid expenses and other assets.....	185	142	708	
Total current assets.....	19,397	19,000	41,356	
Property and equipment--net (Note 3).....	2,258	3,406	5,032	
Other noncurrent assets.....	92	169	169	
Total assets.....	$ 21,747	$ 22,575	$ 46,557	
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)				
Current liabilities:				
Accounts payable	$ 484	$ 729	$ 3,581	
Accrued liabilities.....	622	1,304	2,663	
Current portion of notes payable.....	104	140	29,838	
Current portion of capital lease obligations.....	465	1,035	1,182	
Deferred revenue.....	--	115	305	
Total current liabilities.....	1,675	3,323	37,569	
Notes payable, less current portion.....	321	263	143	
Capital lease obligations, less current portion.....	1,429	2,709	3,937	
Other long-term liabilities.....	7	6	--	
Total liabilities.....	3,432	6,301	41,649	
Commitments and contingencies				
Convertible and redeemable preferred stock, issued and outstanding 10,732,623 shares in 1996 and 13,130,350 in 1997 and June 30, 1998; aggregate preference in liquidation of $49,282 at December 31, 1997 and June 30, 1998.....	30,100	49,282	49,282	$ --
Convertible and redeemable preferred stock warrants.....	--	128	4,423	--
Stockholders' equity (deficit):				
Preferred stock, $.0001 par value, authorized 20,000,000 shares, of which 13,130,350 have been designated as convertible and redeemable at June 30, 1998 and December 31,1997.....	--	--	--	--
Common stock, $.0001 par value, authorized 40,000,000 shares; issued and outstanding 2,650,000 in 1996, 2,932,093 in 1997 and 3,035,927 at June 30, 1998 and 16,166,277 shares pro forma.....	10	1,968	2,162	55,867

Deferred stock compensation...	--	(1,205)	(877)	(877)
Accumulated deficit.....	(11,795)	(33,899)	(50,082)	(50,082)
Total stockholders' equity (deficit).....	(11,785)	(33,136)	(48,797)	$ 4,908
Total liabilities and stockholders' equity (deficit).	$ 21,747	$ 22,575	$ 46,557	

</TABLE>

See accompanying notes.

METAWAVE COMMUNICATIONS CORPORATION

STATEMENTS OF OPERATIONS
(IN THOUSANDS, EXCEPT PER SHARE DATA)

<TABLE>
<CAPTION>

	PERIOD FROM JANUARY 19, 1995 (INCEPTION) TO DECEMBER 31,	YEAR ENDED DECEMBER 31,		SIX MONTHS ENDED JUNE 30,	
	1995	1996	1997	1997	1998
				(UNAUDITED)	(UNAUDITED)
<S>	<C>	<C>	<C>	<C>	<C>
Net revenue.....	$ --	$ 1,291	$ 1,450	$ 392	$ 6,501
Cost of sales.....	--	1,097	1,728	516	6,396
Gross profit (loss).....	--	194	(278)	(124)	105
Operating expenses:					
Research and development.....	883	7,186	13,083	5,365	8,025
Sales and marketing...	84	1,704	5,383	2,244	4,087
General and administrative.....	168	2,434	3,762	1,367	2,429
Total operating expenses.....	1,135	11,324	22,228	8,976	14,541
Operating loss.....	(1,135)	(11,130)	(22,506)	(9,100)	(14,436)
Other income, net.....	157	485	851	409	484
Interest expense.....	(22)	(150)	(449)	(236)	(2,231)
	135	335	402	173	(1,747)
Net loss.....	$(1,000)	$(10,795)	$(22,104)	$(8,927)	$(16,183)
Pro forma net loss per share.....			$ (1.54)		$ (1.01)
Shares used in computation of pro forma net loss per share.....			14,383		16,061

</TABLE>

See accompanying notes.

METAWAVE COMMUNICATIONS CORPORATION

STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

FOR THE PERIOD FROM JANUARY 19, 1995 (INCEPTION) THROUGH JUNE 30, 1998
(IN THOUSANDS, EXCEPT PER SHARE DATA)

<TABLE>
<CAPTION>

	COMMON STOCK				
	SHARES	AMOUNT	DEFERRED STOCK COMPENSATION	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' EQUITY (DEFICIT)
<S>	<C>	<C>	<C>	<C>	<C>
Sale of common stock at $.0036 per share for cash	2,750	$ 10	$ --	$ --	$ 10
Net loss for the period from January 19, 1995 to December 31, 1995	--	--	--	(1,000)	(1,000)
Balance, December 31, 1995	2,750	10	--	(1,000)	(990)
Shares surrendered to Company for no consideration	(100)	--	--	--	--
Net loss for the year ended December 31, 1996	--	--	--	(10,795)	(10,795)
Balance, December 31, 1996	2,650	10	--	(11,795)	(11,785)
Exercise of stock options	282	77	--	--	77
Deferred stock compensation	--	1,881	(1,881)	--	--
Stock compensation expense	--	--	676	--	676
Net loss for the year ended December 31, 1997	--	--	--	(22,104)	(22,104)
Balance, December 31, 1997	2,932	1,968	(1,205)	(33,899)	(33,136)
Repurchased restricted stock *	(138)	--	--	--	--
Exercise of stock options *	231	84	--	--	84
Exercise of stock warrants*	11	110	--	--	110
Stock compensation expense *	--	--	328	--	328
Net loss for the period ended June 30, 1998 *	--	--	--	(16,183)	(16,183)
Balance, June 30, 1998 *	3,036	$2,162	$ (877)	$(50,082)	$(48,797)

</TABLE>

* Unaudited

See accompanying notes.

METAWAVE COMMUNICATIONS CORPORATION

STATEMENTS OF CASH FLOWS
(IN THOUSANDS)

<TABLE>
<CAPTION>

	PERIOD FROM JANUARY 19, 1995 (INCEPTION) TO DECEMBER 31, 1995	YEAR ENDED DECEMBER 31, 1996	YEAR ENDED DECEMBER 31, 1997	SIX MONTHS ENDED JUNE 30, 1997	SIX MONTHS ENDED JUNE 30, 1998
				(UNAUDITED)	(UNAUDITED)
<S>	<C>	<C>	<C>	<C>	<C>
OPERATING ACTIVITIES					
Net loss.....	$(1,000)	$(10,795)	$(22,104)	$ (8,927)	$ (16,183)
Adjustments to reconcile net loss to net cash used in operating activities:					
Depreciation and amortization expense.	19	520	1,841	756	2,441
Loss on disposal of assets	--	--	--	--	24
Stock compensation....	--	--	676	22	438
Reserve for loss on assets.....	--	--	425	--	--
Changes in operating assets and liabilities:					
Increase in accounts receivable.....	(53)	(67)	(1,323)	(267)	(2,349)
Increase in inventories.....	--	--	(4,080)	(2,209)	(8,091)
Increase in other assets.....	(55)	(222)	(34)	(63)	(2,091)
Increase in accounts payable, accrued liabilities and other liabilities...	206	906	926	878	4,864
(Increase) decrease in projects in process.....	(717)	717	--	--	
Increase (decrease) in deferred revenue.	1,291	(1,291)	114	--	191
Net cash used in operating activities...	(309)	(10,232)	(23,559)	(9,810)	(20,756)
INVESTING ACTIVITIES					
Purchases of securities.	(3,612)	--	--	--	--
Proceeds on sale of securities.....	--	3,612	--	--	--
Proceeds on sale of assets.....	--	--	--	--	78
Purchases of equipment..	(151)	(549)	(621)	(870)	(582)
Net cash provided by (used in) investing activities.....	(3,763)	3,063	(621)	(870)	(504)
FINANCING ACTIVITIES					
Proceeds from issuance of preferred stock.....	5,500	24,600	19,182	--	--
Proceeds from issuance					

of common stock.....	10	--	77	1	84
Proceeds from notes payable.....	--	500	--	--	29,000
Payments on notes payable.....	--	(81)	(115)	(60)	(130)
Principal payments on capital lease obligations.....	(16)	(180)	(722)	(290)	(717)
Net cash provided by (used in) financing activities.....	5,494	24,839	18,422	(349)	28,237
Net increase (decrease) in cash.....	1,422	17,670	(5,758)	(11,029)	6,977
Cash and cash equivalents at beginning of period....	--	1,422	19,092	19,092	13,334
Cash and cash equivalents at end of period.....	$ 1,422	$ 19,092	$ 13,334	$ 8,063	$20,311
NONCASH TRANSACTIONS AND SUPPLEMENTAL DISCLOSURES					
Capital lease obligations incurred to purchase assets.....	$ 144	$ 1,952	$ 2,665	$ 1,458	$ 2,099
Inventories reclassified to property and equipment.....	--	--	--	--	171
Deferred compensation on stock option grants....	--	--	1,881	224	--
Interest paid.....	22	150	450	304	214

</TABLE>

See accompanying notes.

METAWAVE COMMUNICATIONS CORPORATION

NOTES TO FINANCIAL STATEMENTS
(INFORMATION AS OF JUNE 30, 1998 AND FOR THE
SIX MONTHS ENDED JUNE 30, 1997 AND 1998 IS UNAUDITED)

1. SIGNIFICANT ACCOUNTING POLICIES

Description of Business

Metawave designs, develops, manufactures and markets spectrum management solutions for the wireless communications industry. Metawave's spectrum management solutions, consisting of smart antenna systems, applications software and engineering services, enable cellular network operators to increase overall network capacity, reduce network operation costs, better manage network infrastructure and stimulate end user demand through improved system quality. Using its proprietary technologies, the Company has developed products that address the capacity, coverage, and call quality problems faced by cellular network operators.

The Company was incorporated in January 1995. Net revenue since inception has been attributable to an engineering consulting contract in 1996, services rendered by the Company's Network Services division during 1997 and sales of the SpotLight 2000 system during the six months ended June 30, 1998. The Company's Network Services division was discontinued during the first quarter

of 1998. Since inception, the Company has incurred significant losses and as of June 30, 1998, had an accumulated deficit of $50.1 million.

Unaudited Interim Financial Information

The financial information as of June 30, 1998 and for the periods ended June 30, 1997 and 1998 is unaudited, but includes all adjustments (consisting only of normal recurring adjustments) that the Company considers necessary for a fair presentation of the financial position at such dates and the operations and cash flows for the periods then ended. Operating results for the period ended June 30, 1998 are not necessarily indicative of results that may be expected for the entire year.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results may differ from those estimates. Significant estimates made in preparing the financial statements include the allowance for doubtful accounts, inventory reserves and warranty accruals.

Revenue Recognition

Product revenues are recognized when the product has been shipped and all customer acceptance conditions have been satisfied. Service revenues, generally installation and consulting, are recognized when the services have been performed. Revenue from maintenance contracts is deferred and recognized ratably over the term of the agreement (which is typically one year). Any billings in excess of revenue are classified as deferred revenue and projects in process are recorded as inventory.

Inventories

Inventories are stated at the lower of cost (first-in, first-out) or market.

Property and Equipment

Property and equipment and leasehold improvements are recorded at cost. Depreciation is provided on the straight-line method for financial statement purposes and on accelerated methods for federal income tax purposes over estimated useful lives of two to seven years. Leasehold improvements are amortized over the lesser of the lease term or estimated useful life.

Pro Forma Net Loss per Share

Pro forma net loss per share is computed using the weighted average number of shares of common stock outstanding and the weighted average convertible and redeemable preferred stock outstanding as if such shares were converted to common stock at the time of issuance. Common stock equivalents,

1. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

including stock options and warrants, are excluded from the computation as t heir effect is antidilutive. For the periods presented, there is no difference between the basic and diluted earnings per share. Historical basic and diluted earnings per share are not presented because they are considered meaningless due to the significant change in capital structure upon the mandatory conversion of convertible redeemable preferred stock upon completion of the

initial public offering.

Warranty

The Company provides a 12 to 18 month warranty which may vary depending upon specific contractual terms, on all products and records a related provision for estimated warranty costs at the date of sale.

Advertising Costs

Advertising costs are charged to expense as incurred. The Company had no material advertising expense for the periods ended December 31, 1995 and 1996, while $535,000 and $342,000 were recorded for the year ended December 31, 1997 and the six months ended June 30, 1998, respectively

Cash Equivalents, Fair Values of Financial Instruments, and Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash equivalents, and trade receivables. The carrying value of financial instruments approximates market value.

Cash equivalents consist of investments with maturities of three months or less when purchased. The Company invests with various high-quality institutions and, by policy, limits the amount of credit exposure to any one institution.

The Company sells its products and provides services to customers in the wireless communications industry. The Company performs on-going credit evaluations of its customers' financial condition and generally does not require collateral. The Company maintains reserves for potential credit losses, and such losses have been within management's expectations and have not been material in any year.

Stock-Based Compensation

The Company has adopted the disclosure-only provisions of Financial Accounting Standards Board Statement No. 123 and applies Accounting Principles Board Opinion No. 25 and related interpretations in accounting for its stock option plans. Accordingly, the Company's stock-based compensation expense is recognized based on the intrinsic value of the option on the date of grant. Recognition of stock-based compensation expense under Statement 123 requires the use of a fair value method to value stock options using option valuation models that were developed for purposes other than valuing employee stock options. Pro forma disclosure of net loss under Statement 123 is provided in Note 6.

Reclassifications

The Company adopted a manufacturing fiscal year in 1998. The fiscal year 1998 is the 52 week period that ends the Sunday following the calendar year end. For convenience of presentation, all fiscal periods in these financial statements are treated as ending on a calendar month end.

Certain prior year amounts have been reclassified to conform to the current year presentation.

1. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Recently Issued Accounting Standards

In 1997, the following accounting standards were issued: SFAS No. 129, "Disclosure of Information About Capital Structure" requiring supplemental disclosure of capital structure, SFAS No. 130, "Reporting Comprehensive Income," (This statement establishes standards for reporting and disclosure of comprehensive income and its components (revenues, expenses, gains and losses) in a full set of general-purpose financial statements), SFAS No. 131, "Disclosures About Segments of an Enterprise and Required Information," and SOP 97-2, "Software Revenue Recognition." Each of these standards became effective for the Company on January 1, 1998. The adoption of these standards did not impact the Company's financial statements or disclosures.

In March 1998, the AICPA issued SOP 98-1, Accounting For the Costs of Computer Software Developed For or Obtained For Internal-Use. The SOP is effective for the Company beginning on January 1, 1999 but earlier adoption is encouraged. The SOP requires the capitalization of certain costs incurred after the date of adoption in connection with developing or obtaining software for internal-use. The Company elected to adopt the SOP in 1998. The SOP did not have a material impact on the Company's operations or financial position.

2. INVENTORIES

<TABLE>
<CAPTION>

	DECEMBER 31, 1997	JUNE 30, 1998
	(IN THOUSANDS)	
<S>	<C>	<C>
Purchased parts	$1,331	$ 6,766
Subassemblies	274	472
Finished goods	2,475	4,762
	$4,080	$12,000

</TABLE>

Purchased parts include purchased components and partially assembled units. Subassemblies primarily represent components that are assembled and ready for final configuration pending the detailed requirements for the specific customer. Finished goods are units representing projects-in-process at customer locations.

3. PROPERTY AND EQUIPMENT

<TABLE>
<CAPTION>

	DECEMBER 31,		JUNE 30,
	1996	1997	1998
	(IN THOUSANDS)		
<S>	<C>	<C>	<C>
Equipment	$ 2,131	$ 4,738	$ 6,932
Furniture and fixtures	394	605	796
Leasehold improvements	272	315	693
	2,797	5,658	8,421
Accumulated depreciation and amortization	(539)	(2,252)	(3,389)
	$ 2,258	$ 3,406	$ 5,032

</TABLE>

4. NOTES PAYABLE

<TABLE>
<CAPTION>

	DECEMBER 31,		JUNE 30,
	1996	1997	1998
	(IN THOUSANDS)		
<S>	<C>	<C>	<C>
Senior Secured Bridge Notes maturing in April 2000, bearing interest at 13.75% accrued semi-annually.....	$ --	$ --	$ 29,708
Note payable to U.S. Bank with monthly payments of $217 maturing in July 2000, bearing interest at 11%..	7	6	4
Note payable to Comdisco with monthly payments of $12,126, maturing in February 2000, bearing interest at 8%, with a residual payment of $50,000 due February 28, 2000, secured by the underlying equipment.....	418	308	252
Notes payable to GMAC with monthly payments aggregating $2,190, maturing between December 2001 and April 2002, bearing interest at rates between 3.9% and 8.75%.....	--	89	17
	425	403	29,981
Current portion.....	(104)	(140)	(29,838)
	$ 321	$ 263	$ 143

</TABLE>

Notes payable are secured by equipment and vehicles.

Future principal payments on notes payable at December 31, 1997 are as follows: 1998--$139,439; 1999--$159,926; 2000--$84,929; 2001--$16,202; and 2002--$2,071.

The Company has a credit facility with a commercial bank, which provides for a revolving credit line of $7.5 million to support working capital with a $3.0 million sublimit for issuance of trade-related commercial and standby letters of credit, which matures on October 14, 1999. Outstanding balances on the credit line bear interest at the bank's prime rate (8.5%) as of December 31, 1997 and June 30, 1998, respectively, and are secured by the Company's accounts receivable and inventory. At December 31, 1997 and June 30, 1998, no amounts were outstanding under this revolving credit line secured by accounts receivable and $2.5 million was outstanding related to issuance of a standby letter of credit.

On April 28, 1998, the Company issued $29 million of Senior Secured Bridge Notes (Notes), which mature on April 28, 2000. The Notes accrue interest at 13.75%, payable semi-annually at the option of the Company in either additional Notes or cash. Until the Notes are repaid in full, the interest rate will increase by 200 basis points up to a maximum of 18.0%. On April 28, 1999 and at the end of each subsequent six-month period; to a maximum rate of 18.00%. One-half of the outstanding Notes and any accrued and unpaid interest is due upon the occurrence of an Initial Public Offering (IPO). The other one-half of the Notes may be redeemed at any time, prior to the maturity date, by the Company by payment in cash of the principal and accrued interest.

The Notes are secured by personal property and intellectual property of the Company. The Company is required to comply with certain covenants and certain

reporting requirements determined by the noteholders.

In connection with the Senior Secured Bridge financing, the noteholders received warrants to purchase 537,500 shares of series D Preferred Stock at $.01 per share. The Company recorded debt

issuance fees of approximately $5,820,000 related to the issuance of these warrants. The fees are amortized over the two-year contractual life of the Notes. The warrants have a two-year term. On April 28, 1999 and at the end of each subsequent three-month period, the Company will issue the noteholders 200,000 additional warrants. This provision will terminate upon an IPO by the Company and redemption of at least one-half of the issued and outstanding Notes.

The Company may redeem the balance of the Notes and warrants on or before the completion of an IPO or on April 28, 1999 for and aggregate redemption and repurchase price of $40.6 million.

5. CONVERTIBLE AND REDEEMABLE PREFERRED STOCK

In July 1995, the Company issued 5,500,000 shares of Series A Preferred Stock (Series A) through a private offering. Proceeds from the financing amounted to $5,500,000.

In May 1996, the Company issued 2,711,113 shares of Series B Preferred Stock (Series B) through a private offering. Proceeds from the financing amounted to $9,150,006. An additional 29,630 shares of Series B were issued in November 1996 with proceeds of $100,002.

In October and November 1996, the Company issued 2,491,880 shares of Series C Preferred Stock (Series C) through a private offering. Proceeds from the financing amounted to $15,349,980.

In August 1997, the Company issued 2,397,727 shares of Series D Preferred Stock (Series D) through a private offering. Proceeds from the financing amounted to $19,181,816.

Holders of Series A, B, C, and D have preferential rights to dividends ($.08, $.27, $.49, and $.64 per share per annum, respectively) when and if declared by the Board of Directors. Dividends are not cumulative until July 1999. The holders are entitled to the number of votes equal to the number of shares of common stock into which the preferred stock could be converted. Each share of preferred stock is convertible into one share of common stock at the option of the holder, or automatically upon the vote or written consent of the holders of the majority of the shares of Series A, B, C, and D originally issued or upon the closing of an initial public offering of the Company's common stock from which the aggregate proceeds are not less than $15 million. The conversion rate is subject to adjustment, as provided by the Company's Amended and Restated Articles of Incorporation. In the event of liquidation, the holders of Series A, B, C, and D have preferential rights to liquidation payments of $1.00, $3.375, $6.16, and $8.00 per share, respectively, plus any declared but unpaid dividends. The preferred stock has redemption rights for a six-month period beginning on December 31, 2000 upon the election of at least 50% of the holders. The redemption price is equal to the original purchase price plus any declared but unpaid dividends.

Convertible and Redeemable Preferred Stock Warrants

In connection with a Master Lease Agreement dated December 13, 1995, the Company has issued two warrants providing for the purchase of 48,750 shares

and 16,666 shares of Series A Preferred Stock at an exercise price of $2.1875 per share, subject to adjustment as provided in the Warrant Agreements. The Warrant Agreements expire after seven years or eighteen months to three years from the effective date of an initial public offering, whichever comes later.

5. CONVERTIBLE AND REDEEMABLE PREFERRED STOCK (CONTINUED)

During 1996, the Company entered into an additional lease line to the aforementioned Master Lease Agreement. The new lease included the issuance of a warrant to purchase 19,999 shares of Series B Preferred Stock with an exercise price of $4.72.

During 1997, the Company entered into an additional lease line to the aforementioned Master Lease Agreement. The new lease included the issuance of a warrant to purchase 34,090 shares of Series C Preferred Stock with an exercise price of $6.16.

6. STOCKHOLDERS' EQUITY

Authorized Shares

In anticipation of the IPO of the Company's Common Stock, in May 1998, the Board of Directors approved the amendment and restatement of the Certificate of Incorporation to change the authorized number of shares of preferred stock to 15,000,000 shares and increase the number of authorized shares of Common Stock of the Company to 150,000,000 shares. These changes are to take effect upon completion of the IPO.

Stock Repurchase Agreement

Prior to June 30, 1998, the Company had common stock repurchase agreements with two founders, whereby if the shareholder ceases to be an employee of the Company, the Company has the right to repurchase shares of common stock at the original issuance price paid by the founder. The stock held by the founders, and subject to the terms of these agreements, vested during each full fiscal quarter commencing after June 30, 1995 at a rate of 33% per year and became fully vested on June 30, 1998. As of December 31, 1997, there were 344,437 shares subject to repurchase with an aggregate purchase price of $1,240. During 1996, one of the founders surrendered 100,000 shares to the Company for no consideration. On January 10, 1998, the Company repurchased 137,775 shares of common stock from one of the founders for $501.

Proforma Stockholders' Equity (Unaudited)

The proforma stockholders' equity in the accompanying balance sheet reflects the conversion of convertible and redeemable Preferred Stock and the conversion of Preferred Stock warrants to Common Stock warrants coincident with the IPO.

Stock Option Plan

The Company's 1995 Stock Option Plan (the Plan) provides for the granting of incentive stock options and nonqualified stock options to employees, officers, directors, and consultants. Options under the Plan have been granted at fair market value on the date of grant and expire between five and ten years. Options granted under this Plan generally become exercisable at the rate of 25% of the total number of shares subject to the option after the first anniversary following the date of grant, with 2.083% vesting monthly thereafter, with all shares becoming fully vested on the fourth anniversary

date of the date of grant. The Company has reserved 4,150,000 shares of common stock for issuance under the Plan.

In anticipation of an IPO of the Company's common stock, in May 1998, the Board of Directors approved the 1998 Stock Option Plan and the 1998 Employees Stock Purchase Plan, subject to stockholder approval. Shares reserved for issuance under these plans were 850,000 shares and 500,000 shares, respectively.

The 1998 Directors' Stock Option Plan was adopted by the Board of Directors in February 1998 and approved by the stockholders on April 20, 1998. A total of 300,000 shares of Common Stock has been

6. STOCKHOLDERS' EQUITY (CONTINUED)

reserved for issuance under the Directors' Plan. The Directors' Plan provides for the automatic grant of nonstatutory stock options to nonemployee directors of the Company upon joining the Board or upon the effectiveness of the Company's initial public offering. Provided an individual remains a director, the Directors' Plan provides that each option granted under the Plan shall become exercisable in installments cumulatively as to 25% of the total number of shares subject to the option on the first anniversary of the date of grant of the option and 2.083% of the total number of shares subject to the option each month thereafter. The exercise price of all stock options granted under the Directors' Plan shall be equal to the fair market value of a share of the Company's Common Stock on the date of grant of the option. The fair market value of any option granted concurrently with the initial effectiveness of the Purchase Plan shall be the Price to Public set forth in the final prospectus relating to this Offering. Options granted under the Directors' Plan have a term of ten years.

In 1997, deferred compensation of $1,881,382 was recorded for options granted under the 1995 Plan. The deferred compensation was calculated as the difference between the exercise price and the deemed value of the Company's stock options granted under the 1995 Plan. The deferred compensation is amortized over the vesting period of the related options. Amortized stock compensation of $676,491 and $328,000 was recorded in the year ended December 31,1997 and the six months ended June 30, 1998, respectively.

Had the stock compensation expense for the Company's stock option plan been determined based on the estimated fair value using the minimum value option pricing model at the date of grant, the Company's net loss would have been increased to these pro forma amounts (in thousands, except per share data):

<TABLE>
<CAPTION>

	1995	1996	1997
<S>	<C>	<C>	<C>
Net loss:			
As reported	$(1,000)	$(10,795)	$(22,104)
Pro forma	(1,002)	(10,816)	(22,109)
Pro forma net loss per share:			
As reported	--	--	(1.54)
Pro forma	--	--	(1.54)

</TABLE>

The fair value for these options was estimated at the date of grant using minimum value option pricing models that take into account: (1) the stock price at the grant date, (2) the exercise prices, (3) a one-year expected life

beyond the vest date, (4) no dividends, and (5) a risk-free interest rate of between 5.42% and 6.43% during 1995 through 1997 over the expected life of the options. Compensation expense recognized in providing pro forma disclosures may not be representative of the effects on pro forma net income for future years because the amounts above include only the amortization for the fair value of 1997, 1996, and 1995 grants.

6. STOCKHOLDERS' EQUITY (CONTINUED)

A summary of the Company's stock option activity and related information follows:

<TABLE>
<CAPTION>

	DECEMBER 31, 1995		DECEMBER 31, 1996		DECEMBER 31, 1997		JUNE 30, 1998	
	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE	OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE
<S>	<C>	<C>	<C>	<C>	<C>	<C>	<C>	<C>
Outstanding at beginning of period	--	$.10	995,500	$.10	1,942,854	$ .24	3,148,794	$ .79
Granted at deemed value	1,012,000	.10	1,189,454	.34	671,983	1.95	530,445	8.20
Granted at below deemed value	--		--	--	1,359,285	.68	--	--
Canceled	(16,500)	.10	(242,100)	.27	(543,236)	.29	(171,970)	1.82
Exercised	--		--	--	(282,092)	.27	(229,509)	.36
Outstanding at end of period	995,500	.10	1,942,854	.24	3,148,794	.79	3,277,760	1.97
Exercisable at end of period	--	--	321,859	.10	2,140,002	.97	2,634,213	2.35
Weighted average fair value of options granted during the period								
Granted at value		$.10		$.34		$1.95		$8.20
Granted at below value		--		--		$1.89		--

</TABLE>

The following information is provided for options outstanding and exercisable at December 31, 1997:

<TABLE>
<CAPTION>

	OUTSTANDING			EXERCISABLE	
EXERCISE RANGE	NUMBER OF OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE (YEARS)	NUMBER OF OPTIONS	WEIGHTED AVERAGE EXERCISE PRICE
<S>	<C>	<C>	<C>	<C>	<C>

</TABLE>

$ .10- .35	913,180	$ .14	7.98	500,104	$ .13
.62-1.20	1,800,314	.65	9.36	1,204,598	.67
2.00-3.36	435,300	2.73	9.91	435,300	2.73
.10-3.36	3,148,794	.79	9.03	2,140,002	.96

</TABLE>

In connection with the Plans, 660,639 shares of common stock are available for future issuance at June 30, 1998.

6. STOCKHOLDERS' EQUITY (CONTINUED)

Common Shares Reserved for Future Issuance. The Company has reserved shares of common stock as follows:

<TABLE>
<CAPTION>

	DECEMBER 31, 1997	JUNE 30, 1998
<S>	<C>	<C>
Series A Preferred Stock	5,500,000	5,500,000
Series B Preferred Stock	2,740,743	2,740,743
Series C Preferred Stock	2,491,880	2,491,880
Series D Preferred Stock	2,397,727	2,397,727
Convertible redeemable preferred stock warrants	119,505	925,755
Stock options	3,667,908	5,288,399
	16,917,763	19,344,504

</TABLE>

Weighted Average Shares and Pro Forma Net Loss Per share (unaudited). Pro forma net loss per share is calculated as follows (in thousands, except share and per share data):

<TABLE>
<CAPTION>

	DECEMBER 31, 1997	JUNE 30, 1998
<S>	<C>	<C>
Net loss	$ (22,104)	$ (16,183)
Weighted average outstanding:		
Common stock	2,723,106	2,930,465
Convertible preferred stock	11,660,178	13,130,350
Total weighted average outstanding	14,383,284	16,060,815
Pro forma net loss per share	$ (1.54)	$ (1.01)

</TABLE>

7. INCOME TAXES

As of December 31, 1997, the Company had federal net operating loss carryforwards (NOL) of approximately $28.5 million and research and

development tax credit carryforwards of approximately $677,500. The federal net operating loss carryforwards will begin to expire in the year 2009 if not utilized. As a result of changes in ownership coincident with the recent financings, the utilization of a portion of the net operating loss carryforward will be limited, pursuant to Section 382 of the Internal Revenue Code of 1986, as amended. Approximately $9,200,000 of the NOL is limited to $920,000 per year. The remaining NOL is not subject to limitation as of December 31, 1997, but is estimated to be subject to annual limitation of $8,000,000 upon completion of the IPO.

7. INCOME TAXES (CONTINUED)

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The Company has recognized a valuation allowance equal to the deferred tax assets due to the uncertainty of realizing the benefits of the assets. Significant components of the Company's deferred tax liabilities and assets as of December 31 are as follows (in thousands):

<TABLE>
<CAPTION>

	1996	1997
<S>	<C>	<C>
Deferred tax liabilities:		
Prepaid assets	$ 18	$ 11
Deferred tax assets:		
Net operating loss carryforwards	3,865	9,674
Research and development tax credit carryforwards	210	678
Accrued compensation	82	167
Fixed assets	70	86
Accrued expenses and reserves	1	431
Deferred revenue	--	906
Stock compensation	--	80
Total deferred tax assets	4,228	12,022
	4,210	12,011
Less valuation reserve	(4,210)	(12,011)
Net deferred taxes	$ --	$ --

</TABLE>

8. COMMITMENTS

The Company has entered into capital lease agreements to acquire certain furniture and equipment, with lease terms ranging from 36 to 48 months. The furniture and equipment, which serves as collateral for the leases, was recorded at $4,635,553 and had accumulated amortization of $1,639,816 at December 31, 1997. Amortization of the assets was included in depreciation expense.

Operating leases are for office and manufacturing facilities.

In September 1997, the Company entered into a build-to-suit lease arrangement for 95,838 square feet that will replace the current facilities. The Company occupied the new building in June 1998, at which time the lease

commenced, and expires May 31, 2005. The Company, at its option, may extend the term of this lease for two successive periods of five years each. The option must be elected twelve months prior to the expiration of the initial lease term. In connection with this arrangement, the Company has issued letters of credit to the landlord aggregating $2.5 million.

8. COMMITMENTS (CONTINUED)

Following is a summary of future minimum payments under capital leases and operating leases, including the new facility, that have initial or remaining noncancelable lease terms in excess of one year at December 31, 1997 (in thousands):

<TABLE>
<CAPTION>

	CAPITAL LEASES	OPERATING LEASES
<S>	<C>	<C>
1998	$ 1,302	$1,256
1999	1,333	1,461
2000	1,162	1,390
2001	475	1,557
2002	--	1,557
	4,272	$7,221
Less interest	(528)	
	3,744	
Current portion	(1,035)	
	$ 2,709	

</TABLE>

Rental expense for operating leases was $667,939, $304,619, and $21,167 for the years ended December 31, 1997, 1996, and 1995, respectively.

The Company entered into agreements with certain leasing companies to provide up to $2 million in 1996, $3 million in 1997 and $3.5 million at June 30, 1998 of financing to allow the Company to lease additional equipment. Pursuant to these agreements, equipment leases would generally have a term of three years and an implicit interest rate of 8.756% for 1996, 7.25% in 1997 and 14.5% at June 30, 1998 all are secured by the underlying equipment. The Company issued warrants to purchase 4,375 shares of series D Preferred Stock with an exercise price of $8 per share in conjunction with one of the lease agreements.

9. RETIREMENT PLANS

The Company has a salary deferral 401(k) plan for its employees. The plan allows employees to contribute a percentage of their pretax earnings annually, subject to limitations imposed by the Internal Revenue Service. The plan also allows the Company to make a matching contribution, subject to certain limitations. To date, the Company has made no contributions.

10. RELATED-PARTY TRANSACTIONS

In October 1997, the Board authorized a secured loan of $162,500 and an unsecured loan of $75,000 to the Company's Chief Financial Officer. Both loans bear interest at 5.5%. The secured loan is payable in full on October 28, 2002 or earlier based upon certain events specified in the agreement. The unsecured loan is forgiven over three years, with the remaining balance of $25,000 due on October 22, 2000 or earlier based upon termination of employment.

11. REVENUES AND OPERATIONS

The Company's customers are primarily cellular network operators in the United States and certain international markets. As such, the Company's primary market is made up of a limited number of customers operating within the same industry, thereby subjecting the Company to business risks associated with potential downturns of the industry. During 1997, two customers of the Network Services division represented 63% and 27% of total revenue.

In addition, the Company's current product design includes two key components that are each currently supplied by a single supplier. Purchases from these key suppliers aggregated $2,046,975 and $1,565,086 during 1997.

In December 1997, the Company determined that it would discontinue the Network Services division. Accordingly, the carrying value of these fixed assets has been adjusted to estimated recoverable value, thereby resulting in an impairment loss of $200,000, which is included in other expenses in the accompanying 1997 Statement of Operations.

In June 1998, in connection with certain patent licenses, the Company issued warrants and recorded fees for an aggregate amount of $360,000. This amount was appropriately recorded as an operating expense for the period ended June 30, 1998.

[INSIDE BACK COVER ARTWORK:

MAP OF THE WORLD INDICATING THE LOCATION OF THE COMPANY'S CUSTOMERS AND COMMERCIAL DEPLOYMENT AND A LIST OF CUSTOMER NAMES.]

TABLE OF CONTENTS

<TABLE>
<CAPTION>

</TABLE>

UNTIL , 1998 (25 DAYS AFTER THE DATE OF THIS PROSPECTUS), ALL DEALERS EFFECTING TRANSACTIONS IN THE REGISTERED SECURITIES, WHETHER OR NOT PARTICIPATING IN THIS DISTRIBUTION, MAY BE REQUIRED TO DELIVER A PROSPECTUS. THIS IS IN addition TO THE OBLIGATION OF DEALERS TO DELIVER A PROSPECTUS WHEN ACTING AS UNDERWRITERS AND WITH RESPECT TO THEIR UNSOLD ALLOTMENTS OR SUBSCRIPTIONS.

5,000,000 SHARES

[LOGO OF METAWAVE COMMUNICATIONS CORPORATION]

COMMON STOCK

PROSPECTUS

BT ALEX. BROWN

MERRILL LYNCH & CO.

NATIONSBANC MONTGOMERY SECURITIES LLC

, 1998

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, payable by the Company in connection with the sale of Common Stock being registered. All amounts are estimates except the SEC registration fee, the NASD filing fee and the Nasdaq National Market Listing Fee.

<TABLE>
<CAPTION>

	AMOUNT TO BE PAID
<S>	<C>
SEC Registration Fee	$15,000
NASD Filing Fee	7,113
Nasdaq National Market Listing Fee	30,000
Printing Fees and Expenses	150,000
Legal Fees and Expenses	300,000
Accounting Fees and Expenses	200,000
Blue Sky Fees and Expenses	5,000
Transfer Agent and Registrar Fees	10,000
Miscellaneous	107,887
Total	825,000

</TABLE>

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the DGCL authorizes a court to award, or a corporation's Board of Directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933, as amended (the "Securities Act"). Article IX of the Registrant's Amended and Restated Certificate of Incorporation (Exhibit 3.1 hereto) provides for indemnification of its directors and officers to the maximum extent permitted by the DGCL and Article IX of the Registrant's Bylaws (Exhibit 3.2 hereto) provides for indemnification of its directors, officers, employees and other agents to the maximum extent permitted by the DGCL. In addition, the Registrant has entered into Indemnification Agreements (Exhibit 10.1 hereto) with its directors and officers containing provisions which are in some respects broader than the specific indemnification provisions contained in the DGCL. The indemnification agreements may require the Company, among other things, to indemnify its directors against certain liabilities that may arise by reason of their status or service as directors (other than liabilities arising from willful misconduct of culpable nature), to advance their expenses incurred as a result of any proceeding against them as to which they could be indemnified, and to obtain directors' insurance if available on reasonable terms. Reference is also made to Section 8 of the Underwriting Agreement contained in Exhibit 1.1 hereto, indemnifying officers and directors of the Company against certain liabilities.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES

(a) Since January 1, 1995, the Registrant has issued and sold (without payment of any selling commission to any person) the following unregistered securities (as adjusted to reflect the automatic conversion of its outstanding Preferred Stock into Common Stock upon completion of this Offering):

(1) In July and November 1995, the Registrant issued and sold shares of Series A Preferred Stock convertible into an aggregate of 5,500,000 shares of Common Stock to 6 investors for an aggregate purchase price of $5,500,000.

(2) From May to September 1996, the Registrant issued and sold shares of

Series B Preferred Stock convertible into an aggregate of 2,740,743 shares of Common Stock to 13 investors for an aggregate purchase price of $9,250,008.

(3) In October and November 1996, the Registrant issued and sold shares of Series C Preferred Stock convertible into an aggregate of 2,491,880 shares of Common Stock to 19 investors for an aggregate purchase price of $15,349,981.

(4) In August 1997, the Registrant issued and sold shares of Series D Preferred Stock convertible into an aggregate of 2,397,727 shares of Common Stock to 17 investors for an aggregate purchase price of $19,181,816.

(5) The Registrant has issued to an equipment lease provider the following warrants: (A) in December 1995, a warrant to purchase shares of Series A Preferred Stock convertible into 48,750 shares of Common Stock for an aggregate purchase price of $106,641; (B) in April 1996, a warrant to purchase shares of Series A Preferred Stock convertible into 16,666 shares of Common Stock for an aggregate purchase price of $36,457; (C) in August 1996, a warrant to purchase shares of Series B Preferred Stock convertible into 19,999 shares of Common Stock for an aggregate purchase price of $95,295; and (D) in June 1997, a warrant to purchase shares of Series C Preferred Stock convertible into 34,091 shares of Common Stock for an aggregate purchase price of $210,001.

(6) In April 1998, the Registrant issued an aggregate principal amount of $29.0 million 13.75% Senior Secured Bridge Notes due April 28, 2000 to certain institutional investors. In connection with the issuance of such notes, the Registrant issued warrants to purchase shares of Series D Preferred Stock convertible into 537,500 shares of Common Stock for an aggregate purchase price of $5,375.

(7) In April 1998, the Registrant issued to an equipment lease provider a warrant to purchase shares of Series D Preferred Stock convertible into 3,182 shares of Common Stock for an aggregate purchase price of $35,000.

(8) In June 1998, in connection with certain patent licenses, the Registrant issued the licensor a warrant to purchase 11,000 shares of Common Stock for an aggregate purchase price of $110. Such licensor subsequently exercised the warrant and purchased 11,000 shares of Common Stock for an aggregate purchase price of $110.

(9) As of June 30, 1998, an aggregate of 511,601 shares of Common Stock had been issued upon exercise of options under the Registrant's 1995 Stock Option Plan.

(b) There were no underwritten offerings employed in connection with any of the transactions set forth in Item 15(a).

The issuances described in Items 15(a)(1) through 15(a)(8) were deemed to be exempt from registration under the Securities Act in reliance upon Section 4(2) thereof as transactions by an issuer not involving any public offering. The recipients of securities in each such transaction represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends where affixed to the securities issued in such transactions. All recipients had adequate access, through their relationships with the Company, to information about the Registrant. The issuances described in Items 15(a)(9) were deemed to be exempt from registration under the Securities Act in reliance upon Rule 701 promulgated thereunder in that they were offered and sold either pursuant to written compensatory benefit plans or pursuant to a written contract relating to compensation, as provided by Rule 701. In addition, such issuances were deemed to be exempt from registration under Section 4(2) of the Securities Act as transactions by an issuer not involving any public offering.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Exhibits

<TABLE>
<C> <S>

1.1	Underwriting Agreement.
3.1	Certificate of Incorporation of the Registrant.
3.2	Bylaws of the Registrant.
3.3*	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be filed and effective upon completion of this Offering.
5.1*	Opinion of Venture Law Group, A Professional Corporation.
10.1	Form of Indemnification Agreement.
10.2	1995 Stock Option Plan, as amended, and form of stock option agreement.
10.3	1998 Stock Option Plan, as amended, and form of stock option agreement.
10.4	1998 Employee Stock Purchase Plan and form of subscription agreement.
10.5	1998 Directors' Stock Option Plan and form of stock option agreement.
10.6	Third Amended and Restated Registration Rights Agreement dated August 6, 1997 by and among the Registrant and certain holders of the Registrant's capital stock.
10.7*	Metawave Communications Corporation 401(k) Savings and Retirement Plan.
10.8+	Lease for Willow Creek Corporate Center dated September 29, 1997 by and between the Registrant and Carr America Realty Corporation.
10.9+	Purchase Agreement dated October 21, 1997 by and between the Registrant and 360 Degree Communications Company.
10.10+	Purchase Agreement dated December 12, 1997 by and between the Registrant and Telefonica Celular de Paraguay S.A.
10.11+	Purchase Agreement dated March 4, 1998 by and between the Registrant and ALLTEL Supply Inc.
10.12+	Purchase Agreement dated March 5, 1998 by and between the Registrant and OJSC St. Petersburg Telecom.
10.13	Loan Agreement dated October 14, 1997 by and between Registrant and Imperial Bank.
10.14	Amendment No. 1 to the Loan Agreement dated October 14, 1997 by and between Registrant and Imperial Bank.
10.15	Metawave Communications Corporation Note Agreement dated as of April 27, 1998 Regarding $29,000,000 13.75% Senior Secured Bridge Notes due April 28, 2000.
23.1	Consent of Ernst & Young LLP, Independent Auditors.
23.2*	Consent of Counsel (included in Exhibit 5.1).
24.1	Power of Attorney (see page II-6).
27.1	Financial Data Schedule.
99.1	Report of Ernst & Young LLP, Independent Auditors on Financial Statement Schedule.
99.2	Financial Statement Schedule.

</TABLE>

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* To be supplied by amendment.

+ Certain information in these exhibits has been omitted and filed separately with the Securities and Exchange Commission pursuant to a confidential treatment request under 17 C.F.R. Sections 200.80(b)(4), 200.83 and 230.406

(b) Financial Statement Schedules

The following financial statement schedule is filed herewith:

Schedule II--Valuation and Qualifying Accounts (see Exhibit 99.2).

Other financial statement sshedules are omitted because the information called for is not required or is shown either in the financial statements or the notes thereto.

ITEM 17. UNDERTAKINGS

The undersigned Registrant hereby undertakes to provide to the Underwriters at the closing specified in the Underwriting Agreement, certificates in such denominations and registered in such names as required by the Underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Act, the information omitted from the form of Prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in the form of prospectus filed by the Registrant pursuant to Rule 424(b)(1), or (4), or 497(h) under the Act shall be deemed to be a part of this Registration Statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Act, each post-effective amendment that contains a form of Prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the undersigned Registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Redmond, State of Washington, on July 22, 1998.

METAWAVE COMMUNICATIONS CORPORATION

/s/ Robert H. Hunsberger

By: _____

Robert H. Hunsberger
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Robert H. Hunsberger and Vito E. Palermo, and each of them, as his or her attorneys-in-fact, each with full power of

substitution, for him or her in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), and any and all Registration Statements filed pursuant to Rule 462 under the Securities Act of 1933, in connection with or related to this Offering contemplated by this Registration Statement and its amendments, if any, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof. This Power of Attorney may be signed in several counterparts.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated:

<TABLE>
<CAPTION>

SIGNATURE	TITLE	DATE
<C>	<S>	<C>
/s/ Robert H. Hunsberger Robert H. Hunsberger	President, Chief Executive Officer and Director (Principal Executive Officer)	July 22, 1998
/s/ Vito E. Palermo Vito E. Palermo	Senior Vice President, Chief Financial Officer and Secretary (Principal Financial and Accounting Officer)	July 22, 1998
/s/ Douglas O. Reudink Douglas O. Reudink	Chief Technical Officer and Chairman of the Board of Directors	July 22, 1998
/s/ Bandel L. Carano Bandel L. Carano	Director	July 22, 1998
/s/ Bruce C. Edwards Bruce C. Edwards	Director	July 22, 1998
/s/ David R. Hathaway David R. Hathaway	Director	July 22, 1998
/s/ Scot B. Jarvis Scot B. Jarvis	Director	July 22, 1998
/s/ Jennifer Gill Roberts Jennifer Gill Roberts	Director	July 22, 1998
/s/ David A. Twyver David A. Twyver	Director	July 22, 1998

</TABLE>

INDEX TO EXHIBITS

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EXHIBIT 1.1

[WSGR DRAFT 7/22/98]

5,000,000 SHARES

METAWAVE COMMUNICATIONS CORPORATION

COMMON STOCK

($0.0001 PAR VALUE)

UNDERWRITING AGREEMENT

_____, 1998

BT Alex. Brown Incorporated
Merrill Lynch, Pierce, Fenner & Smith Incorporated
NationsBanc Montgomery Securities LLC
  As Representatives of the Several Underwriters
c/o BT Alex. Brown Incorporated
135 East Baltimore Street
Baltimore, Maryland 21202

Gentlemen:

Metawave Communications Corporation, a Delaware corporation (the "Company"), proposes to sell to the several underwriters named in Schedule I hereto (the "Underwriters") for whom you are acting as representatives (the "Representatives") an aggregate of 5,000,000 shares of the Company's Common Stock, $0.0001 par value (the "Firm Shares"). The respective amounts of the Firm Shares to be so purchased by the several Underwriters are set forth opposite their names in Schedule I hereto. The Company also proposes to sell at the Underwriters' option an aggregate of up to 750,000 additional shares of the Company's Common Stock (the "Option Shares") as set forth below.

As the Representatives, you have advised the Company (a) that you are authorized to enter into this Agreement on behalf of the several Underwriters and to act on their behalf in the manner herein provided and (b) that the several Underwriters are willing, acting severally and not jointly, to purchase the numbers of Firm Shares set forth opposite their respective names in Schedule I, plus their pro rata portion of the Option Shares if you elect to exercise the over-allotment option in whole

or in part for the accounts of the several Underwriters. The Firm Shares and the

Option Shares (to the extent the aforementioned option is exercised) are herein collectively called the "Shares."

In consideration of the mutual agreements contained herein and of the interests of the parties in the transactions contemplated hereby, the parties hereto agree as follows:

1. Representations and Warranties of the Company.

The Company represents and warrants to each of the Underwriters as follows:

(a) A registration statement on Form S-1 (File No. 333-_____) with respect to the Shares has been prepared by the Company in conformity in all material respects with the requirements of the Securities Act of 1933, as amended (the "Act"), and the Rules and Regulations (the "Rules and Regulations") of the Securities and Exchange Commission (the "Commission") thereunder and has been filed with the Commission. Copies of such registration statement, including any amendments thereto, the preliminary prospectuses (meeting the requirements of the Rules and Regulations) contained therein and the exhibits, financial statements and schedules, as finally amended and revised, have heretofore been delivered by the Company to you. Such registration statement, together with any registration statement filed by the Company pursuant to Rule 462 (b) of the Act, herein referred to as the "Registration Statement," which shall be deemed to include all information omitted therefrom in reliance upon Rule 430A and contained in the Prospectus referred to below, has become effective under the Act and no post-effective amendment to the Registration Statement has been filed as of the date of this Agreement. "Prospectus" means (a) the form of prospectus first filed with the Commission pursuant to Rule 424(b) or (b) the last preliminary prospectus included in the Registration Statement filed prior to the time it becomes effective or filed pursuant to Rule 424(a) under the Act that is delivered by the Company to the Underwriters for delivery to purchasers of the Shares, together with the term sheet or abbreviated term sheet filed with the Commission pursuant to Rule 424(b)(7) under the Act. Each preliminary prospectus included in the Registration Statement prior to the time it becomes effective is herein referred to as a "Preliminary Prospectus." Any reference herein to the Registration Statement, any Preliminary Prospectus or to the Prospectus shall be deemed to refer to and include any supplements or amendments to any Prospectus, filed with the Commission after the date of filing of the Prospectus under Rules 424(b) or 430A, and prior to the termination of the offering of the Shares by the Underwriters.

(b) The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the State of Delaware, with corporate power and authority to own or lease its properties and conduct its business as described in the Registration Statement. The Company is duly qualified to transact business in all jurisdictions in which the conduct of their business requires such qualification except where the failure to so qualify would not have a material adverse effect on the business, properties, assets, rights, operations, financial condition or results of operation of the

Company. The Company has no subsidiaries and owns no

shares of stock or any other equity securities of any corporation or have any equity interest in any firm, partnership, association or entity.

(c) The outstanding shares of Common Stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable; the Shares to be issued and sold by the Company have been duly authorized and when issued and paid for as contemplated herein will be validly issued, fully paid and non-assessable; and no preemptive rights of stockholders exist with respect to any of the Shares or the issue and sale thereof. Neither the filing of the Registration Statement nor the offering or sale of the Shares as contemplated by this Agreement gives rise to any rights, other than those which have been waived or satisfied, for or relating to the registration of any shares of Common Stock.

(d) The information set forth under the caption "Capitalization" in the Prospectus is true and correct. All of the Shares conform to the description set forth in "Description of Securities" in the Prospectus, insofar as it purports to constitute a summary of the Shares. The form of certificates for the Shares conforms to the corporate law of the jurisdiction of the Company's incorporation.

(e) The Commission has not issued an order preventing or suspending the use of any Prospectus relating to the proposed offering of the Shares nor instituted proceedings for that purpose. The Registration Statement contains, and the Prospectus and any amendments or supplements thereto will contain, all statements which are required to be stated therein by, and will conform in all material respects, to the requirements of the Act and the Rules and Regulations. The Registration Statement and any amendment thereto do not contain, and will not contain, any untrue statement of a material fact and do not omit, and will not omit, to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Prospectus and any amendments and supplements thereto do not contain, and will not contain, any untrue statement of material fact; and do not omit, and will not omit, to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that the Company makes no representations or warranties as to information contained in or omitted from the Registration Statement or the Prospectus, or any such amendment or supplement, in reliance upon, and in conformity with, written information furnished to the Company by or on behalf of any Underwriter through the Representatives, specifically for use in the preparation thereof.

(f) The financial statements of the Company, together with related notes and schedules as set forth in the Registration Statement, present fairly the financial position and the results of operations and cash flows of the Company and the consolidated Subsidiaries, at the indicated dates and for the

indicated periods. Such financial statements and related schedules have been prepared in accordance with generally accepted principles of accounting, consistently applied throughout the periods involved, except as disclosed herein, and all adjustments necessary for a fair presentation of results for such periods have been made. The summary financial and statistical data

included in the Registration Statement presents fairly the information shown therein and such data has been compiled on a basis consistent with the financial statements presented therein and the books and records of the Company. [The pro forma financial information included in the Registration Statement and the Prospectus present fairly the information shown therein, have been prepared in accordance with the Commission's rules and guidelines with respect to pro forma financial statements, have been properly compiled on the pro forma bases described therein, and, in the opinion of the Company, the assumptions used in the preparation thereof are reasonable and the adjustments used therein are appropriate to give effect to the transactions or circumstances referred to therein.]

(g) Ernst & Young LLP, who have expressed their opinion with respect to the financial statements filed with the Commission as part of the Registration Statement, are independent public accountants as required by the Act and the Rules and Regulations.

(h) There is no action, suit, claim or proceeding pending or, to the knowledge of the Company, threatened against the Company before any court or administrative agency or otherwise which if determined adversely to the Company might result in any material adverse change in the earnings, business, management, properties, assets, rights, operations, financial condition or prospects of the Company or to prevent the consummation of the transactions contemplated hereby, except as set forth in the Registration Statement.

(i) The Company has good and marketable title to all of the properties and assets reflected in the financial statements (or as described in the Registration Statement) hereinabove described, subject to no lien, mortgage, pledge, charge or encumbrance of any kind except those reflected in such financial statements (or as described in the Registration Statement) or which are not material in amount. The Company occupies its leased properties under valid and binding leases conforming in all material respects to the description thereof set forth in the Registration Statement.

(j) The Company has filed all Federal, State, local and foreign income tax returns which have been required to be filed and has paid all taxes indicated by said returns and all assessments received by them or any of them to the extent that such taxes have become due. All tax liabilities have been adequately provided for in the financial statements of the Company.

(k) Since the respective dates as of which information is given in the Registration Statement, as it may be amended or supplemented, there has not been

any material adverse change or any development involving a prospective material adverse change in or affecting the earnings, business, management, properties, assets, rights, operations, financial condition or prospects of the Company, whether or not occurring in the ordinary course of business, and there has not been any material transaction entered into or any material transaction that is probable of being entered into by the Company, other than transactions in the ordinary course of business and changes and transactions described in the Registration Statement, as it may be amended

or supplemented. The Company has no material contingent obligations which are not disclosed in the Company's financial statements which are included in the Registration Statement.

(l) The Company is not nor with the giving of notice or lapse of time or both, will be, in violation of or in default under its Certificate of Incorporation or Bylaws or under any agreement, lease, contract, indenture or other instrument or obligation to which it is a party or by which it, or any of its properties, is bound and which default is of material significance in respect of the financial condition of the Company or the business, management, properties, assets, rights, operations, financial condition or prospects of the Company. The execution and delivery of this Agreement and the consummation of the transactions herein contemplated and the fulfillment of the terms hereof will not conflict with or result in a breach of any of the terms or provisions of, or constitute a default under, any indenture, mortgage, deed of trust or other agreement or instrument to which the Company, or of the Certificate of Incorporation or Bylaws of the Company or any order, rule or regulation applicable to the Company of any court or of any regulatory body or administrative agency or other governmental body; except where such conflict, breach, violation or default would not have a material adverse effect on the Company's business, management, properties, assets, rights, operations, financial condition or prospects of the Company.

(m) Each approval, consent, order, authorization, designation, declaration or filing by or with any regulatory, administrative or other governmental body necessary in connection with the execution and delivery by the Company of this Agreement and the consummation of the transactions herein contemplated (except such additional steps as may be required by the Commission, the National Association of Securities Dealers, Inc. (the "NASD") or such additional steps as may be necessary to qualify the Shares for public offering by the Underwriters under state securities or Blue Sky laws) has been obtained or made and is in full force and effect.

(n) The Company owns or possesses sufficient licenses or other rights to use all patents, copyrights, trade secrets, trademarks, service marks, trade names, technology, know-how or other proprietary information or materials necessary to the conduct of the business now being conducted by the Company as described in the Prospectus. The Company holds all material licenses, certificates and permits from governmental authorities which are necessary to

the conduct of its business. The Company knows of no material infringement by others of patents, patent rights, trade names, trademarks or copyrights owned by or licensed to the Company. Except as specifically disclosed in the Prospectus, the Company has sufficient, or can acquire on commercially reasonable terms, trademarks, trade names, patent rights, mask works, copyrights, licenses, approvals and governmental authorizations to conduct its business as now conducted and as proposed to be conducted; and the Company has no knowledge of any infringement by it of any trademark, trade name, patent right, mask work, copyright, license, trade secret or other similar right of others, and, to the Company's knowledge, except as disclosed in the Prospectus, no claim has been made against the Company regarding trademark, trade name, patent, mask work, copyright, license, trade secret or other infringement which could have a material

adverse effect on the financial condition, business or results of operations of the Company.

(o) Neither the Company, nor to the Company's best knowledge, any of its affiliates, has taken or may take, directly or indirectly, any action designed to cause or result in, or which has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of the shares of Common Stock to facilitate the sale or resale of the Shares.

(p) The Company is not an "investment company" within the meaning of such term under the Investment Company Act of 1940 and the rules and regulations of the Commission thereunder.

(q) The Company maintains a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(r) The Company carries, or is covered by, insurance in such amounts and covering such risks as is adequate for the conduct of its respective business and the value of their respective properties.

(s) The Company is in compliance in all material respects with all presently applicable provisions of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder ("ERISA"); no "reportable event" (as defined in ERISA) has occurred with respect to any "pension plan" (as defined in ERISA) for which the Company would have any liability; the Company has not incurred and does not expect to

incur liability under (i) Title IV of ERISA with respect to termination of, or withdrawal from, any "pension plan" or (ii) Sections 412 or 4971 of the Internal Revenue Code of 1986, as amended, including the regulations and published interpretations thereunder (the "Code"); and each "pension plan" for which the Company would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified in all material respects and nothing has occurred, whether by action or by failure to act, which would cause the loss of such qualification.

(t) The Company confirms as of the date hereof that it is in compliance with all provisions of Section

517.075 of Laws of the State of Florida.

(u) The Company is conducting its business in compliance with all applicable laws, rules and regulations of the jurisdictions in which it is conducting business, including, without limitation all applicable rules and regulations of the Federal Communications Commission and all applicable local, state and federal environmental laws and regulations; except where failure to be so in compliance could not materially adversely affect the financial condition, business or results of operations of the Company.

2. Purchase, Sale and Delivery of the Firm Shares.

(a) On the basis of the representations, warranties and covenants herein contained, and subject to the conditions herein set forth, the Company agrees to sell to the Underwriters and each Underwriter agrees, severally and not jointly, to purchase, at a price of $_____ per share, the number of Firm Shares set forth opposite the name of each Underwriter in Schedule I hereof, subject to adjustments in accordance with Section 10 hereof.

(b) Payment for the Firm Shares to be sold hereunder is to be made in New York Clearing House funds by certified or bank cashier's checks drawn to the order of the Company against delivery of certificates therefor to the Representatives for the several accounts of the Underwriters. Such payment and delivery are to be made at the offices of BT Alex. Brown Incorporated, 1 South Street, Baltimore, Maryland, at 10:00 a.m., Baltimore time, on the third business day after the date of this Agreement or at such other time and date not later than five business days thereafter as you and the Company shall agree upon, such time and date being herein referred to as the "Closing Date." (As used herein, "business day" means a day on which the New York Stock Exchange is open for trading and on which banks in New York are open for business and are not permitted by law or executive order to be closed.) The certificates for the Firm Shares will be delivered in such denominations and in such registrations as the Representatives request in writing not later than the second full business day prior to the Closing Date, and will be made available for inspection by the Representatives at least one business day prior to the Closing Date.

(c) In addition, on the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company hereby grants an option to the several Underwriters to purchase the Option Shares at the price per share as set forth in the first paragraph of this Section 2. The option granted hereby may be exercised in whole or in part by giving written notice (i) at any time before the Closing Date and (ii) only once thereafter within 30 days after the date of this Agreement, by you, as Representatives of the several Underwriters, to

the Company setting forth the number of Option Shares as to which the several Underwriters are exercising the option, the names and denominations in which the Option Shares are to be registered and the time and date at which such certificates are to be delivered. The time and date at which certificates for Option Shares are to be delivered shall be determined by the Representatives but shall not be earlier than three nor later than 10 full business days after the exercise of such option, nor in any event prior to the Closing Date (such time and date being herein referred to as the "Option Closing Date"). If the date of exercise of the option is three or more days before the Closing Date, the notice of exercise shall set the Closing Date as the Option Closing Date. The number of Option Shares to be purchased by each Underwriter shall be in the same proportion to the total number of Option Shares being purchased as the number of Firm Shares being purchased by such Underwriter bears to 5,000,000, adjusted by you in such manner as to avoid fractional shares. The option with respect to the Option Shares granted hereunder may be exercised only to cover over-allotments in the sale of the Firm Shares by the Underwriters. You, as Representatives of the several Underwriters, may cancel such option at any time prior to its expiration by giving written notice of such cancellation to the Company. To the extent, if any, that the option is exercised, payment for the Option Shares shall be made on the Option Closing Date in New York Clearing House funds by certified or bank cashier's check drawn to the order of the Company against delivery of certificates therefor at the offices of BT Alex. Brown Incorporated, 1 South Street, Baltimore, Maryland.

(d) The Company hereby confirms its engagement of Merrill Lynch, Pierce, Fenner & Smith Incorporated ("Merrill Lynch") as, and Merrill Lynch hereby confirms its Agreement with the Company to render services as, a "Qualified Independent Underwriter," within the meaning of Section (b)(15) of Rule 2720 of the National Association of Securities Dealers, Inc. with respect to the offering and sale of the Shares. Merrill Lynch, solely in its capacity has the Qualified Independent Underwriter and not otherwise, is referred to herein as the "QIU." The price at which the Shares will be sold to the public shall not be greater than the maximum price recommended by the QIU.

3. Offering by the Underwriters.

It is understood that the several Underwriters are to make a public offering of the Firm Shares as soon as the Representatives deem it advisable to do so. The Firm Shares are to be initially offered to the public at the initial

public offering price set forth in the Prospectus. The Representatives may from time to time thereafter change the public offering price and other selling terms. To the extent, if at all, that any Option Shares are purchased pursuant to Section 2 hereof, the Underwriters will offer them to the public on the foregoing terms.

It is further understood that you will act as the Representatives for the Underwriters in the offering and sale of the Shares in accordance with a Master Agreement Among Underwriters entered into by you and the several other Underwriters.

4. Covenants of the Company.

The Company covenants and agrees with the several Underwriters that:

(a) The Company will (i) use its best efforts to cause the Registration Statement to become effective or, if the procedure in Rule 430A of the Rules and Regulations is followed, to prepare and timely file with the Commission under Rule 424(b) of the Rules and Regulations a Prospectus in a form approved by the Representatives containing information previously omitted at the time of effectiveness of the Registration Statement in reliance on Rule 430A of the Rules and Regulations, (ii) not file any amendment to the Registration Statement or supplement to the Prospectus of which the Representatives shall not previously have been advised and furnished with a copy or to which the Representatives shall have reasonably objected in writing or which is not in compliance with the Rules and Regulations and (iii) file on a timely basis all reports and any definitive proxy or information statements required to be filed by the Company with the Commission subsequent to the date of the Prospectus and prior to the termination of the offering of the Shares by the Underwriters.

(b) The Company will advise the Representatives promptly (i) when the Registration Statement or any post-effective amendment thereto shall have become effective, (ii) of receipt of any comments from the Commission, (iii) of any request of the Commission for amendment of the Registration Statement or for supplement to the Prospectus or for any additional information, and (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or the use of the Prospectus or of the institution of any proceedings for that purpose. The Company will use its best efforts to prevent the issuance of any such stop order preventing or suspending the use of the Prospectus and to obtain as soon as possible the lifting thereof, if issued.

(c) The Company will cooperate with the Representatives in endeavoring to qualify the Shares for sale under the securities laws of such jurisdictions as the Representatives may reasonably have designated in writing and will make such applications, file such documents, and furnish such information as may be reasonably required for that purpose, provided the Company shall not be required to qualify as a foreign corporation or to file a general consent to service of process in any jurisdiction where it is not now so qualified or required to file

such a consent. The Company will, from time to time, prepare and file such statements, reports, and other documents, as are or may be required to continue such qualifications in effect for so long a period as the Representatives may reasonably request for distribution of the Shares.

(d) The Company will deliver to, or upon the order of, the Representatives, from time to time, as many copies of any Preliminary Prospectus as the Representatives may reasonably request. The Company will deliver to, or upon the order of, the Representatives during the period when delivery of a Prospectus is required under the Act, as many copies of the Prospectus in final form, or as thereafter amended or supplemented, as the Representatives may reasonably request. The Company will deliver to the Representatives at or before the Closing Date, four signed copies of the

Registration Statement and all amendments thereto including all exhibits filed therewith, and will deliver to the Representatives such number of copies of the Registration Statement (including such number of copies of the exhibits filed therewith that may reasonably be requested), and of all amendments thereto, as the Representatives may reasonably request.

(e) The Company will comply with the Act and the Rules and Regulations, and the Securities Exchange Act of 1934 (the "Exchange Act"), and the rules and regulations of the Commission thereunder, so as to permit the completion of the distribution of the Shares as contemplated in this Agreement and the Prospectus. If during the period in which a prospectus is required by law to be delivered by an Underwriter or dealer, any event shall occur as a result of which, in the judgment of the Company or in the reasonable opinion of the Underwriters, it becomes necessary to amend or supplement the Prospectus in order to make the statements therein, in the light of the circumstances existing at the time the Prospectus is delivered to a purchaser, not misleading, or, if it is necessary at any time to amend or supplement the Prospectus to comply with any law, the Company promptly will prepare and file with the Commission an appropriate amendment to the Registration Statement or supplement to the Prospectus so that the Prospectus as so amended or supplemented will not, in the light of the circumstances when it is so delivered, be misleading, or so that the Prospectus will comply with the law.

(f) The Company will make generally available to its security holders, as soon as it is practicable to do so, but in any event not later than 15 months after the effective date of the Registration Statement, an earning statement (which need not be audited) in reasonable detail, covering a period of at least 12 consecutive months beginning after the effective date of the Registration Statement, which earning statement shall satisfy the requirements of Section 11(a) of the Act and Rule 158 of the Rules and Regulations and will advise you in writing when such statement has been so made available.

(g) The Company will, for a period of five years from the Closing Date, deliver to the Representatives copies of annual reports and copies of all

other documents, reports and information furnished by the Company to its stockholders or filed with any securities exchange pursuant to the requirements of such exchange or with the Commission pursuant to the Act or the Securities Exchange Act of 1934, as amended. The Company will deliver to the Representatives similar reports with respect to significant subsidiaries, as that term is defined in the Rules and Regulations, which are not consolidated in the Company's financial statements.

(h) No offering, sale, short sale or other disposition of any shares of Common Stock of the Company or other securities convertible into or exchangeable or exercisable for shares of Common Stock or derivative of Common Stock (or agreement for such) will be made during the period commencing on the date of this Agreement and ending on the one hundred eightieth (180th) day after the date of the Prospectus, directly or indirectly, by the Company otherwise than (i) hereunder, (ii) with the prior written consent of BT Alex. Brown Incorporated, or (iii) pursuant to the exercise of options or warrants to purchase Common Stock granted pursuant to the stock option or stock purchase plans of the Company

or outstanding warrants of the Company which are described in the Registration Statement and the Prospectus.

(i) The Company will use its best efforts to list, subject to notice of issuance, the Shares on the Nasdaq National Market.

(j) The Company has caused each officer and director and certain security holders of the Company who beneficially own in the aggregate more than 98% of the outstanding shares of Common Stock of the Company to furnish to you, on or prior to the date of this Agreement, a letter or letters, in form and substance satisfactory to the Underwriters, pursuant to which each such person shall agree not to offer, sell, sell short or otherwise dispose of any shares of Common Stock of the Company or other capital stock of the Company, or any other securities convertible, exchangeable or exercisable for Common Shares or derivative of Common Shares owned by such person or request the registration for the offer or sale of any of the foregoing (or as to which such person has the right to direct the disposition of) for a period of 180 days after the date of the Prospectus, directly or indirectly, except with the prior written consent of BT Alex. Brown Incorporated ("Lockup Agreements"). In addition, in connection with any exercise of options to purchase Common Stock granted pursuant to the stock option or stock purchase plans of the Company during such 180 day period, the Company shall cause each optionee to enter into a Lockup Agreement.

(k) The Company shall apply the net proceeds of its sale of the Shares as set forth in the Prospectus and shall file such reports with the Commission with respect to the sale of the Shares and the application of the proceeds therefrom as may be required in accordance with Rule 463 under the Act.

(l) The Company shall not invest, or otherwise use the proceeds

received by the Company from its sale of the Shares in such a manner as would require the Company or any of the Subsidiaries to register as an investment company under the Investment Company Act of 1940, as amended (the "1940 Act").

(m) The Company will maintain a transfer agent and, if necessary under the jurisdiction of incorporation of the Company, a registrar for the Common Stock.

(n) The Company will not take, directly or indirectly, any action designed to cause or result in, or that has constituted or might reasonably be expected to constitute, the stabilization or manipulation of the price of any securities of the Company.

(o) The Company will not take, directly or indirectly, any action designed to cause or result in the filing of a registration statement on Form S-8 under the Act covering shares of Common Stock reserved for issuance under the Company's stock option, stock purchase or other employee benefit plans for a period of 180 days after the date of this Prospectus.

5. Costs and Expenses.

The Company will pay all costs, expenses and fees incident to the performance of the obligations of the Company under this Agreement, including, without limiting the generality of the foregoing, the following: accounting fees of the Company; the fees and disbursements of counsel for the Company; the cost of printing and delivering to, or as requested by, the Underwriters copies of the Registration Statement, Preliminary Prospectuses, the Prospectus, this Agreement, the Underwriters' Selling Memorandum, the Underwriters' Invitation Letter, the Listing Application, the Blue Sky Survey and any supplements or amendments thereto; the filing fees of the Commission; the filing fees and expenses (including legal fees and disbursements) incident to securing any required review by the National Association of Securities Dealers, Inc. (the "NASD") of the terms of the sale of the Shares; the Listing Fee of the Nasdaq National Market; the reasonable fees and expenses of the QIU (including the fees and disbursements of counsel to the QIU); and the expenses, including the fees and disbursements of counsel for the Underwriters, incurred in connection with the qualification of the Shares under State securities or Blue Sky laws. The Company agrees to pay all costs and expenses of the Underwriters, including the reasonable fees and disbursements of counsel for the Underwriters, incident to the offer and sale of directed shares of the Common Stock by the Underwriters to employees and persons having business relationships with the Company and its Subsidiaries. The Company shall not, however, be required to pay for any of the Underwriters expenses (other than those related to qualification under NASD regulation and State securities or Blue Sky laws) except that, if this Agreement shall not be consummated because the conditions in Section 6 hereof are not satisfied, or because this Agreement is terminated by the Representatives pursuant to Section 11 hereof, or by reason of any failure, refusal or inability on the part of the Company to perform any undertaking or satisfy any condition

of this Agreement or to comply with any of the terms hereof on its part to be performed, unless such failure to satisfy said condition or to comply with said terms be due to the default or omission of any Underwriter, then the Company shall reimburse the several Underwriters for reasonable out-of-pocket expenses, including reasonable fees and disbursements of counsel, reasonably incurred in connection with investigating, marketing and proposing to market the Shares or in contemplation of performing their obligations hereunder; but the Company shall not in any event be liable to any of the several Underwriters for damages on account of loss of anticipated profits from the sale by them of the Shares.

6. Conditions of Obligations of the Underwriters.

The several obligations of the Underwriters to purchase the Firm Shares on the Closing Date and the Option Shares, if any, on the Option Closing Date are subject to the accuracy, as of the Closing Date or the Option Closing Date, as the case may be, of the representations and warranties of the Company contained herein, and to the performance by the Company of its covenants and obligations hereunder and to the following additional conditions:

(a) The Registration Statement and all post-effective amendments thereto shall have become effective and any and all filings required by Rule 424 and Rule 430A of the Rules and

Regulations shall have been made, and any request of the Commission for additional information (to be included in the Registration Statement or otherwise) shall have been disclosed to the Representatives and complied with to their reasonable satisfaction. No stop order suspending the effectiveness of the Registration Statement, as amended from time to time, shall have been issued and no proceedings for that purpose shall have been taken or, to the knowledge of the Company, shall be contemplated by the Commission and no injunction, restraining order, or order of any nature by a Federal or state court of competent jurisdiction shall have been issued as of the Closing Date which would prevent the issuance of the Shares.

(b) The Representatives shall have received on the Closing Date or the Option Closing Date, as the case may be, the opinion of Venture Law Group, A Professional Corporation, counsel for the Company, dated the Closing Date or the Option Closing Date, as the case may be, addressed to the Underwriters (and stating that it may be relied upon by counsel to the Underwriters) to the effect that:

(i) The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the State of Delaware, with corporate power and authority to own or lease its properties and conduct its business as described in the Registration Statement; and the Company is duly qualified to transact business in all jurisdictions in which the conduct of their business requires such qualification, or in which the failure to qualify would have a materially adverse effect upon the business of the Company.

(ii) The Company has authorized and outstanding capital stock as set forth under the caption "Capitalization" in the Prospectus; the authorized shares of the Company's Common Stock have been duly authorized; the outstanding shares of the Company's Common Stock have been duly authorized and validly issued and are fully paid and non-assessable; all of the Shares conform to the description thereof contained under the heading "Description of Securities--Common Stock" in the Prospectus; the certificates for the Shares, assuming they are in the form filed with the Commission, are in due and proper form; the shares of Common Stock, including the Option Shares, if any, to be sold by the Company pursuant to this Agreement have been duly authorized and will be validly issued, fully paid and non-assessable when issued and paid for as contemplated by this Agreement; and no preemptive rights of stockholders exist with respect to any of the Shares or the issue or sale thereof.

(iii) Except as described in or contemplated by the Prospectus, to the knowledge of such counsel, there are no outstanding securities of the Company convertible or exchangeable into or evidencing the right to purchase or subscribe for any shares of capital stock of the Company and there are no outstanding or authorized options, warrants or rights of any character obligating the Company to issue any shares of its capital stock or any securities convertible or exchangeable into or evidencing the right to purchase or subscribe for any shares of such stock; and except as described in the Prospectus, to the knowledge of such counsel, no holder of any securities of the Company or any other person has the right, contractual or otherwise, which has not been satisfied or effectively waived, to cause the Company to sell or otherwise issue to them, or to permit

them to underwrite the sale of, any of the Shares or the right to have any Common Shares or other securities of the Company included in the Registration Statement or the right, as a result of the filing of the Registration Statement, to require registration under the Act of any shares of Common Stock or other securities of the Company.

(iv) The Registration Statement has become effective under the Act and, to the best of the knowledge of such counsel, no stop order proceedings with respect thereto have been instituted or are pending or threatened under the Act.

(v) The Registration Statement, the Prospectus and each amendment or supplement thereto comply as to form in all material respects with the requirements of the Act and the applicable rules and regulations thereunder (except that such counsel need express no opinion as to the financial statements and related schedules therein).

(vi) The statements under the captions "Risk Factors--Shares Eligible for Future Sale After the Offering," "--Control by Existing Shareholders," "Management--Limitation of Liability and Indemnification

Matters," "--Severance Arrangements," "Certain Transactions," "Description of Securities" and "Shares Eligible for Future Sale" in the Prospectus, insofar as such statements constitute a summary of documents referred to therein or matters of law, fairly summarize in all material respects the information called for with respect to such documents and matters.

(vii) Such counsel does not know of any contracts or documents required to be filed as exhibits to the Registration Statement or described in the Registration Statement or the Prospectus which are not so filed or described as required, and such contracts and documents as are summarized in the Registration Statement or the Prospectus are fairly summarized in all material respects.

(viii) Such counsel knows of no material legal or governmental proceedings pending or threatened against the Company except as set forth in the Prospectus.

(ix) The execution and delivery of this Agreement and the consummation of the transactions herein contemplated do not and will not conflict with or result in a breach of any of the terms or provisions of, or constitute a default under, the Certificate of Incorporation or Bylaws of the Company, or any agreement or instrument known to such counsel to which the Company or is a party or by which the Company may be bound, except where such conflicts, breach or default would not have the material adverse effect on the earnings, business, management, properties, assets, rights, operations or financial condition of the Company .

(x) This Agreement has been duly authorized, executed and delivered by the Company.

(xi) No approval, consent, order, authorization, designation, declaration or filing by or with any regulatory, administrative or other governmental body is necessary in connection with the execution and delivery of this Agreement and the consummation of the transactions herein contemplated (other than as may be required by the NASD or as required by State securities and Blue Sky laws as to which such counsel need express no opinion) except such as have been obtained or made, specifying the same.

(xii) The Company is not, and will not become, as a result of the consummation of the transactions contemplated by this Agreement, and application of the net proceeds therefrom as described in the Prospectus, required to register as an investment company under the 1940 Act.

In rendering such opinion Venture Law Group, A Professional Corporation, may rely as to matters governed by the laws of states other than Delaware, Washington or Federal laws on local counsel in such jurisdictions, provided that in each case Venture Law Group, A Professional Corporation, shall state that they believe that they and the Underwriters are justified in relying

on such other counsel. In addition to the matters set forth above, such opinion shall also include a statement to the effect that, [ALTHOUGH SUCH COUNSEL DOES NOT ASSUME ANY RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS OR FAIRNESS OF THE STATEMENTS CONTAINED IN THE REGISTRATION STATEMENT OR THE PROSPECTUS,] nothing has come to the attention of such counsel which leads them to believe that (i) the Registration Statement, at the time it became effective under the Act (but after giving effect to any modifications incorporated therein pursuant to Rule 430A under the Act) and as of the Closing Date or the Option Closing Date, as the case may be, contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and (ii) the Prospectus, or any supplement thereto, on the date it was filed pursuant to the Rules and Regulations and as of the Closing Date or the Option Closing Date, as the case may be, contained an untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements, in the light of the circumstances under which they are made, not misleading (except that such counsel need express no view as to financial statements, related notes, schedules and other financial information derived therefrom). With respect to such statement, Venture Law Group, A Professional Corporation may state that their belief is based upon the procedures set forth therein, but is without independent check and verification.

(c) The Underwriters shall have received on the Closing Date an opinion of Fulbright & Jaworski LLP, dated the Closing Date, with respect to certain intellectual property matters, to the effect that:

(i) The Company owns all patents, trademarks, trademark registrations, service marks, service mark registrations, trade names, copyrights, licenses, inventions, trade secrets and rights described in the Prospectus as being owned by it or necessary for the conduct of its business, and such counsel is not aware of any claim to the contrary or any challenge by any other person to the rights of the Company with respect to the foregoing other than those identified in the Prospectus.

(ii) Such counsel is not aware of any legal actions, claims or proceedings pending or threatened against the Company alleging that the Company is infringing or otherwise violating any patents or trade secrets owned by others other than those identified in the Prospectus.

(iii) Such counsel has reviewed the descriptions of patents and patent applications under the captions "Risk Factors--Uncertainty Regarding Protection of Intellectual Property" and "Business--Intellectual Property" in the Registration Statement and Prospectus, and, to the extent they constitute matters of law or legal conclusions, these descriptions are accurate and fairly and completely present the patent situation of the Company.

(iv) Such counsel is aware of nothing that causes such counsel to believe that, as of the date that the Registration Statement became effective and as of the date of such opinion, the description of patents and patent applications under the captions "Risk Factors--Uncertainty Regarding Protection

of Intellectual Property" and "Business--Intellectual Property" in the Registration Statement and Prospectus contained or contains any untrue statement of a material fact or omitted or omits to state a material fact necessary to make the statements made therein, in light of the circumstances under which they were made, not misleading, including without limitation, any undisclosed material issue with respect to the subsequent validity or enforceability of such patent or patent issuing from any such pending patent application.

(d) The Representatives shall have received from Wilson Sonsini Goodrich & Rosati, P.C., counsel for the Underwriters, an opinion dated the Closing Date or the Option Closing Date, as the case may be, substantially to the effect specified in subparagraphs [(iv) and (v)] of Paragraph (b) of this Section 6, and that the Company is a duly organized and validly existing corporation under the laws of the State of Delaware. In rendering such opinion Wilson Sonsini Goodrich & Rosati, P.C. may rely as to all matters governed other than by the laws of the State of California, the State of Delaware or Federal laws on the opinion of counsel referred to in Paragraph (b) of this Section 6. In addition to the matters set forth above, such opinion shall also include a statement to the effect that nothing has come to the attention of such counsel which leads them to believe that (i) the Registration Statement, or any amendment thereto, as of the time it became effective under the Act (but after giving effect to any modifications incorporated therein pursuant to Rule 430A under the Act) and as of the Closing Date or the Option Closing Date, as the case may be, contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and (ii) the Prospectus, or any supplement thereto, on the date it was filed pursuant to the Rules and Regulations and as of the Closing Date or the Option Closing Date, as the case may be, contained an untrue statement of a material fact or omitted to state a material fact, necessary in order to make the statements, in the light of the circumstances under which they are made, not misleading (except that such counsel need express no view as to financial statements, related notes, schedules and other financial information therein). With respect to such statement, Wilson Sonsini Goodrich & Rosati, P.C. may state that their belief is based upon the procedures set forth therein, but is without independent check and verification.

(e) The Representatives shall have received at or prior to the Closing Date from Wilson Sonsini Goodrich & Rosati, P.C., a memorandum or summary, in form and substance satisfactory to the Representatives, with respect to the qualification for offering and sale by the Underwriters of the Shares under the State securities or Blue Sky laws of such jurisdictions as the Representatives may reasonably have designated to the Company.

(f) You shall have received, on each of the dates hereof, the Closing Date and the Option Closing Date, as the case may be, a letter dated the date hereof, the Closing Date or the Option Closing Date, as the case may be, in form and substance satisfactory to you, of Ernst & Young LLP confirming that they are independent public accountants within the meaning of the Act and the applicable

published Rules and Regulations thereunder and stating that in their opinion the financial statements and schedules examined by them and included in the Registration Statement comply in form in all material respects with the applicable accounting requirements of the Act and the related published Rules and Regulations; and containing such other statements and information as is ordinarily included in accountants' "comfort letters" to Underwriters with respect to the financial statements and certain financial and statistical information contained in the Registration Statement and Prospectus.

(g) The Representatives shall have received on the Closing Date or the Option Closing Date, as the case may be, a certificate or certificates of the Chief Executive Officer and the Chief Financial Officer of the Company to the effect that, as of the Closing Date or the Option Closing Date, as the case may be, each of them severally represents as follows:

(i) The Registration Statement has become effective under the Act and no stop order suspending the effectiveness of the Registrations Statement has been issued, and no proceedings for such purpose have been taken or are, to his knowledge, contemplated by the Commission;

(ii) The representations and warranties of the Company contained in Section 1 hereof are true and correct as of the Closing Date or the Option Closing Date, as the case may be;

(iii) All filings required to have been made pursuant to Rules 424 or 430A under the Act have been made;

(iv) He has carefully examined the Registration Statement and the Prospectus and, in his opinion, as of the effective date of the Registration Statement, the statements contained in the Registration Statement were true and correct, and such Registration Statement and Prospectus did not omit to state a material fact required to be stated therein or necessary in order to make the statements therein not misleading, and since the effective date of the Registration Statement, no event has occurred which should have been set forth in a supplement to or an amendment of the Prospectus which has not been so set forth in such supplement or amendment; and

(v) Since the respective dates as of which information is given in the Registration Statement and Prospectus, there has not been any material adverse change or any development involving a prospective material adverse change in or affecting the condition, financial or otherwise, of the Company or the earnings, business, management, properties, assets, rights, operations, financial condition or prospects of the Company, whether or not arising in the ordinary course of business.

(h) The Company shall have furnished to the Representatives such further certificates and documents confirming the representations and warranties, covenants and conditions contained herein and related matters as the

Representatives may reasonably have requested.

(i) The Firm Shares and Option Shares, if any, have been approved for designation upon notice of issuance on the Nasdaq National Market.

(j) The Lockup Agreements described in Section 4 (j) are in full force and effect.

The opinions and certificates mentioned in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in all material respects satisfactory to the Representatives and to Wilson Sonsini Goodrich & Rosati, P.C., counsel for the Underwriters.

If any of the conditions hereinabove provided for in this Section 6 shall not have been fulfilled when and as required by this Agreement to be fulfilled, the obligations of the Underwriters hereunder may be terminated by the Representatives by notifying the Company of such termination in writing or by telegram at or prior to the Closing Date or the Option Closing Date, as the case may be.

In such event, the Company and the Underwriters shall not be under any obligation to each other (except to the extent provided in Sections 5 and 8 hereof).

7. Conditions of the Obligations of the Company.

The obligations of the Company to sell and deliver the portion of the Shares required to be delivered as and when specified in this Agreement are subject to the conditions that at the Closing Date or the Option Closing Date, as the case may be, no stop order suspending the effectiveness of the Registration Statement shall have been issued and in effect or proceedings therefor initiated or threatened.

8. Indemnification.

(a) The Company agrees to indemnify and hold harmless each Underwriter and each person, if any, who controls any Underwriter within the meaning of the Act, against any losses, claims, damages or liabilities to which such Underwriter or any such controlling person may become subject under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions

or proceedings in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement, any Preliminary Prospectus, the Prospectus or any amendment or supplement thereto, or (ii) the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading; and will reimburse each Underwriter and each such controlling person upon demand for any legal or other expenses

reasonably incurred by such Underwriter or such controlling person in connection with investigating or defending any such loss, claim, damage or liability, action or proceeding or in responding to a subpoena or governmental inquiry related to the offering of the Shares, whether or not such Underwriter or controlling person is a party to any action or proceeding; provided, however, that (i) the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement, or omission or alleged omission made in the Registration Statement, any Preliminary Prospectus, the Prospectus, or such amendment or supplement, in reliance upon and in conformity with written information furnished to the Company by or through the Representatives specifically for use in the preparation thereof and (ii) the indemnity agreement contained in this paragraph (a) with respect to any Preliminary Prospectus shall not inure to the benefit of any Underwriter from whom the person asserting any such loss, claim, damage, liability or expense purchased the Shares which is the subject thereof (or to the benefit of any person controlling such Underwriter) if at or prior to the written confirmation of the sale of such Shares a copy of the Prospectus (or the Prospectus as amended or supplemented) was not sent or delivered to such person and the untrue statement or omission of a material fact contained in such Preliminary Prospectus was corrected in the Prospectus (or the Prospectus as amended or supplemented). This indemnity agreement will be in addition to any liability which the Company may otherwise have.

(b) Each Underwriter severally and not jointly will indemnify and hold harmless the Company, each of its directors, each of its officers who have signed the Registration Statement, and each person, if any, who controls the Company within the meaning of the Act, against any losses, claims, damages or liabilities to which the Company or any such director, officer, or controlling person may become subject under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement, any Preliminary Prospectus, the Prospectus or any amendment or supplement thereto, or (ii) the omission or the alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances under which they were made; and will reimburse any legal or other expenses reasonably incurred by the Company or any such director, officer, or controlling person in connection with investigating or defending any such loss, claim, damage, liability, action or proceeding; provided, however, that each Underwriter will be liable in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission has been made in the Registration Statement, any Preliminary Prospectus, the Prospectus or such amendment or supplement, in reliance upon and in conformity with written information furnished to the Company by or through the

Representatives specifically for use in the preparation thereof. This indemnity agreement will be in addition to any liability which such Underwriter may

otherwise have.

(c) In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity may be sought pursuant to this Section 8, such person (the "indemnified party") shall promptly notify the person against whom such indemnity may be sought (the "indemnifying party") in writing. No indemnification provided for in Section 8(a) or (b) shall be available to any party who shall fail to give notice as provided in this Section 8(c) if the party to whom notice was not given was unaware of the proceeding to which such notice would have related and was materially prejudiced by the failure to give such notice, but the failure to give such notice shall not relieve the indemnifying party or parties from any liability which it or they may have to the indemnified party for contribution or otherwise than on account of the provisions of Section 8(a) or (b). In case any such proceeding shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party and shall pay as incurred the fees and disbursements of such counsel related to such proceeding. In any such proceeding, any indemnified party shall have the right to retain its own counsel at its own expense. Notwithstanding the foregoing, the indemnifying party shall pay as incurred (or within 30 days of presentation) the fees and expenses of the counsel retained by the indemnified party in the event (i) the indemnifying party and the indemnified party shall have mutually agreed to the retention of such counsel, (ii) the named parties to any such proceeding (including any impleaded parties) include both the indemnifying party and the indemnified party and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them or (iii) the indemnifying party shall have failed to assume the defense and employ counsel acceptable to the indemnified party within a reasonable period of time after notice of commencement of the action. It is understood that the indemnifying party shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees and expenses of more than one separate firm for all such indemnified parties. Such firm shall be designated in writing by you in the case of parties indemnified pursuant to Section 8(a) and by the Company in the case of parties indemnified pursuant to Section 8(b). The indemnifying party shall not be liable for any settlement of any proceeding effected without its written consent but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party from and against any loss or liability by reason of such settlement or judgment. In addition, the indemnifying party will not, without the prior written consent of the indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding of which indemnification may be sought hereunder (whether or not any indemnified party is an actual or potential party to such claim, action or proceeding) unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising out of such claim, action or proceeding.

(d) If the indemnification provided for in this Section 8 is unavailable to or insufficient to hold harmless an indemnified party under Section 8(a) or (b) above in respect of any

losses, claims, damages or liabilities (or actions or proceedings in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the offering of the Shares. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law, then each indemnifying party shall contribute to such amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and the Underwriters on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities, (or actions or proceedings in respect thereof), as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company and the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus, bear to the aggregate public offering price of the Shares. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company on the one hand or the Underwriters on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this Section 8(d) were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 8(d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions or proceedings in respect thereof) referred to above in this Section 8(d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this subsection (d), (i) no Underwriter shall be required to contribute any amount in excess of the underwriting discounts and commissions applicable to the Shares purchased by such Underwriter, and (ii) no person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations in this Section 8(d) to contribute are several in proportion to their respective

underwriting obligations and not joint.

(e) In any proceeding relating to the Registration Statement, any Preliminary Prospectus, the Prospectus or any supplement or amendment thereto, each party against whom contribution may be sought under this Section 8 hereby consents to the jurisdiction of any court having jurisdiction over any other contributing party, agrees that process issuing from such court may be served upon him or it by any other contributing party and consents to the service of such process and agrees that any other contributing party may join him or it as an additional defendant in any such proceeding in which such other contributing party is a party.

(f) Any losses, claims, damages, liabilities or expenses for which an indemnified party is entitled to indemnification or contribution under this Section 8 shall be paid by the indemnifying party to the indemnified party as such losses, claims, damages, liabilities or expenses are incurred. The indemnity and contribution agreements contained in this Section 8 and the representations and warranties of the Company set forth in this Agreement shall remain operative and in full force and effect, regardless of (i) any investigation made by or on behalf of any Underwriter or any person controlling any Underwriter, the Company, its directors or officers or any persons controlling the Company, (ii) acceptance of any Shares and payment therefor hereunder, and (iii) any termination of this Agreement. A successor to any Underwriter, or to the Company, its directors or officers, or any person controlling the Company, shall be entitled to the benefits of the indemnity, contribution and reimbursement agreements contained in this Section 8.

9. Indemnification of QIU.

(a) The Company agrees to indemnify and hold harmless the QIU, its directors, its officers and each person, if any, who controls the QIU within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, from and against any and all losses, claims, damages, liabilities and judgments (including, without limitation, any legal or other expenses incurred in connection with investigating or defending any matter, including any action, that could give rise to any such losses, claims, damages, liabilities or judgments) related to, based upon or arising out of (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), the Prospectus (or any amendment or supplement thereto) or any preliminary prospectus, or any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading or (ii) the QIU's activities as QIU under its engagement pursuant to Section 2 hereof.

(b) In case any action shall be commenced in any person in respect of which indemnity may be sought pursuant to Section 9(a) (the "QIU Indemnified Party"), the QIU Indemnified Party shall promptly notify the Company in writing and the Company shall assume the defense of such action, including the

employment of counsel reasonably satisfactory to the QIU Indemnified Party and the payment of all fees and expenses of such counsel, as incurred. Any QIU Indemnified Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of the QIU Indemnified Party unless (i) the employment of such counsel shall have been specifically authorized in writing by the Company, (ii) the Company shall have failed to assume the defense of such action or employ counsel reasonably satisfactory to the QIU Indemnified Party or (iii) the named parties to any such action (including any impleaded parties) include both the QIU Indemnified Party and the Company, and the QIU Indemnified Party shall have been advised by such counsel that there may be one or more legal defenses available to it which are different from or additional to those available to the Company (in which case the Company shall not have the right to assume the defense of such

action on behalf of the QIU Indemnified Party). In any such case, the Company shall not, in connection with any one action or separate but substantially similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the fees and expenses of more than one separate firm of attorneys (in addition to any local counsel) for all QIU Indemnified Parties, which firm shall be designated by the QIU, and all such fees and expenses shall be reimbursed as they are incurred. The Company shall indemnify and hold harmless the QUI Indemnified Party from and against any and all losses, claims, damages, liabilities and judgments by reason of any settlement of any action (i) effected with its written consent or (ii) effected without its written consent if the settlement is entered into more than twenty business days after the Company shall have received a request from the QIU Indemnified Party for reimbursement for the fees and expenses of counsel (in any case where such fees and expenses are at the expense of the Company) and, prior to the date of such settlement, the Company shall have failed to comply with such reimbursement request. The Company shall not, without the prior written consent of the QIU Indemnified Party, effect any settlement or compromise of, or consent to the entry of judgment with respect to, any pending or threatened action in respect of which the QIU Indemnified Party is or could have been a party and indemnity or contribution may be or could have been sought hereunder by the QIU Indemnified Party, unless such settlement, compromise or judgment (i) includes an unconditional release of the QIU Indemnified Party from all liability on claims that are or could have been the subject matter of such action and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of the QIU Indemnified Party.

(c) To the extent that the indemnification provided for in this Section 9 is unavailable to a QIU Indemnified Party or insufficient in respect of any losses, claims, damages, liabilities or judgments referred to therein, then the Company, in lieu of indemnifying such QIU Indemnified Party, shall contribute to the amount paid or payable by such QIU Indemnified Party as a result of such losses, claims, damages, liabilities and judgments in such proportion as is appropriate to reflect the relative benefits received by the

Company on the one hand and the QIU on the other hand from the offering of the Shares. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law, then each indemnifying party shall contribute to such amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only the relative benefits referred to but also the relative fault of the Company on the one hand and the QIU on the other hand in connection with the statements or omissions which resulted in such losses, claims, damages, liabilities or judgments, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the QIU on the other hand shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company as set forth in the table on the cover page of the Prospectus, and the fee received by the QIU pursuant to Section 2(d) hereof, bear to the sum of such total net proceeds and such fee. The relative fault of the Company on the one hand and the QIU on the other hand shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or the QIU and the parties relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and the QIU agree that is would not be just and equitable if contribution pursuant to this Section 9(c) were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in the immediately preceding paragraph. The amount paid or payable to a QIU Indemnified Party as a result of the losses, claims, damages, liabilities or judgments referred to in the immediately preceding paragraph shall be deemed to include, subject to the limitations set forth above, any legal or other expenses incurred by such QIU Indemnified Party in connection with investigating or defending any matter, including any action, that could have given rise to such losses, claims, damages, liabilities or judgments. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

(d) The remedies provided for in this Section 9 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any QIU Indemnified Party at law or in equity.

10. Default by Underwriters.

If on the Closing Date or the Option Closing Date, as the case may be, any Underwriter shall fail to purchase and pay for the portion of the Shares which such Underwriter has agreed to purchase and pay for on such date (otherwise than by reason of any default on the part of the Company), you, as Representatives of the Underwriters, shall use your reasonable efforts to procure within 36 hours thereafter one or more of the other Underwriters, or any others, to purchase from the Company such amounts as may be agreed upon and upon

the terms set forth herein, the Firm Shares or Option Shares, as the case may be, which the defaulting Underwriter or Underwriters failed to purchase. If during such 36 hours you, as such Representatives, shall not have procured such other Underwriters, or any others, to purchase the Firm Shares or Option Shares, as the case may be, agreed to be purchased by the defaulting Underwriter or Underwriters, then (a) if the aggregate number of shares with respect to which such default shall occur does not exceed 10% of the Firm Shares or Option Shares, as the case may be, covered hereby, the other Underwriters shall be obligated, severally, in proportion to the respective numbers of Firm Shares or Option Shares, as the case may be, which they are obligated to purchase hereunder, to purchase the Firm Shares or Option Shares, as the case may be, which such defaulting Underwriter or Underwriters failed to purchase, or (b) if the aggregate number of shares of Firm Shares or Option Shares, as the case may be, with respect to which such default shall occur exceeds 10% of the Firm Shares or Option Shares, as the case may be, covered hereby, the Company or you as the Representatives of the Underwriters will have the right, by written notice given within the next 36-hour period to the parties to this Agreement, to terminate this Agreement without liability on the part of the non-defaulting Underwriters or of the Company except to the extent provided in Section 8 hereof. In the event of a default by any Underwriter or Underwriters, as set forth in this Section 10, the Closing Date or Option Closing Date, as the case may be, may be postponed for such period, not exceeding seven days, as you, as Representatives, may determine in order that the required changes in the Registration Statement or in the Prospectus or in any other documents or arrangements may be

effected. The term "Underwriter" includes any person substituted for a defaulting Underwriter. Any action taken under this Section 10 shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

11. Notices.

All communications hereunder shall be in writing and, except as otherwise provided herein, will be mailed, delivered, telecopied or telegraphed and confirmed as follows: if to the Underwriters, to BT Alex. Brown Incorporated, 1 South Street, Baltimore, Maryland 21202, Attention: _____; with a copy to BT Alex. Brown Incorporated, 1 South Street, Baltimore, Maryland 21202. Attention: General Counsel; if to the Company, to

Robert H. Hunsberger
President and Chief Executive Officer
and
Kathy Surace-Smith,
General Counsel
Metawave Communications Corporation
8700-148th Avenue N.E.
Redmond, Washington 98052-3482

12. Termination.

This Agreement may be terminated by you by notice to the Company as follows:

(a) at any time prior to the earlier of (i) the time the Shares are released by you for sale by notice to the Underwriters, or (ii) 11:30 a.m. on the first business day following the date of this Agreement;

(b) at any time prior to the Closing Date if any of the following has occurred: (i) since the respective dates as of which information is given in the Registration Statement and the Prospectus, any material adverse change or any development involving a prospective material adverse change in or affecting the condition, financial or otherwise, of the Company and its Subsidiaries taken as a whole or the earnings, business, management, properties, assets, rights, operations, financial condition or prospects of the Company, whether or not arising in the ordinary course of business, (ii) any outbreak or escalation of hostilities or declaration of war or national emergency or other national or international calamity or crisis or change in economic or political conditions if the effect of such outbreak, escalation, declaration, emergency, calamity, crisis or change on the financial markets of the United States would, in your reasonable judgment, make it impracticable to market the Shares or to enforce contracts for the sale of the Shares, or (iii) suspension of trading in securities generally on the New York Stock Exchange or the American Stock Exchange or limitation on prices (other than limitations on hours or numbers of days of trading) for securities on either such Exchange, (iv) the enactment, publication, decree or

other promulgation of any statute, regulation, rule or order of any court or other governmental authority which in your opinion materially and adversely affects or may materially and adversely affect the business or operations of the Company, (v) declaration of a banking moratorium by United States or New York State authorities, (vi) any downgrading in the rating of the Company's debt securities by any "nationally recognized statistical rating organization" (as defined for purposes of Rule 436(g) under the Exchange Act); (vii) the suspension of trading of the Company's Common Stock by the Commission on the Nasdaq National Market or (viii) the taking of any action by any governmental body or agency in respect of its monetary or fiscal affairs which in your reasonable opinion has a material adverse effect on the securities markets in the United States; or

(c) as provided in Sections 6 and 10 of this Agreement.

13. Successors.

This Agreement has been and is made solely for the benefit of the Underwriters and the Company and their respective successors, executors,

administrators, heirs and assigns, the officers, directors and controlling persons referred to herein, and the QIU Indemnified Parties and no other person will have any right or obligation hereunder. No purchaser of any of the Shares from any Underwriter shall be deemed a successor or assign merely because of such purchase.

14. Information Provided by Underwriters.

The Company, and the Underwriters acknowledge and agree that the only information furnished or to be furnished by any Underwriter to the Company for inclusion in any Prospectus or the Registration Statement consists of the information set forth in the last paragraph on the front cover page (insofar as such information relates to the Underwriters), legends required by Item 502(d) of Regulation S-K under the Act and the information under the caption "Underwriting" in the Prospectus.

15. Miscellaneous.

The reimbursement, indemnification and contribution agreements contained in this Agreement and the representations, warranties and covenants in this Agreement shall remain in full force and effect regardless of (a) any termination of this Agreement, (b) any investigation made by or on behalf of any Underwriter or controlling person thereof, any QIU Indemnified Party or by or on behalf of the Company or its directors or officers and (c) delivery of and payment for the Shares under this Agreement.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

This Agreement shall be governed by, and construed in accordance with, the laws of the State of Maryland.

If the foregoing letter is in accordance with your understanding of our agreement, please sign and return to us the enclosed duplicates hereof, whereupon it will become a binding agreement among the Company and the several Underwriters in accordance with its terms.

Very truly yours,

METAWAVE COMMUNICATIONS CORPORATION

By

Robert H. Hunsberger
President and Chief Executive Officer

The foregoing Underwriting Agreement
is hereby confirmed and accepted as
of the date first above written.

BT ALEX. BROWN INCORPORATED
MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED
NATIONSBANC MONTGOMERY SECURITIES LLC

As Representatives of the several
Underwriters listed on Schedule I

By: BT Alex. Brown Incorporated

By:

Authorized Officer

SCHEDULE 1

SCHEDULE OF UNDERWRITERS

UNDERWRITER	NUMBER OF FIRM SHARES TO BE PURCHASED
BT Alex. Brown Incorporated.....	
Merrill Lynch, Pierce, Fenner & Smith Incorporated.....	
NationsBanc Montgomery Securities LLC.....	
Total.....	

EXHIBIT 3.1

THIRD AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

METAWAVE COMMUNICATIONS CORPORATION,

A DELAWARE CORPORATION

The undersigned, Vito Palermo, hereby certifies that:

1. He is the duly elected Chief Financial Officer and Secretary, respectively, of Metawave Communications Corporation, a Delaware corporation.

2. The Certificate of Incorporation of this corporation was originally filed with the Secretary of State of Delaware on July 11, 1995.

3. The Certificate of Incorporation of this corporation shall be amended and restated to read in full as follows:

ARTICLE I

The name of this Corporation is Metawave Communications Corporation.

ARTICLE II

The address of the registered office of this Corporation in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE III

The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.

ARTICLE IV

A. CLASSES OF STOCK. This Corporation is authorized to issue two classes of stock to be designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares that this Corporation is authorized to issue is sixty million (60,000,000) shares. Forty million (40,000,000) shares shall be Common Stock, par value $.0001 per share, and twenty million (20,000,000) shares shall

be Preferred Stock, par value $.0001 per share.

B. RIGHTS, PREFERENCES AND RESTRICTIONS OF PREFERRED STOCK. The Preferred Stock authorized by this Third Amended and Restated Certificate of Incorporation may be issued from time to time in one or more series. The rights, preferences, privileges, and restrictions granted to

and imposed on the Series A Preferred Stock, which series shall consist of 5,565,416 shares, and the Series B Preferred Stock, which series shall consist of 2,760,742 shares, and the Series C Preferred Stock, which series shall consist of 2,700,000 shares and the Series D Preferred Stock, which series shall consist of 2,500,000 shares, are as set forth below in this Article IV(B). The Board of Directors is hereby authorized to fix or alter the rights, preferences, privileges and restrictions granted to or imposed upon additional series of Preferred Stock, and the number of shares constituting any such series and the designation thereof, or of any of them. Subject to compliance with applicable protective voting rights that have been or may be granted to the Preferred Stock or series thereof in Certificates of Determination or this Corporation's Third Amended and Restated Certificate of Incorporation ("Protective Provisions"), but notwithstanding any other rights of the Preferred Stock or any series thereof, the rights, privileges, preferences and restrictions of any such additional series may be subordinated to, pari passu with (including, without limitation, inclusion in provisions with respect to dividends, liquidation and acquisition preferences, redemption and/or approval of matters by vote or written consent), or senior to any of those of any present or future class or series of Preferred or Common Stock. Subject to compliance with applicable Protective Provisions and unless otherwise specifically provided in the resolution establishing any series, the Board of Directors shall further have the authority, after the issuance of shares of a series whose number it has designated, to amend the resolution establishing such series to decrease the number of shares of that series, but not below the number of shares of such series then outstanding. In case the number of shares of any series shall be so decreased, the shares constituting such decrease shall resume the status that they had prior to the adoption of the resolution originally fixing the number of shares of such series.

1. DIVIDEND PROVISIONS. Subject to the rights of other series of Preferred Stock that may from time to time come into existence, the holders of shares of Series A, Series B, Series C and Series D Preferred Stock shall be entitled to receive dividends, when, as and if declared by the Board of Directors, out of any assets legally available therefor, prior and in preference to any declaration or payment of any dividend (payable other than in Common Stock or other securities and rights convertible into or entitling the holder thereof to receive, directly or indirectly, additional shares of Common Stock of this Corporation) on the Common Stock of this Corporation, (a) at the rate of $.08 per share of Series A Preferred Stock, $.27 per share of Series B Preferred Stock, $.49 per share of Series C Preferred Stock, and $.64 per share of Series D Preferred Stock, per annum (each of such amounts being subject to equitable adjustment to reflect the effects of any stock dividends, stock splits, combinations, reverse splits, reclassifications or recapitalizations (herein

referred to as "Adjustment Events")), or (b) if a dividend is paid on the Common Stock in an amount per share (the "Alternate Rate") which, when multiplied by the respective numbers of shares of Common Stock into which shares of the Series A, Series B, Series C or Series D Preferred Stock are then convertible, exceeds the preferential dividend per share which holders of shares of such series would otherwise be entitled to receive under clause (a) of this Section 1, then holders of shares of such series shall be entitled to receive the Alternate Rate per share of such series in lieu of the preferential dividend set forth in clause (a) of this Section 1. Such dividends shall not be cumulative until the calendar quarter beginning July 1, 2000. Such dividends shall accrue on each share from July 1, 2000, if declared

by the Board of Directors. Such dividends shall be cumulative so that, if such dividends in respect of any previous or current annual dividend period, at the annual rate specified above, shall have been declared but not paid, the deficiency shall first be fully paid before any dividend or other distribution shall be paid on or declared and set apart for the Common Stock. Any accumulation of dividends on the Series A, Series B, Series C and Series D Preferred Stock shall not bear interest. Cumulative dividends with respect to a share of Series A, Series B, Series C or Series D Preferred Stock that are accrued, payable and/or in arrears shall, upon conversion of such share to Common Stock, subject to the rights of other series of Preferred Stock that may from time to time come into existence, be paid to the extent assets are legally available therefor either in cash or in Common Stock (valued at the fair market value on the date of payment as determined by the Board of Directors of this Corporation). Any amounts for which assets are not legally available shall be paid promptly as assets become legally available therefor. Any partial payment will be made pro rata among the holders of such shares.

2. LIQUIDATION PREFERENCE

(a) In the event of any liquidation, dissolution or winding up of this Corporation, either voluntary or involuntary, subject to the rights of other series of Preferred Stock that may from time to time come into existence, the holders of Series A, Series B, Series C and Series D Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of this Corporation to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to the sum of (i) $1.00 for each outstanding share of Series A Preferred Stock (the "Original Series A Issue Price"), $3.375 for each outstanding share of Series B Preferred Stock (the "Original Series B Issue Price"), $6.16 for each outstanding share of Series C Preferred Stock (the "Original Series C Issue Price") and $8.00 for each outstanding share of Series D Preferred Stock (the "Original Series D Issue Price") (each such amount being subject to adjustment for Adjustment Events), and (ii) an amount equal to declared but unpaid dividends and accrued cumulative dividends on each such share of Series A, Series B, Series C and Series D Preferred Stock. If upon the occurrence of such event, the assets and funds thus distributed among the holders of the Series A, Series B, Series C and Series D

Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then, subject to the rights of other series of Preferred Stock that may from time to time come into existence, the entire assets and funds of this Corporation legally available for distribution shall be distributed ratably among the holders of the Series A, Series B, Series C and Series D Preferred Stock in proportion to the preferential amount each such holder is otherwise entitled to receive.

(b) For purposes of subsections (b), (c), (d) and (e) of this Section 2, the following definitions shall apply:

"Series A Investment Amount" shall mean the Original Series A Issue Price multiplied by the number of shares of Series A Preferred Stock outstanding.

"Series B Investment Amount" shall mean the Original Series B Issue Price multiplied by the number of shares of Series B Preferred Stock outstanding.

"Series C Investment Amount" shall mean the Original Series C Issue Price multiplied by the number of shares of Series C Preferred Stock outstanding.

"Series D Investment Amount" shall mean the Original Series D Issue Price multiplied by the number of shares of Series D Preferred Stock outstanding.

"Total Preferred Stock Investment Amount" shall mean the sum of the Series A Investment Amount, Series B Investment Amount, Series C Investment Amount and Series D Investment Amount.

"Series A Percentage" shall mean the Series A Investment Amount divided by the Total Preferred Stock Investment Amount.

"Series B Percentage" shall mean the Series B Investment Amount divided by the Total Preferred Stock Investment Amount.

"Series C Percentage" shall mean the Series C Investment Amount divided by the Total Preferred Stock Investment Amount.

"Series D Percentage" shall mean the Series D Investment Amount divided by the Total Preferred Stock Investment Amount.

(c) Upon the completion of the distributions required by subsection (a) of this Section 2 and any other distribution that may be required with respect to other series of Preferred Stock that may from time to time come into existence, the remaining assets of this Corporation available for distribution to stockholders shall be distributed as follows: (i) an aggregate

amount (the "First Distribution Amount") equal to the product of $1.50 multiplied by the number of shares of Series A, Series B, Series C and Series D Preferred Stock then outstanding (as adjusted for Adjustment Events) shall be distributed, on a pari passu basis, in an amount equal to the Series A Percentage multiplied by the First Distribution Amount, ratably among the holders of Series A Preferred Stock, the Series B Percentage multiplied by the First Distribution Amount, ratably among the holders of Series B Preferred Stock, the Series C Percentage multiplied by the First Distribution Amount, ratably among the holders of Series C Preferred Stock, and the Series D Percentage multiplied by the First Distribution Amount, ratably among the holders of Series D Preferred Stock, and (ii) an amount per share equal to $1.50 for each outstanding share of Common Stock (as adjusted for Adjustment Events), in addition to the amounts paid pursuant to subsection (a) of this Section 2, shall be distributed ratably among the holders of Common Stock. If the assets and funds thus distributed among the holders of the Series A, Series B, Series C and Series D Preferred Stock and the holders of the Common Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then, subject to the rights of other series of Preferred Stock that may from time to time come into existence, the entire assets and funds of this Corporation legally available for

distribution shall be distributed ratably among the holders of the Series A, Series B, Series C and Series D Preferred Stock and the holders of the Common Stock in proportion to the preferential amount each such holder is otherwise entitled to receive under this subsection (c).

(d) Upon the completion of the distributions required by subsections (a) and (c) of this Section 2 and any other distribution that may be required with respect to other series of Preferred Stock that may from time to time come into existence, the remaining assets of this Corporation available for distribution to stockholders shall be distributed as follows: (i) an aggregate amount (the "Second Distribution Amount") equal to the product of $3.5625 multiplied by the number of shares of Series B, Series C and Series D Preferred Stock then outstanding (as adjusted for Adjustment Events) shall be distributed, on a pari passu basis, in an amount equal to the Series A Percentage multiplied by the Second Distribution Amount, ratably among the holders of Series A Preferred Stock, the Series B Percentage multiplied by the Second Distribution Amount, ratably among the holders of Series B Preferred Stock, the Series C Percentage multiplied by the Second Distribution Amount, ratably among the holders of Series C Preferred Stock, and the Series D Percentage multiplied by the Second Distribution Amount, ratably among the holders of Series D Preferred Stock, and (ii) an amount per share equal to $3.5625 for each outstanding share of Common Stock (as adjusted for Adjustment Events), in addition to the amounts paid pursuant to subsections (a) and (c) of this Section 2, shall be distributed ratably among the holders of Common Stock. If the assets and funds thus distributed among the holders of the Series A, Series B, Series C and Series D Preferred Stock and the holders of the Common Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts,

then, subject to the rights of other series of Preferred Stock that may from time to time come into existence, the entire assets and funds of this Corporation legally available for distribution shall be distributed ratably among the holders of the Series A, Series B, Series C and Series D Preferred Stock and the holders of the Common Stock in proportion to the preferential amount each such holder is otherwise entitled to receive under this subsection (d).

(e) Upon the completion of the distributions required by subsections (a), (c) and (d) of this Section 2 and any other distribution that may be required with respect to other series of Preferred Stock that may from time to time come into existence, the remaining assets of this Corporation available for distribution to stockholders shall be distributed as follows: (i) an aggregate amount (the "Third Distribution Amount") equal to the product of $4.1775 multiplied by the number of shares of Series C and Series D Preferred Stock then outstanding (as adjusted for Adjustment Events) shall be distributed, on a pari passu basis, in an amount equal to the Series A Percentage multiplied by the Third Distribution Amount, ratably among the holders of Series A Preferred Stock, the Series B Percentage multiplied by the Third Distribution Amount, ratably among the holders of Series B Preferred Stock, the Series C Percentage multiplied by the Third Distribution Amount, ratably among the holders of Series C Preferred Stock, and the Series D Percentage multiplied by the Third Distribution Amount, ratably among the holders of Series D Preferred Stock, and (ii) an amount per share equal to $4.1775 for each outstanding share of Common Stock (as adjusted for Adjustment Events), in addition to the amounts paid pursuant to subsections (a), (c) and (d) of this Section 2, shall be

distributed ratably among the holders of Common Stock. If the assets and funds thus distributed among the holders of the Series A, Series B, Series C and Series D Preferred Stock and the holders of the Common Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then, subject to the rights of other series of Preferred Stock that may from time to time come into existence, the entire assets and funds of this Corporation legally available for distribution shall be distributed ratably among the holders of the Series A, Series B, Series C and Series D Preferred Stock and the holders of the Common Stock in proportion to the preferential amount each such holder is otherwise entitled to receive under this subsection (e).

(f) Upon the completion of the distributions required by subsections (a), (c), (d) and (e) of this Section 2 and any other distribution that may be required with respect to other series of Preferred Stock that may from time to time come into existence, the remaining assets of this Corporation available for distribution to stockholders shall be distributed as follows: (i) an aggregate amount (the "Fourth Distribution Amount") equal to the product of $2.76 multiplied by the number of shares of Series D Preferred Stock then outstanding (as adjusted for Adjustment Events) shall be distributed, on a pari passu basis, in an amount equal to the Series A Percentage multiplied by the

Fourth Distribution Amount, ratably among the holders of Series A Preferred Stock, the Series B Percentage multiplied by the Fourth Distribution Amount, ratably among the holders of Series B Preferred Stock, the Series C Percentage multiplied by the Fourth Distribution Amount, ratably among the holders of Series C Preferred Stock, and the Series D Percentage multiplied by the Fourth Distribution Amount, ratably among the holders of Series D Preferred Stock, and (ii) an amount per share equal to $2.76 for each outstanding share of Common Stock (as adjusted for Adjustment Events), in addition to the amounts paid pursuant to subsections (a), (c), (d) and (e) of this Section 2, shall be distributed ratably among the holders of Common Stock. If the assets and funds thus distributed among the holders of the Series A, Series B, Series C and Series D Preferred Stock and the holders of the Common Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then, subject to the rights of other series of Preferred Stock that may from time to time come into existence, the entire assets and funds of this Corporation legally available for distribution shall be distributed ratably among the holders of the Series A, Series B, Series C and Series D Preferred Stock and the holders of the Common Stock in proportion to the preferential amount each such holder is otherwise entitled to receive under this subsection (f).

(g) Upon the completion of the distributions required by subsections (a), (c), (d)(e), and (f) of this Section 2 and any other distribution that may be required with respect to other series of Preferred Stock that may from time to time come into existence, if assets remain in this Corporation, the holders of Series A, Series B, Series C and Series D Preferred Stock shall receive no further distributions and the holders of the Common Stock of this Corporation shall receive all of the remaining assets of this Corporation pro rata based on the number of shares of Common Stock held by each.

(h) (i) For purposes of this Section 2, a liquidation, dissolution or winding up of this Corporation shall be deemed to be occasioned by, or to include, (A) the acquisition of this Corporation by another entity by means of any transaction or series of related transactions (including, without limitation, any reorganization, merger or consolidation) that results in the transfer of fifty percent (50%) or more of the outstanding voting power of this Corporation; or (B) a sale of all or substantially all of the assets of this Corporation.

(ii) In any of such events, if the consideration received by this Corporation is other than cash, the value of such consideration will be deemed its fair market value. Any securities shall be valued as follows:

(A) Securities not subject to investment letter or other similar restrictions on free marketability covered by (B) below:

(1) If traded on a securities exchange or through the NASDAQ National Market, the value shall be deemed to be the average of the

closing prices of the securities on such quotation system over the thirty (30) day period ending three (3) days prior to the closing;

(2) If actively traded over-the-counter, the value shall be deemed to be the average of the closing bid or sale prices (whichever is applicable) over the thirty (30) day period ending three (3) days prior to the closing; and

(3) If there is no active public market, the value shall be the fair market value thereof, as mutually determined by this Corporation and the holders of at least a majority of the voting power of all then outstanding shares of Series A, Series B, Series C and Series D Preferred Stock.

(B) The method of valuation of securities subject to investment letter or other restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder's status as an affiliate or former affiliate) shall be to make an appropriate discount from the market value determined as above in (A)(1), (2) or (3) to reflect the approximate fair market value thereof as mutually determined by this Corporation and the holders of at least a majority of the voting power of all then outstanding shares of Series A, Series B, Series C and Series D Preferred Stock.

(iii) In the event the requirements of this subsection 2(f) are not complied with, this Corporation shall forthwith either:

(A) cause such closing to be postponed until such time as the requirements of this Section 2(f) have been complied with; or

(B) cancel such transaction, in which event the rights, preferences and privileges of the holders of the Series A, Series B, Series C and Series D

Preferred Stock shall revert to and be the same as such rights, preferences and privileges existing immediately prior to the date of the first notice referred to in subsection 2(f)(iv) hereof.

(iv) This Corporation shall give each holder of record of Series A, Series B, Series C and Series D Preferred Stock written notice of such impending transaction not later than twenty (20) days prior to the stockholders' meeting called to approve such transaction, if any, or twenty (20) days prior to the closing of such transaction, whichever is earlier, and shall also notify such holders in writing of the final approval of such transaction. The first of such notices shall describe the material terms and conditions of the impending transaction and the provisions of this Section 2, and this Corporation shall thereafter give such holders prompt notice of any material changes. The transaction shall in no event take place sooner than twenty (20) days after this Corporation has given the first notice provided for herein or sooner than ten

(10) days after this Corporation has given notice of any material changes provided for herein; provided, however, that such periods may be shortened upon the written consent of the holders of Preferred Stock that are entitled to such notice rights or similar notice rights and that represent at least a majority of the voting power of all then outstanding shares of Series A, Series B, Series C and Series D Preferred Stock.

3. REDEMPTION

(a) Subject to the rights of other series of Preferred Stock that may from time to time come into existence, upon receipt by this Corporation, within the six (6) month period commencing December 31, 2000, of a written request (the "Redemption Request") from the holders of not less than fifty percent (50%) of the then outstanding shares of Series A, Series B, Series C and Series D Preferred Stock (voting together as a single class and not as a separate series, and on an as converted basis) that all or, if less than all, a specified percentage of such holders' shares of such series (which percentage shall be the same for the Series A, Series B, Series C and Series D Preferred Stock) be redeemed, and concurrently with surrender by such holders of the certificates representing such shares, this Corporation shall, to the extent it may lawfully do so, redeem (i) in four (4) equal annual installments commencing no later than the first anniversary of the receipt of the Redemption Request (each such payment date being referred to herein as a "Redemption Date"), or (ii) at the Corporation's election, in fewer annual installments, including without limitation, a single lump sum payment, the shares specified in such request by paying in cash therefor a sum per share equal to $1.00 per share of Series A Preferred Stock (as adjusted for Adjustment Events) to be redeemed plus all declared but unpaid dividends and accrued cumulative dividends on such share (the "Series A Redemption Price"), a sum per share equal to $3.375 per share of Series B Preferred Stock (as adjusted for Adjustment Events) to be redeemed plus all declared but unpaid dividends and accrued cumulative dividends on such share (the "Series B Redemption Price"), a sum per share equal to $6.16 per share of Series C Preferred Stock (as adjusted for Adjustment Events) to be redeemed plus all declared but unpaid dividends and accrued cumulative dividends on such share (the "Series C Redemption Price") and a sum per share equal to $8.00 per share of Series D Preferred Stock (as adjusted for Adjustment Events) to be redeemed plus all declared but unpaid dividends and accrued cumulative dividends on such share (the "Series D Redemption Price"). The holders of the

Series A, Series B, Series C and Series D Preferred Stock may exercise their redemption rights pursuant to this subsection 3(a) only during the six (6) month period commencing December 31, 2000, and any redemption payments shall be made on a pro rata basis among the holders of all shares of Series A, Series B, Series C and Series D Preferred Stock to be redeemed in proportion to the aggregate redemption payments due to each such holder.

(b) Subject to the rights of other series of Preferred Stock that may from time to time come into existence, at least fifteen (15) but no

more than thirty (30) days prior to each Redemption Date, written notice shall be mailed, first class postage prepaid, to each holder of record (at the close of business on the business day next preceding the day on which notice is given) of the Series A, Series B, Series C and Series D Preferred Stock to be redeemed on the Redemption Date, at the address last shown on the records of this Corporation for such holder, notifying such holder of the redemption to be effected, specifying the number of shares to be redeemed from such holder, the Redemption Date or Dates, the Redemption Price (as applicable), the place at which payment may be obtained and calling upon such holder to surrender to this Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares to be redeemed (the "Redemption Notice") on such Redemption Date or Dates. Except as provided in subsection 3(c), on or after each Redemption Date, each holder of Series A, Series B, Series C and Series D Preferred Stock to be redeemed shall surrender to this Corporation the certificate or certificates representing such shares, in the manner and at the place designated in the Redemption Notice, and thereupon the applicable Redemption Price of such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof and each surrendered certificate shall be canceled. In the event less than all the shares represented by any such certificate are redeemed on a Redemption Date, a new certificate shall be issued representing the unredeemed shares. Any certificate issued after the date of the Redemption Request shall bear a legend indicating that such shares are subject to redemption by the Company pursuant to the Redemption Request. Shares subject to redemption by the Company pursuant to the Redemption Request shall be transferable (subject to redemption by the Company) but shall not be convertible into Common Stock except as provided in subsection 4(a) of Division B of this Article IV.

(c) From and after each Redemption Date, unless there shall have been a default in payment of the Redemption Price, all rights of the holders of shares of Series A, Series B, Series C or Series D Preferred Stock designated for redemption on such Redemption Date, as holders of Series A, Series B, Series C or Series D Preferred Stock (except the right to receive the applicable Redemption Price without interest upon surrender of their certificate or certificates), shall cease with respect to such shares, and such shares shall not thereafter be transferred on the books of this Corporation or be deemed to be outstanding for any purpose whatsoever. Subject to the rights of other series of Preferred Stock that may from time to time come into existence, if the funds of this Corporation legally available for redemption of shares of Series A, Series B, Series C and Series D Preferred Stock on any Redemption Date are insufficient to redeem the total number of shares of Series A, Series B, Series C and Series D Preferred Stock to be redeemed on such date, those funds that are legally available will be used to redeem the maximum possible number of such shares ratably among the holders of such

shares to be redeemed such that each holder of a share of Series A, Series B, Series C and Series D Preferred Stock receives the same percentage of the applicable Series A Redemption Price, Series B Redemption Price, Series C

Redemption Price or Series D Redemption Price. The shares of Series A, Series B, Series C and Series D Preferred Stock not redeemed shall remain outstanding and entitled to all the rights and preferences provided herein. Subject to the rights of other series of Preferred Stock that may from time to time come into existence, at any time thereafter when additional funds of this Corporation are legally available for the redemption of such shares of Series A, Series B, Series C and Series D Preferred Stock, such funds will immediately be used to redeem the balance of the shares that this Corporation has become obligated but has failed to redeem on any Redemption Date.

(d) On or prior to each Redemption Date, this Corporation shall deposit the Redemption Price of all shares of Series A, Series B, Series C and Series D Preferred Stock designated for redemption in the Redemption Notice and not yet redeemed or converted with a bank or trust corporation having aggregate capital and surplus in excess of $100,000,000 as a trust fund for the benefit of the respective holders of the shares designated for redemption and not yet redeemed, with irrevocable instructions and authority to the bank or trust corporation to publish the notice of redemption thereof and pay the Redemption Price for such shares to their respective holders on or after the Redemption Date, upon receipt of notification from this Corporation that such holder has surrendered his, her or its share certificate to this Corporation pursuant to subsection 3(b) above. As of the date of such deposit (even if prior to the Redemption Date), the deposit shall constitute full payment of the shares to their holders, and from and after the date of the deposit the shares so called for redemption shall be redeemed and shall be deemed to be no longer outstanding, and the holders thereof shall cease to be stockholders with respect to such shares and shall have no rights with respect thereto except the rights to receive from the bank or trust corporation payment of the Redemption Price of the shares, without interest, upon surrender of their certificates therefor, and the right to convert such shares as provided in Article IV(B)(4) hereof. Such instructions shall also provide that any moneys deposited by this Corporation pursuant to this subsection 3(d) for the redemption of shares thereafter converted into shares of this Corporation's Common Stock pursuant to Article IV(B)(4) hereof prior to the Redemption Date shall be returned to this Corporation forthwith upon such conversion. The balance of any moneys deposited by this Corporation pursuant to this subsection 3(d) remaining unclaimed at the expiration of two (2) years following each Redemption Date shall thereafter be returned to this Corporation upon its request expressed in a resolution of its Board of Directors.

4. CONVERSION. The shares of Series A, Series B, Series C and Series D Preferred Stock shall be subject to conversion as follows (the "Conversion Rights"):

(a) RIGHT TO CONVERT. Each share of Series A, Series B, Series C and Series D Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share and on or prior to the fifth day prior to the first Redemption Date, if any, as may have been fixed in any Redemption Notice with respect to such share, at the office of this Corporation or any transfer agent for such stock, into such number of fully paid and

nonassessable shares of Common Stock as is determined by dividing the Original Series A Issue Price, Original Series B Issue Price, Original Series C Issue Price or Original Series D Issue Price, as the case may be, by the respective Conversion Price applicable to such share, determined as hereafter provided, in effect on the date the certificate is surrendered for conversion. The initial Conversion Price per share for shares of Series A Preferred Stock shall be the Original Series A Issue Price, the initial Conversion Price per share for shares of Series B Preferred Stock shall be the Original Series B Issue Price, the initial Conversion Price per share for shares of Series C Preferred Stock shall be the Original Series C Issue Price and the initial Conversion Price per share for shares of Series D Preferred Stock shall be the Original Series D Issue Price; provided, however, that the Conversion Price for the Series A, Series B, Series C and Series D Preferred Stock shall be subject to adjustment as set forth in subsection 4(d).

(b) AUTOMATIC CONVERSION. Each share of the Series A, Series B, Series C and Series D Preferred Stock shall automatically be converted into shares of Common Stock at the respective Conversion Price at the time in effect for such Series A, Series B, Series C or Series D Preferred Stock immediately upon the earlier of (i) the closing of a sale of the Corporation's Common Stock in a firm commitment underwritten public offering pursuant to a registration statement under the Securities Act of 1933, as amended, the public offering price of which was not less than $9.25 per share (adjusted to reflect Adjustment Events) and $15,000,000 in the aggregate, or (ii) the date specified by written consent or agreement of the holders of two-thirds (2/3) of the aggregate number of shares of Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock then outstanding (voting together as a single class and not as a separate series, and on an as converted basis).

(c) MECHANICS OF CONVERSION. Before any holder of Series A, Series B, Series C or Series D Preferred Stock shall be entitled to convert the same into shares of Common Stock, he or she shall surrender the certificate or certificates therefor, duly endorsed, at the office of this Corporation or of any transfer agent for the Series A, Series B, Series C or Series D Preferred Stock, and shall give written notice to this Corporation at its principal corporate office of the election to convert the same and shall state therein the name or names in which the certificate or certificates for shares of Common Stock are to be issued. This Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of Series A, Series B, Series C or Series D Preferred Stock, or to the nominee or nominees of such holder, a certificate or certificates for the number of shares of Common Stock to which such holder shall be entitled as aforesaid. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Series A, Series B, Series C or Series D Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock as

of such date. If the conversion is in connection with an underwritten offering of securities registered pursuant to the Securities Act of 1933, as amended, the conversion may, at the option of any holder tendering Series A, Series B, Series C or Series D Preferred Stock for conversion, be conditioned upon the closing with the underwriters of the sale of securities pursuant to such offering, in which event the person(s) entitled to receive the Common Stock upon conversion of the Series A, Series B,

Series C or Series D Preferred Stock shall not be deemed to have converted such Series A, Series B, Series C or Series D Preferred Stock until immediately prior to the closing of such sale of securities.

(d) Conversion Price Adjustments of Preferred Stock for Certain Dilutive Issuances, Splits and Combinations. The Conversion Price of the Series A, Series B, Series C and Series D Preferred Stock shall be subject to adjustment from time to time as follows:

(i) (A) If this Corporation shall issue, after the date upon which any shares of Series D Preferred Stock were first issued (the "Purchase Date"), any Additional Stock (as defined below) without consideration or for a consideration per share less than the respective Conversion Price for the Series A, Series B, Series C or Series D Preferred Stock in effect immediately prior to the issuance of such Additional Stock, the Conversion Price for such series in effect immediately prior to the issuance shall forthwith (except as otherwise provided in this clause (i)) be adjusted to a price determined by multiplying the Conversion Price of such series in effect immediately prior to such issuance by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issuance (including shares of Common Stock deemed to be issued pursuant to subsection 4(d)(i)(E)) plus the number of shares of Common Stock that the aggregate consideration received by this Corporation for such issuance would purchase at such Conversion Price; and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issuance (including shares of Common Stock deemed to be issued pursuant to subsection 4(d)(i)(E)) plus the number of shares of such Additional Stock. Notwithstanding the foregoing, no such Conversion Price adjustment shall occur pursuant to this subsection 4(d)(i) if prior to the issuance of the Additional Stock this Corporation shall have obtained a written waiver of the adjustment provided for in this subsection, which waiver shall have been approved by the holders of not less than sixty-five percent (65%) of each series of Preferred Stock that would otherwise be entitled to adjustment of its Conversion Price hereunder.

(B) No adjustment of the Conversion Price for the Series A, Series B, Series C or Series D Preferred Stock shall be made in an amount less than one cent per share, provided that any adjustments that are not required to be made by reason of this sentence shall be carried forward and shall be either taken into account in any subsequent adjustment made prior to three (3) years from the date of the event giving rise to the adjustment being

carried forward, or shall be made at the end of the three (3) years from the date of the event giving rise to the adjustment being carried forward. Except to the limited extent provided for in subsections 4(d)(i)(E)(3), (E)(4) and (E)(5), no adjustment of such Conversion Price pursuant to this subsection 4(d)(i) shall have the effect of increasing the Conversion Price above the Conversion Price in effect immediately prior to such adjustment.

(C) In the case of the issuance of Common Stock for cash, the consideration shall be deemed to be the amount of cash paid therefor before deducting

any reasonable discounts, commissions or other expenses allowed, paid or incurred by this Corporation for any underwriting or otherwise in connection with the issuance and sale thereof.

(D) In the case of the issuance of the Common Stock for a consideration in whole or in part other than cash, the consideration other than cash shall be deemed to be the fair value thereof as determined by the Board of Directors irrespective of any accounting treatment.

(E) In the case of the issuance (whether before, on or after the Purchase Date) of options to purchase or rights to subscribe for Common Stock, securities by their terms convertible into or exchangeable for Common Stock or options to purchase or rights to subscribe for such convertible or exchangeable securities, the following provisions shall apply for all purposes of this subsection 4(d)(i) and subsection 4(d)(ii):

(1) The aggregate maximum number of shares of Common Stock deliverable upon exercise (assuming the satisfaction of any conditions to exercisability, including without limitation, the passage of time, but without taking into account potential antidilution adjustments) of such options to purchase or rights to subscribe for Common Stock shall be deemed to have been issued at the time such options or rights were issued and for a consideration equal to the consideration (determined in the manner provided in subsections 4(d)(i)(C) and 4(d)(i)(D)), if any, received by this Corporation upon the issuance of such options or rights plus the minimum exercise price provided in such options or rights (without taking into account potential antidilution adjustments) for the Common Stock covered thereby.

(2) The aggregate maximum number of shares of Common Stock deliverable upon conversion of or in exchange (assuming the satisfaction of any conditions to convertibility or exchangeability, including, without limitation, the passage of time, but without taking into account potential antidilution adjustments) for any such convertible or exchangeable securities or upon the exercise of options to purchase or rights to subscribe for such convertible or exchangeable securities and subsequent conversion or exchange thereof shall be deemed to have been issued at the time such securities were issued or such options or rights were issued and for a consideration equal

to the consideration, if any, received by this Corporation for any such securities and related options or rights, plus the minimum additional consideration, if any, to be received by this Corporation (without taking into account potential antidilution adjustments) upon the conversion or exchange of such securities or the exercise of any related options or rights (the consideration in each case to be determined in the manner provided in subsections 4(d)(i)(C) and 4(d)(i)(D)).

(3) In the event of any change in the number of shares of Common Stock deliverable or in the consideration payable to this Corporation upon exercise of such options or rights or upon conversion of or in exchange for such convertible or exchangeable securities (excluding a change pursuant to subsection 4(d)(i) in the number of shares of Common Stock issuable upon conversion of shares of Preferred Stock), the Conversion

Price of the Series A, Series B, Series C or Series D Preferred Stock, to the extent in any way affected by or computed using such options, rights or securities, shall be recomputed to reflect such change, but no further adjustment shall be made for the actual issuance of Common Stock or any payment of such consideration upon the exercise of any such options or rights or the conversion or exchange of such securities.

(4) Upon the expiration of any such options or rights, the termination of any such rights to convert or exchange, or the expiration of any options or rights related to such convertible or exchangeable securities, the Conversion Price of the Series A, Series B, Series C or Series D Preferred Stock, to the extent in any way affected by or computed using such options, rights or securities or options or rights related to such securities shall be recomputed to reflect the issuance of only the number of shares of Common Stock (and convertible or exchangeable securities that remain in effect) actually issued upon the exercise of such options or rights, upon the conversion or exchange of such securities, or upon the exercise of the options or rights related to such securities.

(5) The number of shares of Common Stock deemed issued and the consideration deemed paid therefor pursuant to subsections 4(d)(i)(E)(1) and (2) shall be appropriately adjusted to reflect any change, termination or expiration of the type described in either subsection 4(d)(i)(E)(3) or (4).

(ii) "Additional Stock" shall mean any shares of Common Stock issued (or deemed to have been issued pursuant to subsection 4(d)(i)(E)) by this Corporation after the Purchase Date other than:

(A) shares of Common Stock issued pursuant to a transaction described in subsection 4(d)(iii) hereof;

(B) shares of Common Stock issuable or issued to

employees, consultants or directors of this Corporation, or affiliates of any such persons, pursuant to a stock option plan, restricted stock plan or grant approved by the Board of Directors of this Corporation;

(C) shares of Common Stock issuable or issued to vendors, suppliers, equipment lessors or bank lenders to this Corporation, or affiliates of any such persons, where such issuance is not principally for the purpose of raising additional equity capital for this Corporation;

(D) shares of Common Stock issued or issuable upon conversion of shares of Series A, Series B, Series C and Series D Preferred Stock of this Corporation (including additional shares of Common Stock issuable upon conversion thereof as a result of the operation of subsection 4(d)(i));

(E) shares of Common Stock issuable or issued upon conversion or exercise of convertible or exercisable securities of this Corporation outstanding as of the date of this Third Amended and Restated Certificate of Incorporation;

(F) shares of Common Stock issued pursuant to the acquisition of another corporation or entity, or any product line, intellectual property or technology, by this Corporation or any subsidiary of this Corporation by means of merger, consolidation, purchase of assets or other transaction of series of related transactions approved by the Board of Directors of this Corporation and, in the case of an acquisition of another corporation or entity, whereby this Corporation or its shareholders own a majority of the voting power of such other corporation or entity following such acquisition; and

(G) shares of Common Stock issued to corporate partners or in connection with other strategic alliances approved by the Board of Directors of this Corporation.

(iii) In the event this Corporation should at any time or from time to time after the Purchase Date fix a record date for the effectuation of a split or subdivision of the outstanding shares of Common Stock or the determination of holders of Common Stock entitled to receive a dividend or other distribution payable in additional shares of Common Stock or other securities or rights convertible into, or entitling the holder thereof to receive, directly or indirectly, additional shares of Common Stock (hereinafter referred to as "Common Stock Equivalents") without payment of any consideration by such holder for the additional shares of Common Stock or the Common Stock Equivalents (including the additional shares of Common Stock issuable upon conversion or exercise thereof), then, as of such record date (or the date of such dividend distribution, split or subdivision if no record date is fixed), the respective Conversion Prices of the Series A, Series B, Series C and Series D Preferred Stock shall be appropriately decreased so that the number of shares of Common Stock issuable on conversion of each share of each such series shall be increased in proportion to such increase of the aggregate of shares of Common

Stock outstanding and those issuable with respect to such Common Stock Equivalents with the number of shares issuable with respect to Common Stock Equivalents determined from time to time in the manner provided for deemed issuances in subsection 4(d)(i)(E).

(iv) If the number of shares of Common Stock outstanding at any time after the Purchase Date is decreased by a combination of the outstanding shares of Common Stock, then, following the record date of such combination, the respective Conversion Prices for the Series A, Series B, Series C and Series D Preferred Stock shall be appropriately increased so that the number of shares of Common Stock issuable on conversion of each share of each such series shall be decreased in proportion to such decrease in outstanding shares.

(e) OTHER DISTRIBUTIONS. In the event this Corporation shall declare a distribution payable in securities of other persons, evidences of indebtedness issued by this Corporation or other persons, assets (excluding cash dividends) or options or rights not referred

to in subsection 4(d)(iii), then, in each such case for the purpose of this subsection 4(e), the holders of the Series A, Series B, Series C and Series D Preferred Stock shall be entitled to a proportionate share of any such distribution as though they were the holders of the number of shares of Common Stock of this Corporation into which their shares of Series A, Series B, Series C and Series D Preferred Stock are convertible as of the record date fixed for the determination of the holders of Common Stock of this Corporation entitled to receive such distribution.

(f) RECAPITALIZATION. If at any time or from time to time there shall be a recapitalization of the Common Stock (other than a subdivision, combination or merger or sale of assets transaction provided for elsewhere in this Section 4 or in Section 2) provision shall be made so that the holders of the Series A, Series B, Series C and Series D Preferred Stock shall thereafter be entitled to receive upon conversion of the Series A, Series B, Series C and Series D Preferred Stock the number of shares of stock or other securities or property of this Corporation or otherwise to which a holder of Common Stock deliverable upon conversion would have been entitled on such recapitalization. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 4 with respect to the rights of the holders of the Series A, Series B, Series C and Series D Preferred Stock after the recapitalization to the end that the provisions of this Section 4 (including adjustment of the Conversion Price then in effect and the number of shares purchasable upon conversion of the Series A, Series B, Series C and Series D Preferred Stock) shall be applicable after that event as nearly equivalent as may be practicable.

(g) NO IMPAIRMENT. This Corporation will not, by amendment of its Third Amended and Restated Certificate of Incorporation or through any

reorganization, recapitalization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by this Corporation, but will at all times in good faith assist in the carrying out of all the provisions of this Section 4 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of the Series A, Series B, Series C and Series D Preferred Stock against impairment.

(h) NO FRACTIONAL SHARES AND CERTIFICATE AS TO ADJUSTMENTS

(i) No fractional shares shall be issued upon the conversion of any share or shares of the Series A, Series B, Series C or Series D Preferred Stock, and the number of shares of Common Stock to be issued shall be rounded to the nearest whole share. Whether or not fractional shares are issuable upon such conversion shall be determined on the basis of the total number of shares of Series A, Series B, Series C or Series D Preferred Stock the holder is at the time converting into Common Stock and the number of shares of Common Stock issuable upon such aggregate conversion.

(ii) Upon the occurrence of each adjustment or readjustment of the Conversion Price of Series A, Series B, Series C or Series D Preferred Stock pursuant to this

Section 4, this Corporation, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of Series A, Series B, Series C and Series D Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. This Corporation shall, upon the written request at any time of any holder of Series A, Series B, Series C or Series D Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (A) such adjustment and readjustment, (B) the Conversion Price for such series of Preferred Stock at the time in effect, and (C) the number of shares of Common Stock and the amount, if any, of other property that at the time would be received upon the conversion of a share of such series of Preferred Stock.

(i) NOTICES OF RECORD DATE. In the event of any taking by this Corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend (other than a cash dividend) or other distribution, any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right, this Corporation shall mail to each holder of Series A, Series B, Series C and Series D Preferred Stock, at least 20 days prior to the date specified therein, a notice specifying the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and the amount and character of such dividend, distribution or right.

(j) RESERVATION OF STOCK ISSUABLE UPON CONVERSIION. This Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series A, Series B, Series C and Series D Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series A, Series B, Series C and Series D Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series A, Series B, Series C and Series D Preferred Stock, in addition to such other remedies as shall be available to the holder of such Preferred Stock, this Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Third Amended and Restated Certificate of Incorporation.

(k) NOTICES. Any notice required by the provisions of this Section 4 to be given to the holders of shares of Series A, Series B, Series C and Series D Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of this Corporation.

5. VOTING RIGHTS

(a) GENERAL VOTING RIGHTS. The holder of each share of Series A, Series B, Series C and Series D Preferred Stock shall have the right to one vote for each share of Common Stock into which such Series A, Series B, Series C and Series D Preferred Stock could then be converted, and with respect to such vote, such holder shall have full voting rights and powers equal to the voting rights and powers of the holders of Common Stock, and shall be entitled, notwithstanding any provision hereof, to notice of any stockholders' meeting in accordance with the bylaws of this Corporation, and shall be entitled to vote, together with holders of Common Stock, with respect to any question upon which holders of Common Stock have the right to vote. Fractional votes shall not, however, be permitted and any fractional voting rights available on an as converted basis (after aggregating all shares into which shares of Series A, Series B, Series C and Series D Preferred Stock held by each holder could be converted) shall be rounded to the nearest whole number (with one-half being rounded upward).

(b) VOTING FOR THE ELECTION OF DIRECTORS. As long as an aggregate of at least 9,589,584 of the shares of Series A, Series B, Series C and Series D Preferred Stock (which number shall be equitably adjusted to reflect Adjustment Events) remain outstanding, the holders of shares of Series A, Series B, Series C and Series D Preferred Stock, voting together as a single

voting group, shall be entitled to elect three (3) directors of this Corporation at each annual election of directors. If the aggregate number of shares of Series A, Series B, Series C and Series D Preferred Stock that remain outstanding shall be between 6,393,056 and 9,589,583 inclusive (which numbers shall be equitably adjusted to reflect Adjustment Events), the holders of shares of Series A, Series B, Series C and Series D Preferred Stock, voting together as a single voting group, shall be entitled to elect two (2) directors of this Corporation at each annual election of directors. If the aggregate number of shares of Series A, Series B, Series C and Series D Preferred Stock that remain outstanding shall be between 3,196,528 and 6,393,055 inclusive (which numbers shall be equitably adjusted to reflect Adjustment Events), the holders of shares of Series A, Series B, Series C and Series D Preferred Stock, voting together as a single voting group, shall be entitled to elect one (1) director of this Corporation at each annual election of directors. The holders of outstanding Common Stock shall be entitled to elect two (2) directors of this Corporation at each annual election of directors. The holders of Series A, Series B, Series C and Series D Preferred Stock and Common Stock (voting together as a single voting group, and on an as-converted basis) shall be entitled to elect any remaining directors of this Corporation.

In the case of any vacancy (other than a vacancy caused by removal) in the office of a director occurring among the directors elected by the holders of a class or series of stock pursuant to this Section 5(b), the remaining directors so elected by that class or series may by affirmative vote of a majority thereof (or the remaining director so elected if there be but one, or if there are no such directors remaining, by the affirmative vote of the holders of a majority of the shares of that class or series), elect a successor or successors to hold office for the unexpired term of the director or directors whose place or places shall be vacant. Any director who shall have been elected by the holders of a class or series of stock or by any directors so

elected as provided in the immediately preceding sentence hereof may be removed during the aforesaid term of office, either with or without cause, by, and only by, the affirmative vote of the holders of the shares of the class or series of stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders, and any vacancy thereby created may be filled by the holders of that class or series of stock represented at the meeting or pursuant to unanimous written consent.

6. PROTECTIVE PROVISIONS. Subject to the rights of other series of Preferred Stock that may from time to time come into existence, this Corporation shall not take any of the following actions without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least a majority of the shares of Series A, Series B, Series C and Series D Preferred Stock then outstanding, voting together as a single class and not as separate series on an as converted basis, provided, however, that in the event that the aggregate number of shares of Series A, Series B, Series C and Series D

Preferred Stock then outstanding represent less than twenty percent (20%) of the sum of the aggregate number of all shares of Preferred Stock then outstanding on an as-converted basis (i.e., after aggregating all shares into which shares of Preferred Stock could be converted) plus Common Stock then outstanding, then the protective provisions of this Section 6 shall cease to be of any force or effect and shall not bind this Corporation:

(a) sell, convey, or otherwise dispose of all or substantially all of its property or business or merge into or consolidate with any other corporation (other than a wholly-owned subsidiary corporation) or effect any transaction or series of related transactions in which more than fifty percent (50%) of the voting power of this Corporation is disposed of;

(b) dissolve, wind-up or liquidate this Corporation;

(c) alter, change or reclassify the rights, preferences or privileges of the shares of Series A, Series B, Series C or Series D Preferred Stock so as to affect adversely the shares;

(d) increase or decrease (other than by redemption or conversion) the total number of authorized shares of Series A, Series B, Series C or Series D Preferred Stock provided, however, that the Board of Directors may amend the terms of any series to decrease the number of shares of that series (but not below the number of shares of such series then outstanding), and the number of shares constituting the decrease shall thereafter constitute authorized but undesignated shares;

(e) authorize or issue, or obligate itself to issue, any other equity security, including any other security convertible into or exercisable for any equity security having a preference over the Series A, Series B, Series C or Series D Preferred Stock with respect to voting, or having a preference over or being on a parity with the Series A, Series B, Series C or Series D Preferred Stock with respect to dividends or upon liquidation;

(f) enter into any transaction or series of related transactions in which this Corporation borrows more than $5,000,000;

(g) amend this Corporation's Third Amended and Restated Certificate of Incorporation or Bylaws (excluding an amendment to this Corporation's Third Amended and Restated Certificate of Incorporation, which amendment does no more than authorize for issuance an equity security not covered by subsection 6(e) above);

(h) change the authorized number of directors of this Corporation;

(i) pay any dividends on its Common Stock; or

(j) redeem, purchase or otherwise acquire (or pay into or set funds aside for a sinking fund for such purpose) any share or shares of Preferred Stock or Common Stock; provided, however, that this restriction shall not apply to the repurchase of shares of Common Stock (up to a maximum of $500,000) from employees, officers, directors, consultants or other persons performing services for the Company or any subsidiary.

7. Additional Series C Preferred Stock Protective Provisions. Subject to the rights of other series of Preferred Stock that may from time to time come into existence, this Corporation shall not take any of the following actions without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least a majority of the voting power of all then outstanding shares of Series C Preferred Stock:

(a) alter or change the rights, preferences or privileges of the shares of Series C Preferred Stock so as to affect adversely the shares; or

(b) amend the automatic conversion provisions applicable to the Preferred Stock as set forth in subsection (4)(b) of Division B of this Article IV.

8. Additional Series D Preferred Stock Protective Provisions. Subject to the rights of other series of Preferred Stock that may from time to time come into existence, this Corporation shall not take any action, without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least a majority of the voting power of all then outstanding shares of Series D Preferred Stock, that would alter, change or reclassify the rights, preferences or privileges of the shares of Series D Preferred Stock so as to affect adversely the shares in a manner different from the Series A, Series B and Series C Preferred Stock.

9. Status of Converted or Redeemed Stock. In the event any shares of Series A, Series B, Series C or Series D Preferred Stock shall be redeemed or converted pursuant to Section 3 or Section 4 hereof, the shares so converted or redeemed shall be canceled and shall not be issuable by this Corporation. The Third Amended and Restated Certificate of Incorporation of this Corporation shall be appropriately amended to effect the corresponding reduction in this Corporation's authorized capital stock.

C. Common Stock

1. Dividend Rights. Subject to the prior rights of holders of all classes of stock at the time outstanding having prior rights as to dividends, the holders of the Common Stock shall be entitled to receive, when and as declared by the Board of Directors, out of any assets of this Corporation legally available therefor, such dividends as may be declared from time to time by the Board of Directors.

2. Liquidation Rights. Upon the liquidation, dissolution or winding up of this Corporation, the assets of this Corporation shall be distributed as provided in Section 2 of Division B of this Article IV.

3. Redemption. The Common Stock is not redeemable.

4. Voting Rights. The holder of each share of Common Stock shall have the right to one vote, and shall be entitled to notice of any stockholders' meeting in accordance with the bylaws of this Corporation, and shall be entitled to vote upon such matters in such manner as may be provided by law.

ARTICLE V

Except as otherwise provided in this Third Amended and Restated Certificate of Incorporation, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of this corporation.

ARTICLE VI

The number of directors of this Corporation shall be fixed from time to time by a bylaw or amendment thereof duly adopted by the Board of Directors or by the stockholders.

ARTICLE VII

Elections of directors need not be by written ballot unless the Bylaws of this Corporation shall so provide.

ARTICLE VIII

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws may provide. The books of this Corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of this Corporation.

ARTICLE IX

A director of this Corporation shall, to the full extent permitted by the Delaware General Corporation Law as it now exists or as it may hereafter be amended, not be liable to this Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. Neither any amendment or repeal of this Article IX, nor the adoption of any provision of this Third Amended and Restated Certificate of Incorporation inconsistent with this Article IX, shall eliminate or reduce the effect of this Article IX in respect of any matter occurring, or any cause of action, suit or claim that, but for this Article IX, would accrue or arise, prior to such amendment, repeal or adoption

of any inconsistent provision.

ARTICLE X

This Corporation reserves the right to amend, alter, change or repeal any provision contained in this Third Amended and Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.

ARTICLE XI

This Corporation shall not take any of the following actions without first obtaining the approval (by vote or written consent, as provided by law) of at least sixty-six and two-thirds percent (662/3%) of the directors of this Corporation;

(a) sell, convey, or otherwise dispose of all or substantially all of its property or business or merge into or consolidate with any other corporation (other than a wholly-owned subsidiary corporation) or effect any transaction or series of related transactions in which more than fifty percent (50%) of the voting power of this Corporation is disposed of;

(b) change the authorized number of directors of this Corporation; or

(c) consummate any financing pursuant to which the holders of Series A, Series B, Series C and Series D Preferred Stock are entitled to exercise the right of first offer set forth in Section 2.4 of the Third Amended and Restated Investors' Rights Agreement, dated on or about August 5, 1997, by and among this Corporation and certain investors and founders, as amended from time to time, unless the existing stockholders of this Corporation purchase less than sixty-six and two-thirds percent (66 2/3%) of the shares sold in such financing.

***

The foregoing Amended and Restated Certificate of Incorporation has been duly adopted by this Corporation's Board of Directors and stockholders in accordance with the applicable provisions of Section 228, 242 and 245 of the General Corporation Law of the State of Delaware.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the undersigned has executed this certificate on August 4, 1997.

/s/ Vito Palermo

Vito Palermo
Chief Financial Officer and Secretary

SIGNATURE PAGE TO THIRD AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION

EXHIBIT 3.2

BYLAWS

OF

METAWAVE COMMUNICATIONS CORPORATION

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BYLAWS

OF

METAWAVE COMMUNICATIONS CORPORATION

ARTICLE I

CORPORATE OFFICES

1.1 REGISTERED OFFICE.

The address of the Corporation's registered office in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

1.2 OTHER OFFICES.

The Board of Directors may at any time establish other offices at any place or places where the corporation is qualified to do business.

ARTICLE II

MEETINGS OF STOCKHOLDERS

2.1 PLACE OF MEETINGS.

Meetings of stockholders shall be held at any place, within or outside the State of Delaware, designated by the Board of Directors. In the absence of any such designation, stockholders' meetings shall be held at the registered office of the corporation.

2.2 ANNUAL MEETING.

The annual meeting of stockholders shall be held on such date, time and place, either within or without the State of Delaware, as may be designated by resolution of the Board of Directors each year. At the meeting, directors shall be elected and any other proper business may be transacted.

2.3 SPECIAL MEETING.

(a) A special meeting of the stockholders may be called at any time by the Board of Directors, the chairman of the board , the president or by one or more stockholders holding shares in the aggregate entitled to cast not less than sixty six and two-thirds percent (66 2/3%) of the votes at that meeting.

(b) If a special meeting is called by any person or persons other than the Board of Directors, the chairman of the board or the president, the request shall be in writing,

specifying the time of such meeting and the general nature of the business proposed to be transacted, and shall be delivered personally or sent by registered mail or by telegraphic or other facsimile transmission to the chairman of the board, the president, any vice president, or the secretary of the corporation. No business may be transacted at such special meeting otherwise than as specified in such notice. The officer receiving the request shall cause notice to be promptly given to the stockholders entitled to vote, in accordance with the provisions of Sections 2.4 and 2.5 of this Article II, that a meeting will be held at the time requested by the person or persons calling the meeting, not less than thirty-five (35) nor more than sixty (60) days after the receipt of the request. If the notice is not given within twenty (20) days after the receipt of the request, the person or persons requesting the meeting may give the notice. Nothing contained in this paragraph of this Section 2.3 shall be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the Board of Directors may be held.

(c) Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the notice of meeting given in accordance with Section 2.2(b). Nominations of persons for election to the board of directors may be made at a special meeting of stockholders at which directors are to be selected pursuant to such notice of meeting (i) by or at the direction of the board of directors or (ii) by any stockholder of the corporation who is a stockholder of record at the time of giving of notice provided for in this paragraph, who shall be entitled to vote at the meeting and who complies with the notice procedures set forth in Section 2.5.

2.4 NOTICE OF STOCKHOLDER'S MEETINGS; AFFIDAVIT OF NOTICE.

All notices of meetings of stockholders shall be in writing and shall be sent or otherwise given in accordance with this Section 2.4 of these Bylaws not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting (or such longer or shorter time as is required by Section 2.5 of these Bylaws, if applicable). The notice shall specify the place, date, and hour of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called.

Written notice of any meeting of stockholders, if mailed, is given when deposited in the United States mail, postage prepaid, directed to the stockholder at his address as it appears on the records of the corporation. An affidavit of the secretary or an assistant secretary or of the transfer agent of the corporation that the notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

2.5 ADVANCE NOTICE OF STOCKHOLDER NOMINEES.

Only persons who are nominated in accordance with the procedures set forth in this Section 2.5 shall be eligible for election as directors. Nominations of persons for election to the board of directors of the corporation may be made at a meeting of stockholders by or at the direction of the board of directors or by

any stockholder of the corporation entitled to vote for the election of directors at the meeting who complies with the notice procedures set forth in this Section 2.5. Such nominations, other than those made by or at the direction of the board of directors, shall be made pursuant to timely notice in writing to the secretary of the corporation.

To be timely, a stockholder's notice shall be delivered to or mailed and received at the principal executive offices of the corporation not less than sixty (60) days nor more than ninety (90) days prior to the meeting; provided, however, that in the event that less than sixty (60) days' notice or prior public disclosure of the date of the meeting is given or made to stockholders, notice by the stockholder to be timely must be so received not later than the close of business on the 10th day following the day on which such notice of the date of the meeting was mailed or such public disclosure was made. Such stockholder's notice shall set forth (a) as to each person whom the stockholder proposes to nominate for election or re-election as a Director, (i) the name, age, business address and residence address of such person, (ii) the principal occupation or employment of such person, (iii) the class and number of shares of the corporation which are beneficially owned by such person and (iv) any other information relating to such person that is required to be disclosed in solicitations of proxies for election of Directors, or is otherwise required, in each case pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (including, without limitation, such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); and (b) as to the stockholder giving the notice (i) the name and address, as they appear on the corporation's books, of such stockholder and (ii) the class and number of shares of the corporation which are beneficially owned by such stockholder. At the request of the Board of Directors any person nominated by the Board of Directors for election as a director shall furnish to the secretary of the corporation that information required to be set forth in a stockholder's notice of nomination which pertains to the nominee. No person shall be eligible for election as a director of the corporation unless nominated in accordance with the procedures set forth in this Section 2.5. The Chairman of the meeting shall, if the facts warrant, determine and declare to the meeting that a nomination was not made in accordance with the procedures prescribed by the Bylaws, and if he or she should so determine, he or she shall so declare to the meeting and the defective nomination shall be disregarded.

2.6 QUORUM.

The holders of a majority of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by statute or by the certificate of incorporation. If, however, such quorum is not present or represented at any meeting of the stockholders, then either (a) the chairman of the meeting or (b) the stockholders entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice

other than announcement at the meeting, until a quorum is present or represented. At such adjourned meeting at which a quorum is present or represented, any business may be transacted that might have been transacted at the meeting as originally noticed.

2.7 ADJOURNED MEETING; NOTICE.

When a meeting is adjourned to another time or place, unless these Bylaws otherwise require, notice need not be given of the adjourned meeting if the time and place thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting the

corporation may transact any business that might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

2.8 CONDUCT OF BUSINESS.

The chairman of any meeting of stockholders shall determine the order of business and the procedure at the meeting, including the manner of voting and the conduct of business.

2.9 VOTING.

(a) The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 2.11 of these Bylaws, subject to the provisions of Sections 217 and 218 of the General Corporation Law of Delaware (relating to voting rights of fiduciaries, pledgors and joint owners of stock and to voting trusts and other voting agreements).

(b) Except as may be otherwise provided in the certificate of incorporation, each stockholder shall be entitled to one vote for each share of capital stock held by such stockholder.

2.10 WAIVER OF NOTICE.

Whenever notice is required to be given under any provision of the General Corporation Law of Delaware or of the certificate of incorporation or these Bylaws, a written waiver thereof, signed by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders need be specified in any written waiver of notice unless so

required by the certificate of incorporation or these Bylaws.

2.11 RECORD DATE FOR STOCKHOLDER NOTICE; VOTING.

In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which shall not be more than sixty (60) nor less than ten (10) days before the date of such meeting, nor more than sixty (60) days prior to any other action. If the Board of Directors does not so fix a record date:

(a) The record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held.

(b) The record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

2.12 PROXIES.

Each stockholder entitled to vote at a meeting of stockholders may authorize another person or persons to act for such stockholder by a written proxy, signed by the stockholder and filed with the secretary of the corporation, but no such proxy shall be voted or acted upon after three (3) years from its date, unless the proxy provides for a longer period. A proxy shall be deemed signed if the stockholder's name is placed on the proxy (whether by manual signature, typewriting, telegraphic transmission or otherwise) by the stockholder or the stockholder's attorney-in-fact. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212(e) of the General Corporation Law of Delaware.

ARTICLE III

DIRECTORS

3.1 POWERS.

Subject to the provisions of the General Corporation Law of Delaware and any limitations in the certificate of incorporation or these Bylaws relating to action required to be approved by the stockholders or by the outstanding shares, the business and affairs of the corporation shall be managed and all corporate powers shall be exercised by or under the direction of the Board of Directors.

3.2 NUMBER OF DIRECTORS.

Upon the adoption of these Bylaws, the number of directors constituting the entire Board of Directors shall be nine (9). Thereafter, this number may be changed by a resolution of the Board of Directors or of the stockholders, subject to Section 3.4 of these Bylaws. No reduction of the authorized number of directors shall have the effect of removing any director before such director's term of office expires.

3.3 ELECTION, QUALIFICATION AND TERM OF OFFICE OF DIRECTORS.

Except as provided in Section 3.4 of these Bylaws, directors shall be elected at each annual meeting of stockholders to hold office until the next annual meeting. Directors need not be stockholders unless so required by the certificate of incorporation or these Bylaws, wherein other qualifications for directors may be prescribed. Each director, including a director elected to fill a vacancy, shall hold office until his or her successor is elected and qualified or until his or her earlier resignation or removal.

Elections of directors need not be by written ballot.

3.4 RESIGNATION AND VACANCIES.

Any director may resign at any time upon written notice to the attention of the Secretary of the corporation. When one or more directors so resigns and the resignation is effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office as provided in this section in the filling of other vacancies. A vacancy created by the removal of a director by the vote of the stockholders or by court order may be filled only by the affirmative vote of a majority of the shares represented and voting at a duly held meeting at which a quorum is present (which shares voting affirmatively also constitute a majority of the quorum. Each director so elected shall hold office until the next annual meeting of the stockholders and until a successor has been elected and qualified.

Unless otherwise provided in the certificate of incorporation or these Bylaws:

(a) Vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the

stockholders having the right to vote as a single class may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director.

(b) Whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the certificate of incorporation, vacancies and newly created directorships of such class or classes or series may be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected.

If at any time, by reason of death or resignation or other cause, the corporation should have no directors in office, then any officer or any stockholder or an executor, administrator, trustee or guardian of a stockholder, or other fiduciary entrusted with like responsibility for the person or estate of a stockholder, may call a special meeting of stockholders in accordance with the provisions of the certificate of incorporation or these Bylaws, or may apply to the Court of Chancery for a decree summarily ordering an election as provided in Section 211 of the General Corporation Law of Delaware.

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole board (as constituted immediately prior to any such increase), then the Court of Chancery may, upon application of any stockholder or stockholders holding at least ten (10) percent of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the General Corporation Law of Delaware as far as applicable.

3.5 PLACE OF MEETINGS; MEETINGS BY TELEPHONE.

The Board of Directors of the corporation may hold meetings, both regular and special, either within or outside the State of Delaware.

Unless otherwise restricted by the certificate of incorporation or these Bylaws, members of the Board of Directors, or any committee designated by the Board of Directors, may participate in a meeting of the Board of Directors, or any committee, by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

3.6 REGULAR MEETINGS.

Regular meetings of the Board of Directors may be held without notice at such time and at such place as shall from time to time be determined by the

board.

3.7 SPECIAL MEETINGS; NOTICE.

Special meetings of the Board of Directors for any purpose or purposes may be called at any time by the chairman of the board, the president, any vice president, the secretary or any two directors.

Notice of the time and place of special meetings shall be delivered personally or by telephone to each director or sent by first-class mail or telegram, charges prepaid, addressed to each director at that director's address as it is shown on the records of the corporation. If the notice is mailed, it shall be deposited in the United States mail at least four (4) days before the time of the holding of the meeting. If the notice is delivered personally or by telephone or by telegram, it shall be delivered personally or by telephone or to the telegraph company at least forty-eight (48) hours before the time of the holding of the meeting. Any oral notice given personally or by telephone may be communicated either to the director or to a person at the office of the director who the person giving the notice has reason to believe will promptly communicate it to the director. The notice need not specify the purpose or the place of the meeting, if the meeting is to be held at the principal executive office of the corporation.

3.8 QUORUM.

At all meetings of the Board of Directors, a majority of the authorized number of directors shall constitute a quorum for the transaction of business and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the Board of Directors, except as may be otherwise specifically provided by statute or by the certificate of incorporation. If a quorum is not present at any meeting of the Board of Directors, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present.

A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

3.9 WAIVER OF NOTICE.

Whenever notice is required to be given under any provision of the General Corporation Law of Delaware or of the certificate of incorporation or these Bylaws, a written waiver thereof, signed by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any

business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the directors, or members of a committee of directors, need be specified in any written waiver of notice unless so required by the certificate of incorporation or these Bylaws.

3.10 BOARD ACTION BY WRITTEN CONSENT WITHOUT A MEETING.

Unless otherwise restricted by the certificate of incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors, or of any committee thereof, may be taken without a meeting if all members of the board or committee, as the case may be, consent thereto in writing and the writing or writings are filed with the minutes of proceedings of the board or committee. Written consents representing actions taken by the board or committee may be executed by telex, telecopy or other facsimile transmission, and such facsimile shall be valid and binding to the same extent as if it were an original.

3.11 FEES AND COMPENSATION OF DIRECTORS.

Unless otherwise restricted by the certificate of incorporation or these Bylaws, the Board of Directors shall have the authority to fix the compensation of directors. No such compensation shall preclude any director from serving the corporation in any other capacity and receiving compensation therefor.

3.12 APPROVAL OF LOANS TO OFFICERS.

The corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiary, including any officer or employee who is a director of the corporation or its subsidiary, whenever, in the judgment of the directors, such loan, guaranty or assistance may reasonably be expected to benefit the corporation. The loan, guaranty or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board of Directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing in this section contained shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

3.13 REMOVAL OF DIRECTORS.

Unless otherwise restricted by statute, by the certificate of incorporation or by these Bylaws, any director or the entire Board of Directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors; provided, however, that if the stockholders of the corporation are entitled to cumulative voting, if less than the entire Board of Directors is to be removed, no director may be removed without cause if the votes cast against his removal would be sufficient to elect

him if then cumulatively voted at an election of the entire Board of Directors.

No reduction of the authorized number of directors shall have the effect of removing any director prior to the expiration of such director's term of office.

3.14 CHAIRMAN OF THE BOARD OF DIRECTORS.

The corporation may also have, at the discretion of the Board of Directors, a chairman of the Board of Directors who shall not be considered an officer of the corporation.

ARTICLE IV

COMMITTEES

4.1 COMMITTEES OF DIRECTORS.

The Board of Directors may, by resolution passed by a majority of the whole board, designate one or more committees, with each committee to consist of one or more of the directors of the corporation. The board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board of Directors or in the Bylaws of the corporation, shall have and may exercise all the powers and authority of the Board

of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers that may require it; but no such committee shall have the power or authority to (a) amend the certificate of incorporation (except that a committee may, to the extent authorized in the resolution or resolutions providing for the issuance of shares of stock adopted by the Board of Directors as provided in Section 151(a) of the General Corporation Law of Delaware, fix the designations and any of the preferences or rights of such shares relating to dividends, redemption, dissolution, any distribution of assets of the corporation or the conversion into, or the exchange of such shares for, shares of any other class or classes or any other series of the same or any other class or classes of stock of the corporation or fix the number of shares of any series of stock or authorize the increase or decrease of the shares of any series), (b) adopt an agreement of merger or consolidation under Sections 251 or 252 of the General Corporation Law of Delaware, (c) recommend to the stockholders the sale, lease or exchange of all or substantially all of the corporation's property and assets, (d) recommend to the stockholders a dissolution of the corporation or a revocation of a dissolution, or (e) amend the Bylaws of the corporation; and, unless the board

resolution establishing the committee, the Bylaws or the certificate of incorporation expressly so provide, no such committee shall have the power or authority to declare a dividend, to authorize the issuance of stock, or to adopt a certificate of ownership and merger pursuant to Section 253 of the General Corporation Law of Delaware.

4.2 COMMITTEE MINUTES.

Each committee shall keep regular minutes of its meetings and report the same to the Board of Directors when required.

4.3 MEETINGS AND ACTION OF COMMITTEES.

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the provisions of Section 3.5 (place of meetings and meetings by telephone), Section 3.6 (regular meetings), Section 3.7 (special meetings and notice), Section 3.8 (quorum), Section 3.9 (waiver of notice), and Section 3.10 (action without a meeting) of these Bylaws, with such changes in the context of such provisions as are necessary to substitute the committee and its members for the Board of Directors and its members; provided, however, that the time of regular meetings of committees may be determined either by resolution of the Board of Directors or by resolution of the committee, that special meetings of committees may also be called by resolution of the Board of Directors and that notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The Board of Directors may adopt rules for the government of any committee not inconsistent with the provisions of these Bylaws.

ARTICLE V

OFFICERS

5.1 OFFICERS.

The officers of the corporation shall be a chief executive officer, a president, a secretary, a chief financial officer and a chief technical officer. The corporation may also have, at the discretion of the Board of Directors, one or more vice presidents, one or more assistant secretaries, one or more assistant treasurers, and any such other officers as may be appointed in accordance with the provisions of Section 5.3 of these Bylaws. Any number of offices may be held by the same person.

5.2 APPOINTMENT OF OFFICERS.

The officers of the corporation, except such officers as may be appointed in accordance with the provisions of Sections 5.3 or 5.5 of these Bylaws, shall be appointed by the Board of Directors, subject to the rights, if any, of an officer under any contract of employment.

5.3 SUBORDINATE OFFICERS.

The Board of Directors may appoint, or empower the chief executive officer or the president to appoint, such other officers and agents as the business of the corporation may require, each of whom shall hold office for such period, have such authority, and perform such duties as are provided in these Bylaws or as the Board of Directors may from time to time determine.

5.4 REMOVAL AND RESIGNATION OF OFFICERS.

Subject to the rights, if any, of an officer under any contract of employment, any officer may be removed, either with or without cause, by an affirmative vote of the majority of the Board of Directors at any regular or special meeting of the board or, except in the case of an officer chosen by the Board of Directors, by any officer upon whom such power of removal may be conferred by the Board of Directors.

Any officer may resign at any time by giving written notice to the attention of the Secretary of the corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice; and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the corporation under any contract to which the officer is a party.

5.5 VACANCIES IN OFFICES.

Any vacancy occurring in any office of the corporation shall be filled by the Board of Directors.

5.6 CHIEF EXECUTIVE OFFICER.

Subject to such supervisory powers, if any, as may be given by the Board of Directors to the chairman of the board, if any, the chief executive officer of the corporation shall, subject to the control of the Board of Directors, have general supervision, direction, and control of the business and the officers of the corporation. He or she shall preside at all meetings of the stockholders and, in the absence or nonexistence of a chairman of the board, at all meetings of the Board of Directors and shall have the general powers and duties of management usually vested in the office of chief executive officer of a corporation and shall have such other powers and duties as may be prescribed by the Board of Directors or these Bylaws.

5.7 PRESIDENT.

Subject to such supervisory powers, if any, as may be given by the Board of Directors to the chairman of the board (if any) or the chief executive officer,

the president shall have general supervision, direction, and control of the business and other officers of the corporation. He or she shall have the general powers and duties of management usually vested in the office of president of a corporation and such other powers and duties as may be prescribed by the Board of Directors or these Bylaws.

5.8 VICE PRESIDENTS.

In the absence or disability of the chief executive officer and president, the vice presidents, if any, in order of their rank as fixed by the Board of Directors or, if not ranked, a vice president designated by the Board of Directors, shall perform all the duties of the president and when so acting shall have all the powers of, and be subject to all the restrictions upon, the president. The vice presidents shall have such other powers and perform such other duties as from time to time may be prescribed for them respectively by the Board of Directors, these Bylaws, the president or the chairman of the board.

5.9 SECRETARY.

The secretary shall keep or cause to be kept, at the principal executive office of the corporation or such other place as the Board of Directors may direct, a book of minutes of all meetings and actions of directors, committees of directors, and stockholders. The minutes shall show the time and place of each meeting, the names of those present at directors' meetings or committee meetings, the number of shares present or represented at stockholders' meetings, and the proceedings thereof.

The secretary shall keep, or cause to be kept, at the principal executive office of the corporation or at the office of the corporation's transfer agent or registrar, as determined by resolution of the Board of Directors, a share register, or a duplicate share register, showing the names of all stockholders and their addresses, the number and classes of shares held by each, the number and date of certificates evidencing such shares, and the number and date of cancellation of every certificate surrendered for cancellation.

The secretary shall give, or cause to be given, notice of all meetings of the stockholders and of the Board of Directors required to be given by law or by these Bylaws. He or she shall keep the seal of the corporation, if one be adopted, in safe custody and shall have such other powers and perform such other duties as may be prescribed by the Board of Directors or by these Bylaws.

5.10 CHIEF FINANCIAL OFFICER.

The chief financial officer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the corporation, including accounts of its assets, liabilities, receipts, disbursements, gains, losses, capital retained earnings, and shares. The books of account shall at all reasonable

times be open to inspection by any director.

The chief financial officer shall deposit all moneys and other valuables in the name and to the credit of the corporation with such depositories as may be designated by the Board of Directors. He or she shall disburse the funds of the corporation as may be ordered by the Board of Directors, shall render to the president, the chief executive officer, or the directors, upon request, an account of all his or her transactions as chief financial officer and of the financial condition of the corporation, and shall have other powers and perform such other duties as may be prescribed by the Board of Directors or the Bylaws.

5.11 CHIEF TECHNICAL OFFICER.

Subject to such supervisory powers of the chief executive officer and the president, the chief technical officer shall have general supervision, direction, and control of the research and development activities of the corporation and shall have other powers and perform such other duties as may be prescribed by the Board of Directors or the Bylaws.

5.12 REPRESENTATION OF SHARES OF OTHER CORPORATIONS.

The chairman of the board, the chief executive officer, the president, any vice president, the chief financial officer, chief technical officer, the secretary or assistant secretary of this corporation, or any other person authorized by the Board of Directors or the chief executive officer or the president or a vice president, is authorized to vote, represent, and exercise on behalf of this corporation all rights incident to any and all shares of any other corporation or corporations standing in the name of this corporation. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by the person having such authority.

5.13 AUTHORITY AND DUTIES OF OFFICERS.

In addition to the foregoing authority and duties, all officers of the corporation shall respectively have such authority and perform such duties in the management of the business of the corporation as may be designated from time to time by the Board of Directors or the stockholders.

ARTICLE VI

INDEMNIFICATION OF DIRECTORS, OFFICERS, EMPLOYEES, AND OTHER AGENTS

6.1 INDEMNIFICATION OF DIRECTORS AND OFFICERS.

The corporation shall, to the maximum extent and in the manner permitted by the General Corporation Law of Delaware, indemnify each of its directors and officers against expenses (including attorneys' fees), judgments, fines,

settlements and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an agent of the corporation. For purposes of this Section 6.1, a "director" or "officer" of the corporation includes any person (a) who is or was a director or officer of the corporation, (b) who is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise, or (c) who was a director or officer of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

6.2 INDEMNIFICATION OF OTHERS.

The corporation shall have the power, to the maximum extent and in the manner permitted by the General Corporation Law of Delaware, to indemnify each of its employees and agents (other than directors and officers) against expenses (including attorneys' fees), judgments, fines, settlements and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an agent of the corporation. For purposes of this Section 6.2, an "employee" or "agent" of the corporation (other than a director or officer) includes any person (a) who is or was an employee or agent of the corporation, (b) who is or was serving at the request of the corporation as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise, or (c) who was an employee or agent of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

6.3 PAYMENT OF EXPENSES IN ADVANCE.

Expenses incurred in defending any action or proceeding for which indemnification is required pursuant to Section 6.1 or for which indemnification is permitted pursuant to Section 6.2 following authorization thereof by the Board of Directors shall be paid by the corporation in advance of the final disposition of such action or proceeding upon receipt of an undertaking by or on behalf of the indemnified party to repay such amount if it shall ultimately

be determined that the indemnified party is not entitled to be indemnified as authorized in this Article VI.

6.4 INDEMNITY NOT EXCLUSIVE.

The indemnification provided by this Article VI shall not be deemed exclusive of any other rights to which those seeking indemnification may be entitled under any Bylaw, agreement, vote of shareholders or disinterested directors or otherwise, both as to action in an official capacity and as to action in another capacity while holding such office, to the extent that such additional rights to indemnification are authorized in the certificate of incorporation.

6.5 INSURANCE.

The corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liability under the provisions of the General Corporation Law of Delaware.

6.6 CONFLICTS.

No indemnification or advance shall be made under this Article VI, except where such indemnification or advance is mandated by law or the order, judgment or decree of any court of competent jurisdiction, in any circumstance where it appears:

(a) That it would be inconsistent with a provision of the certificate of incorporation, these Bylaws, a resolution of the stockholders or an agreement in effect at the time of the accrual of the alleged cause of the action asserted in the proceeding in which the expenses were incurred or other amounts were paid, which prohibits or otherwise limits indemnification; or

(b) That it would be inconsistent with any condition expressly imposed by a court in approving a settlement.

ARTICLE VII

RECORDS AND REPORTS

7.1 MAINTENANCE AND INSPECTION OF RECORDS.

The corporation shall, either at its principal executive offices or at such place or places as designated by the Board of Directors, keep a record of its stockholders listing their names and addresses and the number and class of shares held by each stockholder, a copy of these Bylaws as amended to date, accounting books, and other records.

Any stockholder of record, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose the corporation's stock ledger, a list of its stockholders, and its other books and records and to make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person's interest as a stockholder. In every instance where an attorney or other agent is the person who seeks the right to inspection, the demand under oath shall be accompanied by a power of attorney or

such other writing that authorizes the attorney or other agent to so act on behalf of the stockholder. The demand under oath shall be directed to the corporation at its registered office in Delaware or at its principal place of business.

7.2 INSPECTION BY DIRECTORS.

Any director shall have the right to examine the corporation's stock ledger, a list of its stockholders, and its other books and records for a purpose reasonably related to his or her position as a director. The Court of Chancery is hereby vested with the exclusive jurisdiction to determine whether a director is entitled to the inspection sought. The Court may summarily order the corporation to permit the director to inspect any and all books and records, the stock ledger, and the stock list and to make copies or extracts therefrom. The Court may, in its discretion, prescribe any limitations or conditions with reference to the inspection, or award such other and further relief as the Court may deem just and proper.

7.3 ANNUAL STATEMENT TO STOCKHOLDERS.

The Board of Directors shall present at each annual meeting, and at any special meeting of the stockholders when called for by vote of the stockholders, a full and clear statement of the business and condition of the corporation.

ARTICLE VIII

GENERAL MATTERS

8.1 CHECKS.

From time to time, the Board of Directors shall determine by resolution which person or persons may sign or endorse all checks, drafts, other orders for payment of money, notes or other evidences of indebtedness that are issued in the name of or payable to the corporation, and only the persons so authorized shall sign or endorse those instruments.

8.2 EXECUTION OF CORPORATE CONTRACTS AND INSTRUMENTS.

The Board of Directors, except as otherwise provided in these Bylaws, may authorize any officer or officers, or agent or agents, to enter into any contract or execute any instrument in the name of and on behalf of the corporation; such authority may be general or confined to specific instances. Unless so authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee shall have any power or

authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

8.3 STOCK CERTIFICATES; PARTLY PAID SHARES.

The shares of a corporation shall be represented by certificates, provided that the Board of Directors of the corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Notwithstanding the adoption of such a resolution by the Board of Directors, every holder of stock represented by certificates and upon request every holder of uncertificated shares shall be entitled to have a certificate signed by, or in the name of the corporation by the chairman or vice-chairman of the Board of Directors, or the chief executive officer or the president or vice-president, and by the chief financial officer or an assistant treasurer, or the secretary or an assistant secretary of such corporation representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he or she were such officer, transfer agent or registrar at the date of issue.

The corporation may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate issued to represent any such partly paid shares, upon the books and records of the corporation in the case of uncertificated partly paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully paid shares, the corporation shall declare a dividend upon partly paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

8.4 SPECIAL DESIGNATION ON CERTIFICATES.

If the corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the corporation shall issue to represent such class or series of stock; provided, however, that, except as otherwise provided in Section 202 of the General Corporation Law of Delaware, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the corporation shall issue to represent such class or series of stock a statement that the corporation will furnish without charge to each stockholder who so requests the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

8.5 LOST CERTIFICATES.

Except as provided in this Section 8.5, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the corporation and canceled at the same time. The corporation may issue a new certificate of stock or uncertificated shares in the place of any certificate previously issued by it, alleged to have been lost, stolen or destroyed, and the corporation may require the owner of the lost, stolen or destroyed certificate, or the owner's legal representative, to give the corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

8.6 CONSTRUCTION; DEFINITIONS.

Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the Delaware General Corporation Law shall govern the construction of these Bylaws. Without limiting the generality of this provision, the singular number includes the plural, the plural number includes the singular, and the term "person" includes both a corporation and a natural person.

8.7 DIVIDENDS.

The directors of the corporation, subject to any restrictions contained in (a) the General Corporation Law of Delaware or (b) the certificate of incorporation, may declare and pay dividends upon the shares of its capital stock. Dividends may be paid in cash, in property, or in shares of the corporation's capital stock.

The directors of the corporation may set apart out of any of the funds of the corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve. Such purposes shall include but not be limited to equalizing dividends, repairing or maintaining any property of the corporation, and meeting contingencies.

8.8 FISCAL YEAR.

The fiscal year of the corporation shall be fixed by resolution of the Board of Directors and may be changed by the Board of Directors.

8.9 SEAL.

The corporation may adopt a corporate seal, which may be altered at pleasure, and may use the same by causing it or a facsimile thereof, to be impressed or affixed or in any other manner reproduced.

8.10 TRANSFER OF STOCK.

Upon surrender to the corporation or the transfer agent of the corporation

of a certificate for shares duly endorsed or accompanied by proper evidence of succession,

assignation or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate, and record the transaction in its books.

8.11 STOCK TRANSFER AGREEMENTS.

The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the General Corporation Law of Delaware.

8.12 REGISTERED STOCKHOLDERS.

The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and to vote as such owner, shall be entitled to hold liable for calls and assessments the person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of another person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE IX

AMENDMENTS

The Bylaws of the corporation may be adopted, amended or repealed by the stockholders entitled to vote; provided, however, that the corporation may, in its certificate of incorporation, confer the power to adopt, amend or repeal Bylaws upon the directors; provided, further, any amendment to the Bylaws that increases or reduces the authorized number of directors shall require the affirmative approval of at least two-thirds of the directors. The fact that such power has been so conferred upon the directors shall not divest the stockholders of the power, nor limit their power to adopt, amend or repeal Bylaws. Notwithstanding the foregoing, any amendments to this Article IX shall require approval of holders of two-thirds of the outstanding Common Stock.

CERTIFICATE OF ADOPTION OF BYLAWS

OF

METAWAVE COMMUNICATIONS CORPORATION

The undersigned hereby certifies that the undersigned is the duly elected, qualified, and acting Secretary of Metawave Communications Corporation, and that the foregoing Bylaws were adopted as the Bylaws of the corporation on May 19, 1998, by the Board of Directors of the corporation.

Executed this 14th day of July, 1998.

/s/ Vito Palermo

Vito Palermo, Secretary

EXHIBIT 10.1

INDEMNIFICATION AGREEMENT

This Indemnification Agreement (the "Agreement") is made as of _____, by and between Metawave Communications Corporation, a Delaware corporation (the "Company"), and [IndemniteeName] (the "Indemnitee").

RECITALS

The Company and Indemnitee recognize the increasing difficulty in obtaining liability insurance for directors, officers and key employees, the significant increases in the cost of such insurance and the general reductions in the coverage of such insurance. The Company and Indemnitee further recognize the substantial increase in corporate litigation in general, subjecting directors, officers and key employees to expensive litigation risks at the same time as the availability and coverage of liability insurance has been severely limited. Indemnitee does not regard the current protection available as adequate under the present circumstances, and Indemnitee and agents of the Company may not be willing to continue to serve as agents of the Company without additional protection. The Company desires to attract and retain the services of highly qualified individuals, such as Indemnitee, and to indemnify its directors, officers and key employees so as to provide them with the maximum protection permitted by law.

AGREEMENT

In consideration of the mutual promises made in this Agreement, and for other good and valuable consideration, receipt of which is hereby acknowledged, the Company and Indemnitee hereby agree as follows:

1. INDEMNIFICATION.

(a) THIRD PARTY PROCEEDINGS. The Company shall indemnify Indemnitee if Indemnitee is or was a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Company) by reason of the fact that Indemnitee is or was a director, officer, employee or agent of the Company, or any subsidiary of the Company, by reason of any action or inaction on the part of Indemnitee while an officer or director or by reason of the fact that Indemnitee is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement (if such settlement is approved in advance by the Company, which approval shall not be unreasonably withheld) actually and reasonably incurred by Indemnitee in connection with such action, suit or proceeding if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or

not opposed to the best interests of the Company, and, with respect to any criminal action or proceeding, had no reasonable cause to believe Indemnitee's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that Indemnitee did not act in good faith and in a manner which Indemnitee

reasonably believed to be in or not opposed to the best interests of the Company, or, with respect to any criminal action or proceeding, that Indemnitee had reasonable cause to believe that Indemnitee's conduct was unlawful.

(b) PROCEEDINGS BY OR IN THE RIGHT OF THE COMPANY. The Company shall indemnify Indemnitee if Indemnitee was or is a party or is threatened to be made a party to any threatened, pending or completed action or proceeding by or in the right of the Company or any subsidiary of the Company to procure a judgment in its favor by reason of the fact that Indemnitee is or was a director, officer, employee or agent of the Company, or any subsidiary of the Company, by reason of any action or inaction on the part of Indemnitee while an officer or director or by reason of the fact that Indemnitee is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) and, to the fullest extent permitted by law, amounts paid in settlement (if such settlement is approved in advance by the Company, which approval shall not be unreasonably withheld), in each case to the extent actually and reasonably incurred by Indemnitee in connection with the defense or settlement of such action or suit if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company and its stockholders, except that no indemnification shall be made in respect of any claim, issue or matter as to which Indemnitee shall have been finally adjudicated by court order or judgment to be liable to the Company in the performance of Indemnitee's duty to the Company and its stockholders unless and only to the extent that the court in which such action or proceeding is or was pending shall determine upon application that, in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnity for such expenses which such court shall deem proper.

(c) MANDATORY PAYMENT OF EXPENSES. To the extent that Indemnitee has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in Section 1(a) or Section 1(b) or the defense of any claim, issue or matter therein, Indemnitee shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by Indemnitee in connection therewith.

2. NO EMPLOYMENT RIGHTS. Nothing contained in this Agreement is intended to create in Indemnitee any right to continued employment.

3. EXPENSES; INDEMNIFICATION PROCEDURE.

(a) ADVANCEMENT OF EXPENSES. The Company shall advance all expenses incurred by Indemnitee in connection with the investigation, defense, settlement or appeal of any civil or criminal action, suit or proceeding referred to in Section l(a) or Section 1(b) hereof (including amounts actually paid in settlement of any such action, suit or proceeding). Indemnitee hereby undertakes to repay such amounts advanced only if, and to the extent that, it shall ultimately be determined that Indemnitee is not entitled to be indemnified by the Company as authorized hereby.

(b) NOTICE/COOPERATION BY INDEMNITEE. Indemnitee shall, as a condition precedent to his or her right to be indemnified under this Agreement, give the Company notice in

writing as soon as practicable of any claim made against Indemnitee for which indemnification will or could be sought under this Agreement. Notice to the Company shall be directed to the Chief Executive Officer of the Company and shall be given in accordance with the provisions of Section 12(d) below. In addition, Indemnitee shall give the Company such information and cooperation as it may reasonably require and as shall be within Indemnitee's power.

(c) PROCEDURE. Any indemnification and advances provided for in Section 1 and this Section 3 shall be made no later than twenty (20) days after receipt of the written request of Indemnitee. If a claim under this Agreement, under any statute, or under any provision of the Company's Certificate of Incorporation or Bylaws providing for indemnification, is not paid in full by the Company within twenty (20) days after a written request for payment thereof has first been received by the Company, Indemnitee may, but need not, at any time thereafter bring an action against the Company to recover the unpaid amount of the claim and, subject to Section 11 of this Agreement, Indemnitee shall also be entitled to be paid for the expenses (including attorneys' fees) of bringing such action. It shall be a defense to any such action (other than an action brought to enforce a claim for expenses incurred in connection with any action, suit or proceeding in advance of its final disposition) that Indemnitee has not met the standards of conduct which make it permissible under applicable law for the Company to indemnify Indemnitee for the amount claimed, but the burden of proving such defense shall be on the Company and Indemnitee shall be entitled to receive interim payments of expenses pursuant to Section 3(a) unless and until such defense may be finally adjudicated by court order or judgment from which no further right of appeal exists. It is the parties' intention that if the Company contests Indemnitee's right to indemnification, the question of Indemnitee's right to indemnification shall be for the court to decide, and neither the failure of the Company (including its Board of Directors, any committee or subgroup of the Board of Directors, independent legal counsel, or its stockholders) to have made a determination that indemnification of Indemnitee is proper in the circumstances because Indemnitee has met the applicable standard of conduct required by applicable law, nor an actual determination by the Company (including its Board of Directors, any committee or subgroup of the Board of Directors, independent legal counsel, or its stockholders) that

Indemnitee has not met such applicable standard of conduct, shall create a presumption that Indemnitee has or has not met the applicable standard of conduct.

(d) NOTICE TO INSURERS. If, at the time of the receipt of a notice of a claim pursuant to Section 3(b) hereof, the Company has director and officer liability insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of the Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.

(e) SELECTION OF COUNSEL. In the event the Company shall be obligated under Section 3(a) hereof to pay the expenses of any proceeding against Indemnitee, the Company, if appropriate, shall be entitled to assume the defense of such proceeding, with counsel approved by Indemnitee, upon the delivery to Indemnitee of written notice of its election so to do. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel

by the Company, the Company will not be liable to Indemnitee under this Agreement for any fees of counsel subsequently incurred by Indemnitee with respect to the same proceeding, provided that (i) Indemnitee shall have the right to employ counsel in any such proceeding at Indemnitee's expense; and (ii) if (A) the employment of counsel by Indemnitee has been previously authorized by the Company, (B) Indemnitee shall have reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of any such defense or (C) the Company shall not, in fact, have employed counsel to assume the defense of such proceeding, then the fees and expenses of Indemnitee's counsel shall be at the expense of the Company.

4. ADDITIONAL INDEMNIFICATION RIGHTS; NONEXCLUSIVITY.

(a) SCOPE. Notwithstanding any other provision of this Agreement, the Company hereby agrees to indemnify the Indemnitee to the fullest extent permitted by law, notwithstanding that such indemnification is not specifically authorized by the other provisions of this Agreement, the Company's Certificate of Incorporation, the Company's Bylaws or by statute. In the event of any change, after the date of this Agreement, in any applicable law, statute, or rule which expands the right of a Delaware corporation to indemnify a member of its board of directors or an officer, such changes shall be deemed to be within the purview of Indemnitee's rights and the Company's obligations under this Agreement. In the event of any change in any applicable law, statute or rule which narrows the right of a Delaware corporation to indemnify a member of its board of directors or an officer, such changes, to the extent not otherwise required by such law, statute or rule to be applied to this Agreement shall have no effect on this Agreement or the parties' rights and obligations hereunder.

(b) NONEXCLUSIVITY. The indemnification provided by this Agreement shall not be deemed exclusive of any rights to which Indemnitee may be entitled under the Company's Certificate of Incorporation, its Bylaws, any agreement, any vote of stockholders or disinterested members of the Company's Board of Directors, the General Corporation Law of the State of Delaware, or otherwise, both as to action in Indemnitee's official capacity and as to action in another capacity while holding such office. The indemnification provided under this Agreement shall continue as to Indemnitee for any action taken or not taken while serving in an indemnified capacity even though he or she may have ceased to serve in any such capacity at the time of any action, suit or other covered proceeding.

5. PARTIAL INDEMNIFICATION. If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of the expenses, judgments, fines or penalties actually or reasonably incurred in the investigation, defense, appeal or settlement of any civil or criminal action, suit or proceeding, but not, however, for the total amount thereof, the Company shall nevertheless indemnify Indemnitee for the portion of such expenses, judgments, fines or penalties to which Indemnitee is entitled.

6. MUTUAL ACKNOWLEDGMENT. Both the Company and Indemnitee acknowledge that in certain instances, Federal law or public policy may override applicable state law and prohibit the Company from indemnifying its directors and officers under this Agreement or otherwise.

For example, the Company and Indemnitee acknowledge that the Securities and Exchange Commission (the "SEC") has taken the position that indemnification is not permissible for liabilities arising under certain federal securities laws, and federal legislation prohibits indemnification for certain ERISA violations. Indemnitee understands and acknowledges that the Company has undertaken or may be required in the future to undertake with the SEC to submit the question of indemnification to a court in certain circumstances for a determination of the Company's right under public policy to indemnify Indemnitee.

7. OFFICER AND DIRECTOR LIABILITY INSURANCE. The Company shall, from time to time, make the good faith determination whether or not it is practicable for the Company to obtain and maintain a policy or policies of insurance with reputable insurance companies providing the officers and directors of the Company with coverage for losses from wrongful acts, or to ensure the Company's performance of its indemnification obligations under this Agreement. Among other considerations, the Company will weigh the costs of obtaining such insurance coverage against the protection afforded by such coverage. In all policies of director and officer liability insurance, Indemnitee shall be named as an insured in such a manner as to provide Indemnitee the same rights and benefits as are accorded to the most favorably insured of the Company's directors, if Indemnitee is a director; or of the Company's officers, if Indemnitee is not a director of the Company but is an officer; or of the Company's key employees, if

Indemnitee is not an officer or director but is a key employee. Notwithstanding the foregoing, the Company shall have no obligation to obtain or maintain such insurance if the Company determines in good faith that such insurance is not reasonably available, if the premium costs for such insurance are disproportionate to the amount of coverage provided, if the coverage provided by such insurance is limited by exclusions so as to provide an insufficient benefit, or if Indemnitee is covered by similar insurance maintained by a parent or subsidiary of the Company.

8. SEVERABILITY. Nothing in this Agreement is intended to require or shall be construed as requiring the Company to do or fail to do any act in violation of applicable law. The Company's inability, pursuant to court order, to perform its obligations under this Agreement shall not constitute a breach of this Agreement. The provisions of this Agreement shall be severable as provided in this Section 8. If this Agreement or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the Company shall nevertheless indemnify Indemnitee to the full extent permitted by any applicable portion of this Agreement that shall not have been invalidated, and the balance of this Agreement not so invalidated shall be enforceable in accordance with its terms.

9. EXCEPTIONS. Any other provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement:

(a) CLAIMS INITIATED BY INDEMNITEE. To indemnify or advance expenses to Indemnitee with respect to proceedings or claims initiated or brought voluntarily by Indemnitee and not by way of defense, except with respect to proceedings brought to establish or enforce a right to indemnification under this Agreement or any other statute or law or otherwise as required under Section 145 of the Delaware General Corporation Law, but such indemnification or

advancement of expenses may be provided by the Company in specific cases if the Board of Directors finds it to be appropriate;

(b) LACK OF GOOD FAITH. To indemnify Indemnitee for any expenses incurred by Indemnitee with respect to any proceeding instituted by Indemnitee to enforce or interpret this Agreement, if a court of competent jurisdiction determines that each of the material assertions made by Indemnitee in such proceeding was not made in good faith or was frivolous;

(c) INSURED CLAIMS. To indemnify Indemnitee for expenses or liabilities of any type whatsoever (including, but not limited to, judgments, fines, ERISA excise taxes or penalties, and amounts paid in settlement) to the extent such expenses or liabilities have been paid directly to Indemnitee by an insurance carrier under a policy of officers' and directors' liability insurance maintained by the Company; or

(d) CLAIMS UNDER SECTION 16(b). To indemnify Indemnitee for expenses or the payment of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 16(b) of the Securities Exchange Act of 1934, as amended, or any similar successor statute.

10. CONSTRUCTION OF CERTAIN PHRASES.

(a) For purposes of this Agreement, references to the "Company" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that if Indemnitee is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, Indemnitee shall stand in the same position under the provisions of this Agreement with respect to the resulting or surviving corporation as Indemnitee would have with respect to such constituent corporation if its separate existence had continued.

(b) For purposes of this Agreement, references to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on Indemnitee with respect to an employee benefit plan; and references to "serving at the request of the Company" shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants, or beneficiaries; and if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan, Indemnitee shall be deemed to have acted in a manner "not opposed to the best interests of the Company" as referred to in this Agreement.

11. ATTORNEYS' FEES. In the event that any action is instituted by Indemnitee under this Agreement to enforce or interpret any of the terms hereof, Indemnitee shall be entitled to be paid all court costs and expenses, including reasonable attorneys' fees, incurred by Indemnitee

with respect to such action, unless as a part of such action, the court of competent jurisdiction determines that each of the material assertions made by Indemnitee as a basis for such action were not made in good faith or were frivolous. In the event of an action instituted by or in the name of the Company under this Agreement or to enforce or interpret any of the terms of this Agreement, Indemnitee shall be entitled to be paid all court costs and expenses, including attorneys' fees, incurred by Indemnitee in defense of such action (including with respect to Indemnitee's counterclaims and cross-claims made in such action), unless as a part of such action the court determines that each of Indemnitee's material defenses to such action were made in bad faith or were frivolous.

12. MISCELLANEOUS.

(a) GOVERNING LAW. This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflict of law.

(b) ENTIRE AGREEMENT; ENFORCEMENT OF RIGHTS. This Agreement sets forth the entire agreement and understanding of the parties relating to the subject matter herein and merges all prior discussions between them. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, shall be effective unless in writing signed by the parties to this Agreement. The failure by either party to enforce any rights under this Agreement shall not be construed as a waiver of any rights of such party.

(c) CONSTRUCTION. This Agreement is the result of negotiations between and has been reviewed by each of the parties hereto and their respective counsel, if any; accordingly, this Agreement shall be deemed to be the product of all of the parties hereto, and no ambiguity shall be construed in favor of or against any one of the parties hereto.

(d) NOTICES. Any notice, demand or request required or permitted to be given under this Agreement shall be in writing and shall be deemed sufficient when delivered personally or sent by telegram or forty-eight (48) hours after being deposited in the U.S. mail, as certified or registered mail, with postage prepaid, and addressed to the party to be notified at such party's address as set forth below or as subsequently modified by written notice.

(e) COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

(f) SUCCESSORS AND ASSIGNS. This Agreement shall be binding upon the Company and its successors and assigns, and inure to the benefit of Indemnitee and Indemnitee's heirs, legal representatives and assigns.

(g) SUBROGATION. In the event of payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of

Indemnitee, who shall execute all documents required and shall do all acts that may be necessary to secure such rights and to enable the Company to effectively bring suit to enforce such rights.

[Signature Page Follows]

The parties hereto have executed this Agreement as of the day and year set forth on the first page of this Agreement.

METAWAVE COMMUNICATIONS CORPORATION

By: _____

Title: _____

Address: 8700 148th Avenue N.E.
Redmond, Washington 98052

AGREED TO AND ACCEPTED:

[IndemniteeName]

_____
(Signature)

Address: [IndemniteeAddress1]
[IndemniteeAddress2]

EXHIBIT 10.2

METAWAVE COMMUNICATIONS CORPORATION

THIRD AMENDED AND RESTATED 1995 STOCK OPTION PLAN

1. PURPOSES OF THE PLAN. This Third Amended and Restated 1995 Stock Option Plan amends and restates the Second Amended and Restated Amended and Restated 1995 Stock Option Plan. The purposes of this Third Amended and Restated 1995 Stock Option Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Employees and Consultants of the Company and its Subsidiaries and to promote the success of the Company's business. Options granted under the Plan may be incentive stock options (as defined under Section 422 of the Code) or nonstatutory stock options, as determined by the Administrator at the time of grant of an option and subject to the applicable provisions of Section 422 of the Code, as amended, and the regulations promulgated thereunder.

2. DEFINITIONS. As used herein, the following definitions shall apply:

(a) "Administrator" means the Board or any of its Committees appointed pursuant to Section 4 of the Plan.

(b) "Affiliate" means an entity other than a Subsidiary (as defined below) in which the Company owns an equity interest.

(c) "Applicable Laws" shall have the meaning set forth in Section 4(b)(iii) below.

(d) "Board" means the Board of Directors of the Company.

(e) "Code" means the Internal Revenue Code of 1986, as amended.

(f) "Committee" means the Committee appointed by the Board of Directors in accordance with Section 4(a) of the Plan.

(g) "Common Stock" means the Common Stock of the Company.

(h) "Company" means Metawave Communications Corporation, a Delaware corporation.

(i) "Consultant" means any person, including an advisor, who is engaged by the Company or any Parent or Subsidiary to render services and is compensated for such services, and any director of the Company whether compensated for such services or not.

(j) "Continuous Status as an Employee or Consultant" means the absence of any interruption or termination of service as an Employee or

Consultant. Continuous Status as an Employee or Consultant shall not be considered interrupted in the case of: (i) sick leave; (ii) military leave; (iii) any other leave of absence approved by the Administrator, provided that

such leave is for a period of not more than ninety (90) days, unless reemployment upon the expiration of such leave is guaranteed by contract or statute, or unless provided otherwise pursuant to Company policy adopted from time to time; or (iv) in the case of transfers between locations of the Company or between the Company, its Subsidiaries or their respective successors. For purposes of this Plan, a change in status from an Employee to a Consultant or from a Consultant to an Employee will not constitute an interruption of Continuous Status as an Employee or Consultant.

(k) "Control Transaction" means:

(i) any merger, consolidation, or statutory or contractual share exchange in which there is no group of persons who held a majority of the outstanding Common Stock immediately prior to the transaction who continue to hold, immediately following the transaction, at least a majority of the combined voting power of the outstanding shares of that class of capital stock (herein, "Voting Stock") which ordinarily (and apart from rights accruing under special circumstances) has the right to vote in the election of directors of the Company (or of any other corporation or entity whose securities are issued in such transaction wholly or partially in exchange for Common Stock);

(ii) any liquidation or dissolution of the Company;

(iii) any transaction (or series of related transactions) involving the sale, lease, exchange or other transfer not in the ordinary course of business of all, or substantially all, of the assets of the Company; or

(iv) any transaction (or series of related transactions) in which any person (including, without limitation, any natural person, any corporation or other legal entity, and any person as defined in Sections 13(d)(3) and 14(d)(2) of the Exchange Act, other than the Company or any employee benefit plan sponsored by the Company):

(A) purchases any Common Stock (or securities convertible into Common Stock) for cash, securities or any other consideration pursuant to a tender offer or exchange offer subject to the requirements of the Exchange Act, or

(B) directly or indirectly becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act) of securities of the Company which, when aggregated with such person's beneficial ownership prior to such transaction, either (x) represent 30% or more (50% or more if the Company is not then subject to the requirements of the Exchange Act) (the "Control Percentage") of the combined voting power of the then outstanding Voting Stock of the Company, or (y) if such person's beneficial ownership prior to such transaction already exceeded the applicable Control Percentage, result in an increase in

such holder's beneficial ownership percentage (all such percentages being calculated as provided in Rule 13d-3(d) under the Exchange Act with respect to rights to acquire the Company's securities).

All references in this definition to specific sections of or rules promulgated under the Exchange Act shall apply whether or not the Company is then subject to the requirements of the Exchange Act.

(l) "Director" means a member of the Board.

(m) "Employee" means any person, including Officers, Named Executives and Directors, employed by the Company or any Parent or Subsidiary of the Company, with the status of employment determined based upon such minimum number of hours or periods worked as shall be determined by the Administrator in its discretion, subject to any requirements of the Code. The payment of a director's fee to a Director shall not be sufficient to constitute "employment" of such Director by the Company.

(n) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(o) "Fair Market Value" means, as of any date, the fair market value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system including without limitation the National Market of the National Association of Securities Dealers, Inc. Automated Quotation ("NASDAQ") System, its Fair Market Value shall be the closing sales price for such stock (or the closing bid, if no sales were reported), as quoted on such system or exchange, or the exchange with the greatest volume of trading in Common Stock for the last market trading day prior to the time of determination, as reported in The Wall Street Journal or such other source as the Administrator deems reliable;

(ii) If the Common Stock is quoted on the NASDAQ System (but not on the National Market thereof) or regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value shall be the mean between the high bid and low asked prices for the Common Stock for the last market trading day prior to the time of determination, as reported in The Wall Street Journal or such other source as the Administrator deems reliable; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value thereof shall be determined in good faith by the Administrator.

(p) "Incentive Stock Option" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code, as designated in the applicable written option agreement.

(q) "Named Executive" means any individual who, on the last day of the Company's fiscal year, is the chief executive officer of the Company (or is acting in such capacity) or among the four highest compensated officers of the Company (other than the chief executive officer). Such officer status shall be determined pursuant to the executive compensation disclosure rules under the Exchange Act.

(r) "Nonstatutory Stock Option" means an Option not intended to qualify as an Incentive Stock Option, as designated in the applicable written option agreement.

(s) "Option" means a stock option granted pursuant to the Plan.

(t) "Optioned Stock" means the Common Stock subject to an Option.

(u) "Optionee" means an Employee or Consultant who receives an Option.

(v) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code, or any successor provision.

(w) "Plan" means this Third Amended and Restated 1995 Stock Option Plan.

(x) "Reporting Person" means an officer, director, or greater than ten percent stockholder of the Company within the meaning of Rule 16a-2 under the Exchange Act, who is required to file reports pursuant to Rule 16a-3 under the Exchange Act.

(y) "Rule 16b-3" means Rule 16b-3 promulgated under the Exchange Act, as the same may be amended from time to time, or any successor provision.

(z) "Share" means a share of the Common Stock, as adjusted in accordance with Section 11 of the Plan.

(aa) "Stock Exchange" means any stock exchange or consolidated stock price reporting system on which prices for the Common Stock are quoted at any given time.

(bb) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code, or any successor provision.

3. STOCK SUBJECT TO THE PLAN. Subject to the provisions of Section 11 of the Plan, the maximum aggregate number of shares that may be optioned and sold under the Plan is 4,150,000 shares of Common Stock. The shares may be authorized, but unissued, or reacquired Common Stock. If an Option should expire

or become unexercisable for any reason without having been exercised in full, the unpurchased Shares that were subject thereto shall, unless the Plan shall have been terminated, become available for future grant under the Plan. In addition, any shares of Common Stock which are retained by the Company upon exercise of an Option in order to satisfy the exercise or purchase price for such Option or any withholding taxes due with respect to such exercise shall be treated as not issued and shall continue to be available under the Plan. Shares repurchased by the Company pursuant to any repurchase right which the Company may have shall not be available for future grant under the Plan.

4. ADMINISTRATION OF THE PLAN.

(a) Initial Plan Procedure. Prior to the date, if any, upon which the Company becomes subject to the Exchange Act, the Plan shall be administered by the Board or a committee appointed by the Board.

(b) Plan Procedure After the Date, if any, Upon Which the Company Becomes Subject to the Exchange Act.

(i) Multiple Administrative Bodies. If permitted by Rule 16b-3, grants under the Plan may be made by different bodies with respect to directors, non-director officers and Employees or Consultants who are not Reporting Persons.

(ii) Administration With Respect to Reporting Persons. With respect to grants of Options to Employees who are Reporting Persons, such grants shall be made by (A) the Board if the Board may make grants to Reporting Persons under the Plan in compliance with Rule 16b-3 and Section 162(m) of the Code as it applies so as to qualify grants of options to Named Executive Officers as performance-based compensation, or (B) a committee designated by the Board to make grants to Reporting Persons under the Plan, which committee shall be constituted in such a manner as to permit grants under the Plan to comply with Rule 16b-3 and to qualify grants of Options to Named Executives as performance-based compensation under Section 162(m) of the Code and otherwise so as to satisfy the Applicable Laws. Once appointed, such committee shall continue to serve in its designated capacity until otherwise directed by the Board. From time to time the Board may increase the size of the committee and appoint additional members thereof, remove members (with or without cause) and appoint new members in substitution therefor, fill vacancies, however caused, and remove all members of the committee and thereafter directly make grants to Reporting Persons under the Plan, all to the extent permitted by Rule 16b-3.

(iii) Administration With Respect to Consultants and Other Employees. With respect to grants of Options to Employees or Consultants who are not Reporting Persons, the Plan shall be administered by (A) the Board or (B) a committee designated by the Board, which committee shall be constituted in such a manner as to satisfy the legal requirements relating to the administration of incentive stock option plans, if any, of applicable corporate and securities

laws, of the Code and of any applicable Stock Exchange (the "Applicable Laws"). Once appointed, such Committee shall continue to serve in its designated capacity until otherwise directed by the Board. From time to time the Board may increase the size of the Committee and appoint additional members thereof, remove members (with or without cause) and appoint new members in substitution therefor, fill vacancies, however caused, and remove all members of the Committee and thereafter directly administer the Plan, all to the extent permitted by the Applicable Laws.

(c) Powers of the Administrator. Subject to the provisions of the Plan and in the case of a Committee, the specific duties delegated by the Board to such Committee, and subject to the approval of any relevant authorities, including the approval, if required, of any Stock Exchange, the Administrator shall have the authority, in its discretion:

(i) to determine the Fair Market Value of the Common Stock, in accordance with Section 2(o) of the Plan;

(ii) to select the Consultants and Employees to whom Options may from time to time be granted hereunder;

(iii) to determine whether and to what extent Options or any combination thereof are granted hereunder;

(iv) to determine the number of shares of Common Stock to be covered by each such option granted hereunder;

(v) to approve forms of agreement for use under the Plan;

(vi) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any option granted hereunder;

(vii) to determine whether and under what circumstances an Option may be settled in cash under Section 9(f) instead of Common Stock;

(viii) to reduce the exercise price of any Option to the then current Fair Market Value if the Fair Market Value of the Common Stock covered by such Option shall have declined since the date the Option was granted;

(ix) to construe and interpret the terms of the Plan and Options granted under the Plan; and

(x) in order to fulfill the purposes of the Plan and without amending the Plan, to modify grants of Options to participants who are foreign nationals or employed outside of the United States in order to recognize differences in local law, tax policies or customs.

(d) Effect of Administrator's Decision. All decisions, determinations

and interpretations of the Administrator shall be final and binding on all holders of Options.

5. ELIGIBILITY.

(a) Recipients of Grants. Nonstatutory Stock Options may be granted to Employees and Consultants. Incentive Stock Options may be granted only to Employees; provided, however, that Employees of an Affiliate shall not be eligible to receive Incentive Stock Options. An Employee or Consultant who has been granted an Option may, if he or she is otherwise eligible, be granted additional Options.

(b) Type of Option. Each Option shall be designated in the written option agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designations, to the extent that the aggregate Fair Market Value of the Shares with respect to which Options designated as Incentive Stock Options are exercisable for the first time by any Optionee during any calendar year (under all plans of the Company or any Parent or Subsidiary) exceeds $100,000, such excess Options shall be treated as Nonstatutory Stock Options. For purposes of this Section 5(b), Incentive Stock Options shall be taken into account in the order in which they were granted, and the Fair Market Value of the Shares subject to an Incentive Stock Option shall be determined as of the date of the grant of such Option.

(c) Employment Relationship. The Plan shall not confer upon any Optionee any right with respect to continuation of employment or consulting relationship with the Company, nor shall it interfere in any way with such Optionee's right or the Company's right to terminate his or her employment or consulting relationship at any time, with or without cause.

6. TERM OF PLAN. The Plan shall become effective upon the earlier to occur of its adoption by the Board of Directors or its approval by the stockholders of the Company as described in Section 19 of the Plan. It shall continue in effect for a term of ten (10) years unless sooner terminated under Section 15 of the Plan.

7. TERM OF OPTION. The term of each Option shall be the term stated in the Option Agreement; provided, however, that the term shall be no more than ten (10) years from the date of grant thereof or such shorter term as may be provided in the Option Agreement. However, in the case of an Incentive Stock Option granted to an Optionee who, at the time the Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Option shall be five (5) years from the date of grant thereof or such shorter term as may be provided in the Option Agreement.

8. LIMITATION ON GRANTS TO EMPLOYEES. Subject to adjustment as provided in this Plan, the maximum number of Shares which may be subject to options

granted to any one Employee under this Plan for any fiscal year of the Company shall be [250,000]. This Section 8 shall not apply prior to the date upon which the Company becomes subject to the Exchange Act and following such date, shall not apply until the (i) earliest of: (A) the first material modification of the Plan (including any increase to the number of shares reserved for issuance under the Plan in accordance with Section 3); (B) the issuance of all of the shares of common stock reserved for issuance under the Plan; (C) the expiration of the Plan; or (D) the first meeting of shareholders at which directors are to be elected that occurs after the close of the third calendar year following the calendar year in which occurred the first registration of any equity security under Section 12 of the Exchange Act; or (ii) such other date required by Section 162(m) of the Code and the rules and regulations promulgated thereunder.

9. OPTION EXERCISE PRICE AND CONSIDERATION.

(a) The per share exercise price for the Shares to be issued pursuant to exercise of an Option shall be such price as is determined by the Board, but shall be subject to the following:

(i) In the case of an Incentive Stock Option that is:

(A) granted to an Employee who, at the time of the grant of such Incentive Stock Option, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant.

(B) granted to any other Employee, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(ii) In the case of a Nonstatutory Stock Option that is:

(A) granted to a person who, at the time of the grant of such Option, is a Named Executive Officer the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of the grant.

(B) granted to any person other than a Named Executive Officer, the per Share exercise price shall be no less than 85% of the Fair Market Value per Share on the date of grant.

(b) The consideration to be paid for the Shares to be issued upon exercise of an Option, including the method of payment, shall be determined by the Administrator (and, in the case of an Incentive Stock Option, shall be determined at the time of grant) and may consist entirely of (1) cash, (2) check, (3) promissory note (subject to the provisions of Section 153 of the Delaware General Corporation Law), (4) other Shares that (x) in the case of Shares acquired upon exercise of an Option, have been owned by the Optionee for

more than six months on the date of surrender or such other period as may be required to avoid a charge to the Company's earnings [were not acquired, directly or indirectly from the Company], and (y) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which such Option shall be exercised, (5) authorization for the Company to retain from the total number of Shares as to which the Option is exercised that number of Shares having a Fair Market Value on the date of exercise equal to the exercise price for the total number of Shares as to which the Option is exercised, (6) delivery of a properly executed exercise notice together with such other documentation as the Administrator and the broker, if applicable, shall require to effect an exercise of the Option and delivery to the Company of the sale or loan proceeds required to pay the exercise price and any applicable income or employment taxes, (7) any combination of the foregoing methods of payment, or (8) such other consideration and method of payment for the issuance of Shares to the extent permitted under Applicable Laws. In making its determination as to the type of consideration to accept, the Administrator shall consider if acceptance of such consideration may be reasonably expected to benefit the Company.

10. EXERCISE OF OPTION.

(a) Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder shall be exercisable at such times and under such conditions as determined by the Administrator, including performance criteria with respect to the Company and/or the Optionee, and as shall be permissible under the terms of the Plan.

An Option may not be exercised for a fraction of a Share.

An Option shall be deemed to be exercised when written notice of such exercise has been given to the Company in accordance with the terms of the Option by the person entitled to exercise the Option and the Company has received full payment for the Shares

with respect to which the Option is exercised. Full payment may, as authorized by the Administrator, consist of any consideration and method of payment allowable under Section 9(b) of the Plan. Until the issuance (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company) of the stock certificate evidencing such Shares, no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Optioned Stock, not withstanding the exercise of the Option. The Company shall issue (or cause to be issued) such stock certificate promptly upon exercise of the Option. No adjustment will be made for a dividend or other right for which the record date is prior to the date the stock certificate is issued, except as provided in Section 12 of the Plan.

Exercise of an Option in any manner shall result in a decrease in the number of Shares that thereafter may be available, both for purposes of the

Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(b) Termination of Employment or Consulting Relationship. Subject to Section 10(c), in the event of termination of an Optionee's Continuous Status as an Employee or Consultant with the Company, such Optionee may, but only within three (3) months (or such other period of time not less than thirty (30) days as is determined by the Administrator, with such determination in the case of an Incentive Stock Option being made at the time of grant of the Option and not exceeding three (3) months) after the date of such termination (but in no event later than the expiration date of the term of such Option as set forth in the Option Agreement), exercise his or her Option to the extent that the Optionee was entitled to exercise it at the date of such termination. To the extent that Optionee was not entitled to exercise the Option at the date of such termination, or if Optionee does not exercise such Option to the extent so entitled within the time specified herein, the Option shall terminate. No termination shall be deemed to occur and this Section 10(b) shall not apply if (i) the Optionee is a Consultant who becomes an Employee; or (ii) the Optionee is an Employee who becomes a Consultant.

(c) Disability of Optionee

(i) Notwithstanding Section 10(b) above, in the event of termination of an Optionee's Continuous Status as an Employee or Consultant as a result of his or her total and permanent disability (within the meaning of Section 22(e)(3) of the Code), Optionee may, but only within twelve (12) months from the date of such termination (but in no event later than the expiration date of the term of such Option as set forth in the Option Agreement), exercise the Option to the extent otherwise entitled to exercise it at the date of such termination. To the extent that Optionee was not entitled to exercise the Option at the date of termination, or if Optionee does not exercise such Option to the extent so entitled within the time specified herein, the Option shall terminate.

(ii) In the event of termination of an Optionee's Continuous Status as an Employee or Consultant as a result of a disability which does not fall within the meaning of total and permanent disability (as set forth in Section 22(e)(3) of the Code), Optionee may, but only within six (6) months from the date of such termination (but in no event later than the expiration date of the term of such Option as set forth in the Option Agreement), exercise the

Option to the extent otherwise entitled to exercise it at the date of such termination. However, to the extent that such Optionee fails to exercise an Option which is an Incentive Stock Option ("ISO") (within the meaning of Section 422 of the Code) within three (3) months of the date of such termination, the Option will not qualify for ISO treatment under the Code. To the extent that Optionee was not entitled to exercise the Option at the date of termination, or if Optionee does not exercise such Option to the extent so entitled within six months (6) from the date of termination, the Option shall terminate.

(d) Death of Optionee. In the event of the death of an Optionee during the period of Continuous Status as an Employee or Consultant since the date of grant of the Option, or within thirty (30) days following termination of Optionee's Continuous Status as an Employee or Consultant, the Option may be exercised, at any time within six (6) months following the date of death (but in no event later than the expiration date of the term of such Option as set forth in the Option Agreement), by Optionee's estate or by a person who acquired the right to exercise the Option by bequest or inheritance, but only to the extent of the right to exercise that had accrued at the date of death or, if earlier, the date of termination of Optionee's Continuous Status as an Employee or Consultant. To the extent that Optionee was not entitled to exercise the Option at the date of death or termination, as the case may be, or if Optionee does not exercise such Option to the extent so entitled within the time specified herein, the Option shall terminate.

(e) Extension of Exercise Period. The Administrator shall have full power and authority to extend the period of time for which an option is to remain exercisable following termination of an Optionee's Continuous Status as an Employee or Consultant from the periods set forth in Sections 10(b), 10(c) and 10(d) above or in the Option Agreement to such greater time as the Board shall deem appropriate, provided, that in no event shall such option be exercisable later than the date of expiration of the term of such Option as set forth in the Option Agreement.

(f) Termination for Misconduct. Notwithstanding Sections 10(b), (c), (d) and (e) above, in the event of termination of an Optionee's Continuous Status as an Employee or Consultant for Misconduct, all outstanding Options held by the Optionee shall terminate immediately and cease to be outstanding. For purposes of this Section 10(f), Misconduct shall mean the commission of any act of fraud, embezzlement or dishonesty by the Optionee, any unauthorized use or disclosure by such person of confidential information or trade secrets of the Company or any Parent or Subsidiary, or any other intentional misconduct by such person adversely affecting the business or affairs of the Company or any Parent or Subsidiary in a material manner.

(g) Rule 16b-3. Options granted to Reporting Persons shall comply with Rule 16b-3 and shall contain such additional conditions or restrictions as may be required thereunder to qualify for the maximum exemption for Plan transactions.

(h) Buyout Provisions. The Administrator may at any time offer to buy out for a payment in cash or Shares, an Option previously granted, based on such terms and

conditions as the Administrator shall establish and communicate to the Optionee at the time that such offer is made.

11. WITHHOLDING TAXES. As a condition to the exercise of Options granted hereunder, the Optionee shall make such arrangements as the Administrator may require for the satisfaction of any federal, state, local or foreign withholding tax obligations that may arise in connection with the exercise, receipt or vesting of such Option. The Company shall not be required to issue any Shares under the Plan until such obligations are satisfied.

12. STOCK WITHHOLDING TO SATISFY WITHHOLDING TAX OBLIGATIONS. At the discretion of the Administrator, Optionees may satisfy withholding obligations as provided in this paragraph. When an Optionee incurs tax liability in connection with an Option, which tax liability is subject to tax withholding under applicable tax laws, and the Optionee is obligated to pay the Company an amount required to be withheld under applicable tax laws, the Optionee may satisfy the withholding tax obligation by one or some combination of the following methods: (a) by cash payment, or (b) out of Optionee's current compensation, (c) if permitted by the Administrator, in its discretion, by surrendering to the Company Shares that (i) in the case of Shares previously acquired from the Company, have been owned by the Optionee for more than six months on the date of surrender, and (ii) have a fair market value on the date of surrender equal to or less than the applicable taxes on the ordinary income recognized or (d) by electing to have the Company withhold from the Shares to be issued upon exercise of the Option, if any, that number of Shares having a fair market value equal to the amount required to be withheld. For this purpose, the fair market value of the Shares to be withheld shall be determined on the date that the amount of tax to be withheld is to be determined (the "Tax Date").

Any surrender by a Reporting Person of previously owned Shares to satisfy tax withholding obligations arising upon exercise of this Option must comply with the applicable provisions of Rule 16b-3.

All elections by an Optionee to have Shares withheld to satisfy tax withholding obligations shall be made in writing in a form acceptable to the Administrator and shall be subject to the following restrictions:

(a) the election must be made on or prior to the applicable Tax Date;

(b) once made, the election shall be irrevocable as to the particular Shares of the Option as to which the election is made; and

(c) all elections shall be subject to the consent or disapproval of the Administrator.

In the event the election to have Shares withheld is made by an Optionee and the Tax Date is deferred under Section 83 of the Code because no election is filed under Section 83(b) of the Code, the Optionee shall receive the full number of Shares with respect to which the Option is exercised but such Optionee shall be unconditionally obligated to tender back to the Company the proper number of Shares on the Tax Date.

13. ADJUSTMENTS UPON CHANGES IN CAPITALIZATION, MERGER OR CERTAIN OTHER TRANSACTIONS.

(a) Changes in Capitalization. Subject to any required action by the stockholders of the Company, the number of shares of Common Stock covered by each outstanding Option, and the number of shares of Common Stock that have been authorized for issuance under the Plan but as to which no Options have yet been granted or that have been returned to the Plan upon cancellation or expiration of an Option, the maximum number of shares of Common Stock for which Options may be granted to any employee under Section 8 of the Plan, as well as the price per share of Common Stock covered by each such outstanding Option, shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination, recapitalization or reclassification of the Common Stock, or any other increase or decrease in the number of issued shares of Common Stock effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock subject to an Option.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Board shall notify the Optionee at least fifteen (15) days prior to such proposed action. To the extent it has not been previously exercised, the Option will terminate immediately prior to the consummation of such proposed action.

(c) Control Transaction

(i) The Company shall provide each Optionee with notice of the pendency of any Control Transaction (i) at least thirty (30) days prior to the expected date of consummation of a Control Transaction that has been approved or recommended by the Board, or (ii) promptly after the Board becomes aware of the pendency or occurrence of a proposed or completed Control Transaction that has not been approved or recommended by the Board.

(ii) Each Optionee shall be entitled to exercise the vested portion of the Option at any time prior to consummation of a Control Transaction. If the terms of the Option prescribe a time-based vesting schedule, the Optionee shall, conditioned upon consummation of the Control Transaction and upon the Optionee remaining employed by the Company through the date of such consummation, be entitled to accelerated vesting credit equal to either twelve months or twenty-four months of additional vesting beyond that otherwise scheduled, based on whether he or she has been employed by the Company less than two years, or two years or more, respectively, as of the date of such consummation; provided, however, that this sentence shall not apply with respect

to any Option as to which the Administrator determines, in its sole discretion, that the Board or the acquiring person or the surviving corporation, as the case may be, has made

equitable and appropriate provision for the assumption of or the substitution of a new option for the Option on terms which are, as nearly as practicable, the financial equivalent of the Option (taking into account the consideration for which the Common Stock is to be exchanged in the Control Transaction).

(iii) Any exercise may be made contingent upon consummation of a Control Transaction if so elected by the Optionee in his or her notice of exercise, and must be made contingent upon such consummation with respect to any portion of an Option entitled to accelerated vesting under the second sentence of Section 13(c)(ii) above.

(iv) Upon consummation of a Control Transaction that has been approved or recommended by the Board, all unexercised Options shall expire, except to the extent that the Administrator determines otherwise pursuant to the second sentence of Section 13(c)(ii) above.

(d) Certain Distributions. In the event of any distribution to the Company's stockholders of securities of any other entity or other assets (other than dividends payable in cash or stock of the Company) without receipt of consideration by the Company, the Administrator may, in its discretion, appropriately adjust the price per share of Common Stock covered by each outstanding Option to reflect the effect of such distribution.

14. NON-TRANSFERABILITY OF OPTIONS. Options may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised or purchased during the lifetime of the Optionee only by the Optionee. The designation of a beneficiary by an Optionee will not constitute transfer.

15. TIME OF GRANTING OPTIONS. The date of grant of an Option shall, for all purposes, be the date on which the Administrator makes the determination granting such Option, or such other date as is determined by the Board; provided however that in the case of any Incentive Stock Option, the grant date shall be the later of the date on which the Administrator makes the determination granting such Incentive Stock Option or the date of commencement of the Optionee's employment relationship with the Company. Notice of the determination shall be given to each Employee or Consultant to whom an Option is so granted within a reasonable time after the date of such grant.

16. AMENDMENT AND TERMINATION OF THE PLAN.

(a) Authority to Amend or Terminate. The Board may at any time amend, alter, suspend or discontinue the Plan, but no amendment, alteration, suspension or discontinuation shall be made that would impair the rights of any

Optionee under any grant theretofore made, without his or her consent. In addition, to the extent necessary and desirable to comply with Rule 16b-3 or with Sections 162(m) and 422 of the Code (or any other applicable law or regulation, including the requirements of any Stock Exchange), the Company shall obtain stockholder approval of any Plan amendment in such a manner and to such a degree as required.

(b) Effect of Amendment or Termination. No amendment or termination of the Plan shall adversely affect Options already granted, unless mutually agreed otherwise between the Optionee and the Board, which agreement must be in writing and signed by the Optionee and the Company.

17. CONDITIONS UPON ISSUANCE OF SHARES. Shares shall not be issued pursuant to the exercise of an Option unless the exercise of such Option and the issuance and delivery of such Shares pursuant thereto shall comply with all relevant provisions of law, including, without limitation, the Securities Act of 1933, as amended, the Exchange Act, the rules and regulations promulgated thereunder, and the requirements of any Stock Exchange and shall be further subject to the approval of counsel to the Company with respect to such compliance.

As a condition to the exercise of an Option, the Company may require the person exercising such Option to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required by law.

18. RESERVATION OF SHARES. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.

19. AGREEMENTS. Options shall be evidenced by written agreements in such form as the Administrator shall approve from time to time.

20. STOCKHOLDER APPROVAL.

(a) Continuance of the Plan shall be subject to approval by the stockholders of the Company within twelve (12) months before or after the date the Plan is adopted. Such stockholder approval shall be obtained in the degree and manner required under applicable state and federal law and the rules of any Stock Exchange upon which the Common Stock is listed. All Options issued under the Plan shall become void in the event such approval is not obtained.

(b) In the event that the Company registers any class of equity securities pursuant to Section 12 of the Exchange Act, any required approval of the stockholders of the Company obtained after such registration shall be solicited substantially in accordance with Section 14(a) of the Exchange Act and the rules and regulations promulgated thereunder.

(c) If any required approval by the stockholders of the Plan itself or of any amendment thereto is solicited at any time otherwise than in the manner described in Section 20(b) hereof, then the Company shall, at or prior to the first annual meeting of stockholders held subsequent to the later of (1) the first registration of any class of equity

securities of the Company under Section 12 of the Exchange Act or (2) the granting of an Option hereunder to an officer or director after such registration, do the following:

(i) furnish in writing to the holders entitled to vote for the Plan substantially the same information that would be required (if proxies to be voted with respect to approval or disapproval of the Plan or amendment were then being solicited) by the rules and regulations in effect under Section 14(a) of the Exchange Act at the time such information is furnished; and

(ii) file with, or mail for filing to, the Securities and Exchange Commission four copies of the written information referred to in subsection (i) hereof not later than the date on which such information is first sent or given to stockholders.

EXHIBIT 10.3

METAWAVE COMMUNICATIONS CORPORATION
1998 STOCK OPTION PLAN

1. PURPOSES OF THE PLAN. The purposes of this 1998 Stock Option Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Employees and Consultants of the Company and its Subsidiaries and to promote the success of the Company's business. Options granted under the Plan may be incentive stock options (as defined under Section 422 of the Code) or nonstatutory stock options, as determined by the Administrator at the time of grant of an option and subject to the applicable provisions of Section 422 of the Code, as amended, and the regulations promulgated thereunder.

2. DEFINITIONS. As used herein, the following definitions shall apply:

(a) "Administrator" means the Board or any of its Committees appointed pursuant to Section 4 of the Plan.

(b) "Affiliate" means an entity other than a Subsidiary (as defined below) in which the Company owns an equity interest.

(c) "Applicable Laws" shall have the meaning set forth in Section 4(b)(iii) below.

(d) "Board" means the Board of Directors of the Company.

(e) "Code" means the Internal Revenue Code of 1986, as amended.

(f) "Committee" means the Committee appointed by the Board of Directors in accordance with Section 4(a) of the Plan.

(g) "Common Stock" means the Common Stock of the Company.

(h) "Company" means Metawave Communications Corporation, a Delaware corporation.

(i) "Consultant" means any person, including an advisor, who is
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engaged by the Company or any Parent or Subsidiary to render services and is compensated for such services, and any director of the Company whether compensated for such services or not.

(j) "Continuous Status as an Employee or Consultant" means the
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absence of any interruption or termination of service as an Employee or Consultant. Continuous Status as an Employee or Consultant shall not be considered interrupted in the case of: (i) sick leave; (ii) military leave; (iii) any other leave of absence approved by the Administrator, provided that such leave is for a period of not more than ninety (90) days, unless reemployment upon the expiration of such leave is guaranteed by contract or statute, or unless provided otherwise

pursuant to Company policy adopted from time to time; or (iv) in the case of transfers between locations of the Company or between the Company, its Subsidiaries or their respective successors. For purposes of this Plan, a change in status from an Employee to a Consultant or from a Consultant to an Employee will not constitute an interruption of Continuous Status as an Employee or Consultant.

(k) "Control Transaction" means:

(i) any merger, consolidation, or statutory or contractual share exchange in which there is no group of persons who held a majority of the outstanding Common Stock immediately prior to the transaction who continue to hold, immediately following the transaction, at least a majority of the combined voting power of the outstanding shares of that class of capital stock (herein, "Voting Stock") which ordinarily (and apart from rights accruing under special
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circumstances) has the right to vote in the election of directors of the Company (or of any other corporation or entity whose securities are issued in such transaction wholly or partially in exchange for Common Stock);

(ii) any liquidation or dissolution of the Company;

(iii) any transaction (or series of related transactions) involving the sale, lease, exchange or other transfer not in the ordinary course of business of all, or substantially all, of the assets of the Company; or

(iv) any transaction (or series of related transactions) in which any person (including, without limitation, any natural person, any corporation or other legal entity, and any person as defined in Sections 13(d)(3) and 14(d)(2) of the Exchange Act, other than the Company or any employee benefit plan sponsored by the Company):

(A) purchases any Common Stock (or securities convertible

into Common Stock) for cash, securities or any other consideration pursuant to a tender offer or exchange offer subject to the requirements of the Exchange Act, or

(B) directly or indirectly becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act) of securities of the Company which, when aggregated with such person's beneficial ownership prior to such transaction, either (x) represent 30% or more (50% or more if the Company is not then subject to the requirements of the Exchange Act) (the "Control Percentage") of the combined voting power of the then outstanding Voting Stock of the Company, or (y) if such person's beneficial ownership prior to such transaction already exceeded the applicable Control Percentage, result in an increase in such holder's beneficial ownership percentage (all such percentages being calculated as provided in Rule 13d-3(d) under the Exchange Act with respect to rights to acquire the Company's securities).

All references in this definition to specific sections of or rules promulgated under the Exchange Act shall apply whether or not the Company is then subject to the requirements of the Exchange Act.

(l) "Director" means a member of the Board.

(m) "Employee" means any person, including Officers, Named Executives
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and Directors, employed by the Company or any Parent or Subsidiary of the Company, with the status of employment determined based upon such minimum number of hours or periods worked as shall be determined by the Administrator in its discretion, subject to any requirements of the Code. The payment of a director's fee to a Director shall not be sufficient to constitute "employment" of such Director by the Company.

(n) "Exchange Act" means the Securities Exchange Act of 1934, as
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amended.

(o) "Fair Market Value" means, as of any date, the fair market value
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of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system including without limitation the National Market of the National Association of Securities Dealers, Inc. Automated Quotation ("NASDAQ") System, its Fair Market Value shall be the closing sales
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price for such stock (or the closing bid, if no sales were reported), as quoted on such system or exchange, or the exchange with the greatest volume of trading in Common Stock for the last market trading day prior to the time of

determination, as reported in The Wall Street Journal or such other source as the Administrator deems reliable;

(ii) If the Common Stock is quoted on the NASDAQ System (but not on the National Market thereof) or regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value shall be the mean between the high bid and low asked prices for the Common Stock for the last market trading day prior to the time of determination, as reported in The Wall Street Journal or such other source as the Administrator deems reliable; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value thereof shall be determined in good faith by the Administrator.

(p) "Incentive Stock Option" means an Option intended to qualify as
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an incentive stock option within the meaning of Section 422 of the Code, as designated in the applicable written option agreement.

(q) "Named Executive" means any individual who, on the last day of
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the Company's fiscal year, is the chief executive officer of the Company (or is acting in such capacity) or among the four highest compensated officers of the Company (other than the chief executive officer). Such officer status shall be determined pursuant to the executive compensation disclosure rules under the Exchange Act.

(r) "Nonstatutory Stock Option" means an Option not intended to
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qualify as an Incentive Stock Option, as designated in the applicable written option agreement.

(s) "Option" means a stock option granted pursuant to the Plan.

(t) "Optioned Stock" means the Common Stock subject to an Option.

(u) "Optionee" means an Employee or Consultant who receives an
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Option.

(v) "Parent" means a "parent corporation," whether now or hereafter
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existing, as defined in Section 424(e) of the Code, or any successor provision.

(w) "Plan" means this 1998 Stock Option Plan.

(x) "Reporting Person" means an officer, director, or greater than ten percent stockholder of the Company within the meaning of Rule 16a-2 under the Exchange Act, who is required to file reports pursuant to Rule 16a-3 under the Exchange Act.

(y) "Rule 16b-3" means Rule 16b-3 promulgated under the Exchange Act, as the same may be amended from time to time, or any successor provision.

(z) "Share" means a share of the Common Stock, as adjusted in accordance with Section 11 of the Plan.

(aa) "Stock Exchange" means any stock exchange or consolidated stock price reporting system on which prices for the Common Stock are quoted at any given time.

(bb) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code, or any successor provision.

3. STOCK SUBJECT TO THE PLAN. Subject to the provisions of Section 11 of the Plan, the maximum aggregate number of shares that may be optioned and sold under the Plan is 850,000 shares of Common Stock (the "Pool"). On the first trading day of each of the five calendar years beginning in 1999 and ending in 2003, the Pool shall be increased by an amount equal to three percent (3%) of the outstanding Common Stock up to a maximum of 1,000,000 in any calendar year, or such lower amount as determined by the Board of Directors.

The shares may be authorized, but unissued, or reacquired Common Stock. If an Option should expire or become unexercisable for any reason without having been exercised in full, the unpurchased Shares that were subject thereto shall, unless the Plan shall have been terminated, become available for future grant under the Plan. In addition, any shares of Common Stock which are retained by the Company upon exercise of an Option in order to satisfy the exercise or purchase price for such Option or any withholding taxes due with respect to such exercise shall be treated as not issued and shall continue to be available under the Plan. Shares repurchased by the Company pursuant to any repurchase right which the Company may have shall not be available for future grant under the Plan.

4. ADMINISTRATION OF THE PLAN.

(a) Initial Plan Procedure. Prior to the date, if any, upon which the Company becomes subject to the Exchange Act, the Plan shall be administered by the Board or a committee appointed by the Board.

(b) Plan Procedure After the Date, if any, Upon Which the Company Becomes Subject to the Exchange Act.

(i) Multiple Administrative Bodies. If permitted by Rule 16b-3, grants under the Plan may be made by different bodies with respect to directors, non-director officers and Employees or Consultants who are not Reporting Persons.

(ii) Administration With Respect to Reporting Persons. With respect to grants of Options to Employees who are Reporting Persons, such grants shall be made by (A) the Board if the Board may make grants to Reporting Persons under the Plan in compliance with Rule 16b-3 and Section 162(m) of the Code as it applies so as to qualify grants of options to Named Executive Officers as performance-based compensation, or (B) a committee designated by the Board to make grants to Reporting Persons under the Plan, which committee shall be constituted in such a manner as to permit grants under the Plan to comply with Rule 16b-3 and to qualify grants of Options to Named Executives as performance-based compensation under Section 162(m) of the Code and otherwise so as to satisfy the Applicable Laws. Once appointed, such committee shall continue to serve in its designated capacity until otherwise directed by the Board. From time to time the Board may increase the size of the committee and appoint additional members thereof, remove members (with or without cause) and appoint new members in substitution therefor, fill vacancies, however caused, and remove all members of the committee and thereafter directly make grants to Reporting Persons under the Plan, all to the extent permitted by Rule 16b-3.

(iii) Administration With Respect to Consultants and Other Employees. With respect to grants of Options to Employees or Consultants who are not Reporting Persons, the Plan shall be administered by (A) the Board or (B) a committee designated by the Board, which committee shall be constituted in such a manner as to satisfy the legal requirements relating to the administration of incentive stock option plans, if any, of applicable corporate and securities laws, of the Code and of any applicable Stock Exchange (the "Applicable Laws"). Once appointed, such Committee shall continue to serve in its designated capacity until otherwise directed by the Board. From time to time the Board may increase the size of the Committee and appoint additional members thereof, remove members (with or without cause) and appoint new members in substitution therefor, fill vacancies, however caused, and remove all members

of the Committee and thereafter directly administer the Plan, all to the extent permitted by the Applicable Laws.

(c) Powers of the Administrator. Subject to the provisions of the Plan and in the case of a Committee, the specific duties delegated by the Board to such Committee, and subject to the approval of any relevant authorities, including the approval, if required, of any Stock Exchange, the Administrator shall have the authority, in its discretion:

(i) to determine the Fair Market Value of the Common Stock, in accordance with Section 2(o) of the Plan;

(ii) to select the Consultants and Employees to whom Options may from time to time be granted hereunder;

(iii) to determine whether and to what extent Options or any combination thereof are granted hereunder;

(iv) to determine the number of shares of Common Stock to be covered by each such option granted hereunder;

(v) to approve forms of agreement for use under the Plan;

(vi) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any option granted hereunder;

(vii) to determine whether and under what circumstances an Option may be settled in cash under Section 9(f) instead of Common Stock;

(viii) to reduce the exercise price of any Option to the then current Fair Market Value if the Fair Market Value of the Common Stock covered by such Option shall have declined since the date the Option was granted;

(ix) to construe and interpret the terms of the Plan and Options granted under the Plan; and

(x) in order to fulfill the purposes of the Plan and without amending the Plan, to modify grants of Options to participants who are foreign nationals or employed outside of the United States in order to recognize differences in local law, tax policies or customs.

(d) Effect of Administrator's Decision. All decisions, determinations and interpretations of the Administrator shall be final and binding on all holders of Options.

5. ELIGIBILITY.

(a) Recipients of Grants. Nonstatutory Stock Options may be granted to Employees and Consultants. Incentive Stock Options may be granted only to Employees; provided, however, that Employees of an Affiliate shall not be eligible to receive Incentive Stock Options. An Employee or Consultant who has been granted an Option may, if he or she is otherwise eligible, be granted additional Options.

(b) Type of Option. Each Option shall be designated in the written option agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designations, to the extent that the aggregate Fair Market Value of the Shares with respect to which Options designated as Incentive Stock Options are exercisable for

the first time by any Optionee during any calendar year (under all plans of the Company or any Parent or Subsidiary) exceeds $100,000, such excess Options shall be treated as Nonstatutory Stock Options. For purposes of this Section 5(b), Incentive Stock Options shall be taken into account in the order in which they were granted, and the Fair Market Value of the Shares subject to an Incentive Stock Option shall be determined as of the date of the grant of such Option.

(c) Employment Relationship. The Plan shall not confer upon any Optionee any right with respect to continuation of employment or consulting relationship with the Company, nor shall it interfere in any way with such Optionee's right or the Company's right to terminate his or her employment or consulting relationship at any time, with or without cause.

6. TERM OF PLAN. The Plan shall become effective upon the earlier to occur of its adoption by the Board of Directors or its approval by the stockholders of the Company as described in Section 19 of the Plan. It shall continue in effect for a term of ten (10) years unless sooner terminated under Section 15 of the Plan.

7. TERM OF OPTION. The term of each Option shall be the term stated in the Option Agreement; provided, however, that the term shall be no more than ten (10) years from the date of grant thereof or such shorter term as may be provided in the Option Agreement. However, in the case of an Incentive Stock Option granted to an Optionee who, at the time the Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Option shall be five (5) years from the date of grant thereof or such shorter term as may be provided in the Option Agreement.

8. LIMITATION ON GRANTS TO EMPLOYEES. Subject to adjustment as provided in this Plan, the maximum number of Shares which may be subject to options granted to any one Employee under this Plan for any fiscal year of the Company shall be [5,000,000 MINUS 1995 PLAN OUTSTANDING OPTIONS AS OF S-1 EFFECTIVE DATE]. This Section 8 shall not apply prior to the date upon which the Company becomes subject to the Exchange Act and following such date, shall not apply until the (i) earliest of: (A) the first material modification of the Plan (including any increase to the number of shares reserved for issuance under the Plan in accordance with Section 3); (B) the issuance of all of the shares of common stock reserved for issuance under the Plan; (C) the expiration of the Plan; or (D) the first meeting of shareholders at which directors are to be elected that occurs after the close of the third calendar year following the calendar year in which occurred the first registration of any equity security under Section 12 of the Exchange Act; or (ii) such other date required by Section 162(m) of the Code and the rules and regulations promulgated thereunder.

9. OPTION EXERCISE PRICE AND CONSIDERATION.

(a) The per share exercise price for the Shares to be issued pursuant to exercise of an Option shall be such price as is determined by the Board, but shall be subject to the following:

(i) In the case of an Incentive Stock Option that is:

(A) granted to an Employee who, at the time of the grant of such Incentive Stock Option, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant.

(B) granted to any other Employee, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(ii) In the case of a Nonstatutory Stock Option that is:

(A) granted to a person who, at the time of the grant of such Option, is a Named Executive Officer the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of the grant.

(B) granted to any person other than a Named Executive Officer, the per Share exercise price shall be no less than 85% of the Fair Market Value per Share on the date of grant.

(b) The consideration to be paid for the Shares to be issued upon

exercise of an Option, including the method of payment, shall be determined by the Administrator (and, in the case of an Incentive Stock Option, shall be determined at the time of grant) and may consist entirely of (1) cash, (2) check, (3) promissory note (subject to the provisions of Section 153 of the Delaware General Corporation Law), (4) other Shares that (x) in the case of Shares acquired upon exercise of an Option, have been owned by the Optionee for more than six months on the date of surrender or such other period as may be required to avoid a charge to the Company's earnings [were not acquired, directly or indirectly from the Company], and (y) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which such Option shall be exercised, (5) authorization for the Company to retain from the total number of Shares as to which the Option is exercised that number of Shares having a Fair Market Value on the date of exercise equal to the exercise price for the total number of Shares as to which the Option is exercised, (6) delivery of a properly executed exercise notice together with such other documentation as the Administrator and the broker, if applicable, shall require to effect an exercise of the Option and delivery to the Company of the sale or loan proceeds required to pay the exercise price and any applicable income or employment taxes, (7) any combination of the foregoing methods of payment, or (8) such other consideration and method of payment for the issuance of Shares to the extent permitted under Applicable Laws. In making its determination as to the type of consideration to accept, the Administrator shall consider if acceptance of such consideration may be reasonably expected to benefit the Company.

10. EXERCISE OF OPTION.

(a) Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder shall be exercisable at such times and under such conditions as determined by the Administrator, including performance criteria with respect to the Company and/or the Optionee, and as shall be permissible under the terms of the Plan.

An Option may not be exercised for a fraction of a Share.

An Option shall be deemed to be exercised when written notice of such exercise has been given to the Company in accordance with the terms of the Option by the person entitled to exercise the Option and the Company has received full payment for the Shares with respect to which the Option is exercised. Full payment may, as authorized by the Administrator, consist of any consideration and method of payment allowable under Section 9(b) of the Plan. Until the issuance (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company) of the stock certificate evidencing such Shares, no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Optioned Stock, not withstanding the exercise of the Option. The Company shall issue (or cause

to be issued) such stock certificate promptly upon exercise of the Option. No adjustment will be made for a dividend or other right for which the record date is prior to the date the stock certificate is issued, except as provided in Section 12 of the Plan.

Exercise of an Option in any manner shall result in a decrease in the number of Shares that thereafter may be available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(b) Termination of Employment or Consulting Relationship. Subject to Section 10(c), in the event of termination of an Optionee's Continuous Status as an Employee or Consultant with the Company, such Optionee may, but only within three (3) months (or such other period of time not less than thirty (30) days as is determined by the Administrator, with such determination in the case of an Incentive Stock Option being made at the time of grant of the Option and not exceeding three (3) months) after the date of such termination (but in no event later than the expiration date of the term of such Option as set forth in the Option Agreement), exercise his or her Option to the extent that the Optionee was entitled to exercise it at the date of such termination. To the extent that Optionee was not entitled to exercise the Option at the date of such termination, or if Optionee does not exercise such Option to the extent so entitled within the time specified herein, the Option shall terminate. No termination shall be deemed to occur and this Section 10(b) shall not apply if (i) the Optionee is a Consultant who becomes an Employee; or (ii) the Optionee is an Employee who becomes a Consultant.

(c) Disability of Optionee

(i) Notwithstanding Section 10(b) above, in the event of termination of an Optionee's Continuous Status as an Employee or Consultant as a result of his or her total and permanent disability (within the meaning of Section 22(e)(3) of the Code), Optionee may, but only within twelve (12) months from the date of such termination (but in no event later than the expiration date of the term of such Option as set forth in the Option Agreement), exercise the Option to the extent otherwise entitled to exercise it at the date of such termination. To the extent that Optionee was not entitled to exercise the Option at the date of termination, or if Optionee does not exercise such Option to the extent so entitled within the time specified herein, the Option shall terminate.

(ii) In the event of termination of an Optionee's Continuous Status as an Employee or Consultant as a result of a disability which does not fall within the meaning of total and permanent disability (as set forth in Section 22(e)(3) of the Code), Optionee may, but only within six (6) months from the date of such termination (but in no event later than the expiration date of the term of such Option as set forth in the Option Agreement), exercise the

Option to the extent otherwise entitled to exercise it at the date of such termination. However, to the extent that such Optionee fails to exercise an Option which is an Incentive Stock Option ("ISO") (within the meaning of Section 422 of the Code) within three (3) months of the date of such termination, the Option will not qualify for ISO treatment under the Code. To the extent that Optionee was not entitled to exercise the Option at the date of termination, or if Optionee does not exercise such Option to the extent so entitled within six months (6) from the date of termination, the Option shall terminate.

(d) Death of Optionee. In the event of the death of an Optionee during the period of Continuous Status as an Employee or Consultant since the date of grant of the Option, or within thirty (30) days following termination of Optionee's Continuous Status as an Employee or Consultant, the Option may be exercised, at any time within six (6) months following the date of death (but in no event later than the expiration date of the term of such Option as set forth in the Option Agreement), by Optionee's estate or by a person who acquired the right to exercise the Option by bequest or inheritance, but only to the extent of the right to exercise that had accrued at the date of death or, if earlier, the date of termination of Optionee's Continuous Status as an Employee or Consultant. To the extent that Optionee was not entitled to exercise the Option at the date of death or termination, as the case may be, or if Optionee does not exercise such Option to the extent so entitled within the time specified herein, the Option shall terminate.

(e) Extension of Exercise Period. The Administrator shall have full power and authority to extend the period of time for which an option is to remain exercisable following termination of an Optionee's Continuous Status as an Employee or Consultant from the periods set forth in Sections 10(b), 10(c) and 10(d) above or in the Option Agreement to such greater time as the Board shall deem appropriate, provided, that in no event shall such option be exercisable later than the date of expiration of the term of such Option as set forth in the Option Agreement.

(f) Termination for Misconduct. Notwithstanding Sections 10(b), (c), (d) and (e) above, in the event of termination of an Optionee's Continuous Status as an Employee or Consultant for Misconduct, all outstanding Options held by the Optionee shall terminate immediately and cease to be outstanding. For purposes of this Section 10(f), Misconduct shall mean the commission of any act of fraud, embezzlement or dishonesty by the Optionee, any unauthorized use or disclosure by such person of confidential information or trade secrets of the Company or any Parent or Subsidiary, or any other intentional misconduct by such person adversely affecting the business or affairs of the Company or any Parent or Subsidiary in a material manner.

(g) Rule 16b-3. Options granted to Reporting Persons shall comply

with Rule 16b-3 and shall contain such additional conditions or restrictions as may be required thereunder to qualify for the maximum exemption for Plan transactions.

(h) Buyout Provisions. The Administrator may at any time offer to buy out for a payment in cash or Shares, an Option previously granted, based on such terms and conditions as the Administrator shall establish and communicate to the Optionee at the time that such offer is made.

11. WITHHOLDING TAXES. As a condition to the exercise of Options granted hereunder, the Optionee shall make such arrangements as the Administrator may require for the satisfaction of any federal, state, local or foreign withholding tax obligations that may arise in connection with the exercise, receipt or vesting of such Option. The Company shall not be required to issue any Shares under the Plan until such obligations are satisfied.

12. STOCK WITHHOLDING TO SATISFY WITHHOLDING TAX OBLIGATIONS. At the discretion of the Administrator, Optionees may satisfy withholding obligations as provided in this paragraph. When an Optionee incurs tax liability in connection with an Option, which tax liability is subject to tax withholding under applicable tax laws, and the Optionee is obligated to pay the Company an amount required to be withheld under applicable tax laws, the Optionee may satisfy the withholding tax obligation by one or some combination of the following methods: (a) by cash payment, or (b) out of Optionee's current compensation, (c) if permitted by the Administrator, in its discretion, by surrendering to the Company Shares that (i) in the case of Shares previously acquired from the Company, have been owned by the Optionee for more than six months on the date of surrender, and (ii) have a fair market value on the date of surrender equal to or less than the applicable taxes on the ordinary income recognized or (d) by electing to have the Company withhold from the Shares to be issued upon exercise of the Option, if any, that number of Shares having a fair market value equal to the amount required to be withheld. For this purpose, the fair market value of the Shares to be withheld shall be determined on the date that the amount of tax to be withheld is to be determined (the "Tax Date").

Any surrender by a Reporting Person of previously owned Shares to satisfy tax withholding obligations arising upon exercise of this Option must comply with the applicable provisions of Rule 16b-3.

All elections by an Optionee to have Shares withheld to satisfy tax withholding obligations shall be made in writing in a form acceptable to the Administrator and shall be subject to the following restrictions:

(a) the election must be made on or prior to the applicable Tax Date;

(b) once made, the election shall be irrevocable as to the particular

Shares of the Option as to which the election is made; and

(c) all elections shall be subject to the consent or disapproval of the Administrator.

In the event the election to have Shares withheld is made by an Optionee and the Tax Date is deferred under Section 83 of the Code because no election is filed under Section 83(b) of the Code, the Optionee shall receive the full number of Shares with respect to which the Option is exercised but such Optionee shall be unconditionally obligated to tender back to the Company the proper number of Shares on the Tax Date.

13. ADJUSTMENTS UPON CHANGES IN CAPITALIZATION, MERGER OR CERTAIN OTHER TRANSACTIONS.

(a) Changes in Capitalization. Subject to any required action by the stockholders of the Company, the number of shares of Common Stock covered by each outstanding Option, and the number of shares of Common Stock that have been authorized for issuance under the Plan but as to which no Options have yet been granted or that have been returned to the Plan upon cancellation or expiration of an Option, the maximum number of shares of Common Stock for which Options may be granted to any employee under Section 8 of the Plan, as well as the price per share of Common Stock covered by each such outstanding Option, shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination, recapitalization or reclassification of the Common Stock, or any other increase or decrease in the number of issued shares of Common Stock effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock subject to an Option.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Board shall notify the Optionee at least fifteen (15) days prior to such proposed action. To the extent it has not been previously exercised, the Option will terminate immediately prior to the consummation of such proposed action.

(c) Control Transaction

(i) The Company shall provide each Optionee with notice of the pendency of any Control Transaction (i) at least thirty (30) days prior to the expected date of consummation of a Control Transaction that has been approved or recommended by the Board, or (ii) promptly after the Board becomes aware of the pendency or occurrence of a proposed or completed Control Transaction that has not been approved or recommended by the Board.

(ii) Each Optionee shall be entitled to exercise the vested portion of the Option at any time prior to consummation of a Control Transaction. If the terms of the Option prescribe a time-based vesting schedule, the Optionee shall, conditioned upon consummation of the Control Transaction and upon the Optionee remaining employed by the Company through the date of such consummation, be entitled to accelerated vesting credit equal to either twelve

months or twenty-four months of additional vesting beyond that otherwise scheduled, based on whether he or she has been employed by the Company less than two years, or two years or more, respectively, as of the date of such consummation; provided, however, that this sentence shall not apply with respect to any Option as to which the Administrator determines, in its sole discretion, that the Board or the acquiring person or the surviving corporation, as the case may be, has made equitable and appropriate provision for the assumption of or the substitution of a new option for the Option on terms which are, as nearly as practicable, the financial equivalent of the Option (taking into account the consideration for which the Common Stock is to be exchanged in the Control Transaction).

(iii) Any exercise may be made contingent upon consummation of a Control Transaction if so elected by the Optionee in his or her notice of exercise, and must be made contingent upon such consummation with respect to any portion of an Option entitled to accelerated vesting under the second sentence of Section 13(c)(ii) above.

(iv) Upon consummation of a Control Transaction that has been approved or recommended by the Board, all unexercised Options shall expire, except to the extent that the Administrator determines otherwise pursuant to the second sentence of Section 13(c)(ii) above.

(d) Certain Distributions. In the event of any distribution to the Company's stockholders of securities of any other entity or other assets (other than dividends payable in cash or stock of the Company) without receipt of consideration by the Company, the Administrator may, in its discretion, appropriately adjust the price per share of Common Stock covered by each outstanding Option to reflect the effect of such distribution.

14. NON-TRANSFERABILITY OF OPTIONS. Options may not be sold, pledged,

assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised or purchased during the lifetime of the Optionee only by the Optionee. The designation of a beneficiary by an Optionee will not constitute transfer.

15. TIME OF GRANTING OPTIONS. The date of grant of an Option shall, for all purposes, be the date on which the Administrator makes the determination granting such Option, or such other date as is determined by the Board; provided however that in the case of any Incentive Stock Option, the grant date shall be the later of the date on which the Administrator makes the determination granting such Incentive Stock Option or the date of commencement of the Optionee's employment relationship with the Company. Notice of the determination shall be given to each Employee or Consultant to whom an Option is so granted within a reasonable time after the date of such grant.

16. AMENDMENT AND TERMINATION OF THE PLAN.

(a) Authority to Amend or Terminate. The Board may at any time amend, alter, suspend or discontinue the Plan, but no amendment, alteration, suspension or discontinuation shall be made that would impair the rights of any Optionee under any grant theretofore

made, without his or her consent. In addition, to the extent necessary and desirable to comply with Rule 16b-3 or with Sections 162(m) and 422 of the Code (or any other applicable law or regulation, including the requirements of any Stock Exchange), the Company shall obtain stockholder approval of any Plan amendment in such a manner and to such a degree as required.

(b) Effect of Amendment or Termination. No amendment or termination of the Plan shall adversely affect Options already granted, unless mutually agreed otherwise between the Optionee and the Board, which agreement must be in writing and signed by the Optionee and the Company.

17. CONDITIONS UPON ISSUANCE OF SHARES. Shares shall not be issued pursuant to the exercise of an Option unless the exercise of such Option and the issuance and delivery of such Shares pursuant thereto shall comply with all relevant provisions of law, including, without limitation, the Securities Act of 1933, as amended, the Exchange Act, the rules and regulations promulgated thereunder, and the requirements of any Stock Exchange and shall be further subject to the approval of counsel to the Company with respect to such compliance.

As a condition to the exercise of an Option, the Company may require the person exercising such Option to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required by law.

18. RESERVATION OF SHARES. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.

19. AGREEMENTS. Options shall be evidenced by written agreements in such form as the Administrator shall approve from time to time.

20. STOCKHOLDER APPROVAL.

(a) Continuance of the Plan shall be subject to approval by the stockholders of the Company within twelve (12) months before or after the date the Plan is adopted. Such stockholder approval shall be obtained in the degree and manner required under applicable state and federal law and the rules of any Stock Exchange upon which the Common Stock is listed. All Options issued under the Plan shall become void in the event such approval is not obtained.

(b) In the event that the Company registers any class of equity securities pursuant to Section 12 of the Exchange Act, any required approval of the stockholders of the Company obtained after such registration shall be solicited substantially in accordance with Section 14(a) of the Exchange Act and the rules and regulations promulgated thereunder.

(c) If any required approval by the stockholders of the Plan itself or of any amendment thereto is solicited at any time otherwise than in the manner described in Section 20(b) hereof, then the Company shall, at or prior to the first annual meeting of stockholders held subsequent to the later of (1) the first registration of any class of equity securities of the Company under Section 12 of the Exchange Act or (2) the granting of an Option hereunder to an officer or director after such registration, do the following:

(i) furnish in writing to the holders entitled to vote for the Plan substantially the same information that would be required (if proxies to be voted with respect to approval or disapproval of the Plan or amendment were then being solicited) by the rules and regulations in effect under Section 14(a) of

the Exchange Act at the time such information is furnished; and

(ii) file with, or mail for filing to, the Securities and Exchange Commission four copies of the written information referred to in subsection (i) hereof not later than the date on which such information is first sent or given to stockholders.

EXHIBIT 10.4

METAWAVE COMMUNICATIONS CORPORATION

1998 EMPLOYEE STOCK PURCHASE PLAN

The following constitute the provisions of the 1998 Employee Stock Purchase Plan of Metawave Communications Corporation ("the Company").

1. Purpose. The purpose of the Plan is to provide employees of the Company and its Designated Subsidiaries with an opportunity to purchase Common Stock of the Company. It is the intention of the Company to have the Plan qualify as an "Employee Stock Purchase Plan" under Section 423 of the Internal Revenue Code of 1986, as amended. The provisions of the Plan shall, accordingly, be construed so as to extend and limit participation in a manner consistent with the requirements of that section of the Code.

2. Definitions.

(a) "Board" shall mean the Board of Directors of the Company.

(b) "Code" shall mean the Internal Revenue Code of 1986, as amended.

(c) "Common Stock" shall mean the Common Stock of the Company.

(d) "Company" shall mean Metawave Communications Corporation., a Delaware corporation.

(e) "Compensation" shall mean total cash compensation received by an Employee from the Company or a Designated Subsidiary. By way of illustration, but not limitation, Compensation includes regular compensation such as salary, wages, overtime, shift differentials, bonuses, commissions and incentive compensation, but excludes relocation, expense reimbursements, tuition or other reimbursements and income realized as a result of participation in any stock option, stock purchase, or similar plan of the Company or any Designated Subsidiary.

(f) "Continuous Status as an Employee" shall mean the absence of any interruption or termination of service as an Employee. Continuous Status as an Employee shall not be considered interrupted in the case of a leave of absence agreed to in writing by the Company, provided that such leave is for a period of not more than 90 days or reemployment upon the expiration of such leave is guaranteed by contract or statute.

(g) "Contributions" shall mean all amounts credited to the account of a participant pursuant to the Plan.

(h) "Designated Subsidiaries" shall mean the Subsidiaries which have

been designated by the Board from time to time in its sole discretion as eligible to participate in the Plan.

(i) "Employee" shall mean any person, including an Officer, who is an Employee of the Company for tax purposes whose customary employment with the Company is for at least twenty (20) hours per week and more than five (5) months in a calendar year by the Company or one of its Designated Subsidiaries.

(j) "Exchange Act" shall mean the Securities Exchange Act of 1934, as amended.

(k) "Purchase Date" shall mean the last day of each Purchase Period of the Plan.

(l) "Offering Date" shall mean the first business day of each Offering Period of the Plan.

(m) "Offering Period" shall mean a period of approximately twelve (12) months commencing on the first day of the second payroll period in February and August of each year (or at such other time or times as may be determined by the Board of Directors), except for the first Offering Period as set forth in Section 4(a).

(n) "Officer" shall mean a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(o) "Plan" shall mean this Employee Stock Purchase Plan.

(p) "Purchase Period" shall mean a period of approximately six (6) months within an Offering Period, except for the first Purchase Period as set forth in Section 4(b).

(q) "Purchase Price" shall mean the lower of (i) eighty-five percent (85%) of the fair market value of a share of the Company's Common Stock on the Offering Date, or (ii) eighty-five percent (85%) of the fair market value of a share of the Company's Common Stock on the Purchase Date; provided however, that in the event (i) the Company's shareholders approve an increase in the number of shares available for issuance under the Plan, (ii) all or a portion of such additional shares are to be issued with respect to one or more Offering Periods that are underway at the time of shareholder approval ("New Shares") and (iii) the fair market value of a share of Common Stock on the date of such approval (the "Authorization Date FMV") is higher than the fair market value on the Enrollment Date for any such Offering Period, the Purchase Price with respect to New Shares shall be 85 % of the Authorization Date FMV or the fair market value of a share of Common Stock on the Exercise Date, whichever is lower.

(r) "Purchase Right" shall mean an option granted to a participant pursuant to this Plan to purchase such shares of the Company's Common Stock as provided in section 7, which the participant may or may not exercise during the

Offering Period in which such option is outstanding. Such option arises from the right of a participant to withdraw any accumulated payroll deductions of the Employee not previously applied to the purchase of Common Stock under the Plan and to terminate participation in the Plan at any time during an Offering Period.

(s) "Subsidiary" shall mean a corporation, domestic or foreign, of which not less than 50% of the voting shares are held by the Company or a Subsidiary, whether or not such corporation now exists or is hereafter organized or acquired by the Company or a Subsidiary.

3. Eligibility.

(a) Any person who is an Employee as of the Offering Date of a given Offering Period shall be eligible to participate in such Offering Period under the Plan, subject to the requirements of Section 5(a) and the limitations imposed by Section 423(b) of the Code.

(b) Any provisions of the Plan to the contrary notwithstanding, no Employee shall be granted an Purchase Right under the Plan (i) if, immediately after the grant, such Employee (or any other person whose stock would be attributed to such Employee pursuant to Section 424(d) of the Code) would own stock and/or hold outstanding options to purchase stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or of any subsidiary of the Company, or (ii) if such Purchase Right would permit his or her rights to purchase stock under all employee stock purchase plans (described in Section 423 of the Code) of the Company and its Subsidiaries to accrue at a rate which exceeds Twenty-Five Thousand Dollars ($25,000) of fair market value of such stock (determined at the time such Purchase Right is granted) for each calendar year in which such Purchase Right is outstanding at any time.

4. Offering Periods and Purchase Periods.

(a) Offering Periods. The Plan shall be implemented by a series of Offering Periods of approximately twelve (12) months duration, with new Offering Periods commencing on or about the first day of the second payroll period in February and August of each year (or at such other time or times as may be determined by the Board of Directors). The first Offering Period shall commence on the beginning of the effective date of the Registration Statement on Form S-1 for the initial public offering of the Company's Common Stock (the "IPO Date") and continue until the last day of the first payroll period in July 1999. The Plan shall continue until terminated in accordance with Section 19 hereof. The Board of Directors of the Company shall have the power to change the duration and/or the frequency of Offering Periods with respect to future offerings without shareholder approval if such change is announced at least fifteen (15) days prior to the scheduled beginning of the first Offering Period to be affected. Eligible employees may not participate in more than one Offering

Period at a time.

(b) Purchase Periods. Each Offering Period shall consist of two (2) consecutive purchase periods of approximately six (6) months duration. The last day of each Purchase Period shall be the "Purchase Date" for such Purchase Period. A Purchase Period commencing on the beginning of the second payroll period in February shall end on the last day of the first payroll period in the next August. A Purchase Period commencing on the first day of the second payroll period in August shall end on the last day of the first payroll period in the next February. The first Purchase Period shall commence on the IPO Date and shall end on the last day of the first payroll period in February, 1999. The Board of Directors of the Company shall have the power to change the duration and/or frequency of Purchase Periods with respect to

future purchases without shareholder approval if such change is announced at least fifteen (15) days prior to the scheduled beginning of the first Purchase Period to be affected.

5. Participation.

(a) An eligible Employee may become a participant in the Plan by completing a subscription agreement on the form provided by the Company and filing it with the Company's payroll office prior to the applicable Offering Date, unless a later time for filing the subscription agreement is set by the Board for all eligible Employees with respect to a given offering. The subscription agreement shall set forth the percentage of the participant's Compensation (which shall be not less than 1% and not more than 15%) to be paid as Contributions pursuant to the Plan.

(b) Payroll deductions shall commence on the first payroll following the Offering Date and shall end on the last payroll paid on or prior to the last Purchase Period of the Offering Period to which the subscription agreement is applicable, unless sooner terminated by the participant as provided in Section 10.

6. Method of Payment of Contributions.

(a) At the time a participant files his or her subscription agreement, the participant shall elect to have payroll deductions made on each payday during the Offering Period in an amount not less than one percent (1%) and not more than fifteen percent (15%) of such participant's Compensation on each such payday. All payroll deductions made by a participant shall be credited to his or her account under the Plan. A participant may not make any additional payments into such account.

(b) A participant may discontinue his or her participation in the Plan as provided in Section 10, or, during the Offering Period may increase or decrease the rate of his or her Contributions during such Offering Period by

completing and filing with the Company a new subscription agreement; provided, however, that no participant may effect more than one increase or decrease during a Purchase Period. The change in rate shall be effective as of the beginning of the next calendar month following the date of filing of the new subscription agreement, if the agreement is filed at least ten (10) business days prior to such date and, if not, as of the beginning of the next succeeding calendar month.

(c) Notwithstanding the foregoing, to the extent necessary to comply with Section 423(b)(8) of the Code and Section 3(b) herein, a participant's payroll deductions may be decreased to 0% at such time during an Offering Period. Payroll deductions shall recommence at the rate provided in such participant's subscription Agreement at the beginning of the first Offering Period which is scheduled to end in the following calendar year, unless terminated by the participant as provided in Section 10.

7. Grant of Purchase Right.

(a) On the Offering Date of each Offering Period, each eligible Employee participating in such Offering Period shall be granted a Purchase Right to purchase on each Purchase Date a number of shares of the Company's Common Stock determined by dividing such Employee's Contributions accumulated prior to such Purchase Date and retained in the participant's account as of the Purchase Date by the Purchase Price, provided, however, that the maximum number of shares an Employee may purchase during each Purchase Period shall be 2,500 shares of the Company's Common Stock, and provided further that such purchase shall be subject to the limitations set forth in Sections 3(b) and 13. The fair market value of a share of the Company's Common Stock shall be determined as provided in Section 7(b).

(b) The Purchase Right price per share of the shares offered in a given Offering Period shall be the Purchase Price. The fair market value of the Company's Common Stock on a given date shall be determined by the Board in its discretion based on the closing price of the Common Stock for such date (or, in the event that the Common Stock is not traded on such date, on the immediately preceding trading date), as reported by the National Association of Securities Dealers Automated Quotation (Nasdaq) National Market or, if such price is not reported, the mean of the bid and asked prices per share of the Common Stock as reported by Nasdaq or, in the event the Common Stock is listed on a stock exchange, the fair market value per share shall be the closing price on such exchange on such date (or, in the event that the Common Stock is not traded on such date, on the immediately preceding trading date), as reported in The Wall Street Journal. For purposes of the Offering Date under the first Offering Period under the Plan, the fair market value of a share of the Common Stock of the Company shall be the Price to Public as set forth in the final prospectus filed with the Securities and Exchange Commission pursuant to Rule 424 under the Securities Act of 1933, as amended.

8. Exercise of Purchase Right. Unless a participant withdraws from the Plan as provided in paragraph 10, his or her Purchase Right for the purchase of shares will be exercised automatically on each Purchase Date of an Offering Period, and the maximum number of full shares subject to the Purchase Right will be purchased at the applicable Purchase Right price with the accumulated Contributions in his or her account. The shares purchased upon exercise of a Purchase Right hereunder shall be deemed to be transferred to the participant on the Purchase Date. No fractional shares shall be purchased. Any payroll deductions accumulated in a participant's account which are not sufficient to purchase a full share shall be retained in the participant's account for the subsequent Purchase Period or Offering Period, subject to earlier withdrawal by the participant as provided in Section 10. Any other monies left over in a participant's account after a Purchase Date shall be returned to the Participant. During his or her lifetime, a participant's Purchase Right to purchase shares hereunder is exercisable only by him or her.

9. Delivery. As promptly as practicable after each Purchase Date of each Offering Period, the Company shall arrange the delivery to each participant, as appropriate, of a certificate representing the shares purchased upon exercise of his or her Purchase Right or the deposit of such number of shares with the broker selected by the Company for administration of Plan stock purchases, as determined by the Company.

10. Voluntary Withdrawal; Termination of Employment.

(a) A participant may withdraw all but not less than all the Contributions credited to his or her account under the Plan at any time at least five (5) business days prior to each Purchase Date by giving written notice to the Company in the form provided in the Company. All of the participant's Contributions credited to his or her account will be paid to him or her promptly after receipt of his or her notice of withdrawal and his or her Purchase Right for the current period will be automatically terminated, and no further Contributions for the purchase of shares will be made during the Offering Period.

(b) Upon termination of the participant's Continuous Status as an Employee (as defined in Section 2(f) hereof) prior to the Purchase Date of an Offering Period for any reason, including retirement or death, the Contributions credited to his or her account will be returned to him or her or, in the case of his or her death, to the person or persons entitled thereto under Section 14, and his or her Purchase Right will be automatically terminated.

(c) In the event an Employee fails to remain in Continuous Status as an Employee of the Company for at least twenty (20) hours per week during the Offering Period in which the employee is a participant, he or she will be deemed to have elected to withdraw from the Plan and the Contributions credited to his or her account will be returned to him or her and his or her Purchase Right terminated.

(d) A participant's withdrawal from an offering will not have any effect upon his or her eligibility to participate in a succeeding offering or in any similar plan which may hereafter be adopted by the Company.

11. Automatic Withdrawal. If the fair market value of the shares on the first Purchase Date of an Offering Period is less than the fair market value of the shares on the Offering Date for such Offering Period, then every participant shall automatically (i) be withdrawn from such Offering Period at the close of such Purchase Date and after the acquisition of shares for such Purchase Period, and (ii) be enrolled in the Offering Period commencing on the first business day subsequent to such Purchase Period.

12. Interest. No interest shall accrue on the Contributions of a participant in the Plan.

13. Stock.

(a) The maximum number of shares of the Company's Common Stock which shall be made available for sale under the Plan shall be 500,000 shares, plus an annual increase on the first day of each of the Company's five fiscal years beginning in 1999 and ending in 2003, equal to the lesser of (i) 375,000 shares; (ii) two percent (2%) of the shares of Common Stock outstanding on the last day of the immediately preceding fiscal year; or (iii) a lesser amount determined by the Board, subject to adjustment upon changes in capitalization of the Company as provided in Section 19. If the total number of shares which would otherwise be subject to Purchase Rights granted pursuant to Section 7(a) on the Offering Date of an Offering Period exceeds the number of shares then available under the Plan (after deduction of all shares for

which Purchase Rights have been exercised or are then outstanding), the Company shall make a pro rata allocation of the shares remaining available for Purchase Right grant in as uniform a manner as shall be practicable and as it shall determine to be equitable. In such event, the Company shall give written notice of such reduction of the number of shares subject to the Purchase Right to each Employee affected thereby and shall similarly reduce the rate of Contributions, if necessary.

(b) The participant will have no interest or voting right in shares covered by his or her Purchase Right until such Purchase Right has been exercised.

(c) Shares to be delivered to a participant under the Plan will be registered in the name of the participant or in the name of the participant and his or her spouse.

14. Administration. The Board, or a committee named by the Board, shall supervise and administer the Plan and shall have full power to adopt, amend and

rescind any rules deemed desirable and appropriate for the administration of the Plan and not inconsistent with the Plan, to construe and interpret the Plan, and to make all other determinations necessary or advisable for the administration of the Plan.

15. Designation of Beneficiary.

(a) A participant may file a written designation of a beneficiary who is to receive any shares and cash, if any, from the participant's account under the Plan in the event of such participant's death subsequent to the end of a Purchase Period but prior to delivery to him or her of such shares and cash. In addition, a participant may file a written designation of a beneficiary who is to receive any cash from the participant's account under the Plan in the event of such participant's death prior to the Purchase Date of an Offering Period. If a participant is married and the designated beneficiary is not the spouse, spousal consent shall be required for such designation to be effective.

(b) Such designation of beneficiary may be changed by the participant (and his or her spouse, if any) at any time by written notice. In the event of the death of a participant and in the absence of a beneficiary validly designated under the Plan who is living at the time of such participant's death, the Company shall deliver such shares and/or cash to the executor or administrator of the estate of the participant, or if no such executor or administrator has been appointed (to the knowledge of the Company), the Company, in its discretion, may deliver such shares and/or cash to the spouse or to any one or more dependents or relatives of the participant, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

16. Transferability. Neither Contributions credited to a participant's account nor any rights with regard to the exercise of an Purchase Right or to receive shares under the Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will, the laws of descent and distribution, or as provided in Section 15) by the participant. Any such attempt at assignment, transfer, pledge or other disposition shall be without effect, except that the Company may treat such act as an election to withdraw funds in accordance with Section 10.

17. Use of Funds. All Contributions received or held by the Company under the Plan may be used by the Company for any corporate purpose, and the Company shall not be obligated to segregate such Contributions.

18. Reports. Individual accounts will be maintained for each participant in the Plan. Statements of account will be given to participating Employees promptly following the Purchase Date, which statements will set forth the amounts of Contributions, the per share purchase price, the number of shares purchased and the remaining cash balance, if any.

19. Adjustments Upon Changes in Capitalization; Corporate Transactions.

(a) Adjustment. Subject to any required action by the shareholders of the Company, the number of shares of Common Stock covered by each Purchase Right under the Plan which has not yet been exercised and the number of shares of Common Stock which have been authorized for issuance under the Plan but have not yet been placed under Purchase Right (collectively, the "Reserves"), as well as the price per share of Common Stock covered by each Purchase Right under the Plan which has not yet been exercised, shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock, or any other increase or decrease in the number of shares of Common Stock effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration". Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issue by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock subject to a Purchase Right.

(b) Corporate Transactions. In the event of the proposed dissolution or liquidation of the Company, the Offering Period will terminate immediately prior to the consummation of such proposed action, unless otherwise provided by the Board. In the event of a proposed sale of all or substantially all of the assets of the Company, or the merger of the Company with or into another corporation, each Purchase Right under the Plan shall be assumed or an equivalent Purchase Right shall be substituted by such successor corporation or a parent or subsidiary of such successor corporation, unless the Board determines, in the exercise of its sole discretion and in lieu of such assumption or substitution, to shorten the Offering Period then in progress by setting a new Purchase Date (the "New Purchase Date"). If the Board shortens the Offering Period then in progress in lieu of assumption or substitution in the event of a merger or sale of assets, the Board shall notify each participant in writing, at least ten (10) days prior to the New Purchase Date, that the Purchase Date for his or her Purchase Right has been changed to the New Purchase Date and that his or her Purchase Right will be exercised automatically on the New Purchase Date, unless prior to such date he or she has withdrawn from the Offering Period as provided in Section 10. For purposes of this paragraph, a Purchase Right granted under the Plan shall be deemed to be assumed if, following the sale of assets or merger, the Purchase Right confers the right to purchase, for each share of Purchase Right stock subject to the Purchase

Right immediately prior to the sale of assets or merger, the consideration (whether stock, cash or other securities or property) received in the sale of assets or merger by holders of Common Stock for each share of Common Stock held on the effective date of the transaction (and if such holders were offered a

choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); provided, however, that if such consideration received in the sale of assets or merger was not solely common stock of the successor corporation or its parent (as defined in Section 424(e) of the Code), the Board may, with the consent of the successor corporation and the participant, provide for the consideration to be received upon exercise of the Purchase Right to be solely common stock of the successor corporation or its parent equal in fair market value to the per share consideration received by holders of Common Stock and the sale of assets or merger.

The Board may, if it so determines in the exercise of its sole discretion, also make provision for adjusting the Reserves, as well as the price per share of Common Stock covered by each outstanding Purchase Right, in the event that the Company effects one or more reorganizations, recapitalizations, rights offerings or other increases or reductions of shares of its outstanding Common Stock, and in the event of the Company being consolidated with or merged into any other corporation.

20. Amendment or Termination.

(a) The Board of Directors of the Company may at any time and for any reason terminate or amend the Plan. Except as provided in Section 19, no such termination may affect Purchase Rights previously granted, provided that an Offering Period may be terminated by the Board on a Purchase Date. Except has provided in Section 19, no amendment make any change in any Purchase Right theretofore granted which adversely affects the rights of any participant. In addition, to the extent necessary to comply with Rule 16b-3 under the Exchange Act, or under Section 423 of the Code (or any successor rule or provision or any applicable law or regulation), the Company shall obtain shareholder approval in such a manner and to such a degree as so required.

(b) Without shareholder consent and without regard to whether any participant rights may be considered to have been adversely affected, the Board (or its committee) shall be entitled to change the Offering Periods and Purchase Periods, limit the frequency and/or number of changes in the amount withheld during an Offering Period, establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars, permit payroll withholding in excess of the amount designated by a participant in order to adjust for delays or mistakes in the Company's processing of properly completed withholding elections, establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each participant properly correspond with amounts withheld from the participant's Compensation, and establish such other limitations or procedures as the Board (or its committee) determines in its sole discretion advisable which are consistent with the Plan.

21. Notices. All notices or other communications by a participant to the

Company under or in connection with the Plan shall be deemed to have been duly given when received in the form specified by the Company at the location, or by the person, designated by the Company for the receipt thereof.

22. Conditions Upon Issuance of Shares. Shares shall not be issued with respect to a Purchase Right unless the exercise of such Purchase Right and the issuance and delivery of such shares pursuant thereto shall comply with all applicable provisions of law, domestic or foreign, including, without limitation, the Securities Act of 1933, as amended, the Exchange Act, the rules and regulations promulgated thereunder, and the requirements of any stock exchange upon which the shares may then be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance.

As a condition to the exercise of a Purchase Right, the Company may require the person exercising such Purchase Right to represent and warrant at the time of any such exercise that the shares are being purchased only for investment and without any present intention to sell or distribute such shares if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned applicable provisions of law.

23. Term of Plan; Effective Date. The Plan shall become effective upon the earlier to occur of its adoption by the Board of Directors or its approval by the shareholders of the Company. It shall continue in effect for a term of twenty (20) years unless sooner terminated under Section 20.

METAWAVE, INC.

1998 EMPLOYEE STOCK PURCHASE PLAN
SUBSCRIPTION AGREEMENT

New Election _____
Change of Election _____

1. I, _____, hereby elect to participate in the METAWAVE, INC. 1998 Employee Stock Purchase Plan (the "Plan") for the Offering Period _____, _____ to _____, _____, and subscribe to purchase shares of the Company's Common Stock in accordance with this Subscription Agreement and the Plan.

2. I elect to have Contributions in the amount of _____% of my Compensation, as those terms are defined in the Plan, applied to this purchase. I understand that this amount must not be less than 1% and not more than 20% of my Compensation during the Offering Period. (Please note that no fractional percentages are permitted).

3. I hereby authorize payroll deductions from each paycheck during the Offering Period at the rate stated in Item 2 of this Subscription Agreement. I understand that all payroll deductions made by me shall be credited to my

account under the Plan and that I may not make any additional payments into such account. I understand that all payments made by me shall be accumulated for the purchase of shares of Common Stock at the applicable purchase price determined in accordance with the Plan. I further understand that, except as otherwise set forth in the Plan, shares will be purchased for me automatically on the Purchase Date of each Offering Period unless I otherwise withdraw from the Plan by giving written notice to the Company for such purpose.

4. I understand that I may discontinue at any time prior to the Purchase Date my participation in the Plan as provided in Section 10 of the Plan. I also understand that I can increase or decrease the rate of my Contributions to not less than 1% and to not more than 20% of my Compensation on one occasion only for each rate change during any Purchase Period by completing and filing a new Subscription Agreement with such increase or decrease taking effect as of the beginning of the calendar month following the date of filing of the new Subscription Agreement, if filed at least five (5) business days prior to the beginning of such month. Further, I may change the rate of deductions for future Offering Periods by filing a new Subscription Agreement, and any such change will be effective as of the beginning of the next Offering Period. In addition, I acknowledge that, unless I discontinue my participation in the Plan as provided in Section 10 of the Plan, my election will continue to be effective for each successive Offering Period.

5. I have received a copy of the Company's most recent description of the Plan and a copy of the complete "METAWAVE, INC. 1998 Employee Stock Purchase Plan." I understand that my participation in the Plan is in all respects subject to the terms of the Plan.

6. Shares purchased for me under the Plan should be issued in the name(s) of (name of employee or employee and spouse only):

_____

_____

7. In the event of my death, I hereby designate the following as my beneficiary(ies) to receive all payments and shares due to me under the Plan:

NAME: (Please print) _____
(First) (Middle) (Last)

_____ _____
(Relationship) (Address)

_____

8. I understand that if I dispose of any shares received by me pursuant to the Plan within 2 years after the Offering Date (the first day of the Offering Period during which I purchased such shares) or within 1 year after the

Purchase Date, I will be treated for federal income tax purposes as having received ordinary compensation income at the time of such disposition in an amount equal to the excess of the fair market value of the shares on the Purchase Date over the price which I paid for the shares, regardless of whether I disposed of the shares at a price less than their fair market value at the Purchase Date. The remainder of the gain or loss, if any, recognized on such disposition will be treated as capital gain or loss.

I hereby agree to notify the Company in writing within 30 days after the date of any such disposition, and I will make adequate provision for federal, state or other tax withholding obligations, if any, which arise upon the disposition of the Common Stock. The Company may, but will not be obligated to, withhold from my compensation the amount necessary to meet any applicable withholding obligation including any withholding necessary to make available to the Company any tax deductions or benefits attributable to the sale or early disposition of Common Stock by me.

9. If I dispose of such shares at any time after expiration of the 2-year and 1-year holding periods, I understand that I will be treated for federal income tax purposes as having received compensation income only to the extent of an amount equal to the lesser of (1) the excess of the fair market value of the shares at the time of such disposition over the purchase price which I paid for the shares under the Purchase Right, or (2) 15% of the fair market value of

the shares on the Offering Date. The remainder of the gain or loss, if any, recognized on such disposition will be treated as capital gain or loss.

I understand that this tax summary is only a summary and is subject to change. I further understand that I should consult a tax advisor concerning the tax implications of the purchase and sale of stock under the Plan.

10. I hereby agree to be bound by the terms of the Plan. The effectiveness of this Subscription Agreement is dependent upon my eligibility to participate in the Plan.

SIGNATURE: _____

SOCIAL SECURITY #: _____

DATE: _____

SPOUSE'S SIGNATURE (necessary
if beneficiary is not spouse):

_____
(Signature)

_____
(Print name)

METAWAVE, INC.

1998 EMPLOYEE STOCK PURCHASE PLAN

NOTICE OF WITHDRAWAL

I, _____, hereby elect to withdraw my participation in the METAWAVE, INC. 1998 Employee Stock Purchase Plan (the "Plan") for the Offering Period _____. This withdrawal covers all Contributions credited to my account and is effective on the date designated below.

I understand that all Contributions credited to my account will be paid to me within ten (10) business days of receipt by the Company of this Notice of Withdrawal and that my Purchase Right for the current period will automatically terminate, and that no further Contributions for the purchase of shares can be made by me during the Offering Period.

The undersigned further understands and agrees that he or she shall be eligible to participate in succeeding offering periods only by delivering to the Company a new Subscription Agreement.

Dated:_____ _____
Signature of Employee

_____
Social Security Number

EXHIBIT 10.5

METAWAVE COMMUNICATIONS CORPORATION
1998 DIRECTORS' STOCK OPTION PLAN

1. PURPOSES OF THE PLAN. The purposes of this Directors' Stock Option Plan are to attract and retain the best available personnel for service as Directors of the Company, to provide additional incentive to the Outside Directors of the Company to serve as Directors, and to encourage their continued service on the Board.

All options granted hereunder shall be nonstatutory stock options.

2. DEFINITIONS. As used herein, the following definitions shall apply:

(a) "Board" shall mean the Board of Directors of the Company.

(b) "Code" shall mean the Internal Revenue Code of 1986, as amended.

(c) "Common Stock" shall mean the Common Stock of the Company.

(d) "Company" shall mean Metawave Communications Corporation, a Delaware corporation.

(e) "Continuous Status as a Director" shall mean the absence of any interruption or termination of service as a Director.

(f) "Director" shall mean a member of the Board.

(g) "Employee" shall mean any person, including any officer or director, employed by the Company or any Parent or Subsidiary of the Company. The payment of a director's fee by the Company shall not be sufficient in and of itself to constitute "employment" by the Company.

(h) "Exchange Act" shall mean the Securities Exchange Act of 1934, as amended.

(i) "Option" shall mean a stock option granted pursuant to the Plan. All options shall be nonstatutory stock options (i.e., options that are not intended to qualify as incentive stock options under Section 422 of the Code).

(j) "Optioned Stock" shall mean the Common Stock subject to an Option.

(k) "Optionee" shall mean an Outside Director who receives an Option.

(l) "Outside Director" shall mean a Director who is not an Employee.

(m) "Parent" shall mean a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

(n) "Plan" shall mean this 1998 Directors' Stock Option Plan.

(o) "Share" shall mean a share of the Common Stock, as adjusted in accordance with Section 11 of the Plan.

(p) "Stock Exchange" means any stock exchange or consolidated stock price reporting system on which prices for the Common Stock are quoted at any given time.

(q) "Subsidiary" shall mean a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code.

3. STOCK SUBJECT TO THE PLAN. Subject to the provisions of Section 11 of the Plan, the maximum aggregate number of Shares which may be optioned and sold under the Plan is 300,000 Shares (the "Pool") of Common Stock. The Shares may be authorized, but unissued, or reacquired Common Stock.

If an Option should expire or become unexercisable for any reason without having been exercised in full, the unpurchased Shares which were subject thereto shall, unless the Plan shall have been terminated, become available for future grant under the Plan. If Shares which were acquired upon exercise of an Option are subsequently repurchased by the Company, such Shares shall not in any event be returned to the Plan and shall not become available for future grant under the Plan.

4. ADMINISTRATION OF AND GRANTS OF OPTIONS UNDER THE PLAN.

(a) Administrator. Except as otherwise required herein, the Plan shall be administered by the Board.

(b) Procedure for Grants Effective upon Initial Public Offering. All grants of Options hereunder after the effectiveness date of a registration statement under the Securities Act of 1933 relating to the Company's initial public offering of securities ("IPO Effective Date") shall be automatic and nondiscretionary and shall be made strictly in accordance with the following provisions:

(i) No person shall have any discretion to select which Outside Directors shall be granted Options or to determine the number of Shares to be covered by Options granted to Outside Directors.

(ii) Each Outside Director who has not previously been granted an Option under this Plan shall be automatically granted an Option to purchase Shares (the "First Option") as follows: (A) with respect to persons who are Outside Directors on the IPO Effective Date, as determined in accordance with Section 6 hereof, 25,000 shares on the IPO Effective Date, and (B) with respect

to any other person, 25,000 shares on the date on which such person first becomes an Outside Director, whether through election by the stockholders of the Company or appointment by the Board of Directors to fill a vacancy.

(iii) After the First Option has been granted to an Outside Director, such Outside Director shall thereafter be automatically granted an Option to purchase 5,000 Shares (a "Subsequent Option") on the date of each Annual Meeting of the Company's stockholders immediately following which such Outside Director is serving on the Board, provided that, on such date, he or she shall have served on the Board for at least six (6) months prior to the date of such Annual Meeting.

(iv) Notwithstanding the provisions of subsections (b) and (c) hereof, in the event that a grant would cause the number of Shares subject to outstanding Options plus the number of Shares previously purchased upon exercise of Options to exceed the Pool, then each such automatic grant shall be for that number of Shares determined by dividing the total number of Shares remaining available for grant by the number of Outside Directors receiving an Option on such date on the automatic grant date. Any further grants shall then be deferred until such time, if any, as additional Shares become available for grant under the Plan through action of the stockholders to increase the number of Shares which may be issued under the Plan or through cancellation or expiration of Options previously granted hereunder.

(v) Notwithstanding the provisions of subsections (ii) and (iii) hereof, any grant of an Option made before the Company has obtained stockholder approval of the Plan in accordance with Section 17 hereof shall be conditioned upon obtaining such stockholder approval of the Plan in accordance with Section 17 hereof.

(vi) The terms of each First Option granted hereunder shall be as follows:

(A) the First Option shall be exercisable only while the Outside Director remains a Director of the Company, except as set forth in Section 9 hereof;

(B) the exercise price per Share shall be 100% of the fair market value per Share on the date of grant of the First Option, determined in accordance with Section 8 hereof; and

(C) the First Option shall become exercisable in installments cumulatively as to 25% of the Shares subject to the First Option on the first anniversary of the date of grant of the Option and one-forty-eighth (1/48th) of the total number of shares subject to the Option shall vest ratably at the end of each month thereafter upon Optionee's completion of each month of Continuous Status as a Director.

(vii) The terms of each Subsequent Option granted hereunder shall be as follows:

(A) the Subsequent Option shall be exercisable only while the Outside Director remains a Director of the Company, except as set forth in Section 9 hereof;

(B) the exercise price per Share shall be 100% of the fair market value per Share on the date of grant of the Subsequent Option, determined in accordance with Section 8 hereof; and

(C) the Subsequent Option shall become exercisable in installments cumulatively as to 25% of the Shares subject to the Subsequent Option on the first anniversary of the date of grant of the Option and one-forty-eighth (1/48th) of the total number of shares subject to the Option shall vest ratably at the end of each month thereafter upon Optionee's completion of each month of Continuous Status as a Director.

(c) Powers of the Board. Subject to the provisions and restrictions of the Plan, the Board shall have the authority, in its discretion: (i) to determine, upon review of relevant information and in accordance with Section 8(b) of the Plan, the fair market value of the Common Stock; (ii) to determine the exercise price per share of Options to be granted, which exercise price shall be determined in accordance with Section 8(a) of the Plan; (iii) to interpret the Plan; (iv) to prescribe, amend and rescind rules and regulations relating to the Plan; (v) to authorize any person to execute on behalf of the Company any instrument required to effectuate the grant of an Option previously granted hereunder; and (vi) to make all other determinations deemed necessary or advisable for the administration of the Plan.

(d) Effect of Board's Decision. All decisions, determinations and interpretations of the Board shall be final and binding on all Optionees and any other holders of any Options granted under the Plan.

(e) Suspension or Termination of Option. If the President or his or her designee reasonably believes that an Optionee has committed an act of misconduct, the President may suspend the Optionee's right to exercise any option pending a determination by the Board of Directors (excluding the Outside Director accused of such misconduct). If the Board of Directors (excluding the Outside Director accused of such misconduct) determines an Optionee has committed an act of embezzlement, fraud, dishonesty, nonpayment of an obligation owed to the Company, breach of fiduciary duty or deliberate disregard of the Company rules resulting in loss, damage or injury to the Company, or if an Optionee makes an unauthorized disclosure of any Company trade secret or confidential information, engages in any conduct constituting unfair competition, induces any Company customer to breach a contract with the Company or induces any principal for whom the Company acts as agent to terminate such agency relationship, neither the Optionee nor his or her estate shall be

entitled to exercise any option whatsoever. In making such determination, the Board of Directors (excluding the Outside Director accused of such misconduct) shall act fairly and shall give the Optionee an opportunity to appear and present evidence on Optionee's behalf at a hearing before the Board or a committee of the Board.

5. ELIGIBILITY. Options may be granted only to Outside Directors. After the IPO Effective Date, all Options shall be automatically granted in accordance with the terms set forth in Section 4(b) hereof. An Outside Director who has been granted an Option may, if he or she is otherwise eligible, be granted an additional Option or Options in accordance with such provisions.

The Plan shall not confer upon any Optionee any right with respect to continuation of service as a Director or nomination to serve as a Director, nor shall it interfere in any way with any rights which the Director or the Company may have to terminate his or her directorship at any time.

6. TERM OF PLAN; EFFECTIVE DATE. The Plan shall become effective on the effectiveness of the registration statement under the Securities Act of 1933, as amended, relating to the Company's initial public offering of securities. It shall continue in effect for a term of ten (10) years unless sooner terminated under Section 13 of the Plan.

7. TERM OF OPTIONS. The term of each Option shall be ten (10) years from the date of grant thereof.

8. EXERCISE PRICE AND CONSIDERATION

(a) Exercise Price. The per Share exercise price for the Shares to be issued pursuant to exercise of an Option shall be 100% of the fair market value per Share on the date of grant of the Option.

(b) Fair Market Value. The fair market value shall be determined by the Board; provided, however, that where there is a public market for the Common Stock, the fair market value per Share shall be the mean of the bid and asked prices of the Common Stock in the over-the-counter market on the date of grant, as reported in The Wall Street Journal (or, if not so reported, as otherwise reported by the National Association of Securities Dealers Automated Quotation ("Nasdaq") System) or, in the event the Common Stock is traded on the Nasdaq National Market or listed on a stock exchange, the fair market value per Share shall be the closing price on such system or exchange on the date of grant of the Option (or, in the event that the Common Stock is not traded on such date, on the immediately preceding trading date), as reported in The Wall Street Journal. With respect to any Options granted hereunder concurrently with the initial effectiveness of the Plan, the fair market value shall be the Price to Public as set forth in the final prospectus relating to such initial public offering.

(c) Form of Consideration. The consideration to be paid for the Shares to be issued upon exercise of an Option shall consist entirely of cash, check, other Shares of Common Stock having a fair market value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option shall be exercised (which, if acquired from the Company, shall have been held for at least six months), or any combination of such methods of payment and/or any other consideration or method of payment as shall be permitted under applicable corporate law.

9. EXERCISE OF OPTION

(a) Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder shall be exercisable at such times as are set forth by (i) the Administrator with respect to Options granted prior to the IPO Effective Date and (ii) by 4(b) hereof with respect to Options granted after the IPO Effective Date; provided, however, that after the IPO Effective Date, no Options shall be exercisable prior to stockholder approval of the Plan in accordance with Section 17 hereof.

An Option may not be exercised for a fraction of a Share.

An Option shall be deemed to be exercised when written notice of such exercise has been given to the Company in accordance with the terms of the Option by the person entitled to exercise the Option and full payment for the Shares with respect to which the Option is exercised has been received by the Company. Full payment may consist of any consideration and method of payment allowable under Section 8(c) of the Plan. Until the issuance (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company) of the stock certificate evidencing such Shares, no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Optioned Stock, notwithstanding the exercise of the Option. A share certificate for the number of Shares so acquired shall be issued to the Optionee as soon as practicable after exercise of the Option. No adjustment will be made for a dividend or other right for which the record date is prior to the date the stock certificate is issued, except as provided in Section 11 of the Plan.

Exercise of an Option in any manner shall result in a decrease in the number of Shares which thereafter may be available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(b) Termination of Status as a Director. If an Outside Director ceases to serve as a Director, he or she may, but only within ninety (90) days after the date he or she ceases to be a Director of the Company, exercise his or her Option to the extent that he or she was entitled to exercise it at the date of such termination. Notwithstanding the foregoing, in no event may the Option be exercised after its term set forth in Section 7 has expired. To the extent

that such Outside Director was not entitled to exercise an Option at the date of such termination, or does not exercise such Option (which he or she was entitled to exercise) within the time specified herein, the Option shall terminate.

(c) Disability of Optionee. Notwithstanding Section 9(b) above, in the event a Director is unable to continue his or her service as a Director with the Company as a result of his or her total and permanent disability (as defined in Section 22(e)(3) of the Code), he or she may, but only within six (6) months (or such other period of time not exceeding twelve (12) months as is determined by the Board) from the date of such termination, exercise his or her Option to the extent he or she was entitled to exercise it at the date of such termination. Notwithstanding the foregoing, in no event may the Option be exercised after its term set forth in Section 7 has expired. To the extent that he or she was not entitled to exercise the Option at the date of termination, or if he or she does not exercise such Option (which he or she was entitled to exercise) within the time specified herein, the Option shall terminate.

(d) Death of Optionee. In the event of the death of an Optionee during the period of Continuous Status as a Director since the date of grant of the Option, or within thirty (30) days following termination of Optionee's Continuous Status as a Director, the Option may be exercised, at any time within six (6) months following the date of death (but in no event later than the expiration date of the term of such Option as set forth in the Option Agreement), by Optionee's estate or by a person who acquired the right to exercise the Option by bequest or inheritance, but only to the extent of the right to exercise Shares that are not subject to repurchase that had accrued at the date of death or, if earlier, the date of termination of Optionee's Continuous Status as a Director. To the extent that Optionee was not entitled to exercise the Option at the date of death or

termination, as the case may be, or if Optionee does not exercise such Option to the extent so entitled within the time specified herein, the Option shall terminate

10. NONTRANSFERABILITY OF OPTIONS. The Option may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution or pursuant to a qualified domestic relations order (as defined by the Code or the rules thereunder). The designation of a beneficiary by an Optionee does not constitute a transfer. An Option may be exercised during the lifetime of an Optionee only by the Optionee or a transferee permitted by this Section.

11. ADJUSTMENTS UPON CHANGES IN CAPITALIZATION, MERGER OR CERTAIN OTHER TRANSACTIONS.

(a) Changes in Capitalization. Subject to any required action by the stockholders of the Company, the number of shares of Common Stock covered by each outstanding Option, and the number of shares of Common Stock that have been

authorized for issuance under the Plan but as to which no Options have yet been granted or that have been returned to the Plan upon cancellation or expiration of an Option, as well as the price per share of Common Stock covered by each such outstanding Option, shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination, recapitalization or reclassification of the Common Stock, or any other increase or decrease in the number of issued shares of Common Stock effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock subject to an Option.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Board shall notify the Optionee at least fifteen (15) days prior to such proposed action. To the extent it has not been previously exercised, the Option will terminate immediately prior to the consummation of such proposed action.

(c) Control Transaction.

(i) The Company shall provide each Optionee with notice of the pendency of any Control Transaction (i) at least thirty (30) days prior to the expected date of consummation of a Control Transaction that has been approved or recommended by the Board, or (ii) promptly after the Board becomes aware of the pendency or occurrence of a proposed or completed Control Transaction that has not been approved or recommended by the Board.

(ii) Each Optionee shall be entitled to exercise the vested portion of the Option at any time prior to consummation of a Control Transaction. If the terms of the Option prescribe a time-based vesting schedule, the Optionee shall, conditioned upon consummation of

the Control Transaction and upon the Optionee continuing to serve as a Director through the date of such consummation, be entitled to accelerated vesting credit equal to either twelve months or twenty-four months of additional vesting beyond that otherwise scheduled, based on whether he or she has been in Continuous Status as a Director less than two years, or two years or more, respectively, as of the date of such consummation; provided, however, that this sentence shall not apply with respect to any Option as to which the Administrator determines, in its sole discretion, that the Board or the acquiring person or the surviving corporation, as the case may be, has made equitable and appropriate provision for the assumption of or the substitution of a new option for the Option on terms which are, as nearly as practicable, the financial equivalent of the

Option (taking into account the consideration for which the Common Stock is to be exchanged in the Control Transaction).

(iii) Any exercise may be made contingent upon consummation of a Control Transaction if so elected by the Optionee in his or her notice of exercise, and must be made contingent upon such consummation with respect to any portion of an Option entitled to accelerated vesting under the second sentence of Section 11(c)(ii) above.

(iv) Upon consummation of a Control Transaction that has been approved or recommended by the Board, all unexercised Options shall expire, except to the extent that the Administrator determines otherwise pursuant to the second sentence of Section 11(c)(ii) above.

(d) Certain Distributions. In the event of any distribution to the Company's stockholders of securities of any other entity or other assets (other than dividends payable in cash or stock of the Company) without receipt of consideration by the Company, the Administrator may, in its discretion, appropriately adjust the price per share of Common Stock covered by each outstanding Option to reflect the effect of such distribution.

12. TIME OF GRANTING OPTIONS. With respect to Options granted after the IPO Effective Date, the date of grant of an Option shall, for all purposes, be the date determined in accordance with Section 4(b) hereof. Notice of the determination shall be given to each Outside Director to whom an Option is so granted within a reasonable time after the date of such grant.

13. AMENDMENT AND TERMINATION OF THE PLAN

(a) Amendment and Termination. The Board may amend or terminate the Plan from time to time in such respects as the Board may deem advisable; provided that, to the extent necessary and desirable to comply with Rule 16b-3 under the Exchange Act (or any other applicable law or regulation), the Company shall obtain approval of the stockholders of the Company to Plan amendments to the extent and in the manner required by such law or regulation. Notwithstanding the foregoing, the provisions set forth in Section 4 of this Plan (and any other Sections of this Plan that affect the formula award terms required to be specified in this Plan by Rule 16b-3) shall not be amended more than once every six months, other than to comport with changes in the Code, the Employee Retirement Income Security Act of 1974, as amended, or the rules thereunder.

(b) Effect of Amendment or Termination. Any such amendment or termination of the Plan that would impair the rights of any Optionee shall not affect Options already granted to such Optionee and such Options shall remain in full force and effect as if this Plan had not been amended or terminated, unless mutually agreed otherwise between the Optionee and the Board, which agreement must be in writing and signed by the Optionee and the Company.

14. CONDITIONS UPON ISSUANCE OF SHARES. Shares shall not be issued pursuant to the exercise of an Option unless the exercise of such Option and the issuance and delivery of such Shares pursuant thereto shall comply with all relevant provisions of law, including, without limitation, the Securities Act of 1933, as amended, the Exchange Act, the rules and regulations promulgated thereunder, state securities laws, and the requirements of any stock exchange upon which the Shares may then be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance. As a condition to the exercise of an Option, the Company may require the person exercising such Option to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares, if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned relevant provisions of law.

15. RESERVATION OF SHARES. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan. Inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.

16. OPTION AGREEMENT. Options shall be evidenced by written option agreements in such form as the Board shall approve.

17. STOCKHOLDER APPROVAL. Continuance of the Plan shall be subject to approval by the stockholders of the Company at or prior to the first annual meeting of stockholders held subsequent to the granting of an Option hereunder. If such stockholder approval is obtained at a duly held stockholders' meeting, it may be obtained by the affirmative vote of the holders of a majority of the outstanding shares of the Company present or represented and entitled to vote thereon.

EXHIBIT 10.6

METAWAVE COMMUNICATIONS CORPORATION

THIRD AMENDED AND RESTATED

INVESTORS' RIGHTS AGREEMENT

AUGUST 6, 1997

THIRD AMENDED AND RESTATED
INVESTORS' RIGHTS AGREEMENT

THIS THIRD AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (the "Agreement") is made as of the 6th day of August, 1997, by and among Metawave Communications Corporation, a Delaware corporation (the "Company"), and the investors and the founders listed on Schedule A hereto (the "Investors" and the "Founders," respectively).

RECITALS

A. The Company and certain of the Investors have entered into the Series D Preferred Stock Purchase Agreement dated August 6, 1997 (the "Series D Agreement") pursuant to which the Company shall sell to such Investors (the "Series D Investors") up to 2,500,000 shares of its Series D Preferred Stock.

B. The Company, the Founders and certain of the Investors who purchased the Company's Series A Preferred Stock (the "Series A Investors") pursuant to the Series A Preferred Stock Purchase Agreement dated as of July 7, 1995, previously entered into that certain Investors' Rights Agreement of even date therewith (the "First Investors' Rights Agreement"), which granted to the Series A Investors certain rights with respect to the Series A Preferred Stock.

C. The Company, the Founders, the Series A Investors, and certain of the Investors who purchased the Company's Series B Preferred Stock (the "Series B Investors") pursuant to the Series B Preferred Stock Purchase Agreement dated as of May 30, 1996, subsequently entered into that certain Amended and Restated Investors' Rights Agreement dated as of even date therewith (the "Restated Investors' Rights Agreement"), which amended, restated and superseded the First Investors' Rights Agreement, and which granted to the Series A Investors and the Series B Investors certain rights with respect to the Series A Preferred Stock and the Series B Preferred Stock, respectively.

D. The Company, the Founders, the Series A Investors, the Series B Investors, and certain of the Investors who purchased the Company's Series C Preferred Stock (the "Series C Investors") pursuant to the Series C Preferred Stock Purchase Agreement dated as of October 30, 1996, subsequently entered into that certain Second Amended and Restated Investors' Rights Agreement dated as of even date therewith (the "Second Restated Investors' Rights Agreement"), which amended, restated and superseded the Restated Investors' Rights Agreement, and which granted to the Series A Investors, the Series B Investors and the Series C Investors certain rights with respect to the Series A Preferred Stock, Series B Preferred Stock and the Series C Preferred Stock, respectively.

E. The closing of the Series D Agreement, pursuant to which the Series D Investors will receive Series D Preferred Stock, is subject to certain conditions, including the condition that the Company, the Founders, the Series A Investors, the Series B Investors and the Series C Investors grant to the Series D Investors certain rights as set forth herein.

F. The Company, the Founders and the Investors are willing to enter into this Agreement for the purpose of setting forth certain rights to which the Investors are entitled.

NOW, THEREFORE, in consideration of the foregoing recitals and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company, the Founders, the Series A Investors, the Series B Investors, the Series C Investors and the Series D Investors hereby agree as follows:

1. Registration Rights. The Company covenants and agrees as follows:

1.1 Definitions. For purposes of this Agreement:

(a) The term "Act" means the Securities Act of 1933, as amended.

(b) The term "Form S-3" means such form under the Act as in effect on the date hereof or any registration form under the Act subsequently adopted by the SEC which permits inclusion or incorporation of substantial information by reference to other documents filed by the Company with the SEC.

(c) The term "Holder" means any person owning or having the right to acquire Registrable Securities or any assignee thereof in accordance with Section 1.13 hereof.

(d) The term "1934 Act" shall mean the Securities Exchange Act of 1934, as amended.

(e) The term "register", "registered," and "registration" refer to a registration effected by preparing and filing a registration statement or similar document in compliance with the Act, and the declaration or ordering of

effectiveness of such registration statement or document.

(f) The term "Registrable Securities" means Common Stock of the Company not previously sold to the public and (i) issuable or issued upon conversion of the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock (whether currently issued or hereafter acquired), (ii) issued as (or issuable upon the conversion or exercise of any warrant, right or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of the shares referenced in (i) above, and (iii) for purposes of Section 1.3 (and other portions of this Section 1, to the extent they relate to rights or registration under Section 1.3) the term "Registrable Securities" shall also include shares of Common Stock of the Company (other than shares described in clauses (i) and (ii) of this subsection 1.1(f)) eligible for registration pursuant to subsection 1.3(b). Notwithstanding the foregoing, "Registrable Securities" shall exclude any Registrable Securities to the extent (A) sold by a person in a transaction in which his rights under this Section 1 are not assigned, or (B) the registration rights with respect to such Registrable Securities have been terminated pursuant to Section 1.16.

(g) The number of shares of "Registrable Securities then outstanding" shall be determined by the number of shares of Common Stock outstanding that are, and the number of shares of Common Stock issuable pursuant to then exercisable or convertible securities that are, Registrable Securities.

(h) The term "SEC" shall mean the Securities and Exchange Commission.

(i) The term "Affiliate" shall refer to any person or entity controlling, controlled by or under common control with such Investors.

1.2 Request for Registration

(a) If the Company shall receive at any time after the earlier of (i) June 30, 2000, or (ii) six (6) months after the effective date of the first registration statement for a public offering of securities of the Company (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to a stock option, stock purchase or similar plan or a SEC Rule 145 transaction), a written request, from (i) the Holders of a majority of the Registrable Securities then outstanding in the case of the first such written request and (ii) the Holders of at least forty percent (40%) of the Registrable Securities then outstanding in the case of the second such request, that the Company file a registration statement under the Act covering the registration of Registrable Securities then outstanding having an aggregate offering price, net of underwriting discounts and commissions, of at least $7,500,000, then the Company shall:

(A) within ten (10) days of the receipt thereof, give written notice of such request to all Holders; and

(B) effect as soon as practicable, and in any event within sixty (60) days of the receipt of such request, the registration under the Act of all Registrable Securities that the Holders request to be registered, subject to the limitations of subsection 1.2(b), within twenty (20) days of the mailing of such notice by the Company in accordance with Section 3.5.

(1) If the Holders initiating the registration request hereunder ("Initiating Holders") intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to subsection 1.2(a) and the Company shall include such information in the written notice referred to in subsection 1.2(a). The underwriter will be selected by the majority in interest of the Initiating Holders. In such event, the right of any Holder to include his Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting (unless otherwise mutually agreed by a majority in interest of the Initiating Holders and such Holder) to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in

subsection 1.4(e)) enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting. Notwithstanding any other provision of this Section 1.2, if the underwriter advises the Initiating Holders in writing that marketing factors require a limitation of the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that would otherwise be underwritten pursuant hereto, and the number of shares of Registrable Securities that may be included in the underwriting shall be allocated among all Holders (electing to include shares in the offering) thereof, including the Initiating Holders, in proportion (as nearly as practicable) to the amount of Registrable Securities of the Company owned by each Holder; provided, however, that the number of shares of Registrable Securities to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting.

(2) Notwithstanding the foregoing, if the Company shall furnish to Holders requesting a registration statement pursuant to this Section 1.2, a certificate signed by the President of the Company stating that in the good faith judgment of the Board of Directors of the Company, it would be seriously detrimental to the Company and its stockholders for such registration statement to be filed and it is therefore essential to defer the filing of such registration statement, the Company shall have the right to defer taking action with respect to such filing for a period of not more than ninety (90) days after receipt of the request of the Initiating Holders; provided, however, that the Company may not utilize this right more than once in any twelve (12) month period.

(3) The Company is obligated to effect only two (2) such registrations pursuant to this Section 1.2.

1.3 Company Registration

(a) If (but without any obligation to do so) the Company proposes to register (including for this purpose a registration effected by the Company for stockholders other than the Holders) any of its stock or other securities under the Act in connection with the public offering of such securities solely for cash (other than a registration relating solely to the sale of securities to participants in a Company stock plan or a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities), the Company shall, at such time, promptly give each Holder written notice of such registration. Upon the written request of each Holder given within twenty (20) days after mailing of such notice by the Company in accordance with Section 3.5, the Company shall, subject to the provisions of Section 1.8, include in the registration statement all of the Registrable Securities that each such Holder has requested to be registered.

(b) Each Founder shall be deemed a Holder for purposes of Section 1.3(a) and shall be entitled to include Common Stock held by such Founder in any registration described in Section 1.3(a) so long as such Founder (A) continues to serve as an officer or director of the Company on the date the registration statement is filed by the Company

and (B) agrees to be bound by all other provisions of this Agreement and to participate in any such registration on the same basis as each other Holder in accordance with all applicable provisions of this Agreement.

1.4 Obligations of the Company. Whenever required under this Section 1 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) Prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its best efforts to cause such registration statement to become effective, and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or until the Holders have completed the distribution described in the registration statement relating thereto, whichever first occurs.

(b) Prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the Act with respect to the disposition of all securities covered by such registration statement.

(c) Furnish to the Holders such numbers of copies of a prospectus, including a preliminary prospectus, in conformity with the requirements of the Act, and such other documents as they may reasonably request in order to facilitate the disposition of Registrable Securities owned by them.

(d) Use its best efforts to register and qualify the securities covered by such registration statement under such other securities or "Blue Sky" laws of such jurisdictions as shall be reasonably requested by the Holders; provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions.

(e) In the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering. Each Holder participating in such underwriting shall also enter into and perform its obligations under such an agreement.

(f) Notify each Holder of Registrable Securities covered by such registration statement at any time when a prospectus relating thereto is required to be delivered under the Act of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing.

(g) Cause all such Registrable Securities registered pursuant hereunder to be listed on each securities exchange or nationally recognized quotation system on which similar securities issued by the Company are then listed.

1.5 Furnish Information

(a) It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 1 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as shall be required to effect the registration of such Holder's Registrable Securities.

(b) The Company shall have no obligation with respect to any registration requested pursuant to Section 1.2 or Section 1.12 if, due to the operation of subsection 1.5(a), the number of shares or the anticipated aggregate offering price of the Registrable Securities to be included in the registration does not equal or exceed the number of shares or the anticipated aggregate offering price required to originally trigger the Company's obligation to initiate such registration as specified in subsection 1.2(a) or subsection

1.12(b)(ii), whichever is applicable.

1.6 Expenses of Demand Registration. All expenses other than underwriting discounts and commissions incurred in connection with registrations, filings or qualifications pursuant to Section 1.2, including (without limitation) all registration, filing and qualification fees, printers' and accounting fees, fees and disbursements of counsel for the Company and the reasonable fees and disbursements of one counsel (not to exceed $10,000) for the selling Holders shall be borne by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 1.2 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all participating Holders shall bear such expenses), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one demand registration pursuant to Section 1.2; provided further, however, that if at the time of such withdrawal, the Holders have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness following disclosure by the Company of such material adverse change, then the Holders shall not be required to pay any of such expenses and shall retain their rights pursuant to Section 1.2.

1.7 Expenses of Company Registration. The Company shall bear and pay all expenses incurred in connection with any registration, filing or qualification of Registrable Securities with respect to the registrations pursuant to Section 1.3 for each Holder (which right may be assigned as provided in Section 1.13), including (without limitation) all registration, filing, and qualification fees, printers' and accounting fees relating or apportionable thereto and the fees and disbursements of counsel for this purpose; the Company will pay the reasonable fees

and disbursements of one counsel (not to exceed $10,000), for the selling Holders selected by them but excluding underwriting discounts and commissions relating to Registrable Securities.

1.8 Underwriting Requirements. In connection with any offering involving an underwriting of shares of the Company's capital stock, the Company shall not be required under Section 1.3 to include any of the Holders' securities in such underwriting unless they accept the terms of the underwriting as agreed upon between the Company and the underwriters selected by it, and then only in such quantity as the underwriters determine in their sole discretion will not adversely affect their ability to market the offering. If the total amount of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the amount of securities sold other than by the Company that the underwriters determine in their sole discretion is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such

securities, including Registrable Securities, that the underwriters determine in their sole discretion will not adversely affect their ability to market the offering (the securities so included to be apportioned pro rata among the selling stockholders according to the total amount of securities owned by each selling stockholder or in such other proportions as shall mutually be agreed to by such selling stockholders) but in no event shall (a) the amount of securities of the selling Holders included in the offering be reduced below thirty percent (30%) of the total amount of securities included in such offering, unless such offering is the initial public offering of the Company's securities in which case the selling stockholders may be reduced to a lesser percentage if the underwriters make the determination described above and no other stockholder's securities are included or (b) notwithstanding clause (a) above, any shares being sold by a stockholder exercising a demand registration right similar to that granted in Section 1.2 be excluded from such offering. For purposes of the preceding parenthetical concerning apportionment, for any selling stockholder that is a holder of Registrable Securities and which is a partnership or corporation, the partners, retired partners and stockholders of such holder, or the estates and family members of any such partners and retired partners and any trusts for the benefit of any of the foregoing persons shall be deemed to be a single "selling stockholder", and any pro-rata reduction with respect to such "selling stockholder" shall be based upon the aggregate amount of shares carrying registration rights owned by all entities and individuals included in such "selling stockholder", as defined in this sentence.

1.9 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 1.

1.10 Indemnification. In the event any Registrable Securities are included in a registration statement under this Section 1:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each Holder, any underwriter (as defined in the Act) for such Holder and each person, if any, who controls such Holder or underwriter within the meaning of the Act or the 1934 Act, against any losses, claims, damages, or liabilities (joint or several) to which they may

become subject under the Act, or the 1934 Act or other federal or state securities law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively a "Violation"): (i) any untrue statement or alleged untrue statement of a material fact contained in such registration statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation by the Company of the Act, the 1934 Act, any

state securities law or any rule or regulation promulgated under the Act, or the 1934 Act or any state securities law; and the Company will pay to each such Holder, underwriter or controlling person, as incurred, any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability, or action; provided, however, that the indemnity agreement contained in this subsection 1.10(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld), nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon a Violation that occurs in reliance upon and in conformity with written information furnished expressly for use in connection with such registration by any such Holder, underwriter or controlling person.

(b) To the extent permitted by law, each selling Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who has signed the registration statement, each person, if any, who controls the Company within the meaning of the Act, any underwriter, any other Holder selling securities in such registration statement and any controlling person of any such underwriter or other Holder, against any losses, claims, damages, or liabilities (joint or several) to which any of the foregoing persons may become subject, under the Act, the 1934 Act or other federal or state securities law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereto) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by such Holder expressly for use in connection with such registration; and each such Holder will pay, as incurred, any legal or other expenses reasonably incurred by any person intended to be indemnified pursuant to this subsection 1.10(b), in connection with investigating or defending any such loss, claim, damage, liability, or action; provided, however, that the indemnity agreement contained in this subsection 1.10(b) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; provided, that, in no event shall any indemnity under this subsection 1.10(b) exceed the net proceeds from the offering received by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 1.10 of notice of the commencement of any action (including any governmental action), such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 1.10, deliver to the indemnifying party a written notice

of the commencement thereof and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however,

that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such proceeding. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action, if materially prejudicial to its ability to defend such action, shall relieve such indemnifying party of any liability to the indemnified party under this Section 1.10, but the omission so to deliver written notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 1.10.

(d) If the indemnification provided for in this Section 1.10 is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any loss, liability, claim, damage, or expense referred to therein, then the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage, or expense in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and of the indemnified party on the other in connection with the statements or omissions that resulted in such loss, liability, claim, damage, or expense as well as any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission.

(e) The obligations of the Company and Holders under this Section 1.10 shall survive the completion of any offering of Registrable Securities in a registration statement under this Section 1, and otherwise.

1.11 Reports Under Securities Exchange Act of 1934. With a view to making available to the Holders the benefits of Rule 144 promulgated under the Act and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company agrees to:

(a) make and keep public information available, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the first registration statement filed by the Company for the offering of its securities to the general public;

(b) take such action, including the voluntary registration of its

Common Stock under Section 12 of the 1934 Act, as is necessary to enable the Holders to utilize Form S-3 for the sale of their Registrable Securities, such action to be taken as soon as practicable after the end of the fiscal year in which the first registration statement filed by the Company for the offering of its securities to the general public is declared effective;

(c) file with the SEC in a timely manner all reports and other documents required of the Company under the Act and the 1934 Act; and

(d) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the first registration statement filed by the Company), the Act and the 1934 Act (at any time after it has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after it so qualifies), (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration or pursuant to such form.

1.12 Form S-3 Registration. In case the Company shall receive from any Holder or Holders a written request or requests that the Company effect a registration on Form S-3 and any related qualification or compliance with respect to all or a part of the Registrable Securities owned by such Holder or Holders, the Company will:

(a) promptly give written notice of the proposed registration, and any related qualification or compliance, to all other Holders; and

(b) as soon as practicable, effect such registration and all such qualifications and compliances as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Holder's or Holders' Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any other Holder or Holders joining in such request as are specified in a written request given within fifteen (15) days after receipt of such written notice from the Company; provided, however, that the Company shall not be obligated to effect any such registration, qualification or compliance, pursuant to this Section 1.12: (i) if Form S-3 is not available for such offering by the Holders; (ii) if the Holders, together with the holders of any other securities of the Company entitled to inclusion in such registration, propose to sell Registrable Securities and such other securities (if any) at an aggregate price to the public (net of any underwriters' discounts or commissions) of less than $1,000,000; (iii) if the Company shall furnish to the Holders a certificate signed by the President of the Company stating that in the good faith judgment of the Board of Directors of the Company, it would be seriously detrimental to the Company and its stockholders for such Form S-3 Registration to be effected at such time, in which event the Company shall have the right to defer the filing of the Form S-3 registration statement for a period of not more than 90

days after

receipt of the request of the Holder or Holders under this Section 1.12; provided, however, that the Company shall not utilize this right more than once in any twelve (12) month period; (iv) if the Company has, within the twelve (12) month period preceding the date of such request, already effected (A) one (1) registration on Form S-3 for the requesting Holder or Holders or (B) two (2) registrations on Form S-3 pursuant to this Section 1.12; (v) if the Company has already effected four (4) registrations on Form S-3 pursuant to this Section 1.12; or (vi) in any particular jurisdiction in which the Company would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance.

(c) Subject to the foregoing, the Company shall file a registration statement covering the Registrable Securities and other securities so requested to be registered as soon as practicable after receipt of the request or requests of the Holders. All expenses incurred in connection with a registration requested pursuant to Section 1.12, including (without limitation) all registration, filing, qualification, printer's and accounting fees and the reasonable fees and disbursements of counsel (not to exceed $10,000) for the selling Holder or Holders and counsel for the Company, but excluding any underwriters' discounts or commissions associated with Registrable Securities, shall be borne by the Company. Registrations effected pursuant to this Section 1.12 shall not be counted as demands for registration or registrations effected pursuant to Sections 1.2 or 1.3, respectively.

1.13 Assignment of Registration Rights. The rights to cause the Company to register Registrable Securities pursuant to this Section 1 may be assigned (but only with all related obligations) by a Holder to a transferee or assignee of such securities who acquires all of the Registrable Securities previously held by such Holder, or who, after such assignment or transfer, holds at least 100,000 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations and other recapitalizations), provided: the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned; and provided, further, that such assignment shall be effective only if immediately following such transfer the further disposition of such securities by the transferee or assignee is restricted under the Act. For the purposes of determining the number of shares of Registrable Securities held by a transferee or assignee, the holdings of transferees and assignees of a partnership who are partners or retired partners of such partnership (including spouses and ancestors, lineal descendants and siblings of such partners or spouses who acquire Registrable Securities by gift, will or intestate succession) shall be aggregated together and with the partnership; provided that all assignees and transferees who would not qualify individually for assignment of registration rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices or taking

any action under this Section 1.

1.14 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the Registrable Securities then outstanding, enter into any agreement with any holder or

prospective holder of any securities of the Company that would allow such holder or prospective holder (a) to include such securities in any registration filed under Section 1.2 hereof, unless under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of his securities will not reduce the amount of the Registrable Securities of the Holders that is included or (b) to make a demand registration which could result in such registration statement being declared effective prior to the earlier of either of the dates set forth in subsection 1.2(a) or within one hundred twenty (120) days of the effective date of any registration effected pursuant to Section 1.2.

1.15 "Market Stand-Off" Agreement. Each Investor hereby agrees that, during the period of duration (not to exceed one hundred eighty (180) days) specified by the Company and an underwriter of Common Stock or other securities of the Company, following the effective date of a registration statement filed under the Act for the initial public offering of the Company's Common Stock, it shall not, to the extent requested by the Company and such underwriter, directly or indirectly, sell, offer to sell, contract to sell (including, without limitation, any short sale), grant any option to purchase or otherwise transfer or dispose of (other than to donees who agree to be similarly bound) any securities of the Company held by it at any time during such period except Common Stock included in such registration; provided, however, that the restrictions imposed by this subsection 1.15 shall not apply to Common Stock purchased by an Investor in the initial public offering of the Company's Common Stock or acquired by an Investor by purchases in the public market following such initial public offering; and provided further, that all officers and directors of the Company and all other persons with registration rights (whether or not pursuant to this Agreement) enter into similar agreements. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to the securities of the Company (except Common Stock included in such registration) held at any time during such period by each Investor (and the shares or securities of every other person subject to the foregoing restriction) until the end of such period.

1.16 Termination of Registration Rights

No Holder shall be entitled to exercise any right provided for in this Section 1 after the earlier of (a) three (3) years following the consummation of the sale of securities pursuant to a registration statement filed by the Company under the Act in connection with the initial firm commitment underwritten offering of its securities to the general public, the public offering price of

which was not less than $9.25 per share (adjusted to reflect subsequent stock dividends, stock splits or recapitalizations), and $15,000,000 in the aggregate, or (b) as to any Holder, such time at which all Registrable Securities held by such Holder can be sold in any three month period without registration in compliance with Rule 144 of the Act.

2. Covenants

2.1 Delivery of Financial Statements. The Company shall deliver to each Investor:

(a) as soon as practicable, but in any event within ninety (90) days after the end of each fiscal

year of the Company, an income statement for such fiscal year, a balance sheet of the Company and statement of stockholder's equity as of the end of such year, and a statement of cash flows for such year, such year-end financial reports to be in reasonable detail, prepared in accordance with generally accepted accounting principles ("GAAP"), and audited and certified by independent public accountants of nationally recognized standing selected by the Company;

(b) so long as such Investor holds an aggregate of at least 400,000 shares of Series A, Series B, Series C and/or Series D Preferred Stock (or Common Stock issued upon conversion thereof and as adjusted for subsequent stock splits, recombinations or reclassifications) as soon as practicable, but in any event within thirty (30) days after the end of each of the first three (3) quarters of each fiscal year of the Company, an unaudited income statement, statement of cash flows for such fiscal quarter and an unaudited balance sheet as of the end of such fiscal quarter;

(c) so long as such Investor holds an aggregate of at least 400,000 shares of Series A, Series B, Series C and/or Series D Preferred Stock (or Common Stock issued upon conversion thereof and as adjusted for subsequent stock splits, recombinations or reclassifications) within thirty (30) days of the end of each month, an unaudited income statement, statement of cash flows and balance sheet for and as of the end of such month, in reasonable detail;

(d) so long as such Investor holds an aggregate of at least 400,000 shares of Series A, Series B, Series C and/or Series D Preferred Stock (or Common Stock issued upon conversion thereof and as adjusted for subsequent stock splits, recombinations or reclassifications) as soon as practicable, but in any event thirty (30) days prior to the end of each fiscal year, a budget and business plan for the next fiscal year, prepared on a monthly basis, including balance sheets and income statements for such months and, as soon as prepared, any other budgets or revised budgets prepared by the Company;

(e) with respect to the financial statements called for in subsections (b) and (c) of this Section 2.1, an instrument executed by the Chief Financial

Officer or Chief Executive Officer of the Company and certifying that such financials were prepared in accordance with GAAP consistently applied with prior practice for earlier periods (with the exception of footnotes that may be required by GAAP) and fairly present the financial condition of the Company and its results of operation for the period specified, subject to year-end audit adjustment;

(f) such other information relating to the financial condition, business, prospects or corporate affairs of the Company as the Investor or any assignee of the Investor may from time to time request, provided, however, that the Company shall not be obligated under this subsection (f) or any other subsection of Section 2.1 to provide information which it deems in good faith to be a trade secret or similar confidential information.

2.2 Inspection. The Company shall permit each Investor, at such Investor's expense, to visit and inspect the Company's properties, to examine its books of account and records and to discuss the Company's affairs, finances and accounts with its officers, all at such reasonable times as may be requested by the Investor; provided, however, that the Company shall not be obligated pursuant to this Section 2.2 to provide access to any information that it reasonably considers to be a trade secret or similar confidential information.

2.3 Termination of Information and Inspection Covenants. The covenants set forth in Section 2.1 and Section 2.2 shall terminate as to Investors and be of no further force or effect (a) when the sale of securities pursuant to a registration statement filed by the Company under the Act in connection with the firm commitment underwritten offering of its securities to the general public is consummated, the public offering price of which was not less than $9.25 per share (adjusted to reflect subsequent stock dividends, stock splits or recapitalizations), and $15,000,000 in the aggregate or (b) when the Company first becomes subject to the periodic reporting requirements of Sections 12(g) or 15(d) of the 1934 Act, whichever event shall first occur.

2.4 Right of First Offer. Subject to the terms and conditions specified in this Section 2.4, the Company hereby grants to each Investor a right of first offer to purchase its pro rata share (in whole or in part) with respect to future sales by the Company of its Shares (as hereinafter defined). An Investor shall be entitled to assign or apportion the right of first offer hereby granted it among itself and its partners and affiliates (including in the case of a venture capital fund among other venture capital funds affiliated with such fund) in such proportions as it deems appropriate. For purposes of this Section 2.4, an Investor's pro rata share of Shares shall mean that number of Shares that equals the proportion that the number of shares of Common Stock issued and held by each Investor (assuming full conversion, exercise and/or exchange of all convertible, exercisable and exchangeable securities) bears to the total number of shares of Common Stock issued and outstanding immediately prior to the issuance of Shares (assuming full conversion, exercise and/or exchange of all convertible, exercisable and exchangeable securities).

Notwithstanding anything herein to the contrary, if the aggregate number of Shares which the Investors elect to purchase pursuant to this Section 2.4 exceeds sixty-six and two-thirds percent (66 2/3%) of the Shares to be offered by the Company, the number of Shares to be purchased by each Investor shall be reduced proportionately so that the aggregate number of Shares to be purchased by the Investors is no more than sixty-six and two-thirds percent (66 2/3%) of the Shares to be issued.

Each time the Company proposes to offer any shares of, or securities convertible into or exercisable for any shares of, any class of its capital stock ("Shares"), the Company shall first make an offering of such Shares to each Investor in accordance with the following provisions:

(a) The Company shall deliver a notice by certified mail ("Notice") to the Investors stating (i) its bona fide intention to offer such Shares, (ii) the number of such Shares to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such Shares.

(b) By written notification received by the Company within twenty (20) calendar days after receipt of the Notice, each Investor may elect to purchase or obtain, at the price and on the terms specified in the Notice, up to its pro rata share of such Shares.

(c) If all Shares that Investors are entitled to obtain pursuant to subsection 2.4(b) are not elected to be obtained as provided in subsection 2.4(b) hereof, the Company may, during the 30-day period following the expiration of the period provided in subsection 2.4(b) hereof, offer the remaining unsubscribed portion of such Shares to any person or persons at a price not less than, and upon terms no more favorable to the offeree than those specified in the Notice. If the Company does not enter into an agreement for the sale of the Shares within such period, or if such agreement is not consummated within 30 days of the execution thereof, the right provided hereunder shall be deemed to be revived and such Shares shall not be offered unless first reoffered to the Investors in accordance herewith.

(d) The right of first offer in this Section 2.4 shall not be applicable (i) to the issuance or sale of no more than 3,950,000 shares of Common Stock (or options therefor, including the number of options outstanding as of the date of this Agreement) to employees, consultants or directors for the primary purpose of soliciting or retaining their services, (ii) to or after consummation of a bona fide, firmly underwritten public offering of shares of Common Stock, registered under the Act pursuant to a registration statement on Form S-1, at an offering price of at least $9.25 per share (appropriately adjusted for any stock split, dividend, combination or other recapitalization) and $15,000,000 in the aggregate, (iii) the issuance of securities pursuant to the conversion or exercise of convertible or exercisable securities, (iv) the issuance of securities in connection with a bona fide business acquisition of or by the Company, whether by merger, consolidation, sale of assets, sale or

exchange of stock or otherwise, (v) the issuance of securities in connection with a transaction the primary purpose of which is to acquire technology, (vi) the issuance of securities to vendors, suppliers, equipment lessors or bank lenders where such issuance is not principally for the purpose of raising additional equity capital; or (vii) the issuance of securities to corporate partners or in connection with other strategic alliances approved by the Board of Directors of the Company.

2.5 Board of Directors

(a) With respect to those three (3) directors that the Company's Third Amended and Restated Certificate of Incorporation provides are to be elected by holders of Series A, Series B, Series C and Series D Preferred Stock, the Investors hereby agree to vote all of their shares of Series A, Series B, Series C and Series D Preferred Stock in favor of the election of one designee of each of Venrock Associates ("Venrock"), Sevin Rosen Fund IV, L.P. ("Sevin Rosen"), and Oak Investment Partners VI, L.P. ("Oak"). Notwithstanding the foregoing if pursuant to Article IV, Section (B), Paragraph 5(b) of the Company's Third Amended and Restated Certificate of Incorporation (which Paragraph is entitled "Voting for the Election of Directors"), as such provision may be amended from time to time, the number of directors to be elected by the holders of Series A, Series B, Series C and Series D Preferred Stock shall be decreased from three (3) directors to either two (2) directors or one (1) director, then among

Venrock, Sevin Rosen and Oak, those two (2) stockholders (in the case where the Series A, Series B, Series C and Series D Preferred Stock elects two (2) directors) or the one (1) stockholder (in the case where the Series A, Series B, Series C and Series D Preferred Stock elects one (1) director) holding the most shares of Series A, Series B, Series C and Series D Preferred Stock shall be entitled to designate the director(s) pursuant to this subsection (a).

(b) So long as (i) Integral Capital Partners III, L.P. ("Integral") or (ii) Bowman Capital or its related entities ("Bowman") holds an aggregate of at least 243,507 shares of Series C Preferred Stock and/or Series D Preferred Stock (or Common Stock issued upon conversion thereof and as adjusted for subsequent stock splits, recombinations or reclassifications), the Company shall invite one (1) designated representative of each of Integral and Bowman to attend all meetings of its Board of Directors in a nonvoting advisory capacity, and so long as any Investor holds an aggregate of at least 324,675 shares of Series C Preferred Stock and/or Series D Preferred Stock (or Common Stock issued upon conversion thereof and as adjusted for subsequent stock splits, recombinations or reclassifications), the Company shall invite one (1) designated representative of such Investor to attend all meetings of its Board of Directors in a nonvoting observer capacity. The Company shall give such designated representatives copies of all notices, minutes, consents, and other materials that it provides to its directors at the same time as such materials are provided to the directors; provided, however, that such representatives shall agree to hold in confidence and trust and to act in a fiduciary manner with

respect to all information so provided; and, provided further, that the Company reserves the right to withhold any information and to exclude such representatives from any meeting or portion thereof if the Company believes, upon advise of counsel, that such exclusion is reasonably necessary to preserve the attorney-client privilege, to protect highly confidential information, or for other similar reasons. The covenants and rights set forth in this Section 2.6 shall terminate and be of no further force or effect upon the closing of the Company's initial firm commitment underwritten offering of its securities to the general public, the public offering price of which was not less than $9.25 per share (adjusted to reflect subsequent stock dividends, stock splits or recapitalizations), and $15,000,000 in the aggregate.

3. Miscellaneous

3.1 Successors and Assigns. Except as otherwise provided herein, the terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties (including transferees of any shares of Registrable Securities). Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

3.2 Governing Law. This Agreement shall be governed by and construed under the laws of the State of Delaware as applied to agreements among Delaware residents entered into and to be performed entirely within Delaware.

3.3 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

3.4 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

3.5 Notices. Unless otherwise provided, any notice required or permitted under this Agreement shall be given in writing and shall be deemed effectively given upon personal delivery to the party to be notified or upon delivery by facsimile or overnight courier or upon deposit with the United States Post Office, by registered or certified mail, postage prepaid and addressed to the party to be notified at the address indicated for such party on the signature page hereof, or at such other address as such party may designate by ten (10) days' advance written notice to the other parties.

3.6 Expenses. If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

3.7 Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the holders of at least sixty-five percent (65%) of the Registrable Securities then outstanding; provided, however, that in the event such amendment or waiver (a) adversely affects the rights and/or obligations of an individual Holder in a different manner than the other Holders, such amendment or waiver shall also require the written consent of such individual Holder or (b) adversely affects the rights and/or obligations of the Founders under Section 1 of this Agreement in a different manner than the other Holders, such amendment or waiver shall also require the written consent of the Holders of at least a majority of the Common Stock (assuming the conversion of all outstanding shares of Preferred Stock) then held by the Founders; or (c) affects the rights and/or obligations of Integral and/or Bowman under Section 2.5(b) of this Agreement, such amendment or waiver shall also require the written consent of Integral and/or Bowman, as the case may be.

3.8 Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provision shall be excluded from this Agreement, and the balance of the Agreement shall be interpreted as if such provision were so excluded, and shall be enforceable in accordance with its terms.

3.9 Aggregation of Stock. All shares of Registrable Securities of the Company held or acquired by affiliated stockholders shall be aggregated together for the purpose of determining the availability of any rights under this Agreement. For purposes of the foregoing, the shares held by any stockholder that (a) is a partnership or corporation shall be

deemed to include shares held by the partners, retired partners and stockholders of such holder or members of the "immediate family" (as defined below) of any such partners, retired partners and stockholders, and any custodian or trustee for the benefit of any of the foregoing persons and (b) is an individual shall be deemed to include shares held by any members of the stockholder's immediate family ("immediate family" shall include any spouse, father, mother, brother, sister, lineal descendant of spouse or lineal descendant) or to any custodian or trustee for the benefit of any of the foregoing persons.

3.10 Amendment and Restatement. The Company, the Founders and the Investors consent to the execution of this Agreement, and to any and all other documents and agreements contemplated hereby and waive any and all rights they may have to object hereto or thereto and agree that this Agreement supersedes in all respects all prior agreements relating to the rights set forth herein, including the Second Restated Investors' Rights Agreement.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

COMPANY:

METAWAVE COMMUNICATIONS CORPORATION

By:

Vito Palermo
Chief Financial Officer and Secretary

Address: 8700 148th Avenue N.E.
Redmond, WA 98052

INVESTORS:

SPINNAKER TECHNOLOGY FUND, L.P.

By: Bowman Capital Management, L.L.C.
Its: General Partner

By:

Its:

Address: 1875 South Grant Road, Suite 1600
San Mateo, CA 94402

[SIGNATURE PAGE TO SERIES D INVESTOR RIGHTS AGREEMENT]

SPINNAKER TECHNOLOGY OFFSHORE FUND LIMITED

By: Bowman Capital Management, L.L.C.
Its: Investment Advisor and Attorney-in-Fact

By:

Its:

Address: 1875 South Grant Road, Suite 1600
San Mateo, CA 94402

SPINNAKER FOUNDERS FUND, L.P.

By: Bowman Capital Management, L.L.C.
Its: General Partner

By:

Its:

Address: 1875 South Grant Road, Suite 1600
San Mateo, CA 94402

SPINNAKER CLIPPER FUND, L.P.

By: Bowman Capital Management, L.L.C.
Its: General Partner

By:

Its:

Address: 1875 South Grant Road, Suite 1600
San Mateo, CA 94402

[SIGNATURE PAGE TO SERIES D INVESTOR RIGHTS AGREEMENT]

VENROCK ASSOCIATES

By:

Its:

Address: 30 Rockefeller Plaza
Room 5508
New York, NY 10112

VENROCK ASSOCIATES II, L.P.

By:

Its:

Address: 30 Rockefeller Plaza
Room 5508
New York, NY 10112

OAK INVESTMENT PARTNERS VI, L.P.

By:

Its:

Address: 525 University Avenue, Suite 1300
Palo Alto, CA 94301

OAK VI AFFILIATES FUND, L.P.

By:

Its:

Address: 525 University Avenue, Suite 1300
Palo Alto, CA 94301

[SIGNATURE PAGE TO SERIES D INVESTOR RIGHTS AGREEMENT]

SEVIN ROSEN FUND IV L.P.

By: SRB Associates IV L.P.
Its: General Partner

By:

Its: General Partner

Address: 13455 Noel Road., Suite 1670
Dallas, TX 75240
Attn: John V. Jaggers

SEVIN ROSEN FUND V L.P.

By: SRB Associates V L.P.
Its: General Partner

By: _____
Its: General Partner

Address: 13455 Noel Road., Suite 1670
Dallas, TX 75240
Attn: John V. Jaggers

SEVIN ROSEN BAYLESS MANAGEMENT CO.

By: _____
Its: Vice President

Address: 13455 Noel Road., Suite 1670
Dallas, TX 75240
Attn: John V. Jaggers

[SIGNATURE PAGE TO SERIES D INVESTOR RIGHTS AGREEMENT]

SEVIN ROSEN V AFFILIATES FUND L.P.

By: SRB Associates V L.P.
Its: General Partner

By: _____
Its: General Partner

Address: 13455 Noel Road., Suite 1670
Dallas, TX 75240
Attn: John V. Jaggers

_____
Jennifer G. Roberts

Address: c/o The Sevin Rosen Funds
550 Lytton Avenue, Suite 200
Palo Alto, CA 94301

Stephen L. Domenik

Address: c/o The Sevin Rosen Funds
550 Lytton Avenue, Suite 200
Palo Alto, CA 94301

David F. Bellet

Address: c/o Crown Advisors, Ltd.
The Lincoln Building
60 East 42nd Street, Suite 3405
New York, NY 10165

[SIGNATURE PAGE TO SERIES D INVESTOR RIGHTS AGREEMENT]

INTEGRAL CAPITAL PARTNERS III, L.P.

By: Integral Capital Management III, L.P.
Its: General Partner

By:

Its: General Partner

Address: 2750 Sand Hill Road
Menlo Park, CA 94025

INTEGRAL CAPITAL PARTNERS INTERNATIONAL III, L.P.

By: Integral Capital Management III, L.P.
Its: Investment General Partner

By:

Its: General Partner

Address: 2750 Sand Hill Road
Menlo Park, CA 94025

[SIGNATURE PAGE TO SERIES D INVESTOR RIGHTS AGREEMENT]

WORLDVIEW TECHNOLOGY PARTNERS I, L.P.

By:

    James Wei
    Managing Director

Worldview Capital I, L.P.
    Its: General Partner

Address: 435 Tasso Street, Suite 120
          Palo Alto, CA 94301

WORLDVIEW TECHNOLOGY INTERNATIONAL I, L.P.

By:

    James Wei
    Managing Director

Worldview Capital I, L.P.
    Its: General Partner

Address: 435 Tasso Street, Suite 120
          Palo Alto, CA 94301

Address: 435 Tasso Street, Suite 120
          Palo Alto, CA 94301

[SIGNATURE PAGE TO SERIES D INVESTOR RIGHTS AGREEMENT]

STANFORD UNIVERSITY

By:

    Its:

Address: 2770 San Hill Rd.
          Menlo Park, CA 94025

WA&H INVESTMENTS, L.L.C.

By: Wessels, Arnold & Henderson Group, L.L.C.
Its: Managing Member

By:

Kenneth J. Wessels
CEO/Managing Director

Address: 901 Marquette Avenue
Minneapolis, MN 55402-3280

MONTGOMERY ASSOCIATES, 1992 L.P.

By:

Its:

Address: 600 Montgomery Street
San Francisco, CA 94111

FOUNDERS:

Thomas S. Huseby

Address: c/o Metawave Communications Corporation
8700 148th Avenue N.E.
Redmond, WA 98052

[SIGNATURE PAGE TO SERIES D INVESTOR RIGHTS AGREEMENT]

Douglas O. Reudink

Address: c/o Metawave Communications Corporation
8700 148th Avenue N.E.
Redmond, WA 98052

Schedule A

SCHEDULE OF INVESTORS

Investors

Spinnaker Technology Fund, L.P.
Spinnaker Technology Offshore Fund Limited
Spinnaker Founders Fund, L.P.
Spinnaker Clipper Fund, L.P.
1875 South Grant Road, Suite 1600
San Mateo, CA 94402

Venrock Associates
Venrock Associates II, L.P.
30 Rockefeller Plaza, Room 5508
New York, NY 10112

Oak Investment Partners VI, L.P.

Oak VI Investment Affiliates Fund, L.P.
525 University Avenue, Suite 1300
Palo Alto, CA 94301

Sevin Rosen Fund IV L.P.
Sevin Rosen Fund V L.P.
Sevin Rosen Bayless Management Co.
Sevin Rosen V Affiliates Fund L.P.
Two Galleria Tower
13455 Noel Road, Suite 1670
Dallas, TX 75240

Jennifer G. Roberts
c/o The Sevin Rosen Funds
550 Lytton Avenue, Suite 200
Palo Alto, CA 94301

Stephen L. Domenik
c/o The Sevin Rosen Funds
550 Lytton Avenue, Suite 200
Palo Alto, CA 94301

David F. Bellet
c/o Crown Advisors Ltd.
The Lincoln Building
60 East 42nd Street, Suite 3405
New York, NY 10165

Integral Capital Partners III, L.P.
Integral Capital Partners International III, L.P.
Roger McNamee

2750 Sand Hill Road
Menlo Park, CA 94025

Worldview Technology Partners I, L.P.
Worldview Technology International I, L.P.
Worldview Strategic Partners I, L.P.
James Wei
435 Tasso Street, Suite 120
Palo Alto, CA 94301

Stanford University
Carol Gilmer
2770 Sand Hill Rd.
Menlo Park, CA 94025

David F. Bellett - Trustee
Profit Sharing Plan DLJSC - Cust.
FBO David F. Bellett
Nicole Primack
Donaldson, Lufkin & Jenrette
Investment Services Group - 13th Floor
277 Park Avenue
New York, NY 10172

DMG Technology Ventures, L.L.C.
1550 El Camino Real, Suite 100
Menlo Park, CA 94025

Itochu Corporation
S-1, Kita-Aoyama 2-chome
Minato-ku Tokyo 107-77
Japan

NVCC No. 1 Investment Enterprise Partnership
7-1-16, Akaska
Minato-ku Tokyo 107
Japan

IBJ Strategic Investments USA, Inc.
1251 Avenue of the Americas
New York, NY 10020

Cowen Investment Partners XXVIII
Two International Place
Boston, MA 02110

Bayview Investors, Ltd.
555 California Street
San Francisco, CA 94104

Wessels, Arnold & Henderson Investment, L.L.C.
601 Second Avenue South, Suite 3100
Minneapolis, MN 55402-4314

Founders

Thomas S. Huseby
c/o Metawave Communications Corporation
8700 148th Avenue N.E.
Redmond, WA 98052

Doug Reudink
c/o Metawave Communications Corporation
8700 148th Avenue N.E.
Redmond, WA 98052

EXHIBIT 10.8

* * * * * * * * * * * * * * * * * * * *

Lease

WILLOW CREEK CORPORATE CENTER

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* * * * * * * * * * * * * * * * * * * *

Between

METAWAVE COMMUNICATIONS CORPORATION, INC.

(Tenant)

---

and

CARR AMERICA REALTY CORPORATION

(Landlord)

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<TABLE>
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LEASE

THIS LEASE (the "Lease") is made as of September 29, 1997 between CARRAMERICA REALTY CORPORATION, a Maryland corporation (the "Landlord") and the Tenant as named in the Schedule below. The term "Project" means the buildings one through six (individually the "Building" and collectively the "Buildings") known as "Willow Creek Corporate Center" and the land (the "Land") located at 10525 Willows Road, Redmond, Washington 98073. "Premises" means that part of the Project leased to Tenant described in the Schedule and outlined on Appendix A.

The following schedule (the "Schedule") is an integral part of this Lease. Terms defined in this Schedule shall have the same meaning throughout the Lease.

SCHEDULE

I. TENANT: Metawave Communications Corporation, Inc., a Delaware corporation.
II. PREMISES: Buildings 1 and 2 of the Project.
III. RENTABLE SQUARE FEET OF THE PREMISES: Approximately 95,838 square feet (Building 1 - 51,286 square feet, Building 2 - 44,552 square feet).
IV. TENANT'S PROPORTIONATE SHARE: 28.62% (based upon a total of 334,906 rentable square feet in the Buildings).

V. SECURITY DEPOSIT: $2,500,000 Letter of Credit.

VI. TENANT'S REAL ESTATE BROKER FOR THIS LEASE: CB Commercial Real Estate Group, Inc.

VII. LANDLORD'S REAL ESTATE BROKER FOR THIS LEASE: N/A.

VIII. TENANT IMPROVEMENTS, IF ANY: See the Tenant Improvement Agreement attached hereto as Appendix C.

IX. COMMENCEMENT DATE: June 1, 1998. If the Commencement Date is other than June 1, 1998, Landlord and Tenant shall execute a Commencement Date Confirmation substantially in the form of Appendix E promptly following the Commencement Date.

X. TERMINATION DATE/TERM: May 31, 2005, seven (7) years after the Commencement Date, or if the Commencement Date is not the first day of a month, then after the first day of the following month.

XI. GUARANTOR: N/A.

XII. BASE RENT.

<TABLE>
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Period	Annual Base Rent	Monthly Base Rent	Per Sq. Ft. Rent
6-1-98 through 5-31-01	[***]	[***]	[***]
6-1-01 through 5-31-03	[***]	[***]	[***]
6-1-03 through 5-31-05	[***]	[***]	[***]

</TABLE>

I. APPENDICES: The following attached Appendices are an integral part of this Lease and incorporated herein by this reference:

Appendix A-1 - Plan of the Premises
Appendix A-2 - Plan of the Project
Appendix B - Rules and Regulations
Appendix C - Tenant Improvement Agreement
Appendix D - Mortgages Affecting Project
Appendix E - Commencement Date Conformation
Appendix F - Legal Description
Appendix G - Extension Option
Appendix H - Expansion Option

1. LEASE AGREEMENT. On the terms stated in this Lease, Landlord leases the Premises to Tenant, and Tenant leases the Premises from Landlord, for the Term beginning on the Commencement Date and ending on the Termination Date unless extended or sooner terminated pursuant to this Lease.

2. RENT.

A. Types of Rent. Tenant shall pay the following Rent in the form of a check to Landlord at the following address:

CARRAMERICA REALTY CORPORATION
WILLOW CREEK CORPORATE CENTER
P.O. Box 198456
Atlanta, GA 30384-7918

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

or by wire transfer as follows:

Account Name:	CarrAmerica Realty Corporation
Account Number:	3255807986
ABA Number:	061-000-052
Bank Name:	NationsBank of Georgia
Notification:	Jennifer Malone (CarrAmerica)
Telephone:	202-639-3829

or in such other manner as Landlord may notify Tenant:

(1) Base Rent in monthly installments in advance on or before the first day of each month of the Term in the amount set forth on the Schedule. Notwithstanding the foregoing, Landlord and Tenant agree that for the first six (6) months of the Lease Term Tenant's monthly Base Rent payment shall be [***] and, thereafter, Tenant s Base Rent obligation shall be as set forth in the Schedule. Landlord and Tenant agree that in the event Tenant shall occupy any portion of the approximately 23,000 square feet of Pocket Space as identified in the Tenant Improvement Agreement, Appendix C, Section 1, the Base Rent during months one through six (1-6) of the Lease Term shall be increased proportionately based on [***] PSF for that portion of the Pocket Space occupied by Tenant.

(2) Operating Cost Share Rent in an amount equal to the Tenant's Proportionate Share of the Operating Costs for the applicable fiscal year of the Lease, paid monthly in advance in an estimated amount. Definitions of Operating Costs and Tenant's Proportionate Share, and the method for billing and payment of Operating Cost Share Rent are set forth in Sections 2B, 2C and 2D.

(3) Tax Share Rent in an amount equal to the Tenant's Proportionate Share of the Taxes for the applicable fiscal year of this Lease, paid monthly in

advance in an estimated amount. A definition of Taxes and the method for billing and payment of Tax Share Rent are set forth in Sections 2B, 2C and 2D.

(4) Additional Rent in the amount of all costs, expenses, liabilities, and amounts which Tenant is required to pay under this Lease, excluding Base Rent, Operating Cost Share Rent, and Tax Share Rent, but including any interest for late payment of any item of Rent.

(5) Rent as used in this Lease means Base Rent, Operating Cost Share Rent, Tax Share Rent and Additional Rent. Tenant's agreement to pay Rent is an independent covenant, with no right of setoff, deduction or counterclaim of any kind, except as otherwise expressly stated herein.

(6) Skybridge. Tenant hereby agrees to pay to Landlord the costs and expenses incurred by Landlord in the construction of the skybridge pursuant to Appendix C(6)(b) as follows: Tenant shall pay monthly throughout the term of this Lease an amount per month equal to the total cost and expenses of constructing the skybridge amortized over the seven year term of this Lease at an annual interest rate of 10.5%. Tenant shall not be required to remove the skybridge at the termination of the Lease.

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

B. Payment of Operating Cost Share Rent and Tax Share Rent.

(1) Payment of Estimated Operating Cost Share Rent and Tax Share Rent

Landlord shall estimate the Operating Costs and Taxes of the Project by April 1 of each fiscal year, or as soon as reasonably possible thereafter. Landlord may revise these estimates whenever it obtains more accurate information, such as the final real estate tax assessment or tax rate for the Project.

Within ten (10) days after receiving the original or revised estimate from Landlord, Tenant shall pay Landlord one-twelfth (1/12th) of Tenant's Proportionate Share of this estimate, multiplied by the number of months that have elapsed in the applicable fiscal year to the date of such payment including the current month, minus payments previously made by Tenant for the months elapsed. On the first day of each month thereafter, Tenant shall pay Landlord one-twelfth (1/12th) of Tenant's Proportionate Share of this estimate, until a new estimate becomes applicable.

(2) Correction of Operating Cost Share Rent. Landlord shall deliver

to Tenant a report for the previous fiscal year (the "Operating Cost Report") by April 1 of each year, or as soon as reasonably possible thereafter, setting forth (a) the actual Operating Costs incurred, (b) the amount of Operating Cost Share Rent due from Tenant, and (c) the amount of Operating Cost Share Rent paid by Tenant. Within twenty (20) days after such delivery, Tenant shall pay to Landlord the amount due minus the amount paid. If the amount paid exceeds the amount due, Landlord shall apply the excess to Tenant's payments of Operating Cost Share Rent next coming due.

(3) Correction of Tax Share Rent. Landlord shall deliver to Tenant a report for the previous fiscal year (the "Tax Report") by April 1 of each year, or as soon as reasonably possible thereafter, setting forth (a) the actual Taxes, (b) the amount of Tax Share Rent due from Tenant, and (c) the amount of Tax Share Rent paid by Tenant. Within twenty (20) days after such delivery, Tenant shall pay to Landlord the amount due from Tenant minus the amount paid by Tenant. If the amount paid exceeds the amount due, Landlord shall apply any excess as a credit against Tenant's payments of Tax Share Rent next coming due.

C. Definitions.

(1) Included Operating Costs. "Operating Costs" means any expenses, costs and disbursements of any kind other than Taxes, paid or incurred by Landlord in connection with the management, maintenance, operation, insurance, repair and other related activities in connection with any part of the Project and of the personal property, fixtures, machinery, equipment, systems and apparatus used in connection therewith, including the cost of providing those repair, maintenance and services required to be furnished by Landlord to the Premises and Building under this Lease, a management fee

in an amount equal to three percent (3%) of the annual Base Rent and accounting and administration costs incurred by Landlord with respect to the Project. Operating Costs shall also include the costs of any capital improvements (other than Landlord's Work, Initial Improvements, and Additional Improvements) which reduce Operating Costs or improve safety, and those made to keep the Project in compliance with governmental requirements applicable from time to time (collectively, "Included Capital Items"); provided, that the costs of any Included Capital Item shall be amortized by Landlord, together with an amount equal to interest at ten percent (10%) per annum, over the estimated useful life of such item and such amortized costs are only included in Operating Costs for that portion of the useful life of the Included Capital Item which falls within the Term.

If the Project is not fully occupied during any portion of any fiscal

year, Landlord may adjust (an "Equitable Adjustment") Operating Costs to equal what would have been incurred by Landlord had the Project been fully occupied. This Equitable Adjustment shall apply only to Operating Costs which are variable and therefore increase as occupancy of the Project increases. Landlord may incorporate the Equitable Adjustment in its estimates of Operating Costs.

If Landlord does not furnish any particular service whose cost would have constituted an Operating Cost to a tenant other than Tenant who has undertaken to perform such service itself, Operating Costs shall be increased by the amount which Landlord would have incurred if it had furnished the service to such tenant.

(2) Excluded Operating Costs. Operating Costs shall not include:

(a) costs of alterations of tenant premises;

(b) costs of capital improvements other than Included Capital Items;

(c) interest and principal payments on mortgages or any other debt costs, or rental payments on any ground lease of the Project;

(d) real estate brokers' leasing commissions;

(e) legal fees, space planner fees and advertising expenses incurred with regard to leasing the Building or portions thereof;

(f) any cost or expenditure for which Landlord is reimbursed, by insurance proceeds or otherwise, except by Operating Cost Share Rent;

(g) the cost of any service furnished to any office tenant of the Project which Landlord does not make available to Tenant;

(h) depreciation (except on any Included Capital Items);

(i) franchise or income taxes imposed upon Landlord;

(j) costs of correcting defects in construction of the Building, including Building Shell, Initial Improvements and Additional Improvements (as opposed to the cost of normal repair, maintenance and replacement expected with the construction materials and equipment installed in the Building in

light of their specifications);

(k) legal and auditing fees which are for the benefit of Landlord such as collecting delinquent rents, preparing tax returns and other financial statements, and audits other than those incurred in connection with the preparation of reports required pursuant to Section 2B above;

(l) the wages of any employee for services not related directly to the day to day management, maintenance, operation and repair of the Building; and

(m) fines, penalties and interest.

(n) amounts paid for deductibles on insurance carried by Landlord relating to the Project in excess of industry standard deductibles for insurance policies covering comparable Projects.

(3) Taxes. "Taxes" means any and all taxes, assessments and charges
----- -----
of any kind, general or special, ordinary or extraordinary, levied against the Project, which Landlord shall pay or become obligated to pay in connection with the ownership, leasing, renting, management, use, occupancy, control or operation of the Project or of the personal property, fixtures, machinery, equipment, systems and apparatus used in connection therewith. Taxes shall include real estate taxes, personal property taxes, sewer rents, water rents, special or general assessments, transit taxes, ad valorem taxes, and any tax levied on the rents hereunder or the interest of Landlord under this Lease (the "Rent Tax"). Taxes shall also include all fees and other costs and expenses
----
paid by

Landlord in reviewing any tax and in seeking a refund or reduction of any Taxes, whether or not the Landlord is ultimately successful.

For any year, the amount to be included in Taxes (a) from taxes or assessments payable in installments, shall be the amount of the installments (with any interest) due and payable during such year, and (b) from all other Taxes, shall at Landlord's election be the amount accrued, assessed, or otherwise imposed for such year or the amount due and payable in such year. Any refund or other adjustment to any Taxes by the taxing authority, shall apply during the year in which the adjustment is made.

Taxes shall not include any net income (except Rent Tax), capital, stock, succession, transfer, franchise, gift, estate or inheritance tax, except to the extent that such tax shall be imposed in lieu of any portion of Taxes.

(4) Lease Year. "Lease Year" means each consecutive twelve-month
---------- ----------

period beginning with the Commencement Date, except that if the Commencement Date is not the first day of a calendar month, then the first Lease Year shall be the period from the Commencement Date through the final day of the twelve months after the first day of the following month, and each subsequent Lease Year shall be the twelve months following the prior Lease Year.

(5) Fiscal Year. "Fiscal Year" means the calendar year, except that the first fiscal year and the last fiscal year of the Term may be a partial calendar year.

D. Computation of Base Rent and Rent Adjustments.

(1) Prorations. If this Lease begins on a day other than the first day of a month, the Base Rent, Operating Cost Share Rent and Tax Share Rent shall be prorated for such partial month based on the actual number of days in such month. If this Lease begins on a day other than the first day, or ends on a day other than the last day, of the fiscal year, Operating Cost Share Rent and Tax Share Rent shall be prorated for the applicable fiscal year.

(2) Default Interest. Any sum due from Tenant to Landlord not paid when due shall bear interest from the date due until paid at ten and one half percent (10.5%).

(3) Rent Adjustments. The square footage of the Premises and the Building set forth in the Schedule are conclusively deemed to be the actual square footage thereof, without regard to any subsequent remeasurement of the Premises or the Building. If any Operating Cost paid in one fiscal year relates to more than one fiscal year, Landlord may proportionately allocate such Operating Cost among the related fiscal years.

(4) Books and Records. Landlord shall maintain books and records reflecting the Operating Costs and Taxes in accordance with sound accounting and management practices. Tenant and its certified public accountant shall have the right to inspect Landlord's records at Landlord's office upon at least seventy-two (72) hours' prior notice during normal business hours during the ninety (90) days following the respective delivery of the Operating Cost Report or the Tax Report. The results of any such inspection shall be kept strictly confidential by Tenant and its agents, and Tenant and its certified public accountant must agree, in their contract for such services, to such confidentiality restrictions and shall specifically agree that the results shall not be made available to any other tenant of the Building. Unless Tenant sends to Landlord any written exception to either such report within said ninety (90) day period, such report

shall be deemed final and accepted by Tenant. Tenant shall pay the amount shown on both reports in the manner prescribed in this Lease, whether or not Tenant takes any such written exception, without any prejudice to such exception. If Tenant makes a timely exception, Landlord shall cause its independent certified public accountant to issue a final and conclusive resolution of Tenant's exception. Tenant shall pay the cost of such certification unless Landlord's original determination of annual Operating Costs or Taxes overstated the amounts thereof by more than five percent (5%).

(5) Miscellaneous. So long as Tenant is in default of any obligation under this Lease, Tenant shall not be entitled to any refund of any amount from Landlord. If this Lease is terminated for any reason prior to the annual determination of Operating Cost Share Rent or Tax Share Rent, either party shall pay the full amount due to the other within fifteen (15) days after Landlord's notice to Tenant of the amount when it is determined. Landlord may commingle any payments made with respect to Operating Cost Share Rent or Tax Share Rent, without payment of interest.

3. PREPARATION AND CONDITION OF PREMISES; POSSESSION AND SURRENDER OF PREMISES.

A. Condition of Premises. Except to the extent of the Tenant Improvements item on the Schedule, and without limiting Landlord s duties under other provisions of this Lease, Landlord is leasing the Premises to Tenant "as is", without any obligation to alter, remodel, improve, repair or decorate any part of the Premises. Landlord shall cause the Premises to be completed in accordance with the Tenant Improvement Agreement attached as Appendix C.

B. Tenant's Possession. Tenant's taking possession on the Commencement Date of any portion of the Premises shall be conclusive evidence that the Premises was in good order, repair and condition, other than latent and other defects which are not discoverable upon reasonable inspection by Tenant at the time of taking possession. If Landlord authorizes Tenant to take possession of any part of the Premises prior to the Commencement Date for purposes of doing business, all terms of this Lease shall apply to such pre-Term possession, including Base Rent at the rate set forth for the First Lease

Year in the Schedule prorated for any partial month. Notwithstanding the foregoing, Tenant shall be granted access to the Premises thirty (30) days prior to the Commencement Date for the purposes of installing Tenant s furniture, fixtures and equipment.

In the event that through no fault of Tenant, and subject to force majeure, Landlord has not substantially completed (as defined in Appendix C) the Premises

in accordance with Appendix C by the Commencement Date, as Tenant s sole and exclusive remedy, Landlord shall provide Tenant with two (2) days of Base Rent abatement credit for each day of late delivery until the Premises are substantially complete provided, however, that in the event that Premises are not delivered within 120 days of the Commencement Date, Tenant shall have the right to terminate this Lease.

C. Surrender. Subject to Landlord's obligations set forth herein and paragraph 4E, throughout the Term, Tenant shall maintain, repair and replace the Premises in their condition as of the Completion Date, loss or damage caused by the elements, ordinary wear, and fire and other casualty excepted, and at the termination of this Lease, or Tenant's right to possession, Tenant shall return the Premises to Landlord in broom-clean condition. To the extent Tenant fails to perform either obligation, Landlord may, but need not, restore the Premises to such condition and Tenant shall pay the cost thereof.

4. BUILDING AND LANDLORD REPAIR.

Landlord shall furnish the services, repair and maintenance to the Premises and Buildings ("Building Services"), unless otherwise stated herein, as follows:

A. Heating and Air Conditioning. Landlord shall furnish heating and air conditioning system to the Premises as part of the Building Shell to provide a comfortable temperature, in Landlord's judgment, for normal business operations. Tenant may install supplementary stand alone air conditioning units in the Premises, if necessary to maintain comfortable temperature for normal business operations, provided that such improvements by Tenant shall be of Tenant's sole cost and expense, and subject to Landlord's reasonable prior approval and the terms of Article 5 hereof. Tenant shall pay to Landlord upon demand as Additional Rent the cost of operation, repair and maintenance thereof.

B. Electricity. Landlord shall furnish to the Premises as part of the Building Shell sufficient electricity to operate normal office equipment. Tenant shall not install or operate in the Premises any electrically operated equipment or other machinery, other than business machines and equipment normally employed for general office use (other than equipment installed in Tenant's "equipment demo rooms", engineering laboratories and on the production floor) which do not require high electricity consumption for operation. If any of Tenant's equipment requires electricity consumption in excess of the capacity of the electrical system installed by Landlord in the Premises, all additional

transformers, distribution panels and wiring that may be required to provide the amount of electricity required for Tenant's equipment shall be installed by Landlord at the cost and expense of Tenant except to the extent covered by the Landlord Contribution. Tenant shall pay the cost of electricity it consumes as

recorded by the electric meter serving the Premises directly to the electric company. In the event that the Premises are not separately metered, Tenant shall be billed periodically by Landlord based upon such consumption or shall be made part of the Operating Cost Share Rent.

C. Water. Landlord shall furnish hot and cold tap water for drinking and toilet purposes to the Premises as part of the Building Shell. Tenant shall pay directly to the water company for water furnished and consumed. Tenant shall not permit water to be wasted.

D. Janitorial Service. Tenant shall provide, at its own cost and expense, janitorial services to the Premises. At Tenant's request, Landlord may furnish janitorial to the Premises. Tenant shall reimburse Landlord such costs as Additional Rent.

E. Landlord's Repair Obligations. Subject to Tenant's obligations set forth in paragraph 5F below and Landlord's rights to reimbursement of costs and expenses as set forth in this Lease, Landlord shall repair, maintain and replace, as necessary, the Building shell, the roof, exterior walls and structural parts of the Premises, and equipment and fixtures comprising the Building Services (unless otherwise expressly excluded as set forth in this paragraph 4). Tenant shall pay to and reimburse Landlord for the cost and expense of Landlord's obligations hereunder as Operating Costs, or if such services are provided solely to Tenant and the Premises, Landlord shall invoice Tenant and Tenant shall pay Landlord, as Additional Rent, the cost of such services. Notwithstanding the foregoing, Landlord shall not (i) be required to make repairs necessitated by reason of the negligence or willful misconduct of Tenant or anyone claiming under Tenant, by reason of the failure of Tenant to perform or observe any conditions or agreements of this Lease, or by reason of any improvements or alterations made by Tenant, or (ii) be liable to Tenant for failure to make repairs as herein specifically required of it unless Tenant has notified Landlord, in writing (except in emergencies) of the need for such repairs and Landlord has failed to commence said repairs within ten (10) business days following receipt of Tenant's notification.

F. Interruption of Services. If any of the Building utilities systems, equipment or machinery provided or maintained by Landlord ceases to function properly for any cause, Landlord shall use reasonable diligence to repair the same promptly. Landlord's inability to furnish, to any extent, the Building Services set forth in this Section 4, or any cessation thereof resulting from any causes, including any entry for repairs pursuant to this Lease, and any renovation, redecoration or rehabilitation of any area of the Building shall not render Landlord liable for damages to either person or property or for interruption or loss to Tenant's business, nor be construed as an eviction of Tenant, nor work an abatement of any portion of rent, nor relieve Tenant from fulfillment

of any covenant or agreement hereof; provided, however, in the event that an interruption of the Building Services set forth in this Section 4 to the extent caused by Landlord's negligence or performance of its duties under this Lease causes the Premises to be untenantable for a period of at least five (5) consecutive business days, monthly Rent shall be abated proportionately.

5. ALTERATIONS AND REPAIRS BY TENANT.

A. Landlord's Consent and Conditions.

Tenant shall not make any improvements or alterations to the Premises (the "Work"), in excess of ten thousand dollars ($10,000) without in each instance
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submitting plans to Landlord and obtaining Landlord's prior written consent, which shall not be unreasonably withheld. For purposes of this Section, the term "Work" shall not include Tenant's furniture, fixtures or equipment. Landlord will be deemed to be acting reasonably in withholding its consent for any Work which (a) impacts the base structural components or systems of the Building, (b) impacts any other tenant's premises, or (c) is visible from outside the Premises, with the exception of antennas installed pursuant to Section 6 hereof. With respect to any consent required herein, Landlord shall respond within ten (10) days.

Tenant shall reimburse Landlord for actual costs incurred for review of the plans and all other items submitted by Tenant. Tenant shall pay for the cost of all Work. All Work shall become the property of Landlord upon its installation, except for Tenant's trade fixtures and for items which Landlord requires Tenant to remove at Tenant's cost at the termination of the Lease pursuant to Section 5E.

The following requirements shall apply to all Work:

(1) Prior to commencement, Tenant shall furnish to Landlord building permits, certificates of insurance satisfactory to Landlord, and, at Landlord's request, security for payment of all costs.

(2) Tenant shall perform all Work so as to maintain peace and harmony among other contractors serving the Project and shall avoid interference with other work to be performed or services to be rendered in the Project.

(3) The Work shall be performed in a good and workmanlike manner, meeting the standard for construction and quality of materials in the Building, and shall comply with all insurance requirements and all applicable governmental laws, ordinances and regulations ("Governmental Requirements").
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(4) Tenant shall perform all Work so as to minimize or prevent disruption to other tenants, and Tenant shall comply with all reasonable requests of Landlord in response to complaints from other tenants.

(5) Tenant shall perform all Work in compliance with Landlord's "Policies, Rules and Procedures for Construction Projects" in effect at the time the Work is performed.

(6) Tenant shall permit Landlord to supervise all Work. Landlord may charge a supervisory fee not to exceed five percent (5%) of labor, material, and all other costs of the Work, if Landlord's employees or contractors perform the Work.

(7) Upon completion, Tenant shall furnish Landlord with contractor's affidavits and full and final statutory waivers of liens, as-built plans and specifications, and receipted bills covering all labor and materials.

B. Damage to Systems. If any part of the mechanical, electrical or other systems in the Premises provided or maintained by landlord shall be damaged as a result of Tenant's improvements or alterations, Tenant shall promptly notify Landlord, and Landlord shall repair such damage. Landlord may also at any reasonable time make any repairs or alterations which Landlord deems necessary for the safety or protection of the Project, or which Landlord is required to make by any court or pursuant to any Governmental Requirement. During any period of Tenant's alteration or improvement of the Premises, Tenant shall at its expense make all other repairs required as a result or caused by Tenant's construction of alterations and improvements necessary to keep the Premises, and Tenant's fixtures and personal property, in good order, condition and repair; to the extent Tenant fails to do so, Landlord may make such repairs itself. The cost of any repairs made by Landlord on account of Tenant's default, or on account of the mis-use or neglect by Tenant or its invitees, contractors or agents anywhere in the Project, shall become Additional Rent payable by Tenant on demand.

C. No Liens. Tenant has no authority to cause or permit any lien or encumbrance of any kind to affect Landlord's interest in the Project; any such lien or encumbrance shall attach to Tenant's interest only. If any mechanic's lien shall be filed or claim of lien made for work or materials furnished to Tenant, then Tenant shall at its expense within ten (10) days thereafter either discharge or contest the lien or claim. If Tenant contests the lien or claim, then Tenant shall (i) within such ten (10) day period, provide Landlord adequate security for the lien or claim, (ii) contest the lien or claim in good faith by appropriate proceedings that operate to stay its enforcement, and (iii) pay promptly any final adverse judgment entered in any such proceeding. If Tenant does not comply with these requirements, Landlord may discharge the lien or claim, and the amount paid, as well as attorney's fees and other expenses incurred by Landlord, shall become Additional Rent payable by Tenant on demand.

D. Ownership of Improvements. All improvements, alterations or work to the Premises as defined in this Section 5, partitions, hardware, equipment, machinery and all other improvements and all fixtures except trade fixtures, constructed in the Premises by either Landlord or Tenant, (i) shall become Landlord's property upon installation without compensation to Tenant, unless Landlord consents otherwise in writing, and (ii) shall at Landlord's option either (a) be surrendered to Landlord with the Premises at the termination of the Lease or of Tenant's right to possession, or (b) be removed in accordance with Subsection 5E below (unless Landlord at the time it gives its consent to the performance of such construction expressly waives in writing the right to require such removal).

E. Removal at Termination. Upon the termination of this Lease or Tenant's right of possession Tenant shall remove from the Project its trade fixtures, furniture, moveable equipment and other personal property, any improvements which Landlord elects shall be removed by Tenant pursuant to Section 5D, and any improvements to any portion of the Project other than the Premises, provided, however, that Tenant is not required to remove any Initial Improvements, Additional Improvements, Landlord's Work, or the skybridge. If Tenant does not timely remove such property, then Tenant shall be conclusively presumed to have, at Landlord's election (i) conveyed such property to Landlord without compensation or (ii) abandoned such property, and Landlord may dispose of or store any part thereof in any manner at Tenant's sole cost, without waiving Landlord's right to claim from Tenant all expenses arising out of Tenant's Sailure to remove the property, and without liability to Tenant or any other person. Landlord shall have no duty to be a bailee of any such personal property. If Landlord elects abandonment, Tenant shall pay to Landlord, upon demand, any expenses incurred for disposition.

F. Tenant's Repair Obligation. Subject to Landlord's obligations set forth in paragraph 4E, Tenant shall, throughout the term of this Lease and at its own cost and expense, maintain, repair and replace, as necessary, or required by applicable law or ordinances, the Premises improvements, fixtures, equipment, mechanical and electrical systems in their condition as of the Commencement Date, ordinary wear and tear excepted. Tenant shall provide its own garbage service to the Premises at its own cost and expense. All replacements made by Tenant shall be of like kind and quality to the items replaced as they existed when originally installed. With respect to any maintenance or repair of mechanical and electrical systems in the Premises and required be maintained by Tenant hereunder, Tenant shall contract and pay for periodic inspection and maintenance and the repair and replacement, as necessary, subject to the Landlord's approval and satisfaction which shall not be unreasonably withheld or delayed.

6. USE OF PREMISES. Tenant shall use the Premises only for general

office and light manufacturing purposes, which shall include product demonstration to customers, equipment testing and storage. Tenant shall not allow any use of the Premises which will negatively affect the cost of coverage of Landlord's insurance on the Project.

Tenant shall not allow any inflammable or explosive liquids or materials to be kept on the Premises (other than propane tanks used for vehicles on the Premises). Tenant shall not allow any use of the Premises which would cause the value or utility of any part of the Premises to diminish or would interfere with any other Tenant or with the operation of the Project by Landlord. Tenant shall not permit any nuisance or waste upon the Premises, or allow any offensive noise or odor in or around the Premises.

If any governmental authority shall deem the Premises to be a "place of public accommodation" under the Americans with Disabilities Act or any other comparable law as a result of Tenant's use, Tenant shall either modify its use to cause such authority to rescind its designation or be responsible for any alterations, structural or otherwise, required to be made to the Building or the Premises under such laws.

Tenant, its employees, agents, contractors or invitees shall be allowed access to the building roof for the purpose of installing servicing, monitoring, testing and changing its equipment; provided that Landlord shall be notified prior to any installation work and such work satisfies the requirements of Section 3 and 5.

7. GOVERNMENTAL REQUIREMENTS AND BUILDING RULES. Landlord shall comply
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with all Governmental Regulations applicable to the design or construction of the Premises, the Building shell, the Initial Improvements and the Additional Improvements. Tenant shall comply with all Governmental Requirements applying to its use of the Premises. Tenant shall also comply with all reasonable rules established for the Project from time to time by Landlord. The present rules and regulations are contained in Appendix B. Failure by another tenant to comply with the rules or failure by Landlord to enforce them shall not relieve Tenant of its obligation to comply with the rules or make Landlord responsible to Tenant in any way. Landlord shall use reasonable efforts to apply the rules and regulations uniformly with respect to Tenant and tenants in the Project under leases containing rules and regulations similar to this Lease. In the event of alterations and repairs performed by Tenant, Tenant shall comply with the provisions of Section 5 of this Lease and also landlord s Policies, Rules and Regulations for Construction Projects".

8. WAIVER OF CLAIMS; INDEMNIFICATION; INSURANCE.

A. Waiver of Claims. To the extent permitted by law, Tenant waives any
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claims it may have against Landlord or its officers, directors, employees or

agents for business interruption or damage to property sustained by Tenant constituting insurable risks covered by the insurance policies required to be maintained by the parties hereunder as the result of any act or omission of Landlord.

To the extent permitted by law, Landlord waives any claims it may have against Tenant or its officers, directors, employees or agents for loss of rents or damage to property sustained by Landlord constituting insurable risks covered by the insurance

policies required to be maintained by the parties hereunder as the result of any act or omission of Tenant.

B. Indemnification. Tenant shall indemnify, defend and hold harmless
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Landlord and its officers, directors, employees and agents against any claim by any third party for injury to any person or damage to or loss of any property occurring in the Project and arising from the use of the Premises or from any other act or omission or negligence of Tenant or any of Tenant's employees or agents. Tenant's obligations under this section shall survive the termination of this Lease.

Landlord shall indemnify, defend and hold harmless Tenant and its officers, directors, employees and agents against any claim by any third party for injury to any person or damage to or loss of any property occurring in the Project and arising from any other act or omission or negligence of Landlord or any of Landlord's employees or agents. Landlord's obligations under this section shall survive the termination of this Lease.

TENANT HEREBY WAIVES ITS IMMUNITY WITH RESPECT TO LANDLORD UNDER THE INDUSTRIAL INSURANCE ACT (RCW TITLE 51) AND/OR THE LONGSHOREMAN S AND HARBORWORKER S ACT AND/OR ANY EQUIVALENT ACTS AND TENANT EXPRESSLY AGREES TO ASSUME POTENTIAL LIABILITY FOR ACTIONS BROUGHT AGAINST LANDLORD BY TENANT S EMPLOYEES EXCEPT TO THE EXTENT CAUSED BY LANDLORD. THIS WAIVER HAS BEEN SPECIFICALLY NEGOTIATED BY THE PARTIES TO THIS LEASE AND TENANT HAS HAD THE OPPORTUNITY TO, AND HAS BEEN ENCOURAGED, TO CONSULT WITH INDEPENDENT COUNSEL REGARDING THIS WAIVER.

C. Tenant's Insurance. Tenant shall maintain insurance as follows, with
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such other terms, coverages and insurers, as Landlord shall reasonably require from time to time:

(1) Commercial General Liability Insurance, with (a) Contractual Liability including the indemnification provisions contained in this Lease, (b) a severability of interest endorsement, (c) limits of not less than One Million Dollars ($1,000,000) combined single limit per occurrence and not less than Two Million Dollars ($2,000,000) in the aggregate for bodily injury, sickness or death, and property damage, and umbrella coverage of not less than Five Million

Dollars ($5,000,000).

(2) Property Insurance against "Special Form, All Risks" of physical loss covering the replacement cost of all improvements, fixtures and personal property.

(3) Workers compensation or similar insurance in form and amounts required by law, and Employers Liability with not less than the following limits:

Each Accident	$100,000
Disease--Policy Limit	$500,000
Disease--Each Employee	$100,000

Tenant's insurance shall be primary and not contributory to that carried by Landlord, its agents, or mortgagee. Landlord, and if any, Landlord s building manager or agent and ground lessor shall be named as additional insureds as respects to insurance required of the Tenant in Section 8C(1). The company or companies writing any insurance which Tenant is required to maintain under this Lease, as well as the form of such insurance, shall at all times be subject to Landlord's approval, and any such company shall be licensed to do business in the state in which the Building is located. Such insurance companies shall have a A.M. Best rating of A VI or better.

Tenant shall cause any contractor of Tenant performing work on the Premises to maintain insurance as follows, with such other terms, coverages and insurers, as Landlord shall reasonably require from time to time:

(1) Commercial General Liability Insurance, including contractor's liability coverage, contractual liability coverage, completed operations coverage, broad form property damage endorsement, and contractor's protective liability coverage, to afford protection with limits, for each occurrence, of not less than One Million Dollars ($1,000,000) with respect to personal injury, death or property damage.

(2) Workers compensation or similar insurance in form and amounts required by law, and Employer's Liability with not less than the following limits:

Each Accident	$100,000
Disease--Policy Limit	$500,000
Disease--Each Employee	$100,000

Tenant's contractor's insurance shall be primary and not contributory to that carried by Tenant, Landlord, their agents or mortgagees. Tenant and Landlord, and if any, Landlord's building manager or agent, mortgagee or ground lessor shall be named as additional insured on Tenant's contractor's insurance policies.

D. Insurance Certificates. Tenant shall deliver to Landlord certificates evidencing all required insurance no later than five (5) days prior to the Commencement Date and each renewal date. Each certificate will provide for thirty (30) days prior written notice of cancellation to Landlord and Tenant.

E. Landlord's Insurance. Landlord shall maintain "Special Form, All-Risk" property insurance at replacement cost, including loss of rents, on the Building, and Commercial General Liability insurance policies covering the common areas of the

Building, each with such terms, coverages and conditions as are normally carried by reasonably prudent owners of properties similar to the Project.

F. Waiver of Subrogation. With respect to all policies of insurance to be maintained hereunder by Tenant and Landlord, Landlord and Tenant mutually waive all rights of subrogation, and the respective "All-Risk" coverage property insurance policies carried by Landlord and Tenant shall contain enforceable waiver of subrogation endorsements.

9. FIRE AND OTHER CASUALTY.

A. Termination. If a fire or other casualty causes substantial damage to the Building or the Premises, Landlord shall engage a registered architect to certify within one (1) month of the casualty to both Landlord and Tenant the amount of time needed to restore the Building and the Premises to tenantability, using standard working methods. If the time needed exceeds twelve (12) months from date of damage, or two (2) months therefrom if the restoration would begin during the last twelve (12) months of the Lease, then in the case of the Premises, either Landlord or Tenant may terminate this lease, and in the case of the Building, Landlord may terminate this Lease, by notice to the other party within ten (10) days after the notifying party's receipt of the architect's certificate. The termination shall be effective thirty (30) days from the date of the notice and Rent shall be paid by Tenant to that date, with an abatement for any portion of the Premises which has been untenantable after the casualty.

B. Restoration. If a casualty causes damage to the Building or the Premises but this Lease is not terminated for any reason, then subject to the rights of any mortgagees or ground lessors, Landlord shall obtain the applicable insurance proceeds and diligently restore the Building and the Premises subject to current Governmental Requirements. Tenant shall replace its damaged improvements, personal property and fixtures. Rent shall be abated on a per diem basis during the restoration for any portion of the Premises which is

untenantable, except to the extent that Tenant's negligence caused the casualty.

10. EMINENT DOMAIN. If a part of the Project is taken by eminent domain or deed in lieu thereof which is so substantial that the Premises cannot reasonably be used by Tenant for the operation of its business, then either party may terminate this Lease effective as of the date of the taking. In the event that seventy five percent (75%) or more of the Project is taken without affecting the Premises, then Landlord may terminate this Lease as of the date of such taking. Rent shall abate from the date of the taking in proportion to any part of the Premises taken. Subject to Tenant's rights to pursue claims described below, the entire award for a taking of any kind shall be paid to Landlord, and Tenant shall have no right to share in the award. All obligations accrued to the date of the taking shall be performed by each party. Notwithstanding the foregoing, nothing herein shall be deemed a waiver of Tenant's rights to receive an award for a

taking of its personal property, good will, relocation expense and/or interest in the Lease provided Tenant's award does not reduce or adversely affect Landlord's award.

11. RIGHTS RESERVED TO LANDLORD.

Landlord may exercise at any time any of the following rights respecting the operation of the Project without liability to the Tenant of any kind:

A. Name. To change the name or street address (but only to extent such changes in street address is required by a governmental authority) of the Building or the suite number(s) of the Premises.

B. Signs. Subject to applicable law, to install and maintain any signs on the exterior and in the interior of the Building, and to approve at its reasonable discretion, prior to installation, any of Tenant's signs in the Premises visible from the common areas or the exterior of the Building.

C. Window Treatments. To approve, at its discretion, prior to installation, any shades, blinds, ventilators or window treatments of any kind, as well as any lighting within the Premises that may be visible from the exterior of the Building or any interior common area.

D. Keys. To retain and use at any time passkeys to enter the Premises or any door within the Premises after reasonable notice (except in emergency).

E. Access. To have access to inspect the Premises, and to perform its

obligations, or make repairs, alterations, additions or improvements, as permitted by this Lease.

F. Preparation for Reoccupancy. To decorate, remodel, repair, alter or otherwise prepare the Premises for reoccupancy at any time after Tenant abandons the Premises, without relieving Tenant of any obligation to pay Rent.

G. Heavy Articles. To approve the weight, size, placement and time and manner of movement within the Building of any safe, central filing system or other heavy article of Tenant's property. Tenant shall move its property entirely at its own risk.

H. Show Premises. To show the Premises to prospective purchasers, tenants, brokers, lenders, investors, rating agencies or others at any reasonable time, provided that Landlord gives prior notice to Tenant and does not materially interfere with Tenant's use of the Premises.

I. Use of Lockbox. To designate a lockbox collection agent for collections of amounts due Landlord. In that case, the date of payment of Rent or other sums shall be

the date of the agent's receipt of such payment or the date of actual collection if payment is made in the form of a negotiable instrument thereafter dishonored upon presentment. However, Landlord may reject any payment for all purposes as of the date of receipt or actual collection by mailing to Tenant within 21 days after such receipt or collection a check equal to the amount sent by Tenant.

J. Repairs and Alterations. To make repairs or alterations to the Project and in doing so transport any required material through the Premises, to close entrances, doors, corridors, elevators and other facilities in the Project, to open any ceiling in the Premises, or to temporarily suspend services or use of common areas in the Building. Landlord may perform any such repairs or alterations during ordinary business hours, provided that Landlord gives prior notice to Tenant and does not materially interfere with Tenant s use of the Premises, except that Tenant may require any Work in the Premises to be done after business hours if Tenant pays Landlord for overtime and any other expenses incurred. Landlord may do or permit any work on any nearby building, land, street, alley or way.

K. Landlord's Agents. If Tenant is in default under this Lease, possession of Tenant's funds or negotiation of Tenant's negotiable instrument by any of Landlord's agents shall not waive any breach by Tenant or any remedies of

Landlord under this Lease.

L. Building Services. To install, use and maintain through the Premises, pipes, conduits, wires and ducts serving the Building, provided that such installation, use and maintenance does not unreasonably interfere with Tenant's use of the Premises.

M. Other Actions. To take any other action which Landlord deems reasonable in connection with the operation, maintenance or preservation of the Building.

12. TENANT'S DEFAULT.

Any of the following shall constitute a default by Tenant:

A. Rent Default. Tenant fails to pay any Rent when due within five (5) days of written notice to Tenant.

B. Assignment/Sublease Default. Tenant defaults in its obligations under Section 17 Assignment and Sublease;

C. Other Performance Default. Tenant fails to perform any other obligation to Landlord under this Lease, and, in the case of only the first two (2) such failures during the Term of this Lease, this failure continues for ten (10) days after written notice from Landlord, except that if Tenant begins to cure its failure within the ten (10) day period but cannot reasonably complete its cure within such period, then, so long as Tenant continues

to diligently attempt to cure its failure, the ten (10) day period shall be extended to sixty (60) days, or such lesser period as is reasonably necessary to complete the cure;

D. Credit Default. One of the following credit defaults occurs:

(1) Tenant commences any proceeding under any law relating to bankruptcy, insolvency, reorganization or relief of debts, or seeks appointment of a receiver, trustee, custodian or other similar official for the Tenant or for any substantial part of its property, or any such proceeding is commenced against Tenant and either remains undismissed for a period of thirty days or results in the entry of an order for relief against Tenant which is not fully stayed within seven days after entry;

(2) Tenant becomes insolvent or bankrupt, does not generally pay its debts as they become due, or admits in writing its inability to pay its debts, or makes a general assignment for the benefit of creditors;

13. LANDLORD REMEDIES.

A. Termination of Lease or Possession. If Tenant defaults, Landlord may elect by notice to Tenant either to terminate this Lease or to terminate Tenant's possession of the Premises without terminating this Lease. In either case, Tenant shall immediately vacate the Premises and deliver possession to Landlord, and Landlord may repossess the Premises and may, at Tenant's sole cost, remove any of Tenant's signs and any of its other property, without relinquishing its right to receive Rent or any other right against Tenant.

B. Lease Termination Damages. If Landlord terminates the Lease, Tenant shall pay to Landlord all Rent due on or before the date of termination, plus Landlord's reasonable estimate of the aggregate Rent that would have been payable from the date of termination through the Termination Date, reduced by the rental value of the Premises calculated as of the date of termination for the same period, taking into account reletting expenses and market concessions, both discounted to present value at the rate of five percent (5%) per annum. If Landlord shall relet any part of the Premises for any part of such period before such present value amount shall have been paid by Tenant or finally determined by a court, then the amount of Rent payable pursuant to such reletting (taking into account any concessions) shall be deemed to be the reasonable rental value for that portion of the Premises relet during the period of the reletting.

C. Possession Termination Damages. If Landlord terminates Tenant's right to possession without terminating the Lease and Landlord takes possession of the Premises itself, Landlord may relet any part of the Premises for such Rent, for such time, and upon such terms as Landlord in its sole discretion shall determine, without any obligation to do so prior to renting other vacant areas in the Building. Any proceeds from reletting the Premises shall first be applied to the expenses of reletting, including redecoration, repair, alteration, advertising, brokerage, legal, and other reasonably necessary expenses. If the

reletting proceeds after payment of expenses are insufficient to pay the full amount of Rent under this Lease, Tenant shall pay such deficiency to Landlord monthly upon demand as it becomes due. Any excess proceeds shall be retained by Landlord.

D. Landlord's Remedies Cumulative. All of Landlord's remedies under this Lease shall be in addition to all other remedies Landlord may have at law or in

equity. Waiver by Landlord of any breach of any obligation by Tenant shall be effective only if it is in writing, and shall not be deemed a waiver of any other breach, or any subsequent breach of the same obligation. Landlord's acceptance of payment by Tenant shall not constitute a waiver of any breach by Tenant, and if the acceptance occurs after Landlord's notice to Tenant, or termination of the Lease or of Tenant's right to possession, the acceptance shall not affect such notice or termination. Acceptance of payment by Landlord after commencement of a legal proceeding or final judgment shall not affect such proceeding or judgment. Landlord may advance such monies and take such other actions for Tenant s account as reasonably may be required to cure or mitigate any default by Tenant. Tenant shall immediately reimburse Landlord for any such advance, and such sums shall bear interest at the default interest rate until paid.

E. WAIVER OF TRIAL BY JURY. EACH PARTY WAIVES TRIAL BY JURY IN THE EVENT OF ANY LEGAL PROCEEDING BROUGHT BY THE OTHER IN CONNECTION WITH THIS LEASE. EACH PARTY SHALL BRING ANY ACTION AGAINST THE OTHER IN CONNECTION WITH THIS LEASE IN A FEDERAL OR STATE COURT LOCATED IN WASHINGTON, CONSENTS TO THE JURISDICTION OF SUCH COURTS, AND WAIVES ANY RIGHT TO HAVE ANY PROCEEDING TRANSFERRED FROM SUCH COURTS ON THE GROUND OF IMPROPER VENUE OR INCONVENIENT FORUM.

F. Litigation Costs. Tenant shall pay Landlord's reasonable attorneys' fees and other costs in any action brought to enforce this Lease.

14. SURRENDER. Upon termination of this Lease or Tenant's right to possession, Tenant shall return the Premises to Landlord in good order and condition, ordinary wear and casualty damage excepted. If Landlord requires Tenant to remove any alterations, then Tenant shall remove the alterations in a good and workmanlike manner and restore the Premises to its condition prior to their installation.

15. HOLDOVER. If Tenant retains possession of any part of the Premises after the Term, Tenant shall become a month-to-month tenant for the entire Premises upon all of the terms of this Lease as might be applicable to such month-to-month tenancy, except that Tenant shall pay all of Base Rent, Operating Cost Share Rent and Tax Share Rent at one hundred twenty five percent (125%) of the rate in effect immediately prior to such holdover, computed on a monthly basis for each full or partial month Tenant remains in possession. Tenant shall also pay Landlord all of Landlord's

direct and consequential damages if such holdover is without consent. No acceptance of Rent or other payments by Landlord under these holdover provisions shall operate as a waiver of Landlord's right to regain possession or any other of Landlord's remedies.

16. SUBORDINATION TO GROUND LEASES AND MORTGAGES.

A. Subordination. Subject to Section 16B, this Lease shall be subordinate to any present or future ground lease or mortgage respecting the Project, and any amendments to such ground lease or mortgage, at the election of the ground lessor or mortgagee as the case may be, effected by notice to Tenant in the manner provided in this Lease. The subordination shall be effective upon such notice, but at the request of Landlord or ground lessor or mortgagee, Tenant shall within ten (10) days of the request, execute and deliver to the requesting party any reasonable documents provided to evidence the subordination.

B. Termination of Ground Lease or Foreclosure of Mortgage. If any ground lease is terminated or mortgage foreclosed or deed in lieu of foreclosure given and the ground lessor, mortgagee, or purchaser at a foreclosure sale shall thereby become the owner of the Project, Tenant shall attorn to such ground lessor or mortgagee or purchaser without any deduction or setoff by Tenant, and this Lease shall continue in effect as a direct lease between Tenant and such ground lessor, mortgagee or purchaser. The ground lessor or mortgagee or purchaser shall be liable as Landlord only during the time such ground lessor or mortgagee or purchaser is the owner of the Project. At the request of Landlord, ground lessor or mortgagee, Tenant shall execute and deliver within ten (10) days of the request any document furnished by the requesting party to evidence Tenant's agreement to attorn.

C. Security Deposit. Any ground lessor or mortgagee shall be responsible for the return of any security deposit by Tenant only to the extent the security deposit is received by such ground lessor or mortgagee.

D. Notice and Right to Cure. The Project is subject to any ground lease and mortgage identified with name and address of ground lessor or mortgagee in Appendix D to this Lease (as the same may be amended from time to time by written notice to Tenant). Tenant agrees to send by registered or certified mail to any ground lessor or mortgagee identified either in such Appendix or in any later notice from Landlord to Tenant a copy of any notice of default sent by Tenant to Landlord. If Landlord fails to cure such default within the required time period under this Lease, but ground lessor or mortgagee begins to cure within ten (10) days after such period and proceeds diligently to complete such cure, then ground lessor or mortgagee shall have such additional time as is necessary to complete such cure, including any time necessary to obtain possession if possession is necessary to cure, and Tenant shall not begin to enforce its remedies so long as the cure is being diligently pursued.

E. Definitions. As used in this Section 16, "mortgage" shall include

"trust deed" and "mortgagee" shall include "trustee", "mortgagee" shall include the mortgagee of any ground lessee, and "ground lessor", "mortgagee", and "purchaser at a foreclosure sale" shall include, in each case, all of its successors and assigns, however remote.

17. ASSIGNMENT AND SUBLEASE.

A. In General. Tenant shall not, without the prior consent of Landlord in each case, (i) make or allow any assignment or transfer, by operation of law or otherwise, of any part of Tenant's interest in this Lease, (ii) grant or allow any lien or encumbrance, by operation of law or otherwise, upon any part of Tenant's interest in this Lease, (iii) sublet any part of the Premises, or (iv) permit anyone other than Tenant and its employees to occupy any part of the Premises. Tenant shall remain primarily liable for all of its obligations under this Lease, notwithstanding any assignment or transfer. No consent granted by Landlord shall be deemed to be a consent to any subsequent assignment or transfer, lien or encumbrance, sublease or occupancy. Tenant shall pay reasonable Landlord's attorneys' fees and other expenses incurred in connection with any consent requested by Tenant or in reviewing any proposed assignment or subletting. Any assignment or transfer, grant of lien or encumbrance, or sublease or occupancy without Landlord's prior written consent shall be void.

B. Landlord's Consent. Landlord will not unreasonably withhold its consent to any proposed assignment or subletting. It shall be reasonable for Landlord to withhold its consent to any assignment or sublease if (i) Tenant is in default under this Lease, (ii) the proposed assignee or sublessee is a tenant in the Project and Landlord has appropriate available space in the Project, (iii) the financial condition, nature of business, and character of the proposed assignee or subtenant are not all reasonably satisfactory to Landlord, (iv) in the reasonable judgment of Landlord the purpose for which the assignee or subtenant intends to use the Premises (or a portion thereof) is not in keeping with Landlord's standards for the Building or are in violation of the terms of this Lease or any other leases in the Project. The foregoing shall not exclude any other reasonable basis for Landlord to withhold its consent.

C. Procedure. Tenant shall notify Landlord of any proposed assignment or sublease at least thirty (30) days prior to its proposed effective date. The notice shall include the name and address of the proposed assignee or subtenant, its corporate affiliates in the case of a corporation and its partners in a case of a partnership, an execution copy of the proposed assignment or sublease, and sufficient information to permit Landlord to determine the financial condition and character of the proposed assignee or subtenant. As a condition to any effective assignment of this Lease, the assignee shall execute and deliver in form satisfactory to Landlord at least fifteen (15) days prior to the effective date of the assignment, an assumption of all of the obligations of Tenant under this Lease. As a condition to any effective sublease, subtenant shall execute and deliver in form satisfactory to Landlord at least fifteen (15) days prior to the

effective date of the sublease, an agreement to comply with all of Tenant's obligations under this Lease, and at Landlord's option, an agreement (except for the economic obligations which subtenant will undertake directly to Tenant) to attorn to Landlord under the terms of the sublease in the event this Lease terminates before the sublease expires.

D. Change of Ownership. Any direct or indirect change in 50% or more of the ownership interest in Tenant shall constitute an assignment of this Lease; provided, however, that Landlord hereby consents to any such assignment that is in connection with (i) transfer of shares between existing shareholders, (ii) redemption of shares by Tenant, or (iii) a public offering of Tenant s stock under the Securities Act of 1933, as amended. Notwithstanding Landlord's prior consent to the foregoing, Tenant shall provide Landlord with written notice required hereunder.

E. Excess Payments. If Tenant shall assign this Lease or sublet any part of the Premises for consideration in excess of the pro-rata portion of Rent applicable to the space subject to the assignment or sublet, then Tenant shall pay to Landlord as Additional Rent 50% of any such excess immediately upon receipt.

18. CONVEYANCE BY LANDLORD. If Landlord shall at any time transfer its interest in the Project or this Lease, provided that the transferee shall expressly assume in writing all duties of Landlord in this Lease, Landlord shall be released of any obligations accruing after such transfer, except the obligation to return to Tenant any security deposit not delivered to its transferee, and Tenant shall look solely to Landlord's successors for performance of such obligations. This Lease shall not be affected by any such transfer.

19. ESTOPPEL CERTIFICATE. Each party shall, within ten (10) days of receiving a request from the other party, execute, acknowledge in recordable form, and deliver to the other party or its designee a certificate stating, subject to a specific statement of any applicable exceptions, that the Lease as amended to date is in full force and effect, that the Tenant is paying Rent and other charges on a current basis, and that to the best of the knowledge of the certifying party, the other party has committed no uncured defaults and has no offsets or claims. The certifying party may also be required to state the date of commencement of payment of Rent, the Commencement Date, the Termination Date, the Base Rent, the current Operating Cost Share Rent and Tax Share Rent estimates, the status of any improvements required to be completed by Landlord, the amount of any security deposit, and such other matters as may be reasonably requested. Failure to deliver such statement within the time required shall be conclusive evidence against the non-certifying party that this Lease, with any amendments identified by the requesting party, is in full force and effect, that

there are no uncured defaults by the requesting party, that not more than one month's Rent has been paid in advance, that the non-certifying party has not paid any security deposit, and that the non-certifying party has no claims or offsets against the requesting party.

20. SECURITY DEPOSIT. Tenant shall arrange for the issuance and delivery
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to Landlord on the date of this Lease, as security for the performance of all of its obligations of Tenant hereunder an irrevocable, standby letter of credit (the "Letter of Credit") from Silicon Valley Bank, Imperial Bank or such other commercial bank of Tenant's choosing and reasonably acceptable and in form and content reasonably satisfactory to Landlord, in the amount set forth on the Schedule. Upon the execution of this Lease, Tenant shall deliver a Letter of Credit in the amount of $1,000.000. The amount of the Letter of Credit shall be increased by $1,000,000 on January 1, 1998 and then by $500,000 on the Commencement Date. If Tenant defaults under this Lease, Landlord may use any part of the Letter of Credit or Security Deposit to make any defaulted payment, to pay for Landlord's cure of any defaulted obligation, or to compensate Landlord for any loss or damage resulting from any default. Landlord agrees to release the Letter of Credit upon satisfaction of all of the following conditions: (i) Tenant s Operating Income from continuing operations under GAAP exceeds $500,000 for four consecutive quarters; (ii) Tenant s cash and receivables are a minimum of $10,000,000; (iii) a current ratio (defined as current assets divided by current liabilities) of at least two times; and (iv) Tenant has delivered a certificate of the President of Tenant representing and warranting the foregoing and the amount of one month s rent as a Security Deposit. Landlord may keep the Security Deposit, if cash, in its general funds and shall not be required to pay interest to Tenant on the deposit amount. If Tenant shall perform all of its obligations under this Lease and return the Premises to Landlord at the end of the Term, Landlord shall return all of the remaining Security Deposit to Tenant within thirty (30) days after the end of the Term. The Security Deposit shall not serve as an advance payment of Rent or a measure of Landlord's damages for any default under this Lease.

If Landlord transfers its interest in the Project or this Lease, Landlord shall transfer the Security Deposit to its transferee. Upon such transfer, Landlord shall have no further obligation to return the Security Deposit to Tenant, and Tenant's right to the return of the Security Deposit shall apply solely against Landlord's transferee.

21. FORCE MAJEURE. Landlord shall not be in default under this Lease to
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the extent Landlord is unable to perform any of its obligations on account of any strike or labor problem, energy shortage, governmental pre-emption or prescription, national emergency, or any other cause of any kind beyond the reasonable control of Landlord ("Force Majeure"). This Section 21 shall not limit Tenant's rights to any abatement of rent expressly allowed in this Lease.

22. TENANT'S PERSONAL PROPERTY AND FIXTURES. Intentionally omitted.

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23. NOTICES. All notices, consents, approvals and similar communications to be given by one party to the other under this Lease, shall be given in writing, mailed or personally delivered as follows:

A. Landlord. To Landlord as follows:

CARRAMERICA REALTY CORPORATION
18640 NE 67th Court, Suite 150
Redmond, WA 98052
Attn: Market Officer
Fax No. 425-558-2246

with a copy to:

CarrAmerica Realty Corporation
1700 Pennsylvania Avenue, N.W.
Washington, D.C. 20006
Attn: Lease Administration

or to such other person at such other address as Landlord may designate by notice to Tenant.

B. Tenant. To Tenant as follows:

(i) After Commencement Date:

Metawave Communications Corporation, Inc.
10525 Willows Road
Redmond, WA 98073
Attn: CFO

with a copy to:

Metawave Communications Corporation, Inc.
10525 Willows Road
Redmond, WA 98073
Attn: General Counsel

(ii) Prior to Commencement Date:

Metawave Communications Corporation, Inc.
8700 - 148th Avenue N.E.
Redmond, WA 98052
Attn: CFO
Fax No. 425-702-5972

with a copy to:

Metawave Communications Corporation, Inc.

8700 - 148th Avenue N.E.
Redmond, WA 98052
Attn: General Counsel
Fax No. 425-702-5976

or to such other person at such other address as Tenant may designate by notice to Landlord.

Notices shall be sent by United States certified or registered mail, by a reputable national overnight courier service, postage prepaid, hand delivery, or by facsimile transmission. Mailed notices shall be deemed to have been given on the earlier of actual delivery or three (3) business days after posting in the United States mail in the case of registered or certified mail, and one business day in the case of overnight courier.

24. QUIET POSSESSION. So long as Tenant shall perform all of its obligations under this Lease, Tenant shall enjoy peaceful and quiet possession of the Premises against Landlord or any party claiming through the Landlord. Interruption of Tenant's peaceful and quiet possession, unless caused by Tenant, shall title Tenant to an appropriate abatement of rent.

25. REAL ESTATE BROKER. Tenant represents to Landlord that Tenant has not dealt with any real estate broker with respect to this Lease except for any broker(s) listed in the Schedule, and no other broker is in any way entitled to any broker's fee or other payment in connection with this Lease. Tenant shall indemnify and defend Landlord against any claims by any other broker or third party for any payment of any kind in connection with this Lease. Landlord shall pay to CB Commercial Real Estate Group Inc. a real estate leasing commission per a separate agreement and Tenant shall have no responsibility for such commission.

26. MISCELLANEOUS.

A. Successors and Assigns. Subject to the limits on Tenant's assignment contained in Section 17, the provisions of this Lease shall be binding upon and inure to the benefit of all successors and assigns of Landlord and Tenant.

B. Date Payments Are Due. Except for payments to be made by Tenant under this Lease which are due upon demand, Tenant shall pay to Landlord any amount for which Landlord renders a statement of account within ten days of Tenant's receipt of Landlord's statement.

C. Meaning of "Landlord", "Re-Entry, "including" and "Affiliate". The term "Landlord" means only the owner of the Project and the lessor's interest in this Lease from time to time. The words "re-entry" and "re-enter" are not restricted to their technical legal meaning. The words "including" and similar words shall mean "without limitation."

The word "affiliate" shall mean a person or entity controlling, controlled by or under common control with the applicable entity. "Control" shall mean the power directly or indirectly, by contract or otherwise, to direct the management and policies of the applicable entity.

D. Time of the Essence. Time is of the essence of each provision of this Lease.

E. No Option. This document shall not be effective for any purpose until it has been executed and delivered by both parties; execution and delivery by one party shall not create any option or other right in the other party.

F. Severability. The unenforceability of any provision of this Lease shall not affect any other provision.

G. Governing Law. This Lease shall be governed in all respects by the laws of the state of Washington, without regard to the principles of conflicts of laws.

H. Lease Modification. Tenant agrees to modify this Lease in any way requested by a mortgagee which does not cause increased expense to Tenant or otherwise materially adversely affect Tenant's interests under this Lease.

I. No Oral Modification. No modification of this Lease shall be effective unless it is a written modification signed by both parties.

J. Landlord's Right to Cure. If Landlord breaches any of its obligations under this Lease, Tenant shall notify Landlord in writing and shall take no action respecting such breach so long as Landlord immediately begins to cure the breach and diligently pursues such cure to its completion. Landlord may cure any default by Tenant; any expenses incurred shall become Additional Rent due from Tenant on demand by Landlord.

K. Captions. The captions used in this Lease shall have no effect on the

construction of this Lease.

L. Authority. Landlord and Tenant each represents to the other that it has full power and authority to execute and perform this Lease.

M. Landlord's Enforcement of Remedies. Landlord may enforce any of its remedies under this Lease either in its own name or through an agent.

N. Entire Agreement. This Lease, together with all Appendices, constitutes the entire agreement between the parties. No representations or agreements of any kind have been made by either party which are not contained in this Lease.

O. Landlord's Title. Without limiting Tenant s right to peaceful and quiet possession of the Premises, Landlord's title shall always be paramount to the interest of the Tenant, and nothing in this Lease shall empower Tenant to do anything which might in any way impair Landlord's title.

P. Light and Air Rights. Landlord does not grant in this Lease any rights to light and air in connection with Project. Landlord reserves to itself, the Land, the Building below the improved floor of each floor of the Premises, the Building above the ceiling of each floor of the Premises, the exterior of the Premises and the areas on the same floor outside the Premises, along with the areas within the Premises required for the installation and repair of utility lines and other items required to serve other tenants of the Building.

Q. Singular and Plural. Wherever appropriate in this Lease, a singular term shall be construed to mean the plural where necessary, and a plural term the singular. For example, if at any time two parties shall constitute Landlord or Tenant, then the relevant term shall refer to both parties together.

R. No Recording by Tenant. Tenant shall not record in any public records any memorandum or any portion of this Lease except as may be required by applicable securities laws.

S. Exclusivity. Landlord does not grant to Tenant in this Lease any exclusive right except the right to occupy its Premises.

T. No Construction Against Drafting Party. The rule of construction that ambiguities are resolved against the drafting party shall not apply to this Lease.

U. Survival. All obligations of Landlord and Tenant under this Lease shall survive the termination of this Lease.

V. Rent Not Based on Income. No rent or other payment in respect of the Premises shall be based in any way upon net income or profits from the Premises. Tenant may not enter into or permit any sublease or license or other agreement in connection with the Premises which provides for a rental or other payment based on net income or profit.

W. Building Manager and Service Providers. Landlord may perform any of its obligations under this Lease through its employees or third parties hired by the Landlord.

X. Late Charge and Interest on Late Payments. Without limiting the provisions of Section 12A, if Tenant fails to pay any installment of Rent or other charge

to be paid by Tenant pursuant to this Lease within five (5) business days after the same becomes due and payable, then Tenant shall pay a late charge equal to the greater of three and one-half percent (3-1/2%) of the amount of such payment or $250. In addition, interest shall be paid by Tenant to Landlord on any late payments of Rent from the date due until paid at the rate provided in Section 2D(2). Such late charge and interest shall constitute additional Rent due and payable by Tenant to Landlord upon the date of payment of the delinquent payment referenced above.

Y. Parking. Landlord will provide an allowance of three (3) cars per 1,000 rentable square feet of Premises to Tenant on the Premises.

Z. Signage. Tenant shall have exclusive right, subject to Landlord's reasonable approval to install Tenant's signage on the exterior of Buildings 1 & 2, provided the signage complies with all ordinances and orders.

27. UNRELATED BUSINESS INCOME. If Landlord is advised by its counsel at any time that any part of the payments by Tenant to Landlord under this Lease may be characterized as unrelated business income under the United States Internal Revenue Code and its regulations, then Tenant shall enter into any amendment proposed by Landlord to avoid such income, so long as the amendment does not require Tenant to make more payments or accept fewer services from Landlord, than this Lease provides.

28. HAZARDOUS SUBSTANCES. Tenant shall not cause or permit any Hazardous

Substances to be brought upon, produced, stored, used, discharged or disposed of in or near the Project unless Landlord has consented to such storage or use in its sole discretion. "Hazardous Substances" include those hazardous substances described in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. Section 9601 et seq., the Resource Conservation and Recovery Act, as amended, 42 U.S.C. Section 6901 et seq., any other applicable federal, state or local law, and the regulations adopted under these laws. If any lender or governmental agency shall require testing for Hazardous Substances in the Premises, Tenant shall pay for such testing.

29. EXCULPATION. Without limiting Tenant's rights to abatement of rent as expressly allowed in this Lease, Landlord shall have no personal liability under this Lease; its liability shall be limited to its interest in the Project, and shall not extend to any other property or assets of the Landlord. In no event shall any officer, director, employee, agent, shareholder, partner, member or beneficiary of Landlord be personally liable for any of Landlord's obligations hereunder.

IN WITNESS WHEREOF, the parties hereto have executed this Lease.

LANDLORD:

CARRAMERICA REALTY CORPORATION
a Maryland corporation

By: /s/ Philip L. Hawkins

Print Name: Philip L. Hawkins

Print Title: Managing Director

TENANT:

METAWAVE COMMUNICATIONS
CORPORATION, INC.
a Delaware corporation

By: /s/ Vito Palermo

Print Name: Vito Palermo

Print Title: Chief Financial Officer

DISTRICT OF COLUMBIA)
) ss.
)

On this _____ day of _____, 1997, before me, the undersigned, a Notary Public in and for the District of Columbia, duly commissioned and sworn as such, personally appeared _____, to me known to be the _____ of _____, the corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument, and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal the day and year in this certificate first above written.

Printed Name: _____
NOTARY PUBLIC in and for the District of Columbia,
residing at _____
My commission expires: _____

STATE OF DELAWARE)

) ss.
COUNTY OF KING)

On this _____ day of _____, 1997, before me, the undersigned, a Notary Public in and for the State of Delaware, duly commissioned and sworn as such, personally appeared _____, to me known to be the _____ of _____, the corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation for the uses and purposes therein mentioned, and on oath stated that he/she was authorized to execute said instrument, and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal the day and year in this certificate first above written.

Printed Name: _____
NOTARY PUBLIC in and for the State of Delaware,
residing at _____
My commission expires: _____

APPENDIX A

PLAN OF THE PREMISES

(attach floor plan depicting the Premises)

APPENDIX A
Page 1 of 1

APPENDIX B

RULES AND REGULATIONS

1. Tenant shall not place anything, or allow anything to be placed near the glass of any window, door, partition or wall which may, in Landlord's judgment, appear unsightly from outside of the Project.

2. The Project directory shall be available to Tenant solely to display names and their location in the Project, which display shall be as directed by Landlord.

3. The sidewalks, halls, passages, exits, entrances, elevators and stairways shall not be obstructed by Tenant or used by Tenant for any purposes other than for ingress to and egress from the Premises. Tenant shall lend its full cooperation to keep such areas free from all obstruction and in a clean and sightly condition and shall move all supplies, furniture and equipment as soon as received directly to the Premises and move all such items and waste being taken from the Premises (other than waste customarily removed by employees of the Building) directly to the shipping platform at or about the time arranged for removal therefrom. The halls, passages, exits, entrances, elevators, stairways, balconies and roof are not for the use of the general public and Landlord shall, in all cases, retain the right to control and prevent access thereto by all persons whose presence in the judgment of Landlord, reasonably exercised, shall be prejudicial to the safety, character, reputation and interests of the Project. Except as allowed in the Lease, neither Tenant nor any employee or invitee of Tenant shall go upon the roof of the Project.

4. The toilet rooms, urinals, wash bowls, showers and other apparatuses shall not be used for any purposes other than that for which they were constructed, and no foreign substance of any kind whatsoever shall be thrown therein, and to the extent caused by Tenant or its employees or invitees, the expense of any breakage, stoppage or damage resulting from the violation of this rule shall be borne by Tenant.

5. Tenant shall not cause any unnecessary janitorial labor or services by reason of Tenant's carelessness or indifference in the preservation of good order and cleanliness.

6. Tenant shall not install or operate any refrigerating, heating or air conditioning apparatus, or carry on any mechanical business without the prior written consent of Landlord; use the Premises for housing, lodging or sleeping purposes (other than wellness rooms used by sick employees); or permit preparation or warming of food in the Premises (warming of coffee and individual or group meals with employees and guests excepted). Tenant shall not occupy or use the Premises or permit the Premises to

be occupied or used for any purpose, act or thing which is in violation of any Governmental Requirement or which may be dangerous to persons or property.

7. Tenant shall not bring upon, use or keep in the Premises or the Project any kerosene, gasoline or inflammable or combustible fluid or material, or any other articles deemed hazardous to persons or property (other than propane tanks used for vehicles such as forklifts), or use any method of heating or air conditioning other than that supplied by Landlord.

8. Landlord shall have sole power to direct electricians as to where and how telephone and other wires are to be introduced. No boring or cutting for wires is to be allowed without the consent of Landlord. The location of telephones, call boxes and other office equipment affixed to the Premises shall be subject to the approval of Landlord.

9. No additional locks shall be placed upon any doors, windows or transoms in or to the Premises and Tenant shall not change existing locks or the mechanism thereof without prior notification to Landlord. During the Term and upon termination of the lease, Tenant shall deliver to Landlord all keys and passes for offices, rooms, parking lot and toilet rooms which shall have been furnished Tenant.

In the event of the loss of keys so furnished, Tenant shall pay Landlord therefor. Tenant shall not make, or cause to be made, any such keys and shall order all such keys solely from Landlord and shall pay Landlord for any keys in addition to the two sets of keys originally furnished by Landlord for each lock.

10. Tenant shall not install linoleum, tile, carpet or other floor covering so that the same shall be affixed to the floor of the Premises in any manner except as approved by Landlord.

11. Tenant shall not take or permit to be taken in or out of other entrances of the Building, or take or permit on other elevators, any item normally taken in or out through the trucking concourse or service doors or in or on freight elevators.

12. Tenant shall cause all doors to the Premises to be closed and securely locked before leaving the Project at the end of the day.

13. Without the prior written consent of Landlord, Tenant shall not use the name of the Project or any picture of the Project in connection with, or in promoting or advertising the business of, Tenant, except Tenant may use the address of the Project as the address of its business.

14. Tenant shall cooperate fully with Landlord to assure the most effective operation of the Premises' or the Project's heating and air conditioning, and shall refrain

from attempting to adjust any controls, other than room thermostats installed for Tenant's use. Tenant shall keep corridor doors closed.

15. Tenant assumes full responsibility for protecting the Premises from theft, robbery and pilferage, which may arise from a cause other than Landlord's negligence, which includes keeping doors locked and other means of entry to the Premises closed and secured.

16. Peddlers, solicitors and beggars shall be reported to the office of the Project or as Landlord otherwise requests.

17. Tenant shall not advertise the business, profession or activities of Tenant conducted in the Project in any manner which violates the letter or spirit of any code of ethics adopted by any recognized association or organization pertaining to such business, profession or activities.

18. No motorized vehicle (other than freight handling equipment) and no animals or pets shall be allowed in the Premises, halls, freight docks, or any other parts of the Building except that blind persons may be accompanied by "seeing eye" dogs. Tenant shall not make or permit any noise, vibration or odor to emanate from the Premises, or do anything therein tending to create, or maintain, a nuisance, or do any act tending to injure the reputation of the Building.

19. Tenant acknowledges that Building security problems may occur which may require the employment of extreme security measures in the day-to-day operation of the Project.

Accordingly:

(a) Landlord may, at any time, or from time to time, or for regularly scheduled time periods, as deemed advisable by Landlord and/or its agents, in their sole discretion, require that persons entering or leaving the Project or the Property identify themselves to watchmen or other employees designated by Landlord, by registration, identification or otherwise.

(b) Tenant agrees that it and its employees will cooperate fully with Project employees in the implementation of any and all security procedures.

(c) Such security measures shall be the sole responsibility of Landlord, and Tenant shall have no liability for any action taken by Landlord in connection therewith, it being understood that Landlord is not required to provide any security procedures and shall have no liability for such security procedures or the lack thereof.

20. Tenant shall not do or permit the manufacture, sale or purchase of any fermented, intoxicating or alcoholic beverages without obtaining written consent of Landlord.

21. Tenant shall not disturb the quiet enjoyment of any other tenant.

22. Landlord may retain a pass key to the Premises and be allowed admittance thereto at all times to enable its representatives to examine the Premises from time to time and to exhibit the same in accordance with Section 11(H) of the Lease and Landlord may place and keep on the windows and doors of the Premises at any time signs advertising the Premises for Rent.

23. No equipment, mechanical ventilators, awnings, special shades or other forms of window covering shall be permitted either inside or outside the windows of the Premises without the prior written consent of Landlord, and then only at the expense and risk of Tenant, and they shall be of such shape, color, material, quality, design and make as may be approved by Landlord.

24. Tenant shall not during the term of this Lease canvas or solicit other tenants of the Building for any purpose except as expressly allowed in the Lease or these regulations.

25. Except as allowed in the Lease or related to Tenant's use of the Premises, Tenant shall not install or operate any phonograph, musical or sound-producing instrument or device, radio receiver or transmitter, TV receiver or transmitter, or similar device in the Building which would interfere with any tenant in the Project, nor install or operate any antenna, aerial, wires or other equipment inside or outside the Building, nor operate any electrical device from which may emanate electrical waves which may interfere with or impair radio or television broadcasting or reception from or in the Building or elsewhere, without in each instance the prior written approval of Landlord. The use thereof, if permitted, shall be subject to control by Landlord to the end that others shall not be disturbed.

26. Tenant shall promptly remove all rubbish and waste from the Premises.

27. Tenant shall not exhibit, sell or offer for sale, Rent or exchange in the Premises or at the Project any article, thing or service, except those ordinarily embraced within the use of the Premises specified in Section 6 of this Lease, without the prior written consent of Landlord.

28. Tenant shall not overload any floors in the Premises or any public

corridors or elevators in the Building.

29. Whenever Landlord's consent, approval or satisfaction is required under these Rules, then unless otherwise stated, any such consent, approval or satisfaction must be obtained in advance, such consent or approval may be granted or withheld in Landlord's sole discretion, and Landlord's satisfaction shall be determined in its sole judgment provided, however, Landlord shall respond to any such request within ten (10) days.

30. Tenant and its employees shall cooperate in all fire drills conducted by Landlord in the Building.

31. In the event of a conflict between these Rules and Regulations and the provisions of the Lease, the provisions of the Lease shall prevail.

APPENDIX C

TENANT IMPROVEMENT AGREEMENT

1. INITIAL IMPROVEMENTS. Landlord shall cause to be performed the improvements (the "Initial Improvements") in the Premises provided for in the plans and specifications prepared by _____ dated _____ and agreed to by Landlord and Tenant (the "Plans"). The Initial Improvements shall be performed by _____ (the "Contractor"), using Building standard materials. Landlord shall use commercially reasonable efforts to cause the Work to be substantially completed on or before the Commencement Date specified in the Schedule to the Lease, subject to Tenant Delay (as defined in Section 4 hereof) and any Force Majeure. Notwithstanding the foregoing, Landlord shall be required to deliver only 73,000 square feet of the Premises on the Commencement Date. The remaining 23,000 square feet shall be delivered within 180 days of Tenant s written notice of its intent to occupy the remaining space; provided, however, that rent shall commence no later than January 1, 1999 regardless of the date Tenant occupies such space. Landlord may charge a supervisory fee not to exceed three percent (3%) of labor, material and all other costs of the Initial Improvements and the Additional Improvements.

2. ADDITIONAL IMPROVEMENTS. If Tenant shall require improvements ("Additional Improvements") to the Premises in addition, revision of, or substitution for the Initial Improvements, Tenant shall deliver to Landlord for its approval plans and specifications for such Additional Improvements. If Landlord does not approve of the plans for Additional Improvements, Landlord shall advise Tenant of the revisions required. Tenant shall revise and redeliver the plans and specifications to Landlord within five (5) business days of Landlord's advice or Tenant shall be deemed to have abandoned its request for such Additional Improvements. Tenant shall pay for all such preparations and revisions of plans and specifications, and the construction of all Additional Improvements, subject to Landlord s Contribution.

3. LANDLORD'S CONTRIBUTION. Landlord shall contribute an amount of Twenty Dollars ($20.00) per square foot ("Landlord's Contribution") toward the costs incurred by Landlord for the Initial Improvements or Additional Improvements or other items Tenant is responsible for hereunder that constitute a physical improvement to the Premises such as cabling and security. Landlord has no obligation to pay for costs of the Initial Improvements in excess of Landlord's Contribution. If the cost of the Initial Improvements exceeds the Landlord's Contribution, Tenant shall pay such overage to Landlord upon completion of construction of the Initial Improvements. Tenant shall also pay to Landlord prior to commencement of construction, the cost of all Additional Improvements above the Landlord's Contribution.

4. COMMENCEMENT DATE DELAY. Commencement Date shall be

delayed until the Initial Improvements have been substantially completed (the "Completion Date"), except to the extent that the delay shall be caused by any one or more of the following (a "Tenant Delay"):

(a) Tenant's request for Additional Improvements whether or not any such Additional Improvements are actually performed; or

(b) Contractor's performance of any Additional Improvements; or

(c) Tenant's request for materials, finishes or installations requiring unusually long lead times; or

(d) Tenant's delay in reviewing, revising or approving plans and specifications beyond the periods set forth herein; or

(e) Any other act or omission by Tenant, its agents, contractors or persons employed by any of such persons.

If the Commencement Date is delayed for any reason, then Landlord shall cause Landlord's Architect to certify the date on which the Initial Improvements would have been completed but for such Tenant Delay, or were in fact completed without any Tenant Delay.

5. ACCESS BY TENANT PRIOR TO COMMENCEMENT OF TERM. Landlord shall permit Tenant and its agents to enter the Premises thirty (30) days prior to the Commencement Date to prepare the Premises for Tenant's use and occupancy. Any such permission shall constitute a license only, conditioned upon Tenant's:

(a) working in harmony with Landlord and Landlord's agents, contractors, workmen, mechanics and suppliers and with other tenants and occupants of the Building;

(b) obtaining in advance Landlord's approval of the contractors proposed to be used by Tenant and depositing with Landlord in advance of any work (i) security satisfactory to Landlord for the completion thereof, and (ii) the general contractor's affidavit for the proposed work and the waivers of lien from the general contractor and all subcontractors and suppliers of material; and

(c) furnishing Landlord with such insurance as Landlord may require against liabilities which may arise out of such entry.

Landlord shall not be liable in any way for any injury, loss or damage which may occur to any of Tenant's property or installations in the Premises prior to the Commencement Date. Tenant shall protect, defend, indemnify and save harmless

Landlord from all liabilities, costs, damages, fees and expenses arising out of the activities of Tenant or its agents, contractors, suppliers or workmen in the Premises or the Building. Any entry and occupation permitted under this Section shall be governed by Section 5 and all other terms of the Lease.

6. MISCELLANEOUS.

(a) Landlord s Work. In addition to the Initial Improvements, Landlord shall construct Building 1 and Building 2 in accordance with Plans and Specifications dated _____ ("Landlord s Work"). Landlord shall use its best efforts to substantially complete the Landlord s Work on or before the Commencement Date, subject to force majeure and actions or omissions of Tenant causing delay. The Improvements to be constructed by Landlord shall include as part of the Building Shell (and shall not be included in the Initial Improvements) the following:

Landlord shall provide as part of the Building Shell:

Building HVAC system per the building specifications dated 7-1-97 and the McKinstry Drawings dated 6-30-97

Finished Building Restroom and Core per the building specifications dated 7-1-97 and the G2 Architectural Drawings dated 6-30-97. Landlord to provide one set of showers per building as a component of the shell.

Elevator per G2 Architectural Drawings dated 6-30-97 and building specifications dated 7-1-97.

One on grade loading door per building per the G2 Architectural Drawings dated 6-30-97.

Landlord to provide one dock height loading area at Building One per mutually developed and approved drawings.

Insulated perimeter walls.

Blinds installed on the exterior windows.

Ceiling tiles, grid and lights for the entire Premises of the types identified in the building specifications dated _____. In the event that the plans and specifications for the Initial Improvements are such that fewer ceiling tiles, less grid or fewer lights are required than if the entire Premises were improved for initial use as office space, Tenant shall receive a credit equal to Landlord's resulting cost savings, which shall be applied against any part of the Initial

Improvements, Additional Improvements or other items that become a physical part of the Building (such as security systems, rooftop work and telecommunications improvements) for which Tenant would otherwise be responsible to pay.

Landlord to provide a comprehensive signage program for Willow Creek Corporate Center. The park signage package will include park entry and park directional signage, building directory signage and building informational signage.

(b) Landlord shall construct a skybridge between Building 1 and Building 2, in accordance with plans and specifications prepared by Landlord, subject to Tenant s approval of such plans and specifications. The construction of the skybridge shall be undertaken, if possible, in conjunction with Landlord s work and the Initial Improvements. Costs of the skybridge shall be advanced by Landlord and repaid by Tenant in accordance with the terms of the Lease. Tenant shall not be required to remove the Skybridge at the termination of the Lease.

(c) Substantial Completion as used in this Lease and Appendix shall mean completion of work so that (i) Tenant can use the Premises and Building for intended use without material interference to Tenant, (ii) the only incomplete items are minor or insubstantial details of construction and "punch list" items, and (iii) Landlord has obtained a temporary or permanent certificate of occupancy from the appropriate governmental agency.

(d) Landlord shall provide Tenant with two (2) preliminary Space Planning meetings and two (2) Space Plans at its sole cost and expense, exclusive of the Tenant Allowance.

(e) Landlord shall cooperate with Tenant to assist Tenant in its efforts to allow Tenant the benefits of the R&D Tax Deferral available from the State of Washington, provided that Landlord shall not be required to undertake any act or take any position that in Landlord s reasonable judgment would expose Landlord to any liability, cost or expense.

Terms used in this Appendix C shall have the meanings assigned to them in

the Lease. The terms of this Appendix C are subject to the terms of the Lease.

APPENDIX D

MORTGAGES CURRENTLY AFFECTING THE PROJECT

APPENDIX E

COMMENCEMENT DATE CONFIRMATION

Landlord: CARRAMERICA REALTY CORPORATION, a Maryland corporation

Tenant: _____, a _____

This Commencement Date Confirmation is made by Landlord and Tenant pursuant to that certain Lease dated as of _____, 199__ (the "Lease") for certain premises known as Suite ____ in the building commonly known as WILLOW CREEK CORPORATE CENTER (the "Premises"). This Confirmation is made pursuant to Item 9 of the Schedule to the Lease.

1. Lease Commencement Date, Termination Date. Landlord and Tenant hereby agree that the Commencement Date of the Lease is _____, 199__, and the Termination Date of the Lease is _____, _____.

2. Acceptance of Premises. Subject to the terms of the Lease, Tenant has inspected the Premises and affirms that the Premises is acceptable in all respects in its current "as is" condition.

3. Incorporation. This Confirmation is incorporated into the Lease, and forms an integral part thereof. This Confirmation shall be construed and interpreted in accordance with the terms of the Lease for all purposes.

TENANT:

,

a

Name:_____
Title:_____

LANDLORD:

CARRAMERICA REALTY CORPORATION,
a Maryland corporation

By:_____
Name:_____
Title:_____

APPENDIX F

LEGAL DESCRIPTION

PARCEL A:

THE SOUTH 10 ACRES OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 34, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M., IN KING COUNTY, WASHINGTON.

PARCEL B:

BEGINNING AT THE SOUTHEAST CORNER OF THE NORTH THREE-FOURTHS OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 34, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M., IN KING COUNTY, WASHINGTON;
THENCE NORTH 88 29 27" WEST ALONG THE SOUTH LINE THEREOF 333.48 FEET;
THENCE NORTH 1 30 33" EAST 700.00 FEET;
THENCE SOUTH 88 29 27" EAST 703.19 FEET TO THE WESTERLY MARGIN OF THE C.D. STIMSON ROAD (NOW KNOWN AS WILLOWS ROAD); THENCE SOUTH 6 20 48" EAST ALONG SAID WESTERLY MARGIN 708.26 FEET TO THE SOUTH LINE OF THE NORTH THREE-FOURTHS OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 34;
THENCE NORTH 88 17 35" WEST ALONG SAID SOUTH LINE 466.52 FEET TO THE POINT OF BEGINNING;
EXCEPT THAT PORTION, IF ANY, LYING WITHIN WILLOWS ROAD AS CONVEYED TO THE CITY OF REDMOND BY DEED RECORDED UNDER RECORDING NO. 8002070845;

(BEING KNOWN AS PARCEL 2 OF CITY OF REDMOND LOT LINE ADJUSTMENT NO. SS-83-29 RECORDED UNDER RECORDING NO. 8310270925).

PARCEL C:

THAT PORTION OF THE SOUTH HALF OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 34, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M., IN KING COUNTY, WASHINGTON, LYING WESTERLY OF RIGHT-OF-WAY OF NORTHERN PACIFIC RAILWAY COMPANY;
EXCEPT ANY PORTION LYING WITHIN THE WILLOWS ROAD.

PARCEL D:

THE NORTH 100 FEET OF THAT PORTION OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M., IN KING COUNTY, WASHINGTON, LYING WESTERLY OF THE RIGHT-OF-WAY OF THE NORTHERN PACIFIC RAILWAY COMPANY;

EXCEPT THAT PORTION THEREOF CONVEYED TO KING COUNTY FOR ROAD BY DEED RECORDED UNDER RECORDING NO. 956171.

PARCEL E:

LOTS 1, 2 AND 3 OF CITY OF REDMOND SHORT PLAT NO. SS-79-37 RECORDED UNDER RECORDING NO. 8010230411;

PARCEL F:

THE NORTH HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M., IN KING COUNTY, WASHINGTON;
EXCEPT THE SOUTH 400 FEET OF THE NORTH 430 FEET OF THE EAST 228 FEET THEREOF.

PARCEL G:

THE SOUTH 400 FEET OF THE NORTH 430 FEET OF THE EAST 228 FEET OF THE FOLLOWING DESCRIBED PROPERTY:

THE NORTH HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M., IN KING COUNTY, WASHINGTON.

PARCEL H:

THE NORTH HALF OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M., IN KING COUNTY, WASHINGTON.

PARCEL I:

THE EAST ONE-HALF OF THE FOLLOWING DESCRIBED TRACT:

THE SOUTH 10 ACRES OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M., IN KING COUNTY, WASHINGTON, ACCORDING TO SURVEY THEREOF AS SHOWN BY THE SUBDIVISIONAL PLAT APPROVED BY DECREE OF THE SUPERIOR COURT OF KING COUNTY IN CAUSE NO. 106237.

PARCEL I-1:

AN EASEMENT FOR SANITARY SEWER AND UNDERGROUND UTILITIES OVER AND ACROSS THE NORTH 25 FEET OF THE FOLLOWING DESCRIBED PROPERTY:

BEGINNING AT THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M.;
THENCE SOUTH 370 FEET ALONG THE WESTERLY BOUNDARY OF SAID SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER;
THENCE EAST PARALLEL TO THE NORTH BOUNDARY LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER TO THE COUNTY ROAD AS NOW LAID OUT AND ESTABLISHED;
THENCE NORTHWEST ALONG SAID COUNTY ROAD TO THE NORTH BOUNDARY LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER;
THENCE WEST ALONG SAID NORTH BOUNDARY LINE OF SAID SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER TO THE POINT OF BEGINNING;

TOGETHER WITH THE NORTH 70.42 FEET OF THE SOUTH 295 FEET OF THE NORTH 665 FEET OF THAT PORTION OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M., LYING WESTERLY OF COUNTY ROAD (ALSO KNOWN AS WILLOWS ROAD) IN KING COUNTY, WASHINGTON.

ALL SITUATE IN THE COUNTY OF KING, STATE OF WASHINGTON.

APPENDIX G
EXTENSION OPTION

EXTENSION OPTION. Subject to Subsection B below, Tenant may at its option extend the Term of this Lease for TWO (2) successive periods of FIVE (5) YEARS each. Each such period is called a "Renewal Term", and the first such FIVE (5) YEAR period is called the "First Renewal Term" and the second such five (5) year period is called the "Second Renewal Term". Each Renewal Term shall be upon the same terms contained in this Lease except for the payment of Base Rent during the Renewal Term; and any reference in the Lease to the "Term" of the Lease shall be deemed to include any Renewal Term and apply thereto, unless it is expressly provided otherwise. Tenant shall have no additional extension options.

A. The Base Rent during a Renewal Term shall be the greater of (i) the Base Rent applicable to the last day of the final Lease Year prior to the applicable Renewal Term, or (ii) 100% of the Market Rate (defined hereinafter) for such space for a term commencing on the first day of the Renewal Term. "Market Rate" shall mean the then prevailing market rate for a five (5) year term commencing on the first day of the Renewal Term for tenants of comparable size and creditworthiness for comparable buildings in the general vicinity of the Project. Determination of the Market Rate shall include, without limitation, then current applicable market conditions such as rent abatements, tenant allowances, cash incentives, broker commissions, Tenant's use,

availability of space in the Redmond area, the build out of the Premises and such additional factors as might reasonably be considered in determining the Market Rate.

B. To exercise any option, Tenant must deliver a binding notice to Landlord not less than twelve (12) months prior to the expiration of the initial Term of this Lease, or the first Renewal Term, as the case may be. Thereafter, the Market Rate for the particular Renewal Term shall be calculated pursuant to Subsection C below and Landlord shall inform Tenant of the Market Rate. Such calculations shall be final and shall not be recalculated at the actual commencement of such Renewal Term. If Tenant fails to timely give its notice of exercise, Tenant will be deemed to have waived its option to extend.

C. Market Rate shall be determined as follows:

(i) If Tenant provides Landlord with its binding notice of exercise pursuant to Subsection B above, then at some point between thirteen (13) and eleven (11) months prior to the commencement of the applicable Renewal Term (or, at Landlord s election, at an earlier point), Landlord shall calculate and inform Tenant of the Market Rate. At the same time Landlord shall provide to Tenant in writing supporting information used by Landlord to calculate the Market Rate including rental rates and lease terms on comparable buildings, which Landlord

shall identify by name and location. If Tenant rejects the Market Rate as calculated by Landlord, Tenant shall inform Landlord of its rejection within twenty (20) days after Tenant s receipt of Landlord s calculation, and Landlord and Tenant shall commence negotiations to agree upon the Market Rate. If Tenant fails to timely reject Landlord s calculation of the Market Rate it will be deemed to have accepted such calculation. If Landlord and Tenant are unable to reach agreement within twenty-one (21) days after Landlord s receipt of Tenant s notice of rejection, then the Market Rate shall be determined in accordance with (ii) below.

(ii) If Landlord and Tenant are unable to reach agreement on the Market Rate within said twenty-one (21) day period, then within seven (7) days, Landlord and Tenant shall each simultaneously submit to the other in a sealed envelope its good faith estimate of the Market Rate. If the higher of such estimates is not more than one hundred five percent (105%) of the lower, then the Market Rate shall be the average of the two. Otherwise, the dispute shall be resolved by arbitration in accordance with (iii) below.

(iii) Within seven (7) days after the exchange of estimates, the parties shall select as an arbitrator an independent MAI appraiser with at least five (5) years of experience in appraising office space in the metropolitan area in which the Project is located (a "Qualified Appraiser"). If the parties cannot agree on a Qualified Appraiser, then within a second period of seven (7) days, each shall select a Qualified

Appraiser and within ten (10) days thereafter the two appointed Qualified Appraisers shall select a third Qualified Appraiser and the third Qualified Appraiser shall be the sole arbitrator. If one party shall fail to select a Qualified Appraiser within the second seven (7) day period, then the Qualified Appraiser chosen by the other party shall be the sole arbitrator.

(iv) Within twenty-one (21) days after submission of the matter to the arbitrator, the arbitrator shall determine the Market Rate by choosing whichever of the estimates submitted by Landlord and Tenant the arbitrator judges to be more accurate. The arbitrator shall notify Landlord and Tenant of its decision, which shall be final and binding. If the arbitrator believes that expert advice would materially assist him, the arbitrator may retain one or more qualified persons to provide expert advice. The fees of the arbitrator and the expenses of the arbitration proceeding, including the fees of any expert witnesses retained by the arbitrator, shall be paid by the party whose estimate is not selected. Each party shall pay the fees of its respective counsel and the fees of any witness called by that party.

D. Tenant's option to extend this Lease is subject to the conditions that: (i) on the date that Tenant delivers its binding notice exercising an option to extend, Tenant is

not in default under this Lease after the expiration of any applicable notice and cure periods.

APPENDIX H
EXPANSION OPTION AND LETTER OF CREDIT

1. EXPANSION OPTION. Subject to the terms and conditions of this paragraph, Landlord hereby grants to Tenant an option (the "Option") to lease Building 6 located in the Project as shown on Exhibit A attached hereto (the "Expansion Space"). To exercise the Option, Tenant must deliver a binding written notice to Landlord of its intent to lease the Expansion Space on or before May 1, 1999. In the notice of intent to lease, Tenant shall specify the date on which the Landlord shall deliver the Expansion Space to Tenant, which date (i) shall not be less than nine (9) months from the date of the notice, and (ii) shall be no later than February 1, 2000 . Tenant hereby acknowledges that time is of the essence with respect to delivery of the notice and that failure to deliver such written notice to Landlord within the time required shall result in the termination of Tenant s Option to lease the Expansion Space. Upon proper exercise of Tenant s Option, Landlord shall deliver to Tenant the Expansion Space on the specific delivery date, unless otherwise mutually agreed by Landlord and Tenant. Tenant s notice of its election to exercise its Option for

the Expansion Space shall be subject to the following conditions: (a) the Lease shall be in full force and effect at the time of the exercise of such Option; and (b) Tenant shall not be in default (subject to any notice and cure periods) under the Lease.

Tenant s lease of the Expansion Space shall be on the same terms and conditions of this Lease of the Premises, including, without limitation, at the rental rates paid at the time of such election for the Premises and, except for Extension Options without further extension of the term of the Lease (it being the intent of the parties that the lease of the Expansion Space shall be co-terminus with the lease of the Premises). Landlord and Tenant hereby agree to execute an Amendment to Lease evidencing the lease of the Expansion Space in form consistent with the terms hereof and satisfactory to the parties. Landlord shall deliver to Tenant the Expansion Space in a similar condition and terms as the Premises were delivered to Tenant, including, Landlord s work and the Tenant improvement allowance set forth in the Lease for the initial Premises.

2. LETTER OF CREDIT. Section 12 of the Lease is hereby supplemented and modified by adding the following language as Section 12E:

E. Default Relating to Letter of Credit. In the event that thirty (30) days prior to the expiry date set forth in the Letter of Credit or replacement Letter of Credit required to be provided by Tenant pursuant to Article 20 hereof and which is in effect at such time, Tenant fails to (1) obtain an extension of such Letter of Credit or (2) provide a new Letter of Credit, as security for the performance of all of its obligations hereunder in form and substance satisfactory to Landlord, Landlord may, at its sole and exclusive remedy for such default, present drafts for payment of the entire amount of the Letter of Credit and such amounts shall be held by Landlord as a Security Deposit pursuant to the terms of Article 20 hereof.

EXHIBIT 10.9

360 degrees PURCHASE AGREEMENT

THIS PURCHASE AGREEMENT (this "Agreement") is made as of this 21st day of October, 1997 (the "Effective Date") between Metawave Communications Corporation, a Delaware corporation ("Seller"), and 360 COMMUNICATIONS COMPANY, a Delaware corporation (the "Company").

The parties, in consideration of the mutual covenants, agreements and promises of the other set forth in this Agreement and intending to be legally bound, agree as follows:

1. AGREEMENT

Seller agrees to manufacture, sell and deliver to the Company, and the Company agrees to purchase, the Products identified in Exhibit A to this Agreement (the "Initial Order") in accordance with the specifications and the terms and conditions hereof. As part of the Initial Order, Seller agrees to provide and the Company agrees to purchase, the Services identified in Exhibit A to this Agreement. Notwithstanding any other provision of this Agreement or any other contract between the parties to the contrary, the provisions of this Agreement shall apply to the Initial Order as well as all additional Orders for the Products in excess of the Initial Order (the "Additional Orders") during the term of this Agreement unless the parties expressly agree by written modification to this Agreement that the provisions of this Agreement shall not apply. ANY ADDITIONAL OR DIFFERENT TERMS IN ANY ACKNOWLEDGMENT, INVOICE OR OTHER COMMUNICATION TO THE COMPANY SHALL BE DEEMED OBJECTED TO BY THE COMPANY WITHOUT NEED OF FURTHER NOTICE OF OBJECTION AND SHALL BE OF NO EFFECT AND NOT IN ANY CIRCUMSTANCE BINDING UPON THE COMPANY UNLESS EXPRESSLY ACCEPTED BY THE COMPANY IN WRITING.

2. DEFINITIONS

As used in this Agreement, the following terms shall have the meanings set forth below:

"Acceptance Test Procedure" shall mean the testing procedures and protocols described and administered as set forth in Exhibit C.

"Certification of Acceptance" shall mean the Company's certification of Seller's satisfactory completion of the Acceptance Test Procedure in the form set forth in Exhibit C.

"Order" shall mean this Agreement, together with any purchase order or other communication the Company may deliver to Seller for the purchase of the Products and Services which incorporates the terms and conditions of this

Agreement and which has been accepted by Seller.

[***]

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

[***]

[***]

"Products" shall mean the products listed on Exhibit A hereto and the Software referenced in Exhibit E or any additional products set forth in any amendments to Exhibit A or E as may be subsequently agreed to from time to time by Seller and the Company or in an Order.

"Purchase Price" shall mean the price of the Products shown on Exhibit A attached hereto and incorporated herein or any other amount set forth in any amendments to Exhibit A as may be subsequently agreed to from time to time by Seller and the Company.

"Software" shall mean the object-code computer programs, including firmware object code, licensed by Seller for use solely with the Products which enables the Products to perform its functions and processes.

"Software License" shall mean the software license for the software to be delivered to the Company for use with the Products set forth in Exhibit E.

"Specifications" shall mean the specifications for the Products set forth in Exhibit B attached hereto and incorporated herein.

3. PURCHASE PRICE

The Purchase Price(s) for the Products set forth in Exhibit A are no higher than the prices quoted by Seller to the Company in Seller's written bid therefor, unless agreed to by the Company in writing.

4. DELIVERY OF PRODUCTS

All dates for delivery of Products are firm, and time is of the essence. Seller shall deliver the Products in the Initial Order to the Company's designated location on or before the date(s) specified in Exhibit A hereto, or to the location on or before the date specified in an Order, failing which Seller shall pay to the Company a charge, for every [***] of delay, equal to the rate of [***] of the Purchase Price of the Products which have been delayed, such charge to begin to accrue [***] after the date specified for delivery. Such charges shall not exceed in the aggregate [***]. In the event that the delivery of an Order is delayed more than [***] beyond the delivery date

specified in such Order, Customer shall have the right to cancel such Order without penalty.

5. SHIPPING INSTRUCTIONS, CHARGES AND PACKING

a. Unless otherwise instructed by the Company, Seller shall (1) ship all Products for a designated location complete; (2) ship to the destination designated in Exhibit A or in an Order; (3) enclose a packing memorandum with each shipment; (4) reference this Agreement on all packages and shipping papers; and (5) render

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invoices in accordance with Section 10 below. The Company shall be responsible for payment of all shipping charges.

b. Shipping charges to the destinations specified in Exhibit A shall be as specified in Exhibit A. If the Company rejects or cancels for good cause any Products, Seller shall bear all shipping charges relating to such Products.

c. Products shall be packed by Seller, at no additional charge to the Company, in containers adequate to prevent damage during shipping, handling and storage.

6. ORDERS; CHANGES AND CANCELLATIONS

a. The Company shall order all Products and Services pursuant to this Agreement (other than the Initial Order set forth in Exhibit A) by an Order, which shall be delivered to Seller not later than [***] days prior to the date of delivery for such Products and Services specified in the Order. Each Order shall only become binding on Seller and Customer when agreement has been reached by the parties on all of the terms therein and Seller has confirmed its acceptance of the Purchase Order.

b. Customer shall give Seller, for planning purposes, a non-binding forecast of its estimated requirements for the Products and Services for the forthcoming [***] and such forecast shall be updated on a quarterly basis. The first such forecast shall be delivered by the Company to the Seller in December 1997.

c. The Company may, by 30 days' written notice to Seller at any time before delivery is made, make changes, including changes to quantities, specifications, destinations or other terms set forth in an Order, [***].

d. In the event of destruction of all or a portion of a Product located at one of Customer's cell sites (e.g., by fire, flood, theft or other natural or man-made causes), the Company shall ship a replacement Product (or parts)

within [***] of receipt of notice from Customer to be followed within [***] by an Order from Customer.

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7. TITLE; RISK OF LOSS

a. Unless otherwise specified herein, title to Products sold by Seller to the Company shall vest in the Company when the Products have been delivered to the Company to the location specified in Exhibit A hereto or in an Order (except title to software shall never pass).

b. Seller shall bear the risk of loss of or damage to any Product until delivery of the Product to the destination specified in Exhibit A or in an Order and acceptance by the Company.

8. PERFORMANCE EVALUATION FOR INITIAL ORDER

a. At the end of the Performance Evaluation Period for the Initial Order, Seller and the Company shall review the data for the Products in the Initial Order in accordance with the methodology set forth in Exhibit D and shall mutually agree on the Performance Results. [***].

b. There shall be no Performance Evaluation Period for any Additional Order.

9. WARRANTY

a. Seller warrants that all Products furnished hereunder will conform in all material respects with the requirements of this Agreement and the Specifications; that all Products are free from defects in design, materials, workmanship and title. These warranties shall survive delivery, acceptance and payment of the Purchase Price for a period of [***] from the date of delivery of each such Product to the Company. The warranties in this Agreement are given in lieu of all other warranties express or implied which are specifically excluded, including, without limitation, implied warranties of merchantibility and fitness for a particular purpose.

b. If the Company believes that there is a breach of any warranty set forth herein, the Company will notify Seller, setting forth in writing the nature of the claimed

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breach. Seller shall promptly investigate such breach and advise the Company of Seller's planned corrective action. Thereafter, Seller shall promptly repair or replace such Product or Products or take such other action as may be acceptable to the Company to correct such breach of warranty at no additional charge to the Company. If such breach of warranty has not been corrected to the Company's satisfaction within a reasonable time (not to exceed thirty (30) days from the date of the Company's notice to Seller of the breach), the Company may, in addition to all other rights and remedies provided by law or this Agreement, suspend delivery of any then undelivered portion of the Products to be sold by the Seller to the Company under this Agreement.

c. This warranty is void if (i) the Product is used in other than its normal and customary manner; (ii) the Product has been subject to misuse, accident, neglect or damage; (iii) the Product has been installed, optimized or moved from its original installation site by any person other than Seller or a person who has been trained by Seller to provide such services; or (iv) unauthorized alterations or repairs have been made, or unapproved parts used in the equipment.

d. Seller warrants that the Software will not abnormally end or provide invalid or incorrect results arising from the use of date data beyond the year 1999.

10. INVOICES AND PAYMENT

a. Seller shall render an invoice for the Initial Order promptly following agreement by the parties on the Performance Results. Seller shall render an invoice for Additional Orders promptly upon Acceptance of the Products and Services. In either case, the invoice shall be computed on the basis of the prices set forth in Exhibit A [***] and shall identify and show separately quantities, type of Services, total amounts for each item, shipping charges, applicable sales or use taxes and total amount due. The Company shall promptly pay Seller the amount due within 30 days of the date of invoice, unless it is in dispute; provided, however, that unless otherwise agreed, payment for shortages and/or non-conforming Products may be withheld by the Company. The Company shall pay a late fee at the rate of one and one-half percent (1.5%) of the amount due for each month or portion thereof that the amount remains unpaid.

b. If the Company disputes any invoices rendered or amount paid, the Company will so notify Seller, and the parties will use their reasonable efforts to resolve such dispute expeditiously. [***].

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11. TAXES

The Purchase Price(s) set forth herein include all taxes of whatever nature except state sales and use taxes, which shall be added as applicable and stated as separate items on the invoice applicable to each delivery of Products.

12. INFRINGEMENT INDEMNITY

a. Seller shall defend the Company against (or, at its option, settle) a claim that the Products supplied hereunder infringe a United States patent or copyright provided that (i) the Company promptly notifies Seller in writing of the claim, (ii) the Company gives Seller full opportunity and authority to assume sole control of the defense and all related settlement negotiations, and (iii) the Company gives Seller information and assistance for the defense (the Company will be reimbursed for reasonable costs and expenses incurred in rendering such assistance, against receipt of invoices therefor). Subject to the conditions and limitations of liability stated in this Agreement, Seller shall indemnify and hold harmless the Company from all payments, which by final judgments in such suits, may be assessed against the Company on account of such alleged infringement and shall pay resulting settlements, costs (including reasonable attorneys' fees) and damages finally awarded against the Company by a court of law.

b. The Company agrees that if the Products become, or in Seller's opinion are likely to become, the subject of such a claim, the Company will permit Seller, at its option and expense, either to procure the right for the Company to continue using such Products or to replace or modify same so that they become non-infringing, and, if neither of the foregoing alternatives is available on terms which are acceptable to Seller, the Company shall at the written request of Seller, return the infringing or potentially infringing Products. The Company shall receive a refund of the prorated undepreciated portion of the Purchase Price actually paid by the Company to Seller for the returned portion of the Products. The Purchase Price shall be depreciated over a five (5) year period.

c. Seller disclaims any and all liability for any claim of patent or copyright infringement (i) based upon adherence to specifications, designs or instructions furnished by the Company, (ii) based upon the combination, operation or use of any Products supplied hereunder with products, software or data not supplied by Seller, or (iii) based upon alteration of the Products or modification of any Software made by any party other than Seller.

13. [***]

[***]

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

[***]

14. INDEPENDENT CONTRACTOR

Seller hereby declares and agrees that Seller is engaged in an independent business and will perform its obligations under this Agreement as an independent contractor and not as the agent or employee of the Company; that the persons performing services hereunder are not agents or employees of the Company; that Seller has and hereby retains the right to exercise full control of and supervision over the performance of Seller's obligations hereunder and full control over the employment, direction, compensation and discharge of all employees assisting in the performance of such obligations; that Seller will be solely responsible for all matters relating to payment of such employees, including compliance with workers' compensation, unemployment, disability insurance, social security, withholding and all other federal, state and local laws, rules and regulations governing such matters; and that Seller will be responsible for Seller's own acts and those of Seller's agents, employees and contractors during the performance of Seller's obligations under this Agreement.

15. NONEXCLUSIVE MARKET RIGHTS

It is expressly understood that this Agreement does not grant Seller an exclusive privilege to furnish to the Company any or all of the type of products which are the subject of this Agreement which the Company may require. The Company expressly reserves the right to contract with others for the purchase of products comparable or identical to the products and services which are the subject of this Agreement.

16. INDEMNIFICATION

Seller shall indemnify the Company, its employees and directors, and each of them, against any loss, cost, damage, claim, expense or liability, including but not limited to liability as a result of injury to or death of any person or damage to or loss or destruction of any property arising out of, as a result of, or in connection with the performance of this Agreement and directly caused, in whole or in part, by the acts or omissions, negligent or otherwise, of Seller or a contractor or an agent of Seller or an employee of anyone of them, except where such loss, cost, damage, claim, expense or liability arises from the sole negligence or willful misconduct of the Company or its employees. As used in the preceding sentence, the words "any person" shall include but shall not be limited to, a contractor or an agent of the Company or Seller, and an employee of the Company, Seller or any such contractor or agent; and the words " any property" shall include, but shall not be limited to, property of the Company, Seller or any such contractor or agent, or an employee of any of them. Seller shall, at its own expense, defend any suit asserting a claim for any loss, damage or liability specified above, and Seller shall pay any costs and attorneys' fees that may me incurred by the Company in connection with any such claim or suit or in enforcing

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the indemnity granted above, provided that Seller (i) is given prompt notice of any such claim or suit and (ii) full opportunity to assume control of the defense or settlement.

17. TERM AND TERMINATION

The term of this Agreement shall be [***] from the Effective Date. If either party is in material default of any of its obligations under this Agreement and such default continues for thirty (30) days after written notice thereof by the party not in default, the nondefaulting party may cancel this Agreement and/or the delivery of any Products which may be affected by such default.

18. ASSIGNMENT

a. Any assignment by Seller of this Agreement or any other interest hereunder without the Company's prior written consent, shall be void, except assignment to a person or entity who acquires all or substantially all of the assets, business or stock of Seller, whether by sale, merger or otherwise.

b. The Company reserves the right to assign this Agreement or any portion hereof to any present or future affiliate, subsidiary or parent corporation.

c. Subject to the provisions of paragraphs a and b above, this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns, if any, of the parties hereto.

19. NOTICES

Except as otherwise specified in this Agreement, all notices or other communications hereunder shall be deemed to have been duly given when made in writing and delivered in person or deposited in the United States mail, postage prepaid, certified mail, return receipt requested, or by a reputable overnight courier service providing proof of delivery, or by confirmed facsimile transmission and addressed as follows:

TO SELLER	TO THE COMPANY:
Metawave Communications Corporation	360 degrees Communications Company
8700 148th Avenue NE	8725 Higgins Road
Redmond WA 98052	Chicago, Illinois 60636
Attn:VP, Sales	Attn: Tim Thompson
Copy to: General Counsel	Copy to: Steve Podrzycki
Fax: 425 702 5970	Fax: 773-399-7291

The address to which notices or communications may be given to either party may be changed by written notice given by such party to the other pursuant to this section 18.

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20. COMPLIANCE WITH LAWS

Seller shall comply with all applicable federal, state and local laws, regulations and codes, including the procurement of permits and licenses when needed, in the performance of this Agreement. Seller shall indemnify the Company against any loss or damage that may be sustained by reason of Seller's failure to comply with such federal, state and local laws, regulations and codes.

21. FORCE MAJEURE

Except for payment of moneys due, neither party shall be liable for delays in delivery or performance or for failure to manufacture, deliver or perform resulting from acts beyond the reasonable control of the party responsible for performance. Such acts shall include, but not be limited to(a) acts of God, acts of a public enemy, acts or failures to act by the other party, acts of civil or military authority, governmental priorities, strikes or other labor disturbances, hurricanes, earthquakes, fires, floods, epidemics, embargoes, war, riots, and loss or damage to goods in transit; or (b) inability to obtain necessary products, components, services or facilities on account of causes beyond the reasonable control of the delayed party or its suppliers. In the event of any such delay, the date(s) of delivery or performance shall be extended for as many days are reasonably required due to the delay.

22. GENERAL PROVISIONS

a. All information, data and materials provided by either party under this Agreement shall be subject to the terms and conditions of the Non-Disclosure Agreement between the parties dated March 26, 1996.

b. Except as otherwise provided in this Agreement, the provisions of this Agreement are for the benefit of the parties hereto and not for any other person.

c. Waiver by either party of any obligation or default by the other party shall not be deemed a waiver by such party of any other obligation or default.

d. The section and paragraph headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

e. This Agreement and each Order shall be construed in accordance with the internal laws of the State of Illinois, without regard to its choice of law provisions .

f. Any rights of cancellation, termination or other remedies prescribed

in this Agreement are cumulative and are not intended to be exclusive of any other remedies to which the injured party may be entitled at law or equity (including but not limited to the remedies of specific performance and cover) in case of any breach or threatened breach by the other party of any provision of this Agreement, unless such other remedies which are not prescribed in this Agreement are specifically limited or excluded by this Agreement. The use of one or more available remedies shall not bar the use of any other remedy for the purpose of

enforcing the provisions of this Agreement; provided, however, that a party shall not be entitled to retain the benefit of inconsistent remedies.

g. If any of the provisions of this Agreement shall be invalid or unenforceable, such invalidity or unenforceability shall not invalidate or render unenforceable the entire Agreement, but rather the entire Agreement shall be construed as if not containing the particular invalid or unenforceable provisions, and the rights and obligations or Seller and the Company shall be construed and enforced accordingly.

h. This Agreement, including all Exhibits attached to or referenced in this Agreement, shall constitute the entire agreement between the Company and Seller with respect to the subject matter hereof.

i. No provision of this Agreement shall be deemed waived, amended or modified by any party hereto, unless such waiver, amendment or modification is in writing and signed by a duly authorized representative of each of the parties.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective duly authorized representatives.

Metawave Communications Corporation	360 degrees Communications Company
By:/s/ Robert Hunsberger	By:/s/ Gary Burge
Title: President & CEO	Title: Senior Vice President of Engineering & Network Operations
Date Signed: 10/20/97	Date Signed: 10/21/97

EXHIBITS ATTACHED:

A Products and Services Pricing
B Product Specifications

C Acceptance Test Procedure
D Performance Criteria for Initial Order
E Software License

EXHIBIT A

TO THE PURCHASE AGREEMENT
BETWEEN
METAWAVE COMMUNICATIONS CORPORATION ("SELLER")
AND
360 COMMUNICATIONS COMPANY ("COMPANY")

PRODUCTS AND SERVICES PRICING

For the purposes of uniformity and brevity, references to Agreement or to an Exhibit shall refer to the Purchase Agreement to which this document is Exhibit A and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto unless otherwise expressly defined herein.

INTRODUCTION

This Exhibit A (Products and Services Pricing) lists the pricing for the Initial Order of Products and Services as of the Effective Date of the Agreement. All payments for the Products and Services shall be made according to the terms set forth in the Agreement.

EXHIBIT A: PRODUCTS AND SERVICES PRICING (CONT.)

<TABLE>
<CAPTION>
SPOTLIGHT PRICING (LPAS WITH 30 WATT MODULES)

SPOTLIGHT CONFIGURATIONS	[***]	[***]	[***]	[***]
<S>	<C>	<C>	<C>	<C>
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]

</TABLE>

* The software licensing fee for the current version of LampLighter is included in the purchase price of each unit.

<TABLE>
<CAPTION>
SPOTLIGHT PRICING
(LPAS WITH 40 WATT MODULES)

SPOTLIGHT CONFIGURATIONS	[***]
<S>	<C>
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

</TABLE>

<TABLE>
<CAPTION>
SPOTLIGHT RECOMMENDED SPARES

PART NUMBER	DESCRIPTION	[***]	[***]
<S>	<C>	<C>	<C>
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

	TOTAL	[***]

</TABLE>

[***]

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EXHIBIT A: PRODUCTS AND SERVICES PRICING (CONT.)
INITIAL ORDER

[***]

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EXHIBIT A: PRODUCTS AND SERVICES PRICING (CONT.)

[***]

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EXHIBIT A: PRODUCTS AND SERVICES PRICING (CONT.)

2.0 SPOTLIGHT FIELD REPLACEABLE UNITS PRICING LIST

[***]

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Exhibit B: Performance Specifications

to the Products and Services Purchase Agreement

SpotLight(TM) Multibeam Antenna Platform 2.0
Transmit/Receive

(for use with Motorola HDII Base Station Equipment)

<TABLE>
<S> <C>

</TABLE>

For purposes of uniformity and brevity, references to Agreement or to an Exhibit shall refer to the Products and Services Purchase Agreement to which this document is Exhibit B and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto.

1. INTRODUCTION

The purpose of this document is to describe and specify Metawave's SpotLight 2.0 Multibeam Antenna Platform including:

- System operation
- Hardware and software elements of the SpotLight equipment
- Interconnect between SpotLight equipment and the base station equipment

While the specifications contained in this document are based on the most current information available, such information is based on cell site specific data and may not apply to all cell sites contained within a system. The specifications contained in this document may change from cell site to cell site. Metawave reserves the right to make changes to any design, specification, manufacturing techniques and/or product testing procedures.

ACRONYMS AND TERMS DEFINITION

C/I	Carrier to Interference Ratio
FRU	Field Replaceable Unit
LNA	Low Noise Amplifier
LPA	Linear Power Amplifier
RCU	Radio Channel Unit (P/O Motorola Cell Equipment)
RF	Radio Frequency

RX	Receive
SMAP	Spotlight Multibeam Antenna Platform
SMU	Spectrum Management Unit
TX	Transmit
TXCD	Transmit Combiner Driver

2. SYSTEM DESCRIPTION

2.1 Introduction

The Spotlight Multibeam Antenna Platform (SMAP) brings enhanced performance to existing cellular technology. The system replaces the existing antenna components at a cell site with a high performance antenna array coupled to an RF switch matrix and control system. This upgrade provides a dramatically improved carrier-to-interference ratio (C/I) and is the basis for many other performance enhancements, such as improved audio quality, extended range and greater traffic capacity.

2.2 General System Overview

The SMAP provides the necessary hardware and software to allow the most appropriate narrow beam antennas (2 receive paths and 1 transmit path) to be connected to base station RCUs. The major subsystem components which make up the SpotLight Multibeam Antenna Platform (SMAP) including antennas, RF switch matrix, and controller are depicted in Figure 1.

[***]

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3. REGULATORY REQUIREMENTS

This section specifies requirements which are set primarily by local and/or national governing bodies, consortiums and standards committees.

3.1 US

The SpotLight system complies with appropriate US FCC regulations (includes both RF and EMI). Specifically, the SMAP shall comply with the regulations defined in CFR 47 part 22 and part 15.

EXHIBIT C: ACCEPTANCE TEST PROCEDURE
(ATP)

TO THE PRODUCTS AND SERVICES PURCHASE AGREEMENT

SPOTLIGHT MULTIBEAM ANTENNA PLATFORM

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

TABLE OF CONTENTS

For purposes of uniformity and brevity, references to Agreement or to an Exhibit shall refer to the Products and Services Purchase Agreement to which this document is Exhibit C and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto.

1. INTRODUCTION

The objective of the Acceptance Test Procedure (ATP) is to demonstrate the proper installation and operation of the SpotLight Multibeam Antenna Platform ("SpotLight"). Acceptance shall occur upon the demonstration of the proper installation and optimization of SpotLight. Within [***] after Metawave has advised Customer that installation and optimization are complete, Customer shall furnish representatives to witness the Acceptance Tests as set forth in this Exhibit C. The representatives shall then be available on a continuous basis to witness the ATP. A SpotLight Certificate of Acceptance, included at the end of this Exhibit C, contains a test results checklist that Metawave and Customer fill out and sign.

2. [***]

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[***]

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EXHIBIT D

TO THE PURCHASE AGREEMENT
BETWEEN
METAWAVE COMMUNICATIONS CORPORATION ("SELLER")
AND
360 DEGREES COMMUNICATIONS COMPANY ("COMPANY")

SPOTLIGHT PERFORMANCE CRITERIA

For the purposes of uniformity and brevity, references to Agreement or to an Exhibit shall refer to the Purchase Agreement to which this document is Exhibit D and to the other Exhibits to that Agreement.

[***]

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EXHIBIT E
TO THE PURCHASE AGREEMENT
BETWEEN
METAWAVE COMMUNICATIONS CORPORATION ("SELLER")
AND
360 DEGREES COMMUNICATIONS COMPANY ("COMPANY")

SOFTWARE LICENSE

For purposes of uniformity and brevity, references to Agreement or to an Exhibit shall refer to the Purchase Agreement to which this document is Exhibit E and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto.

1. SCOPE

Pursuant to the above-identified Agreement, Software will be delivered by Seller to Company for use with the Products according to the terms of the Agreement and this Exhibit. Company shall then become a licensee with respect to such Software.

2. LICENSING GRANT

2.1 Concurrent with execution of the Agreement, Seller grants to Company a revocable, non-exclusive and non-transferable license under Seller's applicable proprietary rights to use Software delivered to Company hereunder in accordance with the terms and conditions set forth herein.

2.2 Company agrees to pay the Licensing Fees for the right to use the Software and features and for any support thereof as set forth in Exhibit A (Price List) or in an Amendment thereto.

3. LIMITATIONS ON USE OF SOFTWARE

3.1 Without the prior written consent of Seller, Company shall only use the Software in conjunction with a single Product existing within the

site specified in the Order ("Designated Product").

3.2 Company may use the Software to routinely operate and maintain the Designated Product. For purposes of this Subsection, "maintain" shall be construed to mean performing diagnostic testing consistent with Company's obligation to provide the first level of maintenance. Under no condition shall the Software be used for any other purpose, including, but not limited to, substituted products, or products not owned by Company, or products located at a location other than the site specified in the Order.

3.3 The License granted to Company in Section 2 is personal and may not be transferred to another product or site without the written consent of Seller.

3.4 To the extent specified in Exhibit A or an Amendment thereto and provided Company has paid any applicable licensing fees, Company shall have the right to use features in accordance with the terms of this Exhibit. Company acknowledges that the Software may contain therein several additional features which are each covered by separate licensing fees. Company agrees not to use, and the license specifically does not extend to, such additional features unless they are specified in Exhibit A or an amendment thereto and provided Company has paid the applicable licensing fees for such additional features.

3.5 The Software is subject to laws protecting trade secrets, know-how, confidentiality and copyright.

3.6 Company shall not translate, modify, adapt, decompile, disassemble, or reverse engineer the Software or any portion thereof.

3.7 Unless otherwise expressly agreed by Seller, Company shall not permit its directors, officers, employees or any other person under its direct or indirect control, to write, develop, produce, sell, or license any software that performs the same functions as the Software by means directly attributable to access to the Software (e.g. reverse engineering or copying).

3.8 Company shall not export the Software from the United States without the written permission of Seller. If written permission is granted for export of the Software, then Company shall comply with all U.S. laws and regulations for such exports and shall hold Seller harmless, including legal fees and expenses for any violation or attempted violation of the U.S. export laws.

4. RIGHT TO COPY, PROTECTION AND SECURITY

4.1 Software provided hereunder may be copied (for back-up purposes only) in whole or in part, in printed or machine-readable form for Company's

internal use only, provided, however, that no more than two (2) printed copies and two (2) machine-readable copies shall be in existence at any one time without the prior written consent of Seller, other than copies resident in the Products.

4.2 With reference to any copyright notice of Seller associated with Software, Company agrees to include the same on all copies it makes in whole or in part. Seller's copyright notice may appear in any of several forms, including machine-readable form. Use of a copyright notice on the Software does not imply that such has been published or otherwise made generally available to the public.

4.3 Company agrees to keep confidential, in accordance with the terms of the Agreement, and not provide or otherwise make available in any form any Software or its contents, or any portion thereof, or any documentation pertaining to the Software, to any person other than employees of Company or Seller.

4.4 Software, including features is the sole and exclusive property of Seller and no title or ownership rights to the Software or any of its parts, including documentation, is transferred to Company.

4.5 Company acknowledges that it is the responsibility of Company to take all reasonable measures to safeguard Software and to prevent its unauthorized use or duplication.

5. REMEDIES

Company acknowledges that violation of the terms of this Exhibit or the Agreement shall cause Seller irreparable harm for which monetary damages may be inadequate, and Company agrees that Seller may seek temporary or permanent injunctive relief without the need to prove actual harm in order to protect Seller's interests.

6. TERM

Unless otherwise terminated pursuant to Section 7 herein, the term of the license granted pursuant to Section 2 herein shall be co-extensive with the term of any licensing and/or maintenance fees paid by Company to Seller pursuant to Exhibit A or an Amendment thereto.

7. TERMINATION

7.1 The license granted hereunder may be terminated by Company upon one (1) month's prior written notice.

7.2 Seller may terminate the license granted hereunder if Company is in default of any of the terms and conditions of the Agreement or Exhibits, and such termination shall be effective if Company fails to

correct such default within ten (10) days after written notice thereof by Seller. The provisions of Sections 4 and 5 herein shall survive termination of any such license.

7.3 Within one (1) month after termination of the license granted hereunder, Company shall furnish to Seller a document certifying that through its best efforts and to the best of its knowledge, the original and all copies in whole or in part of all Software, in any form, including any copy in an updated work, have been returned to Seller or destroyed. With prior written consent from Seller, Company may retain one (1) copy for archival purposes only.

8. RIGHTS OF THE PARTIES

8.1 Nothing contained herein shall be deemed to grant, either directly or by implication, estoppel, or otherwise, any license under any patents or patent applications of Seller; except that Company shall have a non-exclusive, license under Seller's patents and patent applications to use, in Seller-supplied equipment only, Software supplied hereunder, when such license is implied or otherwise arises by operation of law by virtue of the purchase of such copies from Seller.

8.2 Rights in programs or operating systems of third parties, if any, are further limited by their license agreements with such third parties, which agreements are hereby incorporated by reference thereto and made a part hereof as if fully set forth herein. Company agrees to abide thereby.

8.3 During the term of the license granted pursuant to Section 2 herein and for a period of one (1) year after expiration or termination, Seller, and where applicable, its licensor(s), or their representatives may, upon prior notice to Company, a) inspect the files, computer processors, equipment, facilities and premises of Company during normal working hours to verify Company's compliance with this Agreement, and b) while conducting such inspection, copy or retain all Software,

including the medium on which it is stored and all documentation that Company may possess in violation of the license or the Agreement.

8.4 Company acknowledges that the provisions of this Exhibit E are intended to inure to the benefit of Seller and its licensors and their respective successors in interest. Company acknowledges that Seller or its licensors have the right to enforce these provisions against Company, whether in Seller's or its licesnsor's name.

9. LIMITATIONS ON SOFTWARE

Company understands that errors occur in Software and Seller makes no

warranty that the Software will perform without error. Company agrees that it is Company's responsibility to select and test the Software to be sure it meets Company's needs. Company accepts the Software "as is".

10. ENTIRE UNDERSTANDING

Notwithstanding anything to the contrary in other agreements, purchase orders or order acknowledgments; the Agreement and this Exhibit E set forth the entire understanding and obligations regarding use of Software, implied or expressed.

EXHIBIT 10.10

METAWAVE COMMUNICATIONS CORPORATION
PURCHASE AGREEMENT

THIS PURCHASE AGREEMENT (this "Agreement") is made as of this 12th day of December, 1997, (the "Effective Date") between Metawave Communications Corporation, a Delaware corporation ("Seller"), and Telefonica Celular del Paraguay S.A., a Paraguay corporation ("Customer"), a subsidiary of Millicom International Cellular S.A., a Luxembourg corporation ("Millicom").

The parties, in consideration of the mutual covenants, agreements and promises of the other set forth in this Agreement and intending to be legally bound, agree as follows:

1. AGREEMENT

Seller agrees to sell to Customer, and Customer agrees to purchase, the Products and Services identified on Exhibit A to this Agreement in accordance with the specifications and the terms and conditions hereof and at the Purchase Prices set forth in Exhibit A. Notwithstanding any other provision of this Agreement or any other contract between the parties to the contrary, the provisions of this Agreement shall apply to all Purchase Orders for the Products and Services during the term of this Agreement unless the parties expressly agree by written modification to this Agreement that the provisions of this Agreement shall not apply. Any additional or different terms in any acknowledgment, invoice, Purchase Order or other communication from one party to the other shall be deemed objected to without need of further notice of objection and shall be of no effect and not in any circumstance binding upon either party unless expressly accepted by both parties in writing.

2. DEFINITIONS

As used in this Agreement, the following terms shall have the meanings set forth below:

"Acceptance Date" shall mean for the Initial Order, a date which is no later than the date specified in Exhibit C on which the Products in the Initial Order shall satisfy the Acceptance Test Procedure and for Follow-on Orders, the date that the Products satisfy the Acceptance Test Procedure.

"Acceptance Test Procedure" shall mean the testing procedures and protocols to be agreed by the parties by January 15, 1998 and set forth in Exhibit C.

"Affiliate" shall mean any partnership, corporation or other entity (i) in which Customer, directly or indirectly, owns a controlling interest or (ii) which owns a controlling interest in Customer.

"Certificate of Acceptance" shall mean the Customer's certification of Seller's satisfactory completion of the Acceptance Test Procedure in the form set forth in Exhibit C.

"Change Order" shall mean any subsequent change to a Purchase Order initiated by either Seller or Customer, including but not limited to, changes in Site configuration, pricing and delivery date, which is mutually agreed to by both parties.

"Follow-on Order" shall mean any Products (and associated Services) in excess of the Initial Order purchased by Customer pursuant to the terms and conditions of this Agreement.

"Initial Order" shall mean the Products (and any associated Services) identified in Exhibit A as the Initial Order which are purchased by Customer pursuant to the terms and conditions of this Agreement.

[***]

[***]

[***]

"Products" shall mean the products listed on Exhibit A hereto or any additional products set forth in any amendments to Exhibit A as may be subsequently agreed to from time to time by Seller and Customer.

"Purchase Order" shall mean any purchase order Customer may deliver to Seller for the purchase of the Products and Services which incorporates the terms and

conditions of this Agreement and which has been accepted by Seller.

"Purchase Price" shall mean the price of the Products and the price of the Services shown on Exhibit A or any other amount set forth in any amendments to Exhibit A as may be subsequently agreed to from time to time by Seller and Customer.

"Services" shall mean the engineering services listed on Exhibit A hereto or any additional services set forth in any amendments to Exhibit A as may be subsequently agreed to from time to time by Seller and Customer.

"Site" shall mean each of the Customer cell site locations at which a Product is installed.

"Software" shall mean the object-code computer programs, including firmware object code, licensed by Seller for use solely with the Products which enables the Products to perform its functions and processes.

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

"Software License" shall mean the software license for the software to be delivered to Customer for use with the Products as set forth in Exhibit D.

"Specifications" shall mean the specifications for the Products set forth in Exhibit B and incorporated herein.

3. DELIVERY AND ACCEPTANCE OF PRODUCTS

Seller shall, for both the Initial Order and Follow-on Orders, (i) properly deliver the Products to Customer's designated location on or before the date(s) specified in a Purchase Order, and (ii) satisfy the Acceptance Test Procedure by the Acceptance Date, failing which Seller shall pay to Customer (or credit against amounts owed to Seller by Customer) a charge, [***] of delay in delivery, equal to the rate of [***] of the Products which have been delayed, provided, however, that such charge shall not apply to any delay caused by an act of force majeure, as set forth in section 15 hereof or to any delays in the Acceptance Date for the Initial Order. Such charges shall not exceed [***] of each Product so delayed.

4. SHIPPING, CHARGES AND PACKING

a. Unless otherwise instructed by Customer, Seller shall ship all Products to the destination designated in a Purchase Order and render invoices in accordance with Section 8 below.

b. Products shall be packed by Seller, at no additional charge to Customer, in containers adequate to prevent damage during shipping, handling and storage. Seller shall adequately insure Products during shipment from Seller's facility to the Sites.

c. Customer shall reimburse Seller at cost for (or pay directly) all shipping costs, insurance costs, customs clearance charges, duties, levies and any other charges in connection with the sale of the Products and their delivery to the Sites.

5. PURCHASE ORDERS; CHANGES AND CANCELLATIONS

a. Customer shall order all Products and Services pursuant to this Agreement by a Purchase Order, which shall specify the date of delivery for such Products and Services mutually agreed by the parties. Each Purchase Order shall only become binding on Seller and Customer when agreement has been reached by the parties on all of the terms therein and Seller has confirmed its acceptance of the Purchase Order in writing (such acceptance not to be unreasonably withheld) subject to completion of the Site survey for each Product pursuant to section 5(b) below. At its sole option, Seller may decline acceptance of a Purchase Order if (i) Seller has determined that the costs associated with the sale of the Products and Services to the Sites specified in the Purchase Order are prohibitive or the conditions at such Sites are unacceptable; or (ii) the sale and delivery of the Products and Services would contravene section 18(h) of this Agreement.

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

b. The Product configurations set forth in Exhibit A hereto or in a Purchase Order are subject to change following the completion of a Site survey by Seller. A change to such configurations may result in a change in the Purchase Price of the Products or Services or in the delivery date. Any such change shall be agreed to in a written Change Order executed by both parties.

c. Promptly following execution of this Agreement, Customer shall give Seller, for planning purposes, a non-binding forecast of its estimated requirements for the Products and Services for the forthcoming [***] and such forecast shall be updated on a quarterly basis.

d. Customer may, by written notice no less than 30 days prior to Seller's shipment of a Product , make changes to destinations specified in the Purchase Order, provided the new destination is within the same country as the original destination.

e. Customer may, by written notice no less than 45 days prior to delivery date specified in Purchase Order, delay the delivery schedule, provided that such delay does not extend the delivery date specified in the Purchase Order beyond 180 days from Seller's acceptance of the Purchase Order.

f. Customer may cancel delivery of a Product prior to the Seller's shipment of a Product provided that if Customer directs such cancellation (a) with less than [***] written notice from delivery date specified in Purchase Order, Customer shall pay to Seller [***] and (b) with between [***] written notice from delivery date specified in Purchase Order, Customer shall pay to Seller a fee [***] of each Product affected by such cancellation.

6. TITLE; RISK OF LOSS

a. [***].

b. Title to the Products supplied hereunder shall pass to Customer upon delivery to a carrier at Metawave's factory in Redmond WA, USA.

7. WARRANTY

a. Seller warrants that (i) all Products furnished hereunder will conform in all material respects with the requirements of this Agreement and the Specifications, (ii) all Products are free from defects in materials, workmanship and title, (iii) the media on which the Software is contained will be free from defects in material and workmanship under normal use and (iv) the Software will substantially conform to the documentation provided by Seller for a period of [***] from the date of execution of the Certificate of Acceptance for each

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Product. The warranties in this Agreement are given in lieu of all other warranties express or implied which are specifically excluded, including, without limitation, implied warranties of merchantibility and fitness for a particular purpose.

b. If Customer believes that there is a breach of any warranty set forth herein, Customer will notify Seller, setting forth in writing the nature of the claimed breach. Seller shall promptly investigate such breach and advise Customer of Seller's planned corrective action. Thereafter, Seller shall promptly repair or replace such Product or Products which includes Software or take such other action as may be acceptable to Customer to correct such breach of warranty at no additional charge to Customer. Any item replaced will be deemed to be on an exchange basis and any item retained by Seller through replacement will become the property of Seller. Items repaired or replaced will be warranted for (i) ninety (90) days from the date that any such item is placed into operation (Customer shall place any repaired or replaced item into operation promptly upon receipt from Seller) and functions properly (the repaired or replaced items shall be deemed to have been placed into operation and to be functioning properly within 30 days of receipt by Customer unless Seller is otherwise notified in writing of non-operation by Customer) or (ii) the balance of the remaining warranty period, whichever period of time is longer. Such action on the part of Seller shall be the full extent of Seller's liability and Customer's exclusive remedy hereunder.

c. This warranty is void if (i) the Product is used in other than its normal and customary manner; (ii) the Product has been subject to misuse, accident, neglect or damage; (iii) the Product has been installed, optimized or moved from its original installation site by any person other than Seller or a person who has been trained by Seller to provide such services; or (iv) unauthorized alterations or repairs have been made, or unapproved parts used in the equipment.

d. Seller shall negotiate in good faith an agreement with Customer regarding its Product Maintenance Program to be set forth in Exhibit G hereof and to be completed January 15, 1998. The Product Maintenance

Program will include an extended hardware and software warranty.

8. INVOICES AND PAYMENT

a. [***]

1. [***].

2. [***].

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

3. [***].

4. [***].

b. [***].

c. [***].

d. For the Initial Order only, Seller shall render invoices to Customer every seven (7) days for reimbursement of air and ground transportation and other expenses (as set forth in Exhibit A or an Amendment) for Seller personnel providing Services. For all Follow-on Orders, Seller shall charge a flat fee for Services, which shall include expenses for the provision of the Services.

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e. All invoices sent by Seller to Customer shall be computed on the basis of the prices set forth in Exhibit A and any Change Orders or amendments and shall identify and show separately quantities of Products, type of Services, total amounts for each item, shipping charges, applicable sales or use taxes and total amount due. Customer shall pay Seller the total amount due in an invoice (in U.S. Dollars) and shall use best efforts to pay by wire transfer the amount due within fifteen (15) days of the date of the invoices rendered pursuant to subsections a(1) and (2) hereof. For all other invoices rendered pursuant to subsections a(3), a(4), b and d hereof, Customer shall promptly pay Seller by wire transfer in U.S. Dollars the amount due within forty-five (45) days of the date of the invoice. Customer shall pay a late fee at the rate of one and one-half percent (1.5%) of the amount due for each month or portion thereof that the amount remains unpaid, provided, however, that such late fee shall not apply in the case of payments due under subsections a(1) and (2) hereof for the first ten (10) days of delay.

f. Customer shall be responsible for the payment of all sales, use and any other taxes applicable to the Products and Services outside the United States provided by the Seller pursuant to this Agreement. When Seller is required by law to collect such taxes, 100% thereof will be added to invoices as separately stated charges and paid by Customer in accordance with this section.

g. If Customer disputes any invoices rendered or amount paid, Customer will so notify Seller, and the parties will use their reasonable efforts to resolve such dispute expeditiously. [***].

9. INFRINGEMENT INDEMNITY

a. Seller shall defend Customer against (or, at its option, settle) a claim that the Products supplied hereunder infringe a United States patent or copyright provided that (i) Customer promptly notifies Seller in writing of the claim, (ii) Customer gives Seller full opportunity and authority to assume sole control of the defense and all related settlement negotiations, and (iii) Customer gives Seller information and assistance for the defense (Customer will be reimbursed for reasonable costs and expenses incurred in rendering such assistance, against receipt of invoices therefor). Subject to the conditions and limitations of liability stated in this Agreement, Seller shall indemnify and hold harmless Customer from all payments, which by final judgments in such suits, may be assessed against Customer on account of such alleged infringement and shall pay resulting settlements, costs and damages finally awarded against Customer by a court of law.

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY

WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

b. Customer agrees that if the Products become, or in Seller's opinion are likely to become, the subject of such a claim, Customer will permit Seller, at its option and expense, either to procure the right for Customer to continue using such Products or to replace or modify same so that they become non-infringing, and, if neither of the foregoing alternatives is available on terms which are acceptable to Seller, Customer shall at the written request of Seller, return the infringing or potentially infringing Products. Customer shall receive a refund of the prorated undepreciated portion of the Purchase Price actually paid by Customer to Seller for the returned portion of the Products. The Purchase Price shall be depreciated over a seven (7) year period.

c. Seller shall have no obligation to Customer with respect to any claim of patent or copyright infringement which is based upon or related to (i) adherence to customized specifications, designs or instructions furnished by Customer, (ii) the interconnection or interface of any Products supplied hereunder with base station products or software not approved by Seller (such products approved by Seller are set forth in Exhibit B, section 2.2.7.), or (iii) the alteration of the Products or modification of any Software made by any party other than Seller.

10. INDEPENDENT CONTRACTOR

Seller hereby declares and agrees that Seller is engaged in an independent business and will perform its obligations under this Agreement as an independent contractor and not as the agent or employee of Customer.

11. INDEMNIFICATION

Seller shall indemnify Customer, its employees and directors, and each of them, against any loss, cost, damage, claim, expense or liability, including but not limited to liability as a result of injury to or death of any person or damage to or loss or destruction of any property arising out of, as a result of, or in connection with the performance of this Agreement and directly caused, in whole or in part, by the acts or omissions, negligent or otherwise, of Seller or a contractor or an agent of Seller or an employee of anyone of them, except where such loss, cost, damage, claim, expense or liability arises from the sole negligence or willful misconduct of Customer or its employees. Seller shall, at its own expense, defend any suit asserting a claim for any loss, damage or liability specified above, and Seller shall pay any costs and attorneys' fees that may me incurred by Customer in connection with any such claim or suit or in enforcing the indemnity granted above, provided that Seller (i) is given prompt notice of any such claim or suit and (ii) full opportunity to assume control of the defense or settlement. Seller shall not be liable to Customer for indirect or consequential damages, including but not limited to lost profits.

12. TERM AND TERMINATION

The term of this Agreement shall be [***] from the Effective Date. If either party is in material default of any of its obligations under this Agreement and such default continues for thirty (30) days after written notice thereof by the party not in default, the nondefaulting party

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may cancel this Agreement. In addition, a party may cancel this Agreement if a petition in bankruptcy or under any insolvency law is filed by or against the other party and is not dismissed within sixty (60) days of the commencement thereof. Any agreements between the parties pursuant to the terms and conditions of Exhibit G hereto (Product Maintenance Program) shall survive the termination of this Agreement.

13. ASSIGNMENT

a. Any assignment by either party of this Agreement or any other interest hereunder without the other party's prior written consent, shall be void, except assignment to a person or entity who acquires all or substantially all of the assets, business or stock of either party, whether by sale, merger or otherwise.

b. The Software license granted to Customer in the form of Exhibit D (Software License), may not be sublicensed, assigned or otherwise transferred by Customer.

c. Subject to the provisions of paragraphs a and b above, this Agreement shall inure to the benefit of and be binding upon the respective

successors and assigns, if any, of the parties hereto.

14. NOTICES

Except as otherwise specified in this Agreement, all notices or other communications hereunder shall be deemed to have been duly given when made in writing and delivered in person or deposited in the United States mail, postage prepaid, certified mail, return receipt requested, or by a reputable overnight courier service providing proof of delivery, or by confirmed facsimile transmission and addressed as follows:

TO SELLER:	TO CUSTOMER:
Metawave Communications Corporation	Telefonica Celular del Paraguay S.A.
8700 148th Avenue NE	F.R. Moreno 509.6to.PISO
Redmond WA 98052	Asuncion, Paraguay
Attn: VP, Sales	Attn.: Mr. Mario Zanotti-Cavazzoni
Copy to: General Counsel	Copy to:
Fax: 425 702 5976	Fax: (1-595-21) 505 661

The address to which notices or communications may be given to either party may be changed by written notice given by such party to the other pursuant to this section 17.

15. COMPLIANCE WITH LAWS

Subject to section 5(a)(ii), Seller shall comply with all applicable federal, state and local laws, regulations and codes, including the procurement of type acceptance, permits and licenses when needed, in the performance of this Agreement. Customer shall assist Seller (including making available to Seller the assistance of Customer's employees in the countries where the Sites are

located) in obtaining such type acceptance, permits and licenses (including the local equivalents of FCC equipment authorization).

16. FORCE MAJEURE

Except for payment of moneys due, neither party shall be liable for delays in delivery or performance or for failure to manufacture, deliver or perform resulting from acts beyond the reasonable control of the party responsible for performance. Such acts shall include, but not be limited to(a) acts of God, acts of a public enemy, acts or failures to act by the other party, acts of civil or military authority, governmental priorities, strikes or other labor disturbances, hurricanes, earthquakes, fires, floods, epidemics, embargoes, war, riots, and loss or damage to goods in transit; (b) inability to obtain necessary products, components, services or facilities on account of causes beyond the reasonable control of the delayed party or its suppliers or (c) a delay in permits, governmental approvals and any other documentation required for the delivery, installation and operation of the Products at the Sites (including visas and work permits for Metawave personnel providing Services if such visas and work permits are unreasonably withheld and can not be obtained from another source.). In the event of any such delay, the date(s) of delivery or performance shall be extended for as many days are reasonably required due to the delay.

17. GOVERNING LAW; DISPUTE RESOLUTION

a. This Agreement and each Purchase Order shall be construed in accordance with the internal laws of the State of New York, without regard to its choice of law provisions.

b. Any and all disputes arising between the parties shall be resolved in the following order: (i) by good faith negotiation between representatives of Customer and Seller who have authority to fully and finally resolve the dispute to commence within ten (10) days of the request of either party; (ii) in the event that the parties have not succeeded in negotiating a resolution of the dispute within ten (10) days after the first meeting, then the dispute will be resolved by nonbinding mediation in a mutually agreed location and to be conducted in English by a mutually agreed upon non-affiliated neutral party having experience with or knowledge in the wireless communications equipment industry to be chosen within twenty (20) days after written notice by either party demanding mediation(the costs therefor to be shared equally); and (iii) if within sixty (60) days of the initial demand for mediation by one of the parties, the dispute cannot be resolved by mediation, then the dispute shall be submitted by the parties to final and binding arbitration under the then current arbitration rules of the International Chamber of Commerce to be conducted in English by three (3) arbitrators having experience with or knowledge in the wireless telecommunications industry to be held in a mutually agreeable location (the costs therefor to be shared

equally).

18. GENERAL PROVISIONS

a. All information, data and materials provided by either party under this Agreement or prior to the Effective Date of this Agreement shall be subject to the terms and conditions of the Non-Disclosure Agreement to be executed by the parties concurrently with this Agreement and attached hereto as Exhibit E.

b. Seller and Customer may issue a joint press release concerning the execution of this Agreement. Such press release shall be subject to prior review and written approval by both parties, not to be unreasonably withheld.

c. Waiver by either party of any obligation or default by the other party shall not be deemed a waiver by such party of any other obligation or default.

d. Any rights of cancellation, termination or other remedies prescribed in this Agreement are cumulative and are not intended to be exclusive of any other remedies to which the injured party may be entitled at law or equity (including but not limited to the remedies of specific performance and cover) in case of any breach or threatened breach by the other party of any provision of this Agreement, unless such other remedies which are not prescribed in this Agreement are specifically limited or excluded by this Agreement. The use of one or more available remedies shall not bar the use of any other remedy for the purpose of enforcing the provisions of this Agreement; provided, however, that a party shall not be entitled to retain the benefit of inconsistent remedies.

e. If any of the provisions of this Agreement shall be invalid or unenforceable, such invalidity or unenforceability shall not invalidate or render unenforceable the entire Agreement, but rather the entire Agreement shall be construed as if not containing the particular invalid or unenforceable provisions, and the rights and obligations or Seller and Customer shall be construed and enforced accordingly.

f. This Agreement, including all Exhibits attached to or referenced in this Agreement, shall constitute the entire agreement between Customer and Seller with respect to the subject matter hereof and supersedes all prior discussions, agreements and representations, whether oral or written.

g. No provision of this Agreement shall be deemed waived, amended or modified by any party hereto, unless such waiver, amendment or modification is in writing and signed by a duly authorized representative of each of the parties.

h. Each party shall comply with all applicable U.S. and foreign export control laws and regulations and shall not export or re-export any technical data or Products or Services except in compliance with the applicable export control laws and regulations of the U.S. and any foreign country.

i. The parties shall not disclose the financial value of this Agreement to third parties unless the parties mutually agreed to disclose such information.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective duly authorized representatives.

Metawave Communications Corporation	Telefonica Celular del Paraguay S.A.
By: /s/ Robert Hunsberger	By: /s/ Mario Zanotti
Name: Robert Hunsberger	Name: /s/ Mario Zanotti
Title: President & CEO	Title: General Manager

EXHIBITS ATTACHED:

A Product and Services Pricing
B Performance Specifications
C Acceptance Test Procedure
D Software License
E Performance Criteria
F Nondisclosure Agreement
G Product Maintenance Program

EXHIBIT A: PRODUCTS AND SERVICES PRICING

TO THE PURCHASE AGREEMENT

BETWEEN

("SELLER")

AND

("CUSTOMER")

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

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PRODUCTS AND SERVICES PRICING

For the purposes of uniformity, references to Agreement or to an Exhibit shall refer to the Purchase Agreement to which this document is Exhibit A and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto unless otherwise expressly defined herein.

1. Introduction

This Exhibit A lists the Products and Services pricing as of the Effective Date of the Agreement. All payments for the Products and Services shall be in US dollars and in accordance with the payment terms set forth in the Agreement. The Product configurations set forth herein or in a Purchase Order are subject to change following the completion of a Site survey by Seller. A change to such configurations may result in a change in the Purchase Price of the Products and Services and a change in the delivery dates. Any such change shall be agreed to in a written Change Order executed by both parties.

2. SpotLight Pricing

SPOTLIGHT TX/RX PRICING
[***]
<TABLE>

<CAPTION>

NO. OF CHANNELS	PRICE
<S>	<C>
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]
[***]	$[***]

</TABLE>
Note: [***]

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SPOTlIGHT RECOMMENDED SPARES KIT
<TABLE>
<CAPTION>

Part Number	DESCRIPTION	QTY.	PRICE
<S>	<C>	<C>	<C>
[***]	Tx Driver	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
	TOTALS:		[***]

</TABLE>

Note: The SpotLight Recommended Spares Kit list is for SpotLight configurations supporting up to 90 channels.

3. Services Pricing

ENGINEERING SERVICES PRICING FOR FOLLOW-ON ORDERS
<TABLE>
<CAPTION>

DESCRIPTION OF SERVICES	PRICE
<S>	<C>
[***]	[***]

</TABLE>

Notes:

[***]

4. [***]

5. [***]

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Initial Order

PRODUCTS AND SERVICES PRICING FOR INITIAL ORDER (USD)

PRODUCT DESCRIPTION	[***]	NO. OF UNITS	EXTENDED PRICE
[***] [***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
Total Product Purchase Price for Initial Order			[***]

SERVICES/PERSONNEL DESCRIPTION	UNIT PRICE	NO. OF SITES	EXTENDED PRICE
[***] [***]	[***]	[***]	[***]
[***]			[***]
Total Services Purchase Price for Initial Order			[***]
Total Purchase Price for Initial Order			[***]

Notes:

1. [***]

2. [***]

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Pricing Assumptions For All Orders:

[***]

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EXHIBIT B: PERFORMANCE SPECIFICATIONS

TO THE PURCHASE AGREEMENT

SPOTLIGHT MULTIBEAM ANTENNA PLATFORM 2.0 TRANSMIT/RECIEVE

(for use with Motorola HDII Base Station Equipment)

Metawave Communications Corporation
8700 148th Avenue NE

Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

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2. System Description

[***]

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3. Regulatory Requirements

This section specifies requirements which are set primarily by local and/or national governing bodies, consortiums and standards committees.

3.1 US

The SpotLight system complies with appropriate US FCC regulations (includes both RF and EMI). Specifically, the SMAP shall comply with the regulations defined in CFR 47 part 22 and part 15.

The SpotLight system complies with the UL Certification process. Final UL approval is expected by the end of 1997.

EXHIBIT C: ACCEPTANCE TEST PROCEDURE (ATP)

TO THE PURCHASE AGREEMENT

SPOTLIGHT MULTIBEAM ANTENNA PLATFORM

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

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SPOTLIGHT ACCEPTANCE TEST PROCEDURE

[***]

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[***]

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EXHIBIT D: SOFTWARE LICENSE

TO THE PURCHASE AGREEMENT

BETWEEN

("SELLER")

AND

("CUSTOMER")

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

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SOFTWARE LICENSE

For purposes of uniformity and brevity, references to Agreement or to an Exhibit shall refer to the Purchase Agreement to which this document is Exhibit D and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto.

1. Scope

Pursuant to the above-identified Agreement, Software will be delivered by Seller to Customer for use with the Products according to the terms of the Agreement and this Exhibit. Customer shall then become a licensee with respect to such Software.

2. Licensing Grant

2.1 CONCURRENT WITH EXECUTION OF THE AGREEMENT, SELLER GRANTS TO CUSTOMER A REVOCABLE, NON-EXCLUSIVE AND NON-TRANSFERABLE LICENSE UNDER SELLER'S APPLICABLE PROPRIETARY RIGHTS TO USE SOFTWARE DELIVERED TO CUSTOMER HEREUNDER IN ACCORDANCE WITH THE TERMS AND CONDITIONS SET FORTH HEREIN.

2.2 CUSTOMER AGREES TO PAY THE LICENSING FEES FOR THE RIGHT TO USE THE SOFTWARE AND FEATURES AND FOR ANY SUPPORT THEREOF AS SET FORTH IN EXHIBIT A (PRICING) OR IN AN AMENDMENT THERETO. THE LICENSING FEE IS A ONE TIME FEE WHICH GRANTS THE CUSTOMER THE RIGHT TO USE THE VERSION OF SOFTWARE LICENSED FOR AS LONG AS THE CUSTOMER OWNS THE PRODUCT.

3. Limitations On Use Of Software

3.1 WITHOUT THE PRIOR WRITTEN CONSENT OF SELLER, CUSTOMER SHALL ONLY USE THE SOFTWARE IN CONJUNCTION WITH A SINGLE PRODUCT EXISTING WITHIN THE SITE SPECIFIED IN THE PO ("DESIGNATED PRODUCT").

3.2 CUSTOMER MAY USE THE SOFTWARE TO ROUTINELY OPERATE AND MAINTAIN THE DESIGNATED PRODUCT. FOR PURPOSES OF THIS SUBSECTION, "MAINTAIN" SHALL BE CONSTRUED TO MEAN PERFORMING DIAGNOSTIC TESTING CONSISTENT WITH CUSTOMER'S OBLIGATION TO PROVIDE THE FIRST LEVEL OF MAINTENANCE. UNDER NO CONDITION SHALL THE SOFTWARE BE USED FOR ANY OTHER PURPOSE, INCLUDING, BUT NOT LIMITED TO, SUBSTITUTED PRODUCTS, OR PRODUCTS NOT OWNED BY CUSTOMER, OR PRODUCTS LOCATED AT A LOCATION OTHER THAN THE SITE SPECIFIED IN THE PO.

3.3 THE LICENSE GRANTED TO CUSTOMER IN SECTION 2 IS PERSONAL AND MAY NOT BE TRANSFERRED TO ANOTHER PRODUCT OR SITE WITHOUT THE WRITTEN CONSENT OF SELLER.

3.4 TO THE EXTENT SPECIFIED IN EXHIBIT A OR AN AMENDMENT THERETO AND PROVIDED CUSTOMER HAS PAID ANY APPLICABLE LICENSING FEES, CUSTOMER SHALL HAVE THE RIGHT TO USE FEATURES IN ACCORDANCE WITH THE TERMS OF THIS EXHIBIT. CUSTOMER ACKNOWLEDGES THAT THE SOFTWARE MAY CONTAIN THEREIN SEVERAL ADDITIONAL FEATURES WHICH ARE EACH COVERED BY SEPARATE LICENSING FEES. CUSTOMER AGREES NOT TO USE, AND THE LICENSE SPECIFICALLY DOES NOT EXTEND TO, SUCH ADDITIONAL FEATURES UNLESS THEY ARE SPECIFIED IN EXHIBIT A OR AN AMENDMENT THERETO AND PROVIDED CUSTOMER HAS PAID THE APPLICABLE LICENSING FEES FOR SUCH ADDITIONAL FEATURES.

3.5 THE SOFTWARE IS SUBJECT TO LAWS PROTECTING TRADE SECRETS, KNOW-HOW, CONFIDENTIALITY AND COPYRIGHT.

3.6 CUSTOMER SHALL NOT TRANSLATE, MODIFY, ADAPT, DECOMPILE, DISASSEMBLE, OR REVERSE ENGINEER THE SOFTWARE OR ANY PORTION THEREOF.

3.7 UNLESS OTHERWISE EXPRESSLY AGREED BY SELLER, CUSTOMER SHALL NOT PERMIT ITS DIRECTORS, OFFICERS, EMPLOYEES OR ANY OTHER PERSON UNDER ITS DIRECT OR INDIRECT CONTROL, TO WRITE, DEVELOP, PRODUCE, SELL, OR LICENSE ANY SOFTWARE THAT PERFORMS THE SAME FUNCTIONS AS THE SOFTWARE BY MEANS DIRECTLY ATTRIBUTABLE TO ACCESS TO THE SOFTWARE (E.G. REVERSE ENGINEERING OR COPYING).

3.8 CUSTOMER SHALL NOT EXPORT THE SOFTWARE FROM THE UNITED STATES WITHOUT THE WRITTEN PERMISSION OF SELLER. IF WRITTEN PERMISSION IS GRANTED FOR EXPORT OF THE SOFTWARE, THEN CUSTOMER SHALL COMPLY WITH ALL U.S. LAWS AND REGULATIONS FOR SUCH EXPORTS AND SHALL HOLD SELLER HARMLESS, INCLUDING LEGAL FEES AND EXPENSES FOR ANY VIOLATION OR ATTEMPTED VIOLATION OF THE U.S. EXPORT LAWS.

4. Right To Copy, Protection And Security

4.1 SOFTWARE PROVIDED HEREUNDER MAY BE COPIED (FOR BACK-UP PURPOSES ONLY) IN WHOLE OR IN PART, IN PRINTED OR MACHINE-READABLE FORM FOR CUSTOMER'S INTERNAL USE ONLY, PROVIDED, HOWEVER, THAT NO MORE THAN TWO (2) PRINTED COPIES AND TWO (2) MACHINE-READABLE COPIES SHALL BE IN EXISTENCE AT ANY ONE TIME WITHOUT THE PRIOR WRITTEN CONSENT OF SELLER, OTHER THAN COPIES RESIDENT IN THE PRODUCTS.

4.2 WITH REFERENCE TO ANY COPYRIGHT NOTICE OF SELLER ASSOCIATED WITH SOFTWARE, CUSTOMER AGREES TO INCLUDE THE SAME ON ALL COPIES IT MAKES IN WHOLE OR IN PART. SELLER'S COPYRIGHT NOTICE MAY APPEAR IN ANY OF SEVERAL FORMS, INCLUDING MACHINE-READABLE FORM. USE OF A COPYRIGHT NOTICE ON THE SOFTWARE DOES NOT IMPLY THAT SUCH HAS BEEN PUBLISHED OR OTHERWISE MADE GENERALLY AVAILABLE TO THE PUBLIC.

4.3 CUSTOMER AGREES TO KEEP CONFIDENTIAL, IN ACCORDANCE WITH THE TERMS OF THE AGREEMENT, AND NOT PROVIDE OR OTHERWISE MAKE AVAILABLE IN ANY FORM ANY SOFTWARE OR ITS CONTENTS, OR ANY PORTION THEREOF, OR ANY DOCUMENTATION PERTAINING TO THE SOFTWARE, TO ANY PERSON OTHER THAN EMPLOYEES OF CUSTOMER OR SELLER.

4.4 SOFTWARE, INCLUDING FEATURES IS THE SOLE AND EXCLUSIVE PROPERTY OF SELLER AND NO TITLE OR OWNERSHIP RIGHTS TO THE SOFTWARE OR ANY OF ITS PARTS, INCLUDING DOCUMENTATION, IS TRANSFERRED TO CUSTOMER.

4.5 CUSTOMER ACKNOWLEDGES THAT IT IS THE RESPONSIBILITY OF CUSTOMER TO TAKE ALL REASONABLE MEASURES TO SAFEGUARD SOFTWARE AND TO PREVENT ITS UNAUTHORIZED USE OR DUPLICATION.

5. Remedies

Customer acknowledges that violation of the terms of this Exhibit or the Agreement shall cause Seller irreparable harm for which monetary damages may be inadequate, and Customer agrees that Seller may seek temporary or permanent injunctive relief without the need to prove actual harm in order to protect Seller's interests.

6. Term

Unless otherwise terminated pursuant to Section 7 herein, the term of the license granted pursuant to Section 2 herein shall be co-extensive with the term of any licensing and/or maintenance fees paid by Customer to Seller pursuant to Exhibit A or an Amendment thereto.

7. Termination

7.1 THE LICENSE GRANTED HEREUNDER MAY BE TERMINATED BY CUSTOMER UPON ONE (1) MONTH'S PRIOR WRITTEN NOTICE.

7.2 SELLER MAY TERMINATE THE LICENSE GRANTED HEREUNDER IF CUSTOMER IS IN DEFAULT OF ANY OF THE TERMS AND CONDITIONS OF THE AGREEMENT OR EXHIBITS, AND SUCH TERMINATION SHALL BE EFFECTIVE IF CUSTOMER FAILS TO CORRECT SUCH DEFAULT WITHIN TEN (10) DAYS AFTER WRITTEN NOTICE THEREOF BY SELLER. THE PROVISIONS OF SECTIONS 4 AND 5 HEREIN SHALL SURVIVE TERMINATION OF ANY SUCH LICENSE.

7.3 WITHIN ONE (1) MONTH AFTER TERMINATION OF THE LICENSE GRANTED HEREUNDER, CUSTOMER SHALL FURNISH TO SELLER A DOCUMENT CERTIFYING THAT THROUGH ITS BEST EFFORTS AND TO THE BEST OF ITS KNOWLEDGE, THE ORIGINAL AND ALL COPIES IN WHOLE OR IN PART OF ALL SOFTWARE, IN ANY FORM, INCLUDING ANY COPY IN AN UPDATED WORK, HAVE BEEN RETURNED TO SELLER OR DESTROYED. WITH PRIOR WRITTEN CONSENT FROM SELLER, CUSTOMER MAY RETAIN ONE (1) COPY FOR ARCHIVAL PURPOSES ONLY.

8. Rights Of The Parties

8.1 NOTHING CONTAINED HEREIN SHALL BE DEEMED TO GRANT, EITHER DIRECTLY OR BY IMPLICATION, ESTOPPEL, OR OTHERWISE, ANY LICENSE UNDER ANY PATENTS OR PATENT APPLICATIONS OF SELLER; EXCEPT THAT CUSTOMER SHALL HAVE A NON-EXCLUSIVE, LICENSE UNDER SELLER'S PATENTS AND PATENT APPLICATIONS TO USE, IN SELLER-SUPPLIED

8.2 EQUIPMENT ONLY, SOFTWARE SUPPLIED HEREUNDER, WHEN SUCH LICENSE IS IMPLIED OR OTHERWISE ARISES BY OPERATION OF LAW BY VIRTUE OF THE PURCHASE OF SUCH COPIES FROM SELLER.

8.3 RIGHTS IN PROGRAMS OR OPERATING SYSTEMS OF THIRD PARTIES, IF ANY, ARE FURTHER LIMITED BY THEIR LICENSE AGREEMENTS WITH SUCH THIRD PARTIES, WHICH AGREEMENTS ARE HEREBY INCORPORATED BY REFERENCE THERETO AND MADE A PART HEREOF AS IF FULLY SET FORTH HEREIN. CUSTOMER AGREES TO ABIDE THEREBY.

8.4 DURING THE TERM OF THE LICENSE GRANTED PURSUANT TO SECTION 2 HEREIN AND FOR A PERIOD OF ONE (1) YEAR AFTER EXPIRATION OR TERMINATION, SELLER, AND WHERE APPLICABLE, ITS LICENSOR(S), OR THEIR REPRESENTATIVES MAY, UPON PRIOR NOTICE TO CUSTOMER, A) INSPECT THE FILES, COMPUTER PROCESSORS, EQUIPMENT, FACILITIES AND PREMISES OF CUSTOMER DURING NORMAL WORKING HOURS TO VERIFY CUSTOMER'S COMPLIANCE WITH THIS AGREEMENT, AND B) WHILE CONDUCTING SUCH INSPECTION, COPY OR RETAIN ALL SOFTWARE, INCLUDING THE MEDIUM ON WHICH IT IS STORED AND ALL DOCUMENTATION THAT CUSTOMER MAY POSSESS IN VIOLATION OF THE LICENSE OR THE AGREEMENT.

8.5 CUSTOMER ACKNOWLEDGES THAT THE PROVISIONS OF THIS EXHIBIT D ARE INTENDED TO INURE TO THE BENEFIT OF SELLER AND ITS LICENSORS AND THEIR RESPECTIVE SUCCESSORS IN INTEREST. CUSTOMER ACKNOWLEDGES THAT SELLER OR ITS LICENSORS HAVE THE RIGHT TO ENFORCE THESE PROVISIONS AGAINST CUSTOMER, WHETHER IN SELLER'S OR ITS LICESNSOR'S NAME.

9. Limitations On Software

Customer understands that errors occur in Software and Seller makes no warranty that the Software will perform without error. Customer agrees that it is Customer's responsibility to select and test the Software to be sure it meets Customer's needs. Customer agrees to accept Software in its current condition. Seller agrees to repair any service effecting Software defect promptly per the warranty terms during the Warranty Period.

10. Entire Understanding

Notwithstanding anything to the contrary in other agreements, purchase orders or order acknowledgments; the Agreement and this Exhibit D set forth the entire understanding and obligations regarding use of Software, implied or expressed.

EXHIBIT E: PERFORMANCE CRITERIA

TO THE PURCHASE AGREEMENT

BETWEEN

METAWAVE COMMUNICATIONS CORP. ("SELLER")

AND

TELEFONICA CELULAR DEL PARAGUAY ("CUSTOMER")

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

PERFORMANCE CRITERIA

For the purposes of uniformity, references to Agreement or to an Exhibit shall refer to the Purchase Agreement to which this document is Exhibit E and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto unless otherwise expressly defined herein. The Performance Evaluation Period(s) definition set forth herein shall take the place of the Performance Evaluation Period set forth in the Definitions section of the Agreement.

1. Introduction

This Exhibit E lists the Performance Criteria required for Performance Acceptance of the Products in the Initial Order. The purpose of the Performance Evaluation is to demonstrate that the Products of the Initial Order meet or

exceed the Performance Criteria required for Performance Acceptance.
2. Performance Criteria

[***]

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

[LOGO OF METAWAVE COMMUNICATIONS CORPORATION]

NON-DISCLOSURE AGREEMENT

This Non-Disclosure Agreement ("Agreement"), effective October 16, 1997 ("Effective Date"), is by and between Telefonica Celular del Paraguay, S.A. ("Recipient") having a place of business at F.R. Moreno 509, 6to. Piso, Asuncion, Paraguay, and Metawave Communications Corporation ("Metawave") having a place of business at 8700 148th Ave. NE, Redmond, WA 98052 U.S.A.

1. The purpose of this Agreement is to allow each party to obtain from the other certain technical and business information related to wireless systems under terms that will protect the confidential and proprietary nature of such information.

2. As used in this Agreement, "Confidential Information" shall mean any and all technical or business information furnished, in whatever form or medium, or disclosed by one party to the other including, but not limited to, product/service specifications, prototypes, computer programs, models, drawings, marketing plans, financial data, and personnel statistics, which are marked as confidential or proprietary by the disclosing party, or, for information which is orally disclosed, the disclosing party indicates to the other at the time of disclosure the confidential or proprietary nature of the information and confirms in writing to the receiving party within thirty (30) days after such disclosure that such information is confidential. Any technical or business information of a third person furnished or disclosed by one party to the other shall be deemed "Confidential Information" of the disclosing party unless otherwise specifically indicated in writing to the contrary.

3. Each party agrees to hold such Confidential Information in confidence for a period of three (3) years from the date of receipt of same unless otherwise agreed to in writing by the disclosing party, and that during such period each party will use such information solely for the purposes of this Agreement unless otherwise allowed in this Agreement or by written permission of the disclosing party. Each party agrees not to copy such Confidential Information of the other unless specifically authorized. Each party agrees that it shall not make disclosure of any such Confidential Information to anyone (including subcontractors) except employees of such party to whom disclosure is necessary for the purposes set forth above. Each party shall appropriately notify such employee that the disclosure is made in confidence and shall be kept in confidence in accordance to this Agreement. Each party also agrees that it will make requests for Confidential Information of the other only if necessary to accomplish the purposes set forth in this Agreement. The receiving party agrees that Confidential Information shall be handled with the same degree of care which the receiving party applies to its own Confidential Information but in no event less than reasonable care.

4. Each party agrees that in the event permission is granted by the other to copy such Confidential Information, each such copy shall contain and state the same confidential or proprietary notices or legends, if any, which appear on the original. Nothing herein shall be construed as granting to either party any right or license under any copyrights, inventions, or patents now or hereafter owned or controlled by the other party.

5. Upon termination of this Agreement for any reason or upon request of the disclosing party, all Confidential Information, together with copies of same as may be authorized herein, shall be returned to the disclosing party or certified destroyed by the receiving party upon the request of the disclosing party. The requirements of use and confidentiality set forth herein shall survive the termination of this Agreement.

6. The obligations imposed in this Agreement shall not apply to any information that:

(a) is already in the possession of or is independently developed by the receiving party; or

(b) is or becomes publicly available through no fault of the receiving party; or

(c) is obtained by the receiving party from a third person who is under no obligation of confidence to the party whose Confidential Information is disclosed; or

(d) is disclosed without restriction by the disclosing party.

7. Except for the obligations of use and confidentiality imposed in this Agreement no obligation of any kind is assumed or implied against either party by virtue of the party's meetings or conversations with respect to whatever Confidential Information is exchanged. Each party further acknowledges that this Agreement and any meetings and communications of the parties relating to the same subject matter shall not:

(a) constitute an offer, request, or contract with the other to engage in any research, development or other work;

(b) constitute an offer, request or contract involving a buyer-seller relationship, venture, teaming or partnership relationship between the parties; and

(c) impair or restrict the parties' right to make, procure or market any products or services, now or in the future, which may be competitive with those offered by the disclosing party, or which are the subject matter of this Agreement.

The parties expressly agree that any money, expenses or losses expended or incurred by each party in preparation for, or as a result of this Agreement or the parties meetings and communications, is at each party's sole cost and expense provided, however, that notwithstanding anything to the contrary in the Agreement, neither party's rights shall be limited in law or equity to enforce the confidentiality and use obligations imposed under this Agreement.

8. Without prior consent of the other party, neither party shall disclose to any third person the existence or purpose of this Agreement, the terms or conditions hereof, the fact that discussions are taking place or that Confidential Information is being shared, except as may be required by law and then only after first notifying the other party of such required disclosure. The parties also agree that neither party shall use any trade name, service mark, or trademark of the other or refer to the other party in any promotional activity or material without first obtaining the prior written consent of the other party.

9. Neither this Agreement nor any rights hereunder in whole or in part shall be assignable or otherwise transferable by either party and the obligations contained in this Agreement shall survive and continue after termination of this Agreement, provided, that either party may assign or transfer this Agreement and rights hereunder to any current or future affiliates or successor company if such assignee agrees in writing to the terms and conditions herein.

10. The foregoing shall apply to any subsequent meetings or any communications between the parties relating to the same subject matter unless this Agreement is modified in writing and such writing is signed by each party.

11. This Agreement shall be governed and construed by the laws of the State of Delaware.

12. Each party shall comply with all applicable U.S. and foreign export control laws and regulations and shall not export or re-export any technical data or products except in compliance with the applicable export control laws and regulations of the U.S. and any foreign country.

13. Any notice to be given under this Agreement by either party to the other, shall be in writing and shall be deemed given when sent by Certified mail. If either party changes its address during the term of this Agreement, it shall so advise the other party in writing as provided in this Agreement and any notice thereafter required to be given shall be sent by Certified mail to such new addresses.

14. In the event that this Agreement is translated into any other language, the English version hereof shall take precedence and govern.

15. This Agreement, together with any and all exhibits incorporated herein, constitutes the entire Agreement between the parties with respect to the subject matter of this Agreement. No provision of this Agreement shall be deemed waived, amended, or modified by either party, unless such waiver, amendment or modification is made in writing and signed by both parties. This Agreement supersedes all previous Agreements between Metawave and Recipient relating to the subject matter in this Agreement.

IN WITNESS WHEREOF, the parties have caused their duly authorized

representatives to sign this Agreement as of the Effective Date.

METAWAVE COMMUNICATIONS CORP.	TELEFONICA CELULAR DEL PARAGUAY, S.A.
/s/ Kathryn Surace-Smith	/s/ Mario Zenotti
(Signature)	(Signature)
Kathryn Surace-Smith	Mario Zenotti
(Print Name)	(Print Name)
General Counsel	General Manager
(Title)	(Title)
12/10/97	January 29, 1998
(Date)	(Date)

EXHIBIT G: PRODUCT MAINTENANCE PROGRAM

TO THE PURCHASE AGREEMENT

BETWEEN

METAWAVE

AND

TELECEL DEL PARAGUAY

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

PRODUCT MAINTENANCE PROGRAM

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EXHIBIT 10.11

METAWAVE COMMUNICATIONS CORPORATION
PURCHASE AGREEMENT

THIS PURCHASE AGREEMENT (this "Agreement") is made as of this 4th day of March, 1998 (the "Effective Date") between Metawave Communications Corporation, a Delaware corporation ("Seller"), and ALLTEL Supply Inc., a Delaware corporation ("Customer").

The parties, in consideration of the mutual covenants, agreements and promises of the other set forth in this Agreement and intending to be legally bound, agree as follows:

1. AGREEMENT

Seller agrees to sell to Customer, and Customer agrees to purchase from time to time by submitting a Purchase Order to Seller, the Products and Services identified on Exhibit A to this Agreement in accordance with the specifications and the terms and conditions hereof and at the Purchase Prices set forth in Exhibit A. Notwithstanding any other provision of this Agreement or any other contract between the parties to the contrary, the provisions of this Agreement shall apply to all Purchase Orders for the Products and Services during the term of this Agreement unless the parties expressly agree by written modification to this Agreement that the provisions of this Agreement shall not apply. Any additional or different terms in any acknowledgment, confirmation, invoice, Purchase Order or other communication from one party to the other shall be deemed objected to without need of further notice of objection and shall be of no effect and not in any circumstance binding upon either party unless expressly accepted by both parties in writing.

2. DEFINITIONS

As used in this Agreement, the following terms shall have the meanings set forth below:

"Acceptance Test Procedure" or "ATP" shall mean the testing procedures and protocols described and administered for each Product as set forth in Exhibit C and Exhibit E.

"Affiliate" shall mean any partnership, corporation or other entity (i) in which Customer, directly or indirectly, owns more than fifty percent (50%) of the voting shares, or (ii) which owns more than fifty percent (50%) of the voting shares of Customer.

"Certificate of Conditional Acceptance" shall mean Customer's certification of Seller's completion of the Acceptance Test Procedure in the form set forth in Exhibit C.

"Certificate of Final Acceptance" shall mean , for the [***],Customer's certification of the Products' satisfaction of the Performance Criteria set forth in Exhibit E.

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

"Change Order" shall mean any subsequent change to a Purchase Order initiated by either Seller or Customer, including but not limited to, changes in Site configuration and Products and Services needed for the Site project, which is mutually agreed to by both parties.

[***]

"Final Acceptance" shall mean (i) for Products in the [***], the date on which Customer has executed a Certificate of Final Acceptance for the Products, and all Punchlist items have been resolved and (ii) for Products in Follow-on Orders, the date on which all Punchlist items for a Product have been resolved.

[***]

"Initial Spectrum Clearing Order" shall mean Customer's initial purchase of a number of Products (and any associated Services)for widespread deployment in a single market which shall be ordered together on one Purchase Order pursuant to the terms and conditions of this Agreement.

[***]

[***]

"Product" shall mean the Spotlight(TM) antenna system described in Exhibit B hereto or any additional products set forth in Exhibit B or any amendments thereto as may be subsequently agreed to from time to time by Seller and Customer.

"Punchlist" shall mean the list provided by Customer to Seller at Conditional Acceptance which sets forth those mutually agreed items relating to a Product, if any, to be resolved by Seller within ten (10) working days of Conditional Acceptance of such Product.

"Purchase Order" shall mean any purchase order Customer may deliver to Seller for the purchase of the Products and Services which incorporates the terms and conditions of this Agreement and which has been accepted by Seller.

"Purchase Price" shall mean the price of the Products and the price of the Services shown on Exhibit A or any other amount set forth in any amendments to Exhibit A as may be subsequently agreed to from time to time by Seller and Customer.

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"Services" shall mean the engineering services set forth in Exhibit A or any additional services set forth in any amendments to Exhibit A as may be subsequently agreed to from time to time by Seller and Customer.

"Site" shall mean each of the Customer cell site locations at which a Product is installed.

"Software" shall mean the (i) object-code computer programs embedded in the Product which control and monitor the operation of the Product ("Embedded Software"), and (ii) the Lamplighter PC-based graphical user interface computer program for the Product, and all Features, Major Releases, Point Releases, and Software Patches (as such terms are defined in Exhibit H), other updates and modifications to such Software (the "Software Updates") and any documentation in support thereof.

"Software License" shall mean the software license for the Software and Software Updates to be delivered to Customer for use with the Products as set forth in Exhibit D.

"Specifications" shall mean the specifications for the Products set forth in Exhibit B and incorporated herein.

3. PURCHASE ORDERS; PRICING; CANCELLATIONS

a. Customer shall order Products and Services pursuant to this Agreement by submitting a Purchase Order to Seller at least ninety (90) days prior to date of delivery for such Products and Services.

b. Upon receipt of the Purchase Order, Seller shall have [***] to confirm or reject its acceptance of the Purchase Order in writing to the Customer, subject to completion of Site survey for each Product to be completed no later than [***] prior to the date of delivery specified on the Purchase Order. If Seller fails to reject acceptance within [***] after receipt of the Purchase Order, the Purchase Order will be deemed accepted.

c. If the Site Survey reveals that the Products configurations set forth in the Purchase Order must be changed in order to implement and install the Products, Seller shall notify Customer immediately with a written proposal for changes. In no event shall Seller's notification and submission of a written proposal for changes exceed [***] from the date of completion of Site survey.

d. Customer shall have [***] to accept the written proposal for changes upon receipt of the proposal. If accepted, Seller and Customer shall execute a written Change Order at which time such Change Order shall become binding on Seller and Customer subject to Section 3(e) below. If rejected, Customer may either inform the Seller in writing to proceed with the original Purchase Order or cancel the Purchase Order subject to section 3(e) below.

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e. Customer may cancel delivery of a Product prior to Seller's shipment of the Product provided that if Customer directs such cancellation with less than [***] written notice from the delivery date specified in Purchase Order, Customer shall pay to Seller any nonrecurring losses associated with such cancellation and which are documented in writing by Seller, provided, however, that any such losses shall not exceed [***] of the Purchase Price of each Product included in such cancellation.

f. Within thirty days following Customer's completion of its seminannual budget, Customer shall give Seller, for planning purposes, a non-binding forecast of its estimated requirements for the Products and Services for the forthcoming [***].

4. SHIPPING; TITLE; RISK OF LOSS

a. Unless otherwise instructed by Customer, and subject to section 3, Seller shall ship all Products to the destination designated in a Purchase Order on or before the delivery date(s) specified in a Purchase Order and render invoices in accordance with Section 6 below. Customer is responsible for the payment of all reasonable shipping charges, except as noted in Section 4(b) below, and any exceptional shipping charges required to fulfill a Purchase Order shall be agreed to in advance with Customer.

b. Products shall be packed by Seller, at no additional charge to Customer, in containers adequate to prevent damage during shipping, handling and storage.

c. Unless otherwise specified herein, title to Products sold by Seller to Customer shall vest in Customer on shipment of Product to Customer (except title to Software shall remain with Seller pursuant to the terms of the Software License attached as Exhibit D hereto).

d. Risk of loss or damage to any Product supplied hereunder shall pass to Customer upon Conditional Acceptance, except for Products installed by Customer, in which case risk of loss or damage shall pass to Customer on shipment of Product to Customer.

5. WARRANTY

a. Seller warrants for a period [***] (the "Warranty Period") that (i) all Products furnished hereunder will be free from defects in materials, workmanship and title, (ii) all Products will conform in all material respects to the documentation and specifications provided by the Seller herein, (iii) the media on which the Software is contained will be free from defects in material and workmanship under normal use, and (iv) the Software will conform in all material respects to the documentation provided by Seller. The warranties in this Agreement are given in

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lieu of all other warranties express or implied which are specifically excluded, including, without limitation, implied warranties of merchantibility and fitness for a particular purpose.

b. If Customer believes that there is a claim under the warranty set forth herein, Customer shall follow the procedures set forth in Exhibit H hereto (Product Maintenance). If Seller is unable to repair or replace the Product so that it conforms to Specifications, Customer shall receive a refund of the prorated undepreciated portion of the Purchase Price actually paid by Customer to Seller for the returned portion of the Products. The Purchase Price shall be depreciated over a five (5) year period for Software and a ten (10) year period for non-Software Products. The actions taken by Seller under the Product Maintenance Program procedures set forth in Exhibit H shall be the full extent of Seller's liability and Customer's exclusive remedy with respect to a claim under this section 5.

c. This warranty does not apply to any claim which arises out of any one of the following: (i) the Product is used in other than its normal and customary manner; (ii) the Product has been subject to misuse, accident, neglect or damage by Customer; (iii) the Product has been installed, optimized or moved from its original installation site by any person other than Seller or a person who has been certified by Seller through completion of a Seller-sponsored training course to provide such services; (iv) unauthorized alterations or repairs have been made to the Product, or parts have been used in the Product which are not approved by Seller, such approval not to be unreasonably withheld (a current list of approved parts is set forth in Exhibit A); (v) the Product is not maintained pursuant to Seller maintenance programs or under the supervision of a person who has been certified by Seller to provide such maintenance service through completion of a Seller-sponsored training course described in Exhibit G; (vi) an event of Force Majeure has occurred; (vii) the failure of third party antennas, lines or interconnection facilities at the Site; and (viii) damage which occurs during shipment of equipment from Customer to Seller.

6. INVOICES AND PAYMENT

a. [***]

1. [***].

2. [***].

3. [***].

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY

WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

b. [***].

c. All invoices shall be computed on the basis of the prices set forth in Exhibit A [***] and shall identify and show separately quantities of Products, type of Services, total amounts for each item, shipping charges, applicable sales or use taxes and total amount due. Customer shall promptly pay Seller the amount due within 30 days of the date of invoice. Customer shall pay a late fee at the rate of one and one-half percent (1.5%) of the amount due for each month or portion thereof that the amount remains unpaid.

d. Customer shall be responsible for the payment of all sales, use and any other taxes applicable to the Products and Services provided by the Seller pursuant to this Agreement. When Seller is required by law to collect such taxes, 100% thereof will be added to invoices as separately stated charges and paid by Customer in accordance with this section.

e. If Customer disputes any invoices rendered or amount paid, Customer will so notify Seller, and the parties will use their reasonable efforts to resolve such dispute expeditiously. [***].

7. OBLIGATIONS OF CUSTOMER

In addition to performing the other obligations set forth in this Agreement, Customer shall:

a. procure from appropriate regulatory authorities all necessary permits and station licenses as may be required to install and operate the system incorporating the Products;

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

b. maintain adequate property insurance for each Site, including coverage for each Product at a Site during the period of installation and operation prior to Conditional Acceptance; and

c. comply with its obligations set forth in Exhibit F.

8. INFRINGEMENT INDEMNITY

a. Seller shall indemnify and hold harmless Customer and its Affiliates against any and all liabilities, losses, costs, damages and expenses, including reasonable attorney's fees, associated with any claim or action for actual or alleged infringement by any Product or Software supplied in accordance with this Agreement of any United States patent, trademark, copyright, trade secret or other intellectual property right incurred by Customer and its Affiliates as a result of Customer's use of such Products or Software in accordance with this Agreement provided that (i) Customer promptly notifies Seller in writing of the claim, (ii) Customer gives Seller full opportunity and authority to assume sole control of the defense and all related settlement negotiations, and (iii) Customer gives Seller information and assistance for the defense (Customer will be reimbursed for reasonable costs and expenses incurred in rendering such assistance, against receipt of invoices therefor). Subject to the conditions and limitations of liability stated in this Agreement, Seller shall indemnify and hold harmless Customer from all payments, which by final judgments in such claims, may be assessed against Customer on account of such alleged infringement and shall pay resulting settlements, costs and damages finally awarded against Customer by a court of law,

arbitration or other adjudication of the claim.

b. Customer agrees that if the Products or Software become, or in Seller's opinion are likely to become, the subject of such a claim, Customer will permit Seller, at its option and expense, either to procure the right for Customer to continue using such Products or Software or to replace or modify same so that they become non-infringing as long as they continue to conform in all material respects to the specifications contained in this Agreement and Exhibits, and, if neither of the foregoing alternatives is available on terms which are acceptable to Seller, Customer shall at the written request of Seller, return the infringing or potentially infringing Products or Software and all the rights thereto at Seller's expense. Customer shall receive a refund of the prorated undepreciated portion of the Purchase Price actually paid by Customer to Seller for the returned portion of the Products. The Purchase Price shall be depreciated over a five (5) year period.

c. Seller shall have no obligation to Customer with respect to any claim of patent or copyright infringement which is based upon (i) adherence to specifications, designs or instructions furnished by Customer, (ii) the combination, operation or use of any Products supplied hereunder with products, software or data not supplied by Seller, (iii) the alteration of the Products or modification of any

Software made by any party other than Seller; or (iv) the Customer's use of a superseded or altered release of some or all of the Software if infringement would have been avoided by the use of a subsequent unaltered release of the Software that is provided to the Customer.

9. INDEPENDENT CONTRACTOR

Seller hereby declares and agrees that Seller is engaged in an independent business and will perform its obligations under this Agreement as an independent contractor and not as the agent or employee of Customer and has no authority to represent Customer as to any matters. Seller shall be solely responsible for payment of compensation to its personnel and for injury to them in the course of their employment except to the extent that any intentional or negligent act of Customer is solely and directly responsible for any such injury . Seller is responsible for payment of all federal, state, or local taxes or contributions imposed or required under unemployment insurance, social security and income tax laws for persons employed by Seller to perform Seller's obligations under this Agreement.

10. INDEMNIFICATION

Seller shall indemnify Customer, its employees and directors, and each of them, against any loss, damage, claim, or liability, arising out of, as a result of, or in connection with the use of the Product in accordance with this Agreement or the acts or omissions, negligent or otherwise, of Seller in the performance of this Agreement, or a contractor or an agent of Seller or an employee of anyone of them, except where such loss, damage, claim, or liability arises from the sole negligence or willful misconduct of Customer, agents or its employees. Seller shall, at its own expense, defend any suit asserting a claim for any loss, damage or liability specified above, and Seller shall pay any costs, expenses and attorneys' fees that may be incurred by Customer in connection with any such claim or suit or in enforcing the indemnity granted above, provided that Seller (i) is given prompt notice of any such claim or suit and (ii) full opportunity to assume control of the defense or settlement. Neither Seller nor Customer shall not be liable to the other for indirect or consequential damages, including but not limited to lost profits.

11. TERM AND TERMINATION

The term of this Agreement shall be [***] from the Effective Date. If either party is in material default of any of its obligations under this Agreement and such default continues for thirty (30) days after written notice thereof by the

party not in default, the nondefaulting party may cancel this Agreement. In addition, a party may cancel this Agreement if a petition in bankruptcy or under any insolvency law is filed by or against the other party and is not dismissed within sixty (60) days of the commencement thereof.

12. ASSIGNMENT

a. Any assignment by Seller of this Agreement or any other interest hereunder without Customer's prior written consent, shall be void, except assignment to

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

a person or entity who acquires all or substantially all of the assets, business or stock of Seller, whether by sale, merger or otherwise.

b. Customer reserves the right to assign this Agreement or any portion hereof to any present or future Affiliate. Notwithstanding the foregoing, without the prior written consent of Seller, (i) the Software license granted to Customer in the form of Exhibit D (Software License), may not be sublicensed, assigned or otherwise transferred by Customer except to Affiliates; (ii) the Products may not be transported, relocated, sold or otherwise transferred outside the United States and (iii) no assignment may be made to an entity which Seller considers to be a competitor.

c. Subject to the provisions of paragraphs a, and b above, this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns, if any, of the parties hereto.

13. [***]

14. NOTICES

Except as otherwise specified in this Agreement, all notices or other communications hereunder shall be deemed to have been duly given when made in writing and delivered in person or deposited in the United States mail, postage prepaid, certified mail, return receipt requested, or by a reputable overnight courier service providing proof of delivery, or by confirmed facsimile transmission and addressed as follows:

To Seller:	To Customer:
Metawave Communications Corporation	ALLTEL Supply Inc.
8700 148th Avenue NE	6625 The Corners Parkway
Redmond WA 98052	Norcross, GA 30092
Attn: VP, Sales	Attn.: H.S. Fisher, Jr.
Copy to: General Counsel	Copy to: Mark Kelso
Fax: 425 702 5976	Fax: (770) 368-1449

The address to which notices or communications may be given to either party may be changed by written notice given by such party to the other pursuant to this section 14.

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

15. COMPLIANCE WITH LAWS

Seller shall comply with all applicable federal, state and local laws,

regulations and codes, including the procurement of permits and licenses when needed, in the performance of this Agreement.

16. FORCE MAJEURE

Except for payment of moneys due, neither party shall be liable for delays in delivery or performance or for failure to manufacture, deliver or perform resulting from acts beyond the reasonable control of the party responsible for performance. Such acts shall include, but not be limited to (a) acts of God, acts of a public enemy, acts or failures to act by the other party, acts of civil or military authority, governmental priorities, strikes or other labor disturbances, hurricanes, earthquakes, fires, floods, epidemics, embargoes, war, riots, and loss or damage to goods in transit; or (b) inability to obtain necessary products, components, services or facilities on account of causes beyond the reasonable control of the delayed party or its suppliers. In the event of any such delay, the date(s) of delivery or performance shall be extended for as many days are reasonably required due to the delay. If such delay continues for 45 days, either party may terminate the Purchase Order affected by the event by providing written notice.

17. GOVERNING LAW; DISPUTE RESOLUTION

a. This Agreement and each Purchase Order shall be construed in accordance with the internal laws of the State of Washington, without regard to its choice of law provisions.

b. Any and all disputes arising between the parties shall be resolved in the following order: (i) by good faith negotiation between representatives of Customer and Seller who have authority to fully and finally resolve the dispute to commence within ten (10) days of the request of either party; (ii) in the event that the parties have not succeeded in negotiating a resolution of the dispute within ten (10) days after the first meeting, then the dispute will be resolved by nonbinding mediation to be held in a mutually agreed location in the United States, using a mutually agreed upon non-affiliated neutral party having experience with or knowledge in the wireless communications equipment industry to be chosen within twenty (20) days after written notice by either party demanding mediation (the costs therefor to be shared equally); and (iii) if within sixty (60) days of the initial demand for mediation by the parties, the dispute cannot be resolved by mediation, then a party may institute litigation in a court having subject matter jurisdiction, and the parties expressly consent and submit themselves to the personal jurisdiction of such court.

18. DELAY PENALTIES

a. The parties agree that damages for delay are difficult to calculate accurately, and, therefore, agree that penalties will be paid for late performance of certain of Seller's obligations under this Agreement.

b. [***]

c. [***].

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

19. GENERAL PROVISIONS

a. All information, data and materials provided by either party under this Agreement shall be subject to the terms and conditions of the Non-Disclosure Agreement between the parties dated April 10, 1996.

b. Seller and Customer may issue a joint press release concerning the

execution of this Agreement. Such press release shall be subject to prior review and written approval by both parties, not to be unreasonably withheld.

c. Waiver by either party of any obligation or default by the other party shall not be deemed a waiver by such party of any other obligation or default.

d. Any rights of cancellation, termination or other remedies prescribed in this Agreement are cumulative and are not intended to be exclusive of any other remedies to which the injured party may be entitled at law or equity (including but not limited to the remedies of specific performance and cover) in case of any breach or threatened breach by the other party of any provision of this Agreement, unless such other remedies which are not prescribed in this Agreement are specifically limited or excluded by this Agreement. The use of one or more available remedies shall not bar the use of any other remedy for the purpose of enforcing the provisions of this Agreement; provided, however, that a party shall not be entitled to retain the benefit of inconsistent remedies.

e. If any of the provisions of this Agreement shall be invalid or unenforceable, such invalidity or unenforceability shall not invalidate or render unenforceable the entire Agreement, but rather the entire Agreement shall be construed as if not containing the particular invalid or unenforceable provisions, and the rights and obligations of Seller and Customer shall be construed and enforced accordingly.

f. This Agreement, including all Exhibits attached to or referenced in this Agreement, shall constitute the entire agreement between Customer and Seller with respect to the subject matter hereof.

g. No provision of this Agreement shall be deemed waived, amended or modified by any party hereto, unless such waiver, amendment or modification is in writing and signed by a duly authorized representative of each of the parties.

h. This Agreement applies only to sales of Products and Services in the United States.

i. Each party shall comply with all applicable U.S. and foreign export control laws and regulations and shall not export or re-export any technical data or products except in compliance with the applicable export control laws and regulations of the U.S. and any foreign country.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective duly authorized representatives.

Metawave Communications Corporation	ALLTEL Supply Inc.
By: /s/ Richard Henderson	By: /s/ H.S. Fisher, Jr.
Name: Richard Henderson	Name: H.S. Fisher, Jr.
Title: Vice President of Sales and Marketing	Title: Senior Vice President, Operations

EXHIBITS ATTACHED:
A Product and Services Pricing
B Performance Specifications

C Site Acceptance Test Procedure (ATP)
D Software License
E System Acceptance Test Procedure (ATP)
F Installation and Optimization
G Training
H Product Maintenance Program

EXHIBIT A: PRODUCTS AND SERVICES PRICING

TO THE AGREEMENT BETWEEN

METAWAVE COMMUNICATIONS CORP. ("SELLER")

AND

ALLTEL SUPPLY, INC. ("CUSTOMER")

Metawave Communications Corporation
8700 148/th/ Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

==========

PRODUCTS AND SERVICES PRICING

For the purposes of uniformity and brevity, references to Agreement or to an Exhibit shall refer to the Purchase Agreement to which this document is Exhibit A and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto unless otherwise expressly defined herein.

1. Introduction

This Exhibit A lists the Products and Services pricing and the Product quantity discounts as of the Effective Date of the Agreement and throughout the term of this Agreement. All payments for the Products and Services shall be made according to the terms set forth in the Agreement. The prices included herein are for products installed and services performed in the U.S.A.

2. SpotLight Pricing

<TABLE>

<CAPTION>
[***]

SPOTLIGHT UNITS (BY NO. OF CHANNELS)	[***]	[***]
<S>	<C>	<C>
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
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</TABLE>
<TABLE>
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LPA CONFIGURATION PRICING

Configuration	[***]	[***]
<S>	<C>	<C>
4 LPA Module Assy.	[***]	[***]
16 LPA Module Assy.	[***]	[***]

</TABLE>
* SpotLight Tx/Rx includes all of the hardware and software as described in Section 2 of Exhibit B except those items identified as optional or supplied by Customer.

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

Products and Services Pricing

[***]

<TABLE>
<CAPTION>
4. SpotLight Spares Pricing
SPOTLIGHT RECOMMENDED SPARES KIT

PART NUMBER	DESCRIPTION	[***]	[***]	[***]
<S>	<C>	<C>	<C>	<C>
250-0035-XX	Tx Driver	[***]	[***]	[***]

250-0042-XX	Voice LNA	[***]	[***]	[***]
250-0044-XX	LNA Alarm	[***]	[***]	[***]
250-0082-XX	LNA Power	[***]	[***]	[***]
250-0083-XX	External I/O card	[***]	[***]	[***]
270-0002-XX	RX SMU Assy.	[***]	[***]	[***]
270-0026-XX	TX SMU Assy.	[***]	[***]	[***]
	LPA module	[***]	[***]	[***]
	TOTALS:			

Notes:

1. The SpotLight Recommended Spares Kit list is for SpotLight configurations supporting up to 90 channels.
2. Metawave recommends to maintain an inventory of one spares kit for every four SpotLight systems installed.

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

Products and Services Pricing

5. CDMA Product Feature Packages

INITIAL RELEASE	DESCRIPTION	[***]
<S>	<C>	<C>
[***]	[***]	[***]
[***]	[***]	[***]

Notes:

1. [***]

2. [***]

6. Engineering Services Pricing
ENGINEERING SERVICES

DESCRIPTION	[***]
<S>	<C>
[***]	[***]
[***]	[***]

Notes:
1. [***]

2. [***]
3. [***]
4. [***]

7. Software Licensing Fee

The Software licensing fees for the most current versions of LampLighter and SpotLight embedded system Software (available at the time of purchase of SpotLight) are included in the Purchase Price of each SpotLight unit purchased. Software Updates are available under the SMP described in Exhibit H or for additional licensing fees.

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Maintenance Fees

Software Maintenance Program (SMP) Fees

The SMP annual fee for LampLighter software and the SpotLight embedded system software is [***] per each RF analog channel supported by SpotLight not to exceed [***] per "Host System" per year where a Host System is defined herein as that group of SpotLight units serving cellular RF infrastructure equipment connected to a common Mobile Switching Center.

Hardware Maintenance Program (HMP) Fees

Seller and Customer agree to negotiate in good faith the HMP fee prior to the end of the Warranty Period.

9. General Conditions For Order:

1. Customer shall provide the local air-time for all drive testing at no charge to Seller.

2. If Seller's Services are delayed for reasons beyond the control of Seller or if additional Services are required by Customer, the Services shown herein shall be adjusted accordingly, as mutually agreed upon by both parties.

3. Towers and transmission lines to the towers and antennas, or any costs associated with the preparation of towers and the site, not covered in Exhibit F, including the installation of antennas and adequate electrical power, are not included in the prices shown herein and are the responsibility of Customer.

4. Performance of the Services set forth herein is dependent upon Customer and or Seller obtaining any and all necessary licenses, permits and governmental approvals required to perform the Services set forth herein. Seller shall not be held liable for any non-performance due to delays by Customer in obtaining any of the above documentation and or approvals.

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Products and Services Pricing

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SPOTLIGHT 2.0 FIELD REPLACEABLE UNIT (FRU) PRICE LIST

PART NUMBER	PART DESCRIPTION	PRICE
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[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

</TABLE>

Products and Services Pricing

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[***]	[***]	[***]
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[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

[***]	[***]	[***]
[***]	[***]	[***]
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[***]	[***]	[***]

</TABLE>

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EXHIBIT B: PERFORMANCE SPECIFICATIONS

TO THE PURCHASE AGREEMENT

SPOTLIGHT MULTIBEAM ANTENNA PLATFORM 2.0
TRANSMIT/RECEIVE

(for use with Motorola HDII Base Station Equipment)

Metawave Communications Corporation
8700 148/th/ Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

FINAL

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PERFORMANCE SPECIFICATIONS

For purposes of uniformity and brevity, references to Agreement or to an Exhibit shall refer to the Products and Services Purchase Agreement to which this document is Exhibit B and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto.

Introduction

The purpose of this document is to describe and specify Metawave's SpotLight(TM) 2.0 Multibeam Antenna Platform including:

- System operation
- Hardware and elements of the SpotLight equipment
- Interconnect between SpotLight equipment and the base station equipment

While the specifications contained in this document are based on the most current information available, such information is based on cell site specific data and may not apply to all cell sites contained within a system. Metawave reserves the right to make changes to any design, specification, manufacturing techniques and/or product testing procedures provided those new specifications meet the minimum requirements contained in this Exhibit, Exhibit G and Exhibit H. The new specifications shall be provided to Customer at least 60 days prior to the date of general availability of the Products.

ACRONYMS AND TERMS DEFINITION

C/I	Carrier to Interference Ratio
FRU	Field Replaceable Unit
LNA	Low Noise Amplifier
LPA	Linear Power Amplifier
RCU	Radio Channel Unit (P/O Motorola Cell Equipment)
RF	Radio Frequency
Rx	Receive
SMAP	Spotlight Multibeam Antenna Platform
SMU	Spectrum Management Unit
Tx	Transmit
TxCD	Transmit Combiner Driver

2. System Description

[***]

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

3. Regulatory Requirements

This section specifies requirements which are set primarily by local and/or national governing bodies, consortiums and standards committees.

The SpotLight system complies with appropriate US FCC regulations (includes both RF and EMI). Specifically, the SMAP shall comply with the resolutions defined in CFR47 part 22 and part 15.

The SpotLight system is UL listed.

4. [***]

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

EXHIBIT C: SITE ACCEPTANCE TEST PROCEDURE (ATP)

TO THE AGREEMENT

BETWEEN

METAWAVE COMMUNICATIONS CORP. ("SELLER")

AND

ALLTEL SUPPLY INC. ("CUSTOMER")

Metawave Communications Corporation
8700 148/th/ Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

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<TABLE>
<S> <C>

</TABLE>

SITE ACCEPTANCE TEST PROCEDURE

[***]

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

SOFTWARE LICENSE AGREEMENT

EXHIBIT D

TO THE PURCHASE AGREEMENT

BETWEEN

METAWAVE COMMUNICATIONS CORPORATION ("SELLER")

AND

ALLTEL SUPPLY, INC. ("CUSTOMER")

1. DEFINITIONS

"Agreement" shall mean the Purchase Agreement between Seller and Customer executed concurrently herewith, and the Exhibits attached thereto, including this Exhibit E (Software License).

"Software" shall mean the (i) object-code computer programs embedded in the Spotlight Unit which control and monitor the operation of the Spotlight Unit ("Embedded Software"), and (ii) the Lamplighter(TM) PC-based graphical user interface computer program for the Spotlight Unit, and all Features, Major Releases, Point Releases, Software Patches, SP Software (as such terms are defined in Exhibit H), other updates and modifications ("Software Updates") and any documentation in support thereof .

"Spotlight Unit" shall mean the Spotlight(TM) antenna system described in Exhibit B.

Any terms not defined herein shall have the same meanings as in the Agreement and the Exhibits thereto.

2. SCOPE

Pursuant to the Agreement, Software will be delivered by Seller to Customer for use with a Spotlight Unit according to the terms of the Agreement and this Exhibit. Customer shall then become a licensee with respect to such Software.

3. LICENSING GRANT

3.1 Concurrent with execution of the Agreement, and subject to the terms and conditions set forth herein, Seller grants to Customer a revocable, non-exclusive and non-transferable license under Seller's applicable proprietary rights to use Software delivered to Customer hereunder. Such use shall apply only to operate a Spotlight Unit delivered under the Agreement.

3.2 The licensing fees for the current versions of the Embedded Software and of Lamplighter(TM) Software are included in the Purchase Price for the Spotlight Unit. Software Updates are available under the Software Maintenance Program described in Exhibit H or for additional licensing fees.

4. LIMITATIONS ON USE OF SOFTWARE

4.1 Without the prior written consent of Seller, Customer shall only use the Software in conjunction with a single Spotlight Unit existing within the site specified in the Purchase Order ("Designated Spotlight Unit").

4.2 Customer may use the Software to perform the activities listed in section 2.5 of Exhibit B and those activities available in future enhancements or features. Under no condition shall the Software be used for any other purpose, including, but not limited to, substituted Spotlight Units, or Spotlight Units not owned by Customer, or Spotlight Units located at a location other than the site specified in the Purchase Order.

4.3 The License granted to Customer in Section 2 is personal and may not be transferred to another Spotlight or site or another entity without the written consent of Seller.

4.4 The Software is subject to laws protecting patents, trade secrets, know-how, confidentiality and copyright.

4.5 Customer shall not translate, modify, adapt, decompile, disassemble, or reverse engineer the Software or any portion thereof.

4.6 Unless otherwise expressly agreed by Seller, Customer shall not permit its directors, officers, employees or any other person under its direct or indirect control, to write, develop, produce, sell, or license any software that performs the same functions as the Software by means directly attributable to access to the Software (e.g. reverse engineering or copying).

4.7 Customer shall not export the Software from the United States without the written permission of Seller. If written permission is granted for export of the Software, then Customer shall comply with all U.S. laws and regulations for such exports and shall hold Seller harmless, including legal fees and expenses for any violation or attempted violation of the U.S. export laws.

4.8 Customer acknowledges that Seller owns the Software and that any rights therein not specifically granted in this License are the exclusive property of Seller.

5. RIGHT TO COPY, PROTECTION AND SECURITY

5.1 Software provided hereunder may be copied (for back-up purposes only) in whole or in part, in printed or machine-readable form for Customer's internal use only, provided, however, that no more than two (2) printed copies and two (2) machine-readable copies shall be in existence at any one time without the prior written consent of Seller, other than copies electronically resident in the Spotlights.

5.2 With reference to any copyright notice of Seller associated with Software, Customer agrees to include the same on all copies it makes in whole or in part. Seller's copyright notice may appear in any of several forms, including machine-readable form. Use of a copyright notice on the Software does not imply that such has been published or otherwise made generally available to the public.

5.3 Customer agrees to keep confidential, in accordance with the terms of the Agreement or a non disclosure agreement signed by the parties, and not provide or otherwise make available in any form any Software or its contents, or any portion thereof, or any documentation pertaining to the Software, to any person other than employees of Customer or Seller.

5.4 Software is the sole and exclusive property of Seller and no title or ownership rights to the Software or any of its parts, including documentation, is transferred to Customer.

5.5 Customer acknowledges that it is the responsibility of Customer to take all reasonable measures to safeguard Software and to prevent its unauthorized use or duplication.

6. REMEDIES

Customer acknowledges that violation of the terms of this Exhibit or the Agreement shall cause Seller irreparable harm for which monetary damages may be inadequate, and Customer agrees that Seller may, in addition to any other legal or equitable remedy it may have, seek temporary or permanent injunctive relief without the need to prove actual harm in order to protect Seller's interests.

7. TERM

Unless otherwise terminated pursuant to Section 8 hereof, or in the event that Customer is required to return the Software pursuant to section 8(b) of the Purchase Agreement, the term of the license granted pursuant to Section 2 herein shall be perpetual.

8. TERMINATION

8.1 The license granted hereunder may be terminated by Customer upon one (1) month's prior written notice.

8.2 Seller may terminate the license granted hereunder if Customer is in material default of any of the terms and conditions of this Exhibit D (Software License Agreement) , and such termination shall be effective if Customer fails to correct such default within thirty (30) days after written notice thereof by Seller. The provisions of Sections 4 and 5 herein shall survive termination of any such license.

8.3 Within one (1) month after termination of the license granted hereunder, Customer shall furnish to Seller a document certifying that through its best efforts and to the best of its knowledge, the original and all copies in whole or in part of all Software, in any form, including any copy in an updated work, have been returned to

Seller or destroyed. With prior written consent from Seller, Customer may retain one (1) copy for archival purposes only.

9. RIGHTS OF THE PARTIES

9.1 Nothing contained herein shall be deemed to grant, either directly or by implication, estoppel, or otherwise, any license under any patents, patent applications or copyrights of Seller except as expressly granted herein.

9.2 Rights in programs or operating systems of third parties, if any, are further limited by their license agreements with such third parties, which agreements are hereby

incorporated by reference thereto and made a part hereof as if fully set forth herein. Customer agrees to abide thereby.

9.3 During the term of the license granted pursuant to Section 2 herein and for a period of one (1) year after expiration or termination, Seller, and where applicable, its licensor(s), or their representatives may, upon prior notice to Customer, a) inspect the files, computer processors, equipment, facilities and premises of Customer during normal working hours to verify Customer's compliance with this Agreement, and b) while conducting such inspection, copy and/or retain all Software, including the medium on which it is stored and all documentation that Customer may possess in violation of the license or the Agreement.

9.4 Customer acknowledges that the provisions of this Exhibit E are intended to inure to the benefit of Seller and its licensors and their respective successors in interest. Customer acknowledges that Seller or its licensors have the right to enforce these provisions against Customer, whether in Seller's or its licensor's name.

10. LIMITATIONS ON SOFTWARE

Customer understands that errors occur in Software and Seller makes no warranty that the Software will perform without error. Customer agrees that it is Customer's responsibility to select and test the Software to determine that is meets Customer's needs. Customer accepts the Software "as is" subject to the warranty set forth in Section 5 of the Purchase Agreement.

11. [***]

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

12. ENTIRE UNDERSTANDING

12.1 This Exhibit D (Software License) is a part of, and is to be read together with, the Agreement which contains additional terms and conditions, warranties and indemnities applicable to the Software.

12.2 Notwithstanding anything to the contrary in other agreements, purchase orders or order acknowledgments, the Agreement, the Software specifications set forth in Exhibit B and this Exhibit D set forth the entire understanding and obligations regarding use of Software,

implied or expressed.

EXHIBIT E: SYSTEM ACCEPTANCE TEST PROCEDURE (ATP)

TO THE AGREEMENT

BETWEEN

METAWAVE COMMUNICATIONS CORP. ("SELLER")

AND

ALLTEL SUPPLY, INC. ("CUSTOMER")

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

CONFIDENTIAL PROPRIETARY FINAL

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SpotLight Multibeam Antenna Platform Site Acceptance Test Procedure

SPECTRUM CLEARING SYSTEM ATP

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EXHIBIT F: SPOTLIGHT IMPLEMENTATION, INSTALLATION AND SITE COMMISSIONING

TO THE PURCHASE AGREEMENT

BETWEEN

("SELLER")

AND

("CUSTOMER")

Metawave Communications Corporation
8700 148/th/ Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

FINAL

Implementation, Installation and Commissioning

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SPOTLIGHT IMPLEMENTATION, INSTALLATION AND SITE COMMISSIONING

For purposes of uniformity and brevity, references to Agreement or to an Exhibit shall refer to the Products and Services Purchase Agreement to which this document is Exhibit F and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto.

1. SCOPE

1.1 THIS EXHIBIT INCLUDES A DESCRIPTION OF THE ENGINEERING SERVICES REQUIRED TO PLACE A SPOTLIGHT PLATFORM INTO COMMERCIAL SERVICE:

- Schedule A: Implementation
- Schedule B: Installation
- Schedule C: Site Commissioning

1.2 CUSTOMER AGREES TO ACCEPT SCHEDULES A, B AND C ACCORDING TO THE TERMS AND CONDITIONS OF THIS EXHIBIT AND TO PAY TO METAWAVE THE PRICES SET FORTH IN EXHIBIT A FOR SUCH SERVICES.

2. COMMENCEMENT OF WORK

2.1 IMPLEMENTATION ENGINEERING SHALL COMMENCE IN ACCORDANCE WITH THE PROJECT SCHEDULE AS SET FORTH IN A PURCHASE ORDER.

2.2 INSTALLATION AND COMMISSIONING SHALL COMMENCE WITHIN A REASONABLE TIME AFTER ARRIVAL OF THE PRODUCTS AT THE SITE AND IN ACCORDANCE WITH THE PROJECT SCHEDULE AS SET FORTH IN A PURCHASE ORDER.

3. SCHEDULE A: IMPLEMENTATION ENGINEERING

3.1 SITE APPRAISAL AND INSTALLATION ANALYSIS

In accordance with the project schedule as set forth in a Purchase Order, Metawave and Customer shall conduct a site walk to appraise the Site and perform an installation analysis. The information gathered at the site walk will be used to develop a Scope of Work. The following information is examined and recorded during a Site walk:

- dimensions of cell site and available space,
- primary power availability and distribution,
- Customer supplied equipment,
- number of channels,

- current antenna configuration,
- current system traffic statistics.

3.2 SCOPE OF WORK

Seller shall prepare a Scope of Work (SOW) document from the information collected during the Site walk. The SOW, shall be mutually agreed upon by both Seller and Customer. The SOW document will contain the materials and resources required from Seller and Customer to perform the installation and shall contain the Network Plan required to complete the commissioning of each cell site.

4. SCHEDULE B: CELL SITE INSTALLATION

4.1 ALL INSTALLATION WILL BE PERFORMED IN ACCORDANCE WITH THE INSTRUCTIONS AND TECHNIQUES AS DESCRIBED IN THE SERVICE MANUALS SUPPLIED WITH THE EQUIPMENT.

4.2 UPON THE COMPLETION OF THE CELL SITE INSTALLATION(S), METAWAVE WILL PROVIDE THE FOLLOWING DOCUMENTATION FOR EACH CELL SITE:

- Site Walk with documentation,
- Scope of Work (SOW),
- Floor plan,
- SpotLight-to-HDII Channel Mapping documentation,
- LampLighter Settings document,
- Antenna Sweep records,
- Installation Verification Test Data sheets,
- Configuration and Integration Test Data sheets,
- Link Budget spread sheet/Tx Path Attenuator Calculations,
- Sig/Scan Installation diagram.

4.3 INSTALLATION TEST SCHEDULE (REFER TO SPOTLIGHT SYSTEMS MANUAL, CHAPTERS 7 AND 8)

[***]

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Implementation, Installation and Commissioning

5. SCHEDULE C: Site Commissioning
UPON COMPLETION OF THE SPOTLIGHT INSTALLATION, METAWAVE WILL INFORM CUSTOMER THAT SPOTLIGHT IS READY FOR COMMISSIONING (BASED ON THE NETWORK PLAN IN THE SOW). COMMISSIONING INCLUDES THE FOLLOWING ACTIVITIES:

[***]

6. ACCEPTANCE TEST PROCEDURE (ATP)
Within 24 hours after Seller has advised Customer that installation and commissioning are complete, Customer shall furnish representative to witness the Acceptance Test Procedure (ATP) as set forth in Exhibit C (Acceptance Test Procedure). The representatives shall then be available on a continuous basis to witness the ATP.

7. CUSTOMER RESPONSIBILITIES
7.1 ANY CHANGES TO THE SOW MUST BE MUTUALLY AGREED UPON BY BOTH SELLER AND CUSTOMER, IN WRITING, AND SHALL BECOME AN ATTACHMENT TO THE PURCHASE AGREEMENT.
7.2 CUSTOMER IS RESPONSIBLE FOR OBTAINING ANY REQUIRED OPERATING AUTHORITY AND ALL REQUIRED APPROVALS AND PERMITS TO INSTALL AND OPERATE THE WIRELESS NETWORK.
7.3 INFORMATION, DOCUMENTATION, FACILITIES AND SERVICES UNDER CUSTOMER'S CONTROL OR REASONABLY OBTAINABLE BY CUSTOMER SHALL BE FURNISHED BY CUSTOMER IN A TIMELY MANNER IN ORDER TO FACILITATE THE ORDERLY PROGRESS OF THE WORK. INCLUDED, WITHOUT IMPLIED LIMITATION, SHALL BE: ACCESS AND RIGHT OF ENTRY TO ALL SITES; REGULATORY FILING

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INFORMATION; FLOOR PLANS; AND ANY SUPPORTING DOCUMENTS WHICH MAY AFFECT SITE ENGINEERING OR INSTALLATION ANALYSIS.

7.4 IN THE EVENT THAT CUSTOMER HAS NOT MADE PERMANENT SITES AVAILABLE TO RECEIVE THE EQUIPMENT BY THE SITE AVAILABILITY DATE AS SET FORTH IN THE SOW, METAWAVE, AT ITS OPTION, MAY SHIP THE EQUIPMENT TO A WAREHOUSE IN OR NEAR THE SITE, AND CUSTOMER SHALL BEAR THE COSTS OF INSURANCE, WAREHOUSING, RELOADING, TRANSPORTING, OFF-LOADING AND MOVING THE EQUIPMENT ONTO THE PERMANENT SITE WHEN SUCH SITE BECOMES AVAILABLE AS WELL AS BEAR THE RESPONSIBILITY FOR SAFEKEEPING AND WAREHOUSING OF THE EQUIPMENT IN ENVIRONMENTAL CONDITIONS AS SET OUT IN THE SPECIFICATIONS.

7.5 CUSTOMER SHALL MAKE EACH SITE AVAILABLE TO SELLER FOR WORK 24 HOURS PER DAY, SEVEN DAYS PER WEEK. SITE ACCESS INCLUDES PROVIDING METAWAVE WITH KEYS, PASS CODES, SECURITY CLEARANCES, ESCORT, ETC., NECESSARY TO GAIN ENTRANCE TO AND EXIT FROM THE WORK AREA. WAIVER OF LIABILITY OR OTHER RESTRICTIONS SHALL NOT BE IMPOSED AS A SITE ACCESS REQUIREMENT.

7.6 CUSTOMER IS AT ALL TIMES RESPONSIBLE FOR MAINTAINING PROPER ENVIRONMENTAL CONDITIONS AT EACH SITE. TEMPERATURE, HUMIDITY, DUST, ETC., SHALL BE MONITORED AND CONTROLLED WITHIN THE RECOMMENDED RANGES SET FORTH IN THE EQUIPMENT SPECIFICATIONS.

7.7 CUSTOMER IS RESPONSIBLE FOR TOWER SPECIFICATIONS FOR THE LOADING OF THE SPOTLIGHT ANTENNAS AND TRANSMISSION LINES.

7.8 ALL CUSTOMER-PROVIDED CABLES AND WIRING SHALL BE RUN TO THE IMMEDIATE AREA OF THE METAWAVE-SUPPLIED EQUIPMENT.

7.9 CUSTOMER SHALL GROUND SELLER EQUIPMENT AND PROVIDE LIGHTING PROTECTION FOR THE RF SYSTEM.

7.10 CUSTOMER SHALL PROVIDE SELLER WITH THE HARDWARE REVISION AND SOFTWARE LOAD OF EACH BASE STATION THAT SELLER'S PRODUCTS ARE TO BE INTERFACED TO.

7.11 CUSTOMER SHALL PROVIDE, AT SELLER'S REQUEST AND IN A TIMELY FASHION, DATABASE INFORMATION, INCLUDING BUT NOT LIMITED TO, NETWORK STATISTICS AND FREQUENCY INFORMATION BEFORE AND AFTER THE INSTALLATION OF SELLER'S PRODUCTS.

8. INVOICES & PAYMENT

Invoices and payment for implementation, installation and commissioning shall be made in accordance with the Agreement.

9. RIGHT TO SUBCONTRACT

Seller shall have the right to subcontract the implementation, installation and commissioning work in whole or in part.

Implementation, Installation and Commissioning

10. SUPERVISION

Seller shall appoint a Program Manager to supervise the implementation, installation and commissioning of the Products. Customer shall appoint a Program Manager who shall have authority to make changes that may be required during the performance of such services.

11. EXTRA WORK

Extra work to be performed by Seller not specified in this Exhibit but required to complete installation or commissioning shall be authorized in writing by Customer prior to the commencement of such work. If mutually agreed-upon, such work shall be performed by Seller at its then prevailing rates.

12. SPECIAL TRANSPORTATION

Special transportation required to gain access to a Site shall be supplied by Customer. Seller shall, if directed in writing, furnish the special transportation and invoice Customer for such services.

EXHIBIT G

TO THE PURCHASE AGREEMENT

BETWEEN

SELLER

AND

CUSTOMER

TRAINING

For purposes of uniformity and brevity, references to Purchase Agreement ("Agreement") or to an Exhibit shall refer to that Agreement to which this document is Exhibit G and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto.

1. OVERVIEW

Seller's sponsored courses include the SpotLight System Maintenance and Operations course as described below. The SpotLight System Maintenance and Operation course is offered at Seller's offices in Redmond, WA [***]. Upon Customer's request, Seller will provide the SpotLight System Maintenance and Operation course at a location chosen by Customer. In the event that Seller provides the training at a Customer chosen location, Customer will pay the instructor's airfare, per diem expenses and any and all equipment shipping charges to provide the class at Customer's chosen location. Metawave training courses are copyrighted by Metawave Communications Corporation. No reproduction rights for these training courses will be granted. Metawave reserves the right to change courses without notifying Customer beforehand.

2. SPOTLIGHT SYSTEM MAINTENANCE AND OPERATION COURSE OBJECTIVE

SpotLight System Maintenance and Operation is a one day course designed for Cellular Technicians, and assumes no prior background with Smart Antenna systems. At the successful completion of this course, technicians will be certified by Seller to maintain, troubleshoot, and replace Field Replaceable Units (FRU) as needed to sustain site operation. The technician will also become familiar with the LampLighter user interface, and be able to configure and monitor SMUs (Spectrum Management Units) either on-site or remotely, view system performance statistics, and perform SpotLight system verification. Upon completion of the course, all students will receive a SpotLight System Manual, a LampLighter User Guide, copies of the presentation materials as site reference material and a course certificate of completion.

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

EXHIBIT H: PRODUCT MAINTENANCE PROGRAM

TO THE PURCHASE AGREEMENT

BETWEEN

METAWAVE COMMUNICATIONS CORP. ("SELLER")

AND

ALLTEL SUPPLY, INC. ("CUSTOMER")

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

METAWAVE COMMUNICATIONS CORPORATION

PRODUCT MAINTENANCE PROGRAM

1. Introduction

Seller's product maintenance program includes both a Hardware Maintenance Program (HMP) and a Software Maintenance Program (SMP). This document describes each of the two programs.

2. Hardware Maintenance Program (HMP)

Seller repairs its Product(s) down to the Field Replaceable Unit (FRU) (refer to Exhibit A for the most current list of FRUs). In this Exhibit H, the term hardware refers to the non-Software components making up a FRU. The following describes Seller's Hardware Maintenance Program ("HMP"):

2.1 Term

2.1.1 SELLER'S HMP IS INCLUDED IN THE PURCHASE PRICE OF EACH PRODUCT PURCHASED BY CUSTOMER AND SHALL EXTEND THROUGHOUT THE DURATION OF THE WARRANTY PERIOD, AS SET FORTH IN THE WARRANTY SECTION OF THE AGREEMENT (THE "INITIAL HMP"). HARDWARE REPAIR SERVICES ARE MADE AVAILABLE TO CUSTOMER FOR A PERIOD OF [***] FROM THE DATE PRODUCT IS SHIPPED FROM SELLER'S FACTORY TO CUSTOMER. FOLLOWING THE EXPIRATION OF THE INITIAL HMP, CUSTOMER HAS A CHOICE OF (I) SUBSCRIBING TO SELLER'S HMP ON AN ANNUAL BASIS PURSUANT TO THE TERMS HEREIN AND AT THE HMP FEES SET FORTH IN EXHIBIT A ("EXTENDED HMP") FOR THE DURATION OF THE TERM OF THE AGREEMENT AND THEREAFTER AT SELLER'S THEN CURRENT HMP FEES, OR (II) HAVING THE PRODUCT REPAIRED ON A TIME-AND-MATERIALS BASIS AT THE REPAIR RATES LISTED IN ANNEX A, SECTION F FOR THE DURATION OF THE TERM OF THE AGREEMENT AND THEREAFTER AT SELLER'S THEN CURRENT REPAIR RATE.

2.2 Seller shall:

2.2.1 IN THE EVENT A DEFECT OCCURS, EITHER (I) REPAIR THE DEFECTIVE FRU OR (II) REPLACE SAID FRU WITH A NEW OR REFURBISHED FRU. ANY ITEM REPLACED WILL BE DEEMED TO BE ON AN EXCHANGE BASIS, AND ANY ITEM RETAINED BY SELLER THROUGH REPLACEMENT WILL BECOME THE PROPERTY OF SELLER.

2.2.2 FRUs THAT HAVE BEEN REPAIRED OR REPLACED WILL BE WARRANTED FOR

A PERIOD OF TIME WHICH IS THE LONGER OF (I) [***] FROM THE DATE OF SHIPMENT OF FRU TO CUSTOMER OR (II) [***].

2.2.3 [***] OF RECEIPT OF A DEFECTIVE FRU FROM CUSTOMER, SHIP A REPAIRED OR REPLACEMENT FRU TO CUSTOMER. EQUIPMENT NOT MANUFACTURED BY SELLER WILL BE REPAIRED OR REPLACED AS PROMPTLY AS ARRANGEMENTS WITH THE MANUFACTURERS OR VENDORS THEREOF PERMIT.

2.2.4 ISSUE A RETURN MATERIAL AUTHORIZATION ("RMA") NUMBER TO CUSTOMER PRIOR TO CUSTOMER'S RETURN OF THE DEFECTIVE FRU.

2.2.5 PAY ALL TRANSPORTATION CHARGES FOR THE RETURN OF THE REPAIRED OR REPLACEMENT FRU TO CUSTOMER.

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2.2.6 PROVIDE TELEPHONE TECHNICAL SUPPORT 24 HOURS A DAY, 7 DAYS A WEEK WITH A TELEPHONE CALL-BACK RESPONSE TIME TO CUSTOMER NOT TO EXCEED ONE HOUR FROM CUSTOMER'S CALL TO CUSTOMER SUPPORT.

2.3 Customer shall:

2.3.1 CONTACT SELLER VIA TELEPHONE, E-MAIL OR FAX TO OBTAIN AN RMA PRIOR TO RETURNING A DEFECTIVE FRU.

2.3.2 PACKAGE FRU IN A MANNER TO PREVENT DAMAGE DURING SHIPMENT AND CLEARLY IDENTIFY RMA NUMBER ON OUTSIDE OF PACKAGE.

2.3.3 SHIP THE DEFECTIVE FRU TO THE ADDRESS SHOWN IN ANNEX A TO THIS EXHIBIT.

2.3.4 PAY ALL COSTS OF TRANSPORTATION FOR SENDING THE DEFECTIVE FRU TO SELLER.

2.3.5 IF SELLER HAS SHIPPED A REPLACEMENT FRU IN ADVANCE OF CUSTOMER RETURNING A DEFECTIVE FRU TO SELLER, CUSTOMER AGREES TO INSURE AND PROVIDE CONFIRMATION OF SHIPMENT OF SUCH DEFECTIVE FRU, FREIGHT PREPAID, TO SELLER (AT ADDRESS SHOWN IN ANNEX A TO THIS EXHIBIT) WITHIN 5 DAYS OF SELLER'S SHIPMENT OF REPLACEMENT FRU. CUSTOMER AGREES TO PROMPTLY PAY SELLER'S INVOICE FOR THE REPLACEMENT FRU (BILLED AT THE THEN CURRENT FRU PRICE) SHIPPED TO CUSTOMER IF THE DEFECTIVE FRU IS NOT RETURNED TO SELLER WITHIN THE SPECIFIED 5 DAY PERIOD.

2.3.6 BE RESPONSIBLE FOR THE INITIAL IDENTIFICATION OF PRODUCT PROBLEMS DOWN TO THE FRU LEVEL AND FOR THE REMOVAL, SHIPMENT AND RE-INSTALLATION OF THE MALFUNCTIONING FRU.

2.4 On-Site Repair

On-Site Repair can be performed at an additional charge. Such charge will be quoted to Customer and agreed upon in writing before dispatch of personnel.

2.5 Service Limitations

2.5.1 SELLER SHALL HAVE NO RESPONSIBILITY TO REPAIR OR REPLACE FRUS WHICH HAVE BEEN REPAIRED IN AN UNAUTHORIZED MANNER OR WHICH HAVE HAD THE BARCODE, SERIAL NUMBER, OR OTHER IDENTIFYING MARK MODIFIED, REMOVED OR OBLITERATED THROUGH ACTION OR INACTION OF CUSTOMER.

2.5.2 IN THE EVENT THAT CUSTOMER SENDS A FRU TO SELLER FOR WHICH NO DEFECTS OR FAILURES CAN BE FOUND, SELLER MAY INVOICE CUSTOMER AT THE THEN CURRENT FEE FOR THE SERVICES RENDERED DURING THE EVALUATION PROCESS.

3. Software Maintenance Program (SMP)

The following describes Seller's SMP:

3.1 Definitions

Terms which are capitalized have the meanings set forth below or, absent definition herein, as contained in the Agreement.

Feature	an innovation or performance improvement to Software that is made available to all users of the current Software release. Features are licensed to Customer individually and may be at additional cost.

Major Release	indicates a new version of Software that adds new Features (excluding Optional Features) or major enhancements to the currently existing release of Software.
Point Release	indicates a modification to Software resulting from planned revisions to the current release, or corrections and/or fixes to the current release of Software.
Software Patch	Software that corrects or removes a reproducible anomaly or "bug" in an existing Major Release.

3.2 Term

3.2.1 SELLER'S SMP IS INCLUDED IN THE PURCHASE PRICE OF EACH PRODUCT PURCHASED BY CUSTOMER AND SHALL EXTEND THROUGHOUT THE DURATION OF THE WARRANTY PERIOD, AS SET FORTH IN THE WARRANTY SECTION OF THE AGREEMENT (THE "INITIAL SMP TERM"). THEREAFTER, SMP IS PROVIDED BY SELLER TO CUSTOMER PURSUANT TO THE TERMS HEREIN AND IS INCLUDED IN THE SMP FEES SET FORTH IN EXHIBIT A FOR A PERIOD OF 12 MONTHS. ANY SOFTWARE PROVIDED TO CUSTOMER DURING THE TERM OF THE SMP WILL BE PROVIDED PURSUANT TO SELLER'S SOFTWARE LICENSE AS SET FORTH IN THE SOFTWARE LICENSE EXHIBIT OF THE PURCHASE AGREEMENT.

3.3 Scope

3.3.1 DURING THE TERM OF SMP, ALL MAJOR RELEASES, POINT RELEASES, SOFTWARE PATCHES AND STANDARD FEATURES MADE GENERALLY AVAILABLE BY SELLER SHALL BE AVAILABLE TO CUSTOMER AT NO ADDITIONAL CHARGE. CUSTOMER SHALL INSTALL SUCH SOFTWARE PROMPTLY UPON RECEIPT.

3.3.2 OPTIONAL FEATURES AND CERTAIN SIGNIFICANT ENHANCEMENTS SHALL BE MADE AVAILABLE TO CUSTOMER AT AN ADDITIONAL CHARGE. [***]

3.3.3 CERTAIN OPTIONAL FEATURES SHALL BE SOLD ON A PER-UNIT BASIS AND MAY HAVE PRICE LEVELS THAT REFLECT UNIT CAPACITY.

3.3.4 CUSTOMER WILL BE RESPONSIBLE FOR PROBLEM IDENTIFICATION OF REPRODUCIBLE SOFTWARE MALFUNCTIONS. IN THE EVENT OF ANY SUCH SOFTWARE MALFUNCTION, CUSTOMER SHALL NOTIFY SELLER PROMPTLY OF THE FAILURE

3.3.5 SELLER SHALL PROVIDE, AT A SELLER AUTHORIZED REPAIR DEPOT, SUCH THROUGH CALLING SELLER'S CUSTOMER SUPPORT.
SERVICE AS IS NECESSARY TO CORRECT SOFTWARE DEFECTS IN ACCORDANCE WITH THE APPLICABLE DOCUMENTATION. SUCH SERVICE WILL BE PROVIDED BY SELLER SEVERITY OF THE PROBLEM.

3.3.6 AS SOON AS IS POSSIBLE AND ON A PRIORITY BASIS ACCORDING TO THE SELLER SHALL PROVIDE TELEPHONE TECHNICAL SUPPORT 24-HOUR A DAY, 7 DAYS A WEEK WITH A TELEPHONE CALL-BACK RESPONSE TIME TO CUSTOMER NOT TO EXCEED ONE HOUR FROM CUSTOMER'S CALL TO CUSTOMER SUPPORT. ADDITIONALLY, SELLER SHALL PROVIDE TELEPHONE ASSISTANCE AND GUIDANCE DURING THE INSTALLATION OF NEW SOFTWARE.

3.3.7 SELLER SHALL SUPPORT THE CURRENT MAJOR RELEASE AND ASSOCIATED POINT RELEASES AND FEATURES AS WELL AS THE IMMEDIATELY PRECEDING MAJOR RELEASE AND ASSOCIATED POINT RELEASES AND FEATURES.

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3.3.8 SELLER SHALL HAVE NO OBLIGATION TO SUPPORT ANY SOFTWARE WHICH IS OLDER THAN THE IMMEDIATELY PRECEDING MAJOR RELEASE. HOWEVER, ANY SUPPORT PROVIDED BY SELLER FOR SOFTWARE OLDER THAN THE IMMEDIATELY PRECEDING MAJOR RELEASE AND ASSOCIATED POINT RELEASES AND FEATURES SHALL BE ON A TIME AND MATERIAL BASIS. AN OPEN PURCHASE ORDER WILL BE REQUIRED BEFORE ANY SUCH SERVICES ARE RENDERED.

3.3.9 SELLER SHALL PERFORM ITS SERVICES HEREUNDER IN A GOOD WORKMANLIKE MANNER AND IN ACCORDANCE WITH INDUSTRY STANDARDS WHERE APPLICABLE.

ANNEX A: PROCEDURES FOR METAWAVE'S HARDWARE MAINTENANCE PROGRAM

A. METAWAVE'S CUSTOMER SUPPORT

Customer Support can be reached by call the following numbers:

Domestic phone: 888-642-2455
International phone: 425-702-6550

B. RETURN MATERIAL AUTHORIZATION (RMA):

Customer must contact Customer Support via telephone, e-mail or fax to obtain a Return Material Authorization (RMA) number. Seller may return shipments without a RMA number to the Customer unrepaired and at Customer's cost.

The RMA number must be clearly written on the outside of the package.

A RMA number will not be issued until a purchase order is provided for the repair price for those items not covered under warranty.

C. RETURN ADDRESS:

All Field Replaceable Units (FRUs) must be shipped to:

Metawave Communications Corporation
8700 148th Avenue N.E.
Redmond, WA 98052 USA

D. PACKING INSTRUCTIONS:

Customer must pack all returned equipment in a manner no less protective to such equipment than the manner in which Seller packages similar equipment.

E. REPAIR PURCHASE ORDERS:

Repair purchase orders are required in the following instances:

1. When Customer requests Emergency Expedite Service.

2. When Customer returns our of warranty FRUs for repair.

3. When Seller sends pre-exchange FRU to Customer prior to the defective FRU being received by Seller.

Under these circumstances, a facsimile copy of the purchase order may be transmitted to be followed up by a confirming hard copy in the mail. The terms and conditions of the Agreement between Seller and the Customer shall prevail notwithstanding any variance with the terms and conditions of any purchase orders submitted by Customer.

F. PRICING AND INVOICING:

Emergency Expedite Request (Under Initial HMP or Extended HMP):

Seller does not charge an Emergency Expedite Fee for FRUs covered under the Initial HMP or Extended HMP..

Emergency Expedite Request (Under Time-and -Materials):

Seller charges an Emergency Expedite Fee of $300 per FRU (plus the standard time-and-materials repair rates shown below) plus freight for emergency service for FRUs not covered under the Initial HMP or Extended HMP.

Repair and Return Shipment of FRUs (Under Initial HMP or Extended HMP):

Seller does not charge for the repair or return shipment of FRUs covered under the Initial or Extended HMP.

Time-and-Material Repair Services (not covered under Initial HMP or Extended HMP):

All repairs not covered under either the Initial HMP or Extended HMP will be calculated on a time-and-materials basis at $100 for the first hour and $50 per hour for each additional hour thereafter. If the estimated cost to repair the defective FRU exceeds 50% of the price of a new FRU, Seller will call Customer to inform them prior to repairing defective FRU.

Loaner Fees:

Seller charges a loaner fee, not to exceed $200 per FRU, when Customer requests a loaner FRU in support of FRUs not covered under either Initial HMP or Extended HMP.

Invoices:

Invoices are payable in accordance with the terms of the Agreement between Seller and Customer.

G. EMERGENCY EXPEDITE SERVICE:

Within 24 hours of notification from Customer of an Emergency, Seller will ship a replacement FRU. Customer must either provide Seller with a new repair purchase order (a facsimile copy of the purchase order may be transmitted to be followed up by a confirming hard copy in the mail) or have already provided Seller with a blanket purchase order if an out of warranty item (s).

H FREIGHT:

Initial HMP or Extended HMP:

Customer shall ship the FRU to Seller on a prepaid basis and Seller will return the FRU to Customer on a prepaid basis, not billing Customer for return freight.

Repair Services on a Time-and-Material basis:

Customer shall ship the FRU to Seller on a prepaid basis and Seller will prepay and invoice Customer for return freight.

I. DUTIES AND TAXES:

All duties, customs clearance fees and any and all taxes will be the responsibility of the Customer.

J. NON-COMPLIANCE:

Failure to comply with any of the procedures may result in delay or non-delivery of the FRUs.

K. CONFLICTING TERMS:

In the event that the terms contained herein conflict with the terms of the Agreement between Seller and Customer, the terms of the Agreement shall govern.

EXHIBIT 10.12

METAWAVE COMMUNICATIONS CORPORATION
PRODUCT PURCHASE AGREEMENT

THIS PRODUCT PURCHASE AGREEMENT (this "Agreement") is made as of this 5th day of March, 1998 (the "Effective Date") between Metawave Communications Corporation, a Delaware corporation ("Seller"), and OJSC St. Petersburg Telecom with offices at Nevsky Prospect 54 - 10, St. Petersburg 191011 Russia, a Russian corporation ("Customer"), a subsidiary of Millicom International Cellular S.A., a Luxembourg corporation ("Millicom").

The parties, in consideration of the mutual covenants, agreements and promises of the other set forth in this Agreement and intending to be legally bound, agree as follows:

1. AGREEMENT TO PURCHASE

Seller agrees to sell to Customer, and Customer agrees to purchase, the Products identified in Section 4 of Exhibit A to this Agreement in accordance with the specifications and the terms and conditions hereof at the price (net of VAT) set forth in Section 4 of Exhibit A ("Purchase Commitment"). Notwithstanding any other provision of this Agreement or any other contract between the parties to the contrary, the provisions of this Agreement shall apply to the Purchase Commitment during the term of this Agreement unless the parties expressly agree by written modification to this Agreement that the provisions of this Agreement shall not apply. Any additional or different terms in any acknowledgment, invoice, Change Order, or other communication from one party to the other shall be deemed objected to without need of further notice of objection and shall be of no effect and not in any circumstance binding upon either party unless expressly accepted by both parties in writing.

2. DEFINITIONS

As used in this Agreement, the following terms shall have the meanings set forth below:

"Acceptance Date" shall mean the date, following the installation of the Products at the Sites in Russia, that the Certification of Conditional Acceptance of the Products occurs.

"Acceptance Test Procedure" or "ATP" shall mean the testing procedures and protocols set forth in Exhibit F.

"Affiliate" shall mean any partnership, corporation or other entity (i) in which Customer, directly or indirectly, owns a controlling interest or (ii) which owns a controlling interest in Customer.

[***]

"Certification of Final Acceptance" shall mean, Customer's certification of the resolution of all Punchlist items, which shall not be unreasonably withheld.

"Change Order" shall mean any subsequent change to the Purchase Commitment initiated by either Seller or Customer, including but not limited to, changes in Site configuration, pricing and delivery date, which is mutually agreed to by both parties.

[***]

"Equipment Authorizations" shall mean all telecommunication equipment certifications required for the installation and operation of the Products in Russia by the Russian Ministry of Posts and Telecommunications, the City of Saint Petersburg and other authorities (including any temporary waivers needed to operate the Products prior to the receipt of such certifications).

[***]

"Products" shall mean the products listed in Exhibit A hereto or any additional products set forth in any amendments to Exhibit A as may be subsequently agreed to from time to time by Seller and Customer.

"Punchlist" shall mean the list provided by Customer to Seller upon Conditional Acceptance of a Product which sets forth those mutually agreed items relating to a Product, if any, to be resolved by Seller using best efforts within ten (10) working days of such Conditional Acceptance of a Product.

"Site" shall mean each of the Customer cell site locations at which a Product is installed.

"Software" shall mean the object-code computer programs, including firmware object code, licensed by Seller for use solely with the Products which enables the Products to perform its functions and processes.

"Software License" shall mean the software license for the software to be delivered to Customer for use with the Products as set forth in Exhibit C.

"Specifications" shall mean the specifications for the Products set forth in Exhibit B and incorporated herein.

3. SHIPPING AND PURCHASE COMMITMENT

a. The Products identified in the Purchase Commitment shall be shipped on or before [***] or on a later date mutually agreed upon by the parties in a Change Order which shall not be later than [***]. At its sole option, Seller may decline to fulfill the Purchase Commitment if Seller determines that (i) the costs associated with the sale of the Products for the Sites are prohibitive or the conditions at such Sites are unacceptable; (ii) the sale and delivery of the

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Products would contravene Section 17(h) of this Agreement; or (iii) Seller's personnel may be exposed to unsafe conditions.

b. The Product configurations set forth in Exhibit A hereto are subject to change following the completion of a Site walk by Seller. A change to such configurations may result in a change in the Purchase Commitment or in the delivery date. Any such change shall be agreed to in a written Change Order executed by both parties.

c. Promptly following execution of this Agreement, Customer shall give Seller, for planning purposes, a non-binding forecast of its estimated requirements for the Products for the forthcoming [***] and such forecast shall be updated on a quarterly basis.

d. Customer may, by written notice, no less than 30 days prior to Seller's shipment of a Product, make a change to a Site destination provided the new Site destination is in Russia. Customer shall provide the address of the new Site destination to Seller in a written Change Order.

e. Customer may, by written notice no less than 45 days prior to delivery date agreed upon by the parties pursuant to Section 3(a) hereof, delay the delivery schedule, provided that such delay does not extend beyond June 30th 1998.

f. Customer may, by written notice no later than 30 days prior to Seller's shipment of a Product, cancel delivery of a Product.

g. In the case of non-delivery of the Products to the Delivery Destination by June 30, 1998, Seller shall return to Customer all funds received from Customer as prepayment for such Products within not more than one hundred and eighty (180) calendar days from the date when the prepayment was made.

h. Seller shall pay to Customer (or credit against amounts owed to Seller by Customer) a charge, for every [***] of delay in the Acceptance Date, equal to the rate of [***] of the Purchase Commitment (or that portion thereof) which has been delayed, provided, however, that such charge shall not apply to any delay caused by an act set forth in Section 15 hereof or for failure of Customer to perform the obligations set forth in Section 7 hereof or the conditions and obligations of the sale are not met as set forth in Exhibit A or Exhibit G. Such charges shall not exceed [***] of the Purchase Commitment.

4. SHIPPING; TITLE; RISK OF LOSS

a. Subject to Section 3(a) hereof and this Section 4, Seller shall ship all Products CIP (INCOTERMS 1990) to the delivery destination specified in subsection (f) hereof (the "Delivery Destination") and render invoices in accordance with Section 6 (Invoices and Payments).

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b. Products shall be packed by Seller, at no additional charge to Customer, in containers adequate to prevent damage during normal international shipping, handling and storage. Seller shall adequately insure Products during shipment from Seller's facility to Delivery Destination.

c. In connection with the delivery of the Products to the Delivery Destination, Seller shall arrange (for the account of Customer) the following items: freight, insurance transportation documentation and export licenses, if any. Customer shall reimburse Seller at cost for such items, including all shipping costs, insurance costs, customs clearance charges, duties, levies and any other charges that may be incurred by Seller in connection with the sale of the Products and their delivery to the Delivery Destination. Seller shall separately invoice Customer for such charges in accordance with Section 6 hereof. Customer shall directly pay for all freight, customs clearance charges, duties, levies, storage fees and any other charges that may be incurred at and from the Delivery Destination to the Site.

d. Unless otherwise specified herein, risk of loss or damage to any Product supplied hereunder shall pass to Customer upon delivery of the Product to the Delivery Destination.

e. Title to the Products supplied hereunder shall pass to Customer upon delivery to a carrier at Metawave's factory in Redmond WA, USA (except title to Software shall remain with Seller pursuant to the terms of the Software License attached as Exhibit C hereto).

f. "Delivery Destination" of the Products in Russia:
Pulkova Customs
Pulkovskaya Tamozhnya
SVA Avia Terminal Service
LIC 057/10
Pilotov St. 9
Office 20,
St. Petersburg, Russia 196210

5. WARRANTY

a. Seller warrants that for a period of [***] from the date of Certification of Final Acceptance for each Product (the "Warranty Period"), (i) all Products furnished hereunder will conform in all material respects with the requirements of this Agreement and the Specifications, (ii) all Products are free from defects in materials, workmanship and title, (iii) the media on which the Software is contained will be free from defects in material and workmanship under normal use and (iv) the Software will substantially conform to the documentation provided by Seller. The warranties in this Agreement are given in lieu of all other warranties express or implied which are specifically excluded, including, without limitation, implied warranties of merchantibility and fitness for

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a particular purpose. Such warranty may be extended by increments of ninety (90) days at the mutual agreement of both parties.

b. If Customer believes that there is a breach of any warranty set forth herein, Customer shall follow the procedures set forth in Exhibit E hereto (Product Maintenance). The actions taken by Seller under the Product Maintenance Program procedures set forth in Exhibit E shall be the full extent of Seller's liability and Customer's exclusive remedy hereunder.

c. This warranty does not apply to any claim which arises out of any one of the following: (i) the Product is used in other than its normal and customary manner; (ii) the Product has been subject to misuse, accident, neglect or damage; (iii) the Product has been installed, optimized or moved from its original installation site by any person other than Seller or a person who has been certified by Seller through completion of a Seller-sponsored training course to provide such services; (iv) unauthorized alterations or repairs have been made to the Product, or unapproved parts have been used in or with the Product; (v) the Product is not maintained pursuant to Seller maintenance programs or under the supervision of a person who has been certified by Seller through completion of a Seller-sponsored training course to provide such maintenance service; (vi) an event of Force Majeure has occurred; (vii) the failure of third party antennas, lines or interconnection facilities at the Site; and (viii) damage which occurs during shipment of equipment from Customer to Seller. The above limitations include, without limitation, the modification, removal or obliteration of the bar code, serial number or other identifying mark of the equipment through the action or inaction of the Customer.

d. If the returned equipment falls outside of the warranty set forth above, Seller may elect to return the equipment unrepaired, repair the equipment at the then current flat rate repair charge or repair the equipment on a time and materials basis.

6. INVOICES AND PAYMENT

a. [***]

b. [***]

c. All invoices sent by Seller to Customer shall be computed on the basis of the prices (which are net of VAT) set forth in Exhibit A and Exhibit E and any Change Orders or amendments and shall identify and show separately quantities

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of Products, total amounts for each item, shipping charges, other charges, applicable sales or use taxes and total amount due. For invoices rendered pursuant to subsection (b) hereof, Section 4(c) and Exhibit E (Product Maintenance Program), Customer shall promptly pay

Seller by wire transfer (to Seller's bank account designated in subsection (g) hereof) in U.S. Dollars the amount due within forty-five (45) days of the date of the invoice. Customer shall pay a late fee at the rate of one and one-half percent (1.5%) of the amount due for each month or portion thereof that the amount is late.

d. Customer shall be responsible for the payment of all sales, use, VAT and any other taxes applicable to the Purchase Commitment outside the United States provided by the Seller pursuant to this Agreement. When Seller is required by law to collect such taxes, 100% thereof will be added to invoices as separately stated charges and paid by Customer in accordance with this Section 6.

e. If Customer disputes any invoices rendered or amount paid, Customer will so notify Seller, and the parties will use their reasonable efforts to resolve such dispute expeditiously. Provided that Customer so notifies Seller of a disputed invoice and there is a good faith basis for such dispute, the time for paying the portion of the invoice in dispute shall be extended by a period of time equal to the time between Seller's receipt of such notice from Customer and the resolution of such dispute.

f. If financing to fund Customer's purchase of Products pursuant to this Agreement has been arranged, Customer may utilize such financing in making payments in accordance with the terms of this Agreement and as required under this subsection. The parties agree that the foregoing does not constitute an offer by Seller to make available such financing, or to arrange such financing for Customer and any such financing is subject to agreement of the parties and the negotiation and execution of separate documentation.

g. Except as otherwise specified in this Agreement, all payments from one party to the other shall be made by wire transfer into the following accounts:

TO SELLER:

Metawave Communications Corporation
[***]

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TO CUSTOMER:

St. Petersburg Telecom
[***]

The bank account designated above may be changed by written notice given by such party to the other pursuant to Section 13 (Notices).

7. OBLIGATIONS OF THE PARTIES

In addition to performing the other obligations set forth in this Agreement:

a. Customer shall procure from appropriate regulatory authorities and other persons all necessary permits and station licenses as may be required to install and operate the cellular network system incorporating the Products; and

b. Customer shall assist Seller in obtaining any required type acceptances, permits and licenses (including all Equipment Authorizations) which shall include providing to Seller the assistance of Customer's employees or agents in Russia for such purpose.

8. INFRINGEMENT INDEMNITY

a. Seller shall defend Customer against (or, at its option, settle) a claim that the Products supplied hereunder infringe a United States patent or copyright provided that (i) Customer promptly notifies Seller in writing of the claim, (ii) Customer gives Seller full opportunity and authority to assume sole control of the defense and all related settlement negotiations, and (iii) Customer gives Seller information and assistance for the defense (Customer will be reimbursed for reasonable costs and expenses incurred in rendering such assistance, against receipt of invoices therefor). Subject to the conditions and limitations of liability stated in this Agreement, Seller shall indemnify and hold harmless Customer from all payments, which by final judgments in such suits, may be assessed against Customer on account of such alleged infringement and shall pay resulting settlements, costs and damages finally awarded against Customer by a court of law.

b. Customer agrees that if the Products become, or in Seller's opinion are likely to become, the subject of such a claim, Customer will permit Seller, at its option and expense, either to procure the right for Customer to continue using such Products

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or to replace or modify same so that they become non-infringing, and, if neither of the foregoing alternatives is available on terms which are acceptable to Seller, Customer shall at the written request of Seller, return the infringing or potentially infringing Products. Customer shall receive a refund of the prorated undepreciated portion of the price actually paid by Customer to Seller for the returned portion of the Products. The price shall be depreciated over a seven (7) year period.

c. Seller shall have no obligation to Customer with respect to any claim of patent or copyright infringement which is based upon or related to (i) adherence to customized specifications, designs or instructions furnished by Customer, (ii) the interconnection or interface of any Products supplied hereunder with base station products or software not approved by Seller (such products approved by Seller are set forth in Exhibit B, Section 2.2.7.), (iii) the alteration of the Products or modification of any Software made by any party other than Seller, or (iv) the Customer's use of a superseded or altered release of some or

all of the Software if infringement would have been avoided by the use of a subsequently altered release of the Software that is provided to Customer.

9. INDEPENDENT CONTRACTOR

Seller hereby declares and agrees that Seller is engaged in an independent business and will perform its obligations under this Agreement as an independent contractor and not as the agent or employee of Customer.

10. INDEMNIFICATION

Seller shall indemnify Customer, its employees and directors, and each of them, against any loss, cost, damage, claim, expense or liability, including but not limited to liability as a result of injury to or death of any person or damage to or loss or destruction of any property arising out of, as a result of, or in connection with the performance of this Agreement and directly caused, in whole or in part, by the acts or omissions, negligent or otherwise, of Seller or a contractor or an agent of Seller or an employee of anyone of them, except where such loss, cost, damage, claim, expense or liability arises from the sole negligence or willful misconduct of Customer or its employees. Seller shall, at its own expense, defend any suit asserting a claim for any loss, damage or liability specified above, and Seller shall pay any costs and attorneys' fees that may be incurred by Customer in connection with any such claim or suit or in enforcing the indemnity granted above, provided that Seller (i) is given prompt notice of any such claim or suit and (ii) full opportunity to assume control of the defense or settlement. Seller shall not be liable to Customer for indirect or consequential damages, including but not limited to lost profits.

11. TERM AND TERMINATION

The term of this Agreement shall be [***]. If either party is in material default of any of its obligations under this Agreement

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and such default continues for thirty (30) days after written notice thereof by the party not in default, the nondefaulting party may cancel this Agreement. In addition, a party may cancel this Agreement if a petition in bankruptcy or under any insolvency law is filed by or against the other party and is not dismissed within sixty (60) days of the commencement thereof. Any agreements between the parties pursuant to the terms and conditions of Exhibit E hereto (Product Maintenance Program) and the rights and obligations of the parties under Sections 5, 6, 7, 8, 10, 12, 13, 15, 16, and 17 shall survive the termination of this Agreement.

12. ASSIGNMENT

a. Any assignment by either party of this Agreement or any other interest hereunder without the other party's prior written consent, shall be void, except assignment to an Affiliate.

b. The Software license granted to Customer in the form of Exhibit C (Software License), may not be sublicensed, assigned or otherwise

transferred by Customer without the prior consent of Seller, except to an Affiliate.

c. Subject to the provisions of paragraphs a and b above, this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns, if any, of the parties hereto.

13. NOTICES

Except as otherwise specified in this Agreement, all notices or other communications hereunder shall be deemed to have been duly given when made in writing and delivered in person or sent by a reputable overnight courier service providing proof of delivery, or by confirmed facsimile transmission and addressed as follows:

TO SELLER:	TO CUSTOMER:
Metawave Communications Corporation	OJSC St. Petersburg Telecom
8700 148th Avenue NE	12 Kantemirovskaya St.
Redmond WA 98052	St. Petersburg, 197042, Russia
Attn.: VP, Sales	Attn.: Technical Director
Copy to: General Counsel	Copy to:
Fax: 425 702 5976	Fax: 7-812-119-5802

The address to which notices or communications may be given to either party may be changed by written notice given by such party to the other pursuant to this Section 13 (Notices).

14. COMPLIANCE WITH LAWS

Subject to Sections 3(a)(ii) and 7(b), Seller shall comply with all applicable laws, regulations and codes, including the procurement of required type acceptance, permits and licenses for the Products, [***].

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15. FORCE MAJEURE

Except for obligations of confidentiality agreed to by the parties, neither party shall be liable for delays in delivery or performance or for failure to manufacture, deliver or perform resulting from acts beyond the reasonable control of the party responsible for performance. Such acts shall include, but not be limited to(a) acts of God, acts of a public enemy, acts or failures to act by the other party, acts of civil or military authority, governmental priorities, strikes or other labor disturbances, natural disaster, embargoes, war, riots, and loss or damage to goods in transit; (b) inability to obtain necessary products, components, services or facilities on account of causes beyond the reasonable control of the delayed party or its suppliers or (c) a delay in obtaining or the failure to obtain the necessary customs clearances, Equipment Authorizations, licenses, permits, governmental approvals and any other documentation required for the delivery, installation and operation of the Products at the Sites (including visas and work permits for Seller personnel) except that Customer shall not be liable for delays in the payment of, or

failure to pay, moneys due to Seller for Products only as a result of an act set forth in subsection (a). In the event of any such delay, the date(s) of delivery or performance shall be extended for as many days are reasonably required due to the delay.

16. Governing Law; dispute resolution

a. This Agreement and the Purchase Commitment shall be construed in accordance with the internal laws of the State of New York, without regard to its choice of law provisions.

b. Any and all disputes arising between the parties shall be resolved in the following order: (i) by good faith negotiation between representatives of Customer and Seller who have authority to fully and finally resolve the dispute to commence within ten (10) days of the request of either party; (ii) in the event that the parties have not succeeded in negotiating a resolution of the dispute within ten (10) days after the first meeting, then the dispute will be resolved by nonbinding mediation in a mutually agreed location and to be conducted in English by a mutually agreed upon non-affiliated neutral party having experience with or knowledge in the wireless communications equipment industry to be chosen within twenty (20) days after written notice by either party demanding mediation(the costs therefor to be shared equally); and (iii) if within sixty (60) days of the initial demand for mediation by one of the parties, the dispute cannot be resolved by mediation, then the dispute shall be submitted by the parties to final and binding arbitration under the then current arbitration rules of the International Chamber of Commerce to be conducted in English by three (3) arbitrators having experience with or knowledge in the wireless telecommunications industry to be held in a mutually agreeable location (the costs therefor to be shared equally).

17. GENERAL PROVISIONS

a. All information, data and materials provided by either party under this Agreement or prior to the Effective Date of this Agreement shall be subject to the terms and conditions of the Non-Disclosure Agreement to be executed by the parties concurrently with this Agreement and attached hereto as Exhibit D. The parties shall not disclose the financial value of this Agreement to third parties unless the parties mutually agree to disclose such information or such disclosure is required by law.

b. Seller and Customer may issue a joint press release concerning the execution of this Agreement. Such press release shall be subject to prior review and written approval by both parties, not to be unreasonably withheld.

c. Waiver by either party of any obligation or default by the other party shall not be deemed a waiver by such party of any other obligation or default.

d. Any rights of cancellation, termination or other remedies prescribed in this Agreement are cumulative and are not intended to be exclusive of any other remedies to which the injured party may be entitled at

law or equity (including but not limited to the remedies of specific performance and cover) in case of any breach or threatened breach by the other party of any provision of this Agreement, unless such other remedies which are not prescribed in this Agreement are specifically limited or excluded by this Agreement. The use of one or more available remedies shall not bar the use of any other remedy for the purpose of enforcing the provisions of this Agreement; provided, however, that a party shall not be entitled to retain the benefit of inconsistent remedies.

e. If any of the provisions of this Agreement shall be invalid or unenforceable, such invalidity or unenforceability shall not invalidate or render unenforceable the entire Agreement, but rather the entire Agreement shall be construed as if not containing the particular invalid or unenforceable provisions, and the rights and obligations or Seller and Customer shall be construed and enforced accordingly.

f. This Agreement, including all Exhibits attached thereto and the Non-Disclosure Agreement shall constitute the entire agreement between Customer and Seller with respect to the subject matter hereof and supersedes all prior discussions, agreements and representations, whether oral or written.

g. No provision of this Agreement shall be deemed waived, amended or modified by any party hereto, unless such waiver, amendment or modification is in writing and signed by a duly authorized representative of each of the parties.

h. Each party shall comply with all applicable U.S. and foreign export control laws and regulations and shall not export or re-export any technical data or Products except in compliance with the applicable export control laws and regulations of the U.S. and any foreign country.

i In the event that this Agreement is translated into any other language, the English version hereof shall take precedence and govern.

j. All costs incurred for translating this Agreement, including all Exhibits attached hereto and any other documents produced in connection with the execution and performance of this Agreement, into another language shall be borne by Customer.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective duly authorized representatives.

METAWAVE COMMUNICATIONS CORPORATION	OJSC ST. PETERSBURG TELECOM
By: /s/ Richard Henderson	By: /s/ Michael Koeho
Name: Richard Henderson	Name: Michael Koeho

Title: Vice President of Sales and Marketing Title: General Director

EXHIBITS ATTACHED:

A Product Pricing
B Performance Specifications
C Software License
D Nondisclosure Agreement
E Product Maintenance Program
F Acceptance Test Procedure
G Responsibility Matrix
H Project Schedule

EXHIBIT A: PRODUCT PRICING

TO THE PRODUCT PURCHASE AGREEMENT

BETWEEN

METAWAVE COMMUNICATIONS CORP. ("SELLER")

AND

ST. PETERSBURG TELECOM ("CUSTOMER")

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

PRODUCT PRICING

For the purposes of uniformity, references to Agreement or to an Exhibit shall refer to the Product Purchase Agreement to which this document is Exhibit A and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto unless otherwise expressly defined herein.

1. INTRODUCTION

This Exhibit A lists the Product pricing as of the Effective Date of the Agreement. All payments for the Products shall be in U.S. dollars and in accordance with the payment terms set forth in the Agreement.

SPOTLIGHT RECOMMENDED SPARES KIT

<TABLE>
<CAPTION>

Part Number	DESCRIPTION	QTY.	PRICE (30W LPA)	PRICE (50W LPA)
<S>	<C>	<C>	<C>	<C>
250-0035-XX	Tx Driver	[***]	[***]	[***]
250-0042-XX	Voice LNA	[***]	[***]	[***]
250-0044-XX	LNA Alarm	[***]	[***]	[***]
250-0082-XX	LNA Power	[***]	[***]	[***]
250-0083-XX	External I/O card	[***]	[***]	[***]
270-0002-XX	RX SMU Assy.	[***]	[***]	[***]
270-0026-XX	TX SMU Assy.	[***]	[***]	[***]
275-0000-XX	30 Watt LPA module	[***]	[***]	[***]
		TOTALS:	[***]	[***]

</TABLE>

Notes:

1. The SpotLight Recommended Spares Kit list is for SpotLight configurations supporting up to 90 channels.
2. Seller recommends to maintain an inventory of one Recommended Spares Kit for every SpotLight unit installed.
3. SpotLight Recommended Spares Kits are not discountable.

2. SOFTWARE LICENSING FEE

The software licensing fees for the most current version of LampLighter and embedded system software (available at the time of purchase of SpotLight) are included in the purchase price of each SpotLight unit purchased. The software

licensing fees for subsequent upgrades of LampLighter and embedded system software will depend on the enhancements made to the software and the number and types of new features available with each new software release.

3. MAINTENANCE FEES

3.1 Software Maintenance Program (SMP) Fees

The SMP annual fee for LampLighter software and the SpotLight embedded system software is [***] per each RF analog channel support by SpotLight not to exceed [***] per "Host System" per year where a Host System is defined herein as that group of SpotLight units serving cellular RF infrastructure equipment connected to a common Mobile Switching Center.

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Product Pricing

3.2 Hardware Maintenance Program (HMP) Fees

The HMP annual fee planning price is [***] per each RF analog channel supported by a SpotLight system not to exceed [***] of all SpotLight units covered under the HMP program.

Seller and Customer agree to negotiate in good faith the HMP fee prior to the end of the Warranty Period.

4. PURCHASE COMMITMENT

PURCHASE COMMITMENT PRICING (USD)

<TABLE>
<CAPTION>

Product Description	UNIT PRICE	NO. OF UNITS	EXTENDED LIST PRICE
<S>	<C>	<C>	<C>
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
PURCHASE COMMITMENT PRICE			[***]

</TABLE>

5. GENERAL CONDITIONS FOR THE PURCHASE COMMITMENT:

1. All payments shall be in U.S. dollars.

2. Shipment and delivery of the Products set forth herein is dependent upon

obtaining all necessary licenses, permits, governmental approvals and customs clearances for the Products. Seller shall not be held liable for any non-performance due to delays in obtaining any of the above documentation, approvals and clearances, provided that Seller has made a reasonable attempt to provide such documentation.

3. Customer shall provide assistance to Seller in obtaining all necessary licenses, permits, government approvals, customs clearances and any other required documentation required for the importation of and operation of the SpotLight systems.

4. Customer shall be responsible for payment of all shipping and delivery charges, all sales, use, VAT, and any other taxes and all customs and duties payments applicable to the sale of the Products set forth herein.

5. In the event that Seller is unable to export Seller's test equipment out of Russia, Customer agrees to purchase such equipment.

6. All prices set forth in the Agreement and any Exhibits to the Agreement are net of all taxes including but not limited to VAT.

7. Customer shall provide the vehicle, driver, cellular phones and air-time for all drive testing at no charge to Seller.

8. Performance of Seller's obligations under the Agreement is dependent upon obtaining all necessary licenses, permits, government approvals, customs clearances and visas for Seller's Products and or personnel. Seller shall not be held liable for any non-performance due to delays in obtaining any of the above documentation, approvals and clearances, provided that Seller has made a reasonable attempt to provide such documentation.

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<TABLE>
<CAPTION>
SPOTLIGHT 2.0 FIELD REPLACEABLE UNIT (FRU) PRICE LIST

PART NUMBER	PART DESCRIPTION	PRICE
<S>	<C>	<C>
[***]		[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
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CONFIDENTIAL AND PROPRITARY 2/10/98

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

Product Pricing

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EXHIBIT B: PERFORMANCE SPECIFICATIONS

TO THE PURCHASE AGREEMENT

SPOTLIGHT MULTIBEAM ANTENNA PLATFORM 2.0
TRANSMIT/RECEIVE

(for use with Motorola HDII Base Station Equipment)

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

01/13/98

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PERFORMANCE SPECIFICATIONS

For purposes of uniformity and brevity, references to Agreement or to an Exhibit shall refer to the Products and Services Purchase Agreement to which this document is Exhibit B and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto.

1. INTRODUCTION

The purpose of this document is to describe and specify Metawave's SpotLight 2.0 Multibeam Antenna Platform including:

- System operation
- Hardware and software elements of the SpotLight equipment
- Interconnect between SpotLight equipment and the base station equipment

While the specifications contained in this document are based on the most current information available, such information is based on cell site specific data and may not apply to all cell sites contained within a system. The specifications contained in this document may change from cell site to cell site. Metawave reserves the right to make changes to any design, specification, manufacturing techniques and/or product testing procedures.

ACRONYMS AND TERMS DEFINITION

C/I	Carrier to Interference Ratio
FRU	Field Replaceable Unit
LNA	Low Noise Amplifier
LPA	Linear Power Amplifier
RCU	Radio Channel Unit (P/O Motorola Cell Equipment)
RF	Radio Frequency
Rx	Receive
SMAP	Spotlight Multibeam Antenna Platform
SMU	Spectrum Management Unit
Tx	Transmit
TxCD	Transmit Combiner Driver

2. System Description

[***]

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

3. REGULATORY REQUIREMENTS

This section specifies requirements which are set primarily by local and/or national governing bodies, consortiums and standards committees.

3.1 US

The SpotLight system complies with appropriate US FCC regulations (includes both RF and EMI). Specifically, the SMAP shall comply with the regulations defined in CFR 47 part 22 and part 15.

The SpotLight system is UL Listed.

EXHIBIT C: SOFTWARE LICENSE

TO THE PURCHASE AGREEMENT

BETWEEN

METAWAVE COMMUNICATIONS CORP. ("SELLER")

AND

ST. PETERSBURG TELECOM ("CUSTOMER")

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

12/5/97

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SOFTWARE LICENSE

For purposes of uniformity and brevity, references to Agreement or to an Exhibit shall refer to the Purchase Agreement to which this document is Exhibit C and to the other Exhibits to that Agreement. All definitions set forth in the Agreement shall apply hereto.

1. SCOPE

Pursuant to the above-identified Agreement, Software will be delivered by Seller to Customer for use with the Products according to the terms of the Agreement and this Exhibit. Customer shall then become a licensee with respect to such Software.

2. LICENSING GRANT

2.1 CONCURRENT WITH EXECUTION OF THE AGREEMENT, SELLER GRANTS TO CUSTOMER A REVOCABLE, NON-EXCLUSIVE AND NON-TRANSFERABLE LICENSE UNDER SELLER'S APPLICABLE PROPRIETARY RIGHTS TO USE SOFTWARE DELIVERED TO CUSTOMER HEREUNDER IN ACCORDANCE WITH THE TERMS AND CONDITIONS SET FORTH HEREIN.

2.2 CUSTOMER AGREES TO PAY THE LICENSING FEES FOR THE RIGHT TO USE THE SOFTWARE AND FEATURES AND FOR ANY SUPPORT THEREOF AS SET FORTH IN EXHIBIT A (PRICING) OR IN AN AMENDMENT THERETO. THE LICENSING FEE IS A ONE TIME FEE WHICH GRANTS THE CUSTOMER THE RIGHT TO USE THE VERSION OF SOFTWARE LICENSED FOR AS LONG AS THE CUSTOMER OWNS THE PRODUCT.

3. LIMITATIONS ON USE OF SOFTWARE

3.1 WITHOUT THE PRIOR WRITTEN CONSENT OF SELLER, CUSTOMER SHALL ONLY USE THE SOFTWARE IN CONJUNCTION WITH A SINGLE PRODUCT EXISTING WITHIN THE SITE SPECIFIED IN THE PO ("DESIGNATED PRODUCT").

3.2 CUSTOMER MAY USE THE SOFTWARE TO ROUTINELY OPERATE AND MAINTAIN THE DESIGNATED PRODUCT. FOR PURPOSES OF THIS SUBSECTION, "MAINTAIN" SHALL BE CONSTRUED TO MEAN PERFORMING DIAGNOSTIC TESTING CONSISTENT WITH CUSTOMER'S OBLIGATION TO PROVIDE THE FIRST LEVEL OF MAINTENANCE. UNDER NO CONDITION SHALL THE SOFTWARE BE USED FOR ANY OTHER PURPOSE, INCLUDING, BUT NOT LIMITED TO, SUBSTITUTED PRODUCTS, OR PRODUCTS NOT OWNED BY CUSTOMER, OR PRODUCTS LOCATED AT A LOCATION OTHER THAN THE SITE SPECIFIED IN THE PO.

3.3 THE LICENSE GRANTED TO CUSTOMER IN SECTION 2 IS PERSONAL AND MAY NOT BE TRANSFERRED TO ANOTHER PRODUCT OR SITE WITHOUT THE WRITTEN CONSENT OF SELLER.

3.4 TO THE EXTENT SPECIFIED IN EXHIBIT A OR AN AMENDMENT THERETO AND PROVIDED CUSTOMER HAS PAID ANY APPLICABLE LICENSING FEES, CUSTOMER SHALL HAVE THE RIGHT TO USE FEATURES IN ACCORDANCE WITH THE TERMS OF THIS EXHIBIT. CUSTOMER ACKNOWLEDGES THAT THE SOFTWARE MAY CONTAIN THEREIN SEVERAL ADDITIONAL FEATURES WHICH ARE EACH COVERED BY SEPARATE LICENSING FEES. CUSTOMER AGREES NOT TO USE, AND THE LICENSE SPECIFICALLY DOES NOT EXTEND TO, SUCH ADDITIONAL FEATURES UNLESS THEY

ARE SPECIFIED IN EXHIBIT A OR AN AMENDMENT THERETO AND PROVIDED CUSTOMER HAS PAID THE APPLICABLE LICENSING FEES FOR SUCH ADDITIONAL FEATURES.

3.5 THE SOFTWARE IS SUBJECT TO LAWS PROTECTING TRADE SECRETS, KNOW-HOW, CONFIDENTIALITY AND COPYRIGHT.

3.6 CUSTOMER SHALL NOT TRANSLATE, MODIFY, ADAPT, DECOMPILE, DISASSEMBLE, OR REVERSE ENGINEER THE SOFTWARE OR ANY PORTION THEREOF.

3.7 UNLESS OTHERWISE EXPRESSLY AGREED BY SELLER, CUSTOMER SHALL NOT PERMIT ITS DIRECTORS, OFFICERS, EMPLOYEES OR ANY OTHER PERSON UNDER ITS DIRECT OR INDIRECT CONTROL, TO WRITE, DEVELOP, PRODUCE, SELL, OR LICENSE ANY SOFTWARE THAT PERFORMS THE SAME FUNCTIONS AS THE SOFTWARE BY MEANS DIRECTLY ATTRIBUTABLE TO ACCESS TO THE SOFTWARE (E.G. REVERSE ENGINEERING OR COPYING).

3.8 CUSTOMER SHALL NOT EXPORT THE SOFTWARE FROM THE UNITED STATES WITHOUT THE WRITTEN PERMISSION OF SELLER. IF WRITTEN PERMISSION IS GRANTED FOR EXPORT OF THE SOFTWARE, THEN CUSTOMER SHALL COMPLY WITH ALL U.S. LAWS AND REGULATIONS FOR SUCH EXPORTS AND SHALL HOLD SELLER HARMLESS, INCLUDING LEGAL FEES AND EXPENSES FOR ANY VIOLATION OR ATTEMPTED VIOLATION OF THE U.S. EXPORT LAWS.

4. RIGHT TO COPY, PROTECTION AND SECURITY

4.1 SOFTWARE PROVIDED HEREUNDER MAY BE COPIED (FOR BACK-UP PURPOSES ONLY) IN WHOLE OR IN PART, IN PRINTED OR MACHINE-READABLE FORM FOR CUSTOMER'S INTERNAL USE ONLY, PROVIDED, HOWEVER, THAT NO MORE THAN TWO (2) PRINTED COPIES AND TWO (2) MACHINE-READABLE COPIES SHALL BE IN EXISTENCE AT ANY ONE TIME WITHOUT THE PRIOR WRITTEN CONSENT OF SELLER, OTHER THAN COPIES RESIDENT IN THE PRODUCTS.

4.2 WITH REFERENCE TO ANY COPYRIGHT NOTICE OF SELLER ASSOCIATED WITH SOFTWARE, CUSTOMER AGREES TO INCLUDE THE SAME ON ALL COPIES IT MAKES IN WHOLE OR IN PART. SELLER'S COPYRIGHT NOTICE MAY APPEAR IN ANY OF SEVERAL FORMS, INCLUDING MACHINE-READABLE FORM. USE OF A COPYRIGHT NOTICE ON THE SOFTWARE DOES NOT IMPLY THAT SUCH HAS BEEN PUBLISHED OR OTHERWISE MADE GENERALLY AVAILABLE TO THE PUBLIC.

4.3 CUSTOMER AGREES TO KEEP CONFIDENTIAL, IN ACCORDANCE WITH THE TERMS OF THE AGREEMENT, AND NOT PROVIDE OR OTHERWISE MAKE AVAILABLE IN ANY FORM ANY SOFTWARE OR ITS CONTENTS, OR ANY PORTION THEREOF, OR ANY DOCUMENTATION PERTAINING TO THE SOFTWARE, TO ANY PERSON OTHER THAN EMPLOYEES OF CUSTOMER OR SELLER.

4.4 SOFTWARE, INCLUDING FEATURES IS THE SOLE AND EXCLUSIVE PROPERTY OF SELLER AND NO TITLE OR OWNERSHIP RIGHTS TO THE SOFTWARE OR ANY OF ITS PARTS, INCLUDING DOCUMENTATION, IS TRANSFERRED TO CUSTOMER.

4.5 CUSTOMER ACKNOWLEDGES THAT IT IS THE RESPONSIBILITY OF CUSTOMER TO TAKE ALL REASONABLE MEASURES TO SAFEGUARD SOFTWARE AND TO PREVENT ITS UNAUTHORIZED USE OR DUPLICATION.

5. REMEDIES

Customer acknowledges that violation of the terms of this Exhibit or the Agreement shall cause Seller irreparable harm for which monetary damages may be inadequate, and Customer agrees that Seller may seek temporary or permanent injunctive relief without the need to prove actual harm in order to protect Seller's interests.

6. TERM

Unless otherwise terminated pursuant to Section 7 herein, the term of the license granted pursuant to Section 2 herein shall be co-extensive with the term of any licensing and/or maintenance fees paid by Customer to Seller pursuant to Exhibit A or an Amendment thereto.

7. TERMINATION

7.1 THE LICENSE GRANTED HEREUNDER MAY BE TERMINATED BY CUSTOMER UPON ONE (1) MONTH'S PRIOR WRITTEN NOTICE.

7.2 SELLER MAY TERMINATE THE LICENSE GRANTED HEREUNDER IF CUSTOMER IS IN DEFAULT OF ANY OF THE TERMS AND CONDITIONS OF THE AGREEMENT OR EXHIBITS, AND SUCH TERMINATION SHALL BE EFFECTIVE IF CUSTOMER FAILS TO CORRECT SUCH DEFAULT WITHIN TEN (10) DAYS AFTER WRITTEN NOTICE THEREOF BY SELLER. THE PROVISIONS OF SECTIONS 4 AND 5 HEREIN SHALL SURVIVE TERMINATION OF ANY SUCH LICENSE.

7.3 WITHIN ONE (1) MONTH AFTER TERMINATION OF THE LICENSE GRANTED HEREUNDER, CUSTOMER SHALL FURNISH TO SELLER A DOCUMENT CERTIFYING THAT THROUGH ITS BEST EFFORTS AND TO THE BEST OF ITS KNOWLEDGE, THE ORIGINAL AND ALL COPIES IN WHOLE OR IN PART OF ALL SOFTWARE, IN ANY FORM, INCLUDING ANY COPY IN AN UPDATED WORK, HAVE BEEN RETURNED TO SELLER OR DESTROYED. WITH PRIOR WRITTEN CONSENT FROM SELLER, CUSTOMER MAY RETAIN ONE (1) COPY FOR ARCHIVAL PURPOSES ONLY.

8. RIGHTS OF THE PARTIES

8.1 NOTHING CONTAINED HEREIN SHALL BE DEEMED TO GRANT, EITHER DIRECTLY OR BY IMPLICATION, ESTOPPEL, OR OTHERWISE, ANY LICENSE UNDER ANY PATENTS OR PATENT APPLICATIONS OF SELLER; EXCEPT THAT CUSTOMER SHALL HAVE A NON-EXCLUSIVE, LICENSE UNDER SELLER'S PATENTS AND PATENT APPLICATIONS TO USE, IN SELLER-SUPPLIED EQUIPMENT ONLY, SOFTWARE SUPPLIED HEREUNDER, WHEN SUCH LICENSE IS IMPLIED OR OTHERWISE ARISES BY OPERATION OF LAW BY VIRTUE OF THE PURCHASE OF SUCH COPIES FROM SELLER.

8.2 RIGHTS IN PROGRAMS OR OPERATING SYSTEMS OF THIRD PARTIES, IF ANY, ARE FURTHER LIMITED BY THEIR LICENSE AGREEMENTS WITH SUCH THIRD PARTIES, WHICH AGREEMENTS ARE HEREBY INCORPORATED BY REFERENCE THERETO AND MADE A PART HEREOF AS IF FULLY SET FORTH HEREIN. CUSTOMER AGREES TO ABIDE THEREBY.

8.3 DURING THE TERM OF THE LICENSE GRANTED PURSUANT TO SECTION 2 HEREIN AND FOR A PERIOD OF ONE (1) YEAR AFTER EXPIRATION OR TERMINATION,

SELLER, AND WHERE APPLICABLE, ITS LICENSOR(S), OR THEIR REPRESENTATIVES MAY, UPON PRIOR NOTICE TO CUSTOMER, A) INSPECT THE FILES, COMPUTER PROCESSORS, EQUIPMENT, FACILITIES AND PREMISES OF CUSTOMER DURING NORMAL WORKING HOURS TO VERIFY CUSTOMER'S COMPLIANCE WITH THIS AGREEMENT, AND B) WHILE CONDUCTING SUCH INSPECTION, COPY OR RETAIN ALL SOFTWARE, INCLUDING THE MEDIUM ON WHICH IT IS STORED AND ALL DOCUMENTATION THAT CUSTOMER MAY POSSESS IN VIOLATION OF THE LICENSE OR THE AGREEMENT.

8.4 CUSTOMER ACKNOWLEDGES THAT THE PROVISIONS OF THIS EXHIBIT C ARE INTENDED TO INURE TO THE BENEFIT OF SELLER AND ITS LICENSORS AND THEIR RESPECTIVE SUCCESSORS IN INTEREST. CUSTOMER ACKNOWLEDGES THAT SELLER OR ITS LICENSORS HAVE THE RIGHT TO ENFORCE THESE PROVISIONS AGAINST CUSTOMER, WHETHER IN SELLER'S OR ITS LICESNSOR'S NAME.

Software License

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9. LIMITATIONS ON SOFTWARE

Customer understands that errors occur in Software and Seller makes no warranty that the Software will perform without error. Customer agrees that it is Customer's responsibility to select and test the Software to be sure it meets Customer's needs. Customer agrees to accept Software in its current condition. Seller agrees to repair any service effecting Software defect promptly per the warranty terms during the Warranty Period.

10. ENTIRE UNDERSTANDING

Notwithstanding anything to the contrary in other agreements, purchase orders or order acknowledgments; the Agreement and this Exhibit C set forth the entire understanding and obligations regarding use of Software, implied or expressed.

Software License

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[LOGO]

NON-DISCLOSURE AGREEMENT

This Non-Disclosure Agreement ("NDA"), effective February 4th, 1998 ("Effective Date"), is by and between OJSC St. Petersburg Telecom ("Recipient") having a place of business at Nevsky Prospect 54 - 10, St. Petersburg 191011 Russia, and Metawave Communications Corporation ("Metawave") having a place of business at 8700 148th Ave. NE, Redmond, WA 98052 U.S.A.

1. The purpose of this NDA is to allow each party to obtain from the other certain technical and business information related to wireless systems under terms that will protect the confidential and proprietary nature of such information.

2. As used in this NDA, "Confidential Information" shall mean any and all technical or business information furnished, in whatever form or medium, or disclosed by one party to the other including, but not limited to, product/service specifications, prototypes, computer programs, models, drawings, marketing plans, financial data, and personnel statistics, which are marked as confidential or proprietary by the disclosing party, or, for information which is orally disclosed, the disclosing party indicates to the other at the time of disclosure the confidential or proprietary nature of the information and confirms in writing to the receiving party within thirty (30) days after such disclosure that such information is confidential. Any technical or business information of a third person furnished or disclosed by one party to the other shall be deemed "Confidential Information" of the disclosing party unless otherwise specifically indicated in writing to the contrary.

3. Each party agrees to hold such Confidential Information in confidence for a period of three (3) years from the date of receipt of same unless otherwise agreed to in writing by the disclosing party, and that during such period each party will use such information solely for the purposes of this NDA unless otherwise allowed in this NDA or by written permission of the disclosing party. Each party agrees not to copy such Confidential Information of the other unless specifically authorized. Each party agrees that it shall not make disclosure of any such Confidential Information to anyone (including subcontractors) except employees of such party to whom disclosure is necessary for the purposes set forth above. Each party shall appropriately notify such employee that the disclosure is made in confidence and shall be kept in confidence in accordance to this NDA. Each party also agrees that it will make requests for Confidential Information of the other only if necessary to accomplish the purposes set forth in this NDA. The receiving party agrees that Confidential Information shall be handled with the same degree of care which the receiving party applies to its own Confidential Information but in no event less than reasonable care.

4. Each party agrees that in the event permission is granted by the other to copy such Confidential Information, each such copy shall contain and state the same confidential or proprietary notices or legends, if any, which appear on the original. Nothing herein shall be construed as granting to either party any right or license under any copyrights, inventions, or patents now or hereafter owned or controlled by the other party.

5. Upon termination of this NDA for any reason or upon request of the disclosing party, all Confidential Information, together with copies of same as may be authorized herein, shall be returned to the disclosing party or certified destroyed by the receiving party upon the request of the disclosing party. The requirements of use and confidentiality set forth herein shall survive the termination of this

NDA.

6. The obligations imposed in this NDA shall not apply to any information that:

(a) is already in the possession of or is independently developed by the receiving party; or

(b) is or becomes publicly available through no fault of the receiving party; or

(c) is obtained by the receiving party from a third person who is under no obligation of confidence to the party whose Confidential Information is disclosed; or

(d) is disclosed without restriction by the disclosing party.

7. Except for the obligations of use and confidentiality imposed in this NDA no obligation of any kind is assumed or implied against either party by virtue of the party's meetings or conversations with respect to whatever Confidential Information is exchanged. Each party further acknowledges that this NDA and any meetings and communications of the parties relating to the same subject matter shall not :

(a) constitute an offer, request, or research, development or other contract with the other to work; engage in any

(b) constitute an offer, request or contract involving a buyer-seller relationship, venture, teaming or partnership relationship between the parties; and

(c) impair or restrict the parties' products or services, now or those offered by the NDA. right to make, procure or market in the future, which may be disclosing party, or which any competitive with are the subject matter of this

The parties expressly agree that any money, expenses or losses expended or incurred by each party in preparation for, or as a result of this NDA or the parties meetings and communications, is at each party's sole cost and expense provided, however, that notwithstanding anything to the contrary in the NDA, neither party's rights shall be limited in law or equity to enforce the confidentiality and use obligations imposed under this NDA.

8. Without prior consent of the other party, neither party shall disclose to any third person the existence or purpose of this NDA, the terms or conditions hereof, the fact that discussions are taking place or that Confidential Information is being shared, except as may be required by law and then only after first notifying the other party of such required disclosure. The parties also agree that neither party shall use any trade name, service mark, or trademark of the other or refer to the other party in any promotional activity or material without first obtaining the prior written consent of the other party.

9. Neither this NDA nor any rights hereunder in whole or in part shall be assignable or otherwise transferable by either party and the obligations contained in this NDA

shall survive and continue after termination of this NDA, provided, that either party may assign or transfer this NDA and rights hereunder to any current or future affiliates or successor company if such assignee agrees in writing to the terms and conditions herein.

10. The foregoing shall apply to any subsequent meetings or any communications between the parties relating to the same subject matter unless this NDA is modified in writing and such writing is signed by each party.

11. This NDA shall be governed and construed by the laws of the State of Delaware.

12. Each party shall comply with all applicable U.S. and foreign export control laws and regulations and shall not export or re-export any technical data or products except in compliance with the applicable export control laws and regulations of the U.S. and any foreign country.

13. Any notice to be given under this NDA by either party to the other, shall be in writing and shall be deemed given when sent by Certified mail. If either party changes its address during the term of this NDA, it shall so advise the other party in writing as provided in this NDA and any notice thereafter required to be given shall be sent by Certified mail to such new addresses.

14. In the event that this NDA is translated into any other language, the English version hereof shall take precedence and govern.

15. This NDA, together with any and all exhibits incorporated herein, constitutes the entire NDA between the parties with respect to the subject matter of this NDA. No provision of this NDA shall be deemed waived, amended, or modified by either party, unless such waiver, amendment or modification is made in writing and signed by both parties. This NDA supersedes all previous NDAs between Metawave and Recipient relating to the subject matter in this NDA.

IN WITNESS WHEREOF, the parties have caused their duly authorized representatives to sign this NDA as of the Effective Date.

METAWAVE COMMUNICATIONS CORP.	OJSC ST. PETERSBURG TELECOM
Signature: _____	Signature: _____
Print Name: Kathy Surace-Smith	Print Name: _____
Title: General Counsel	Title: _____

EXHIBIT E: PRODUCT MAINTENANCE PROGRAM

TO THE PURCHASE AGREEMENT

BETWEEN

METAWAVE COMMUNICATIONS CORP. ("SELLER")

AND

ST. PETERSBURG TELECOM ("CUSTOMER")

Metawave Communications Corporation
8700 148/th/ Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

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Product Maintenance Program
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Product Maintenance Program

METAWAVE COMMUNICATIONS CORPORATION

PRODUCT MAINTENANCE PROGRAM

1. INTRODUCTION

Seller's product maintenance program includes both a Hardware Maintenance Program (HMP) and a Software Maintenance Program (SMP). This document describes each of the two programs.

2. HARDWARE MAINTENANCE PROGRAM

The following details Seller's Hardware Maintenance Program ("HMP"). For each Product purchased, the HMP is included at no charge during the initial period described in Section 2.1.1.

2.1 Term

2.1.1 DURING THE WARRANTY PERIOD (AS DEFINED IN SECTION 5 OF THE AGREEMENT) THE HMP IS INCLUDED IN THE PURCHASE PRICE OF EACH SPOTLIGHT UNIT PURCHASED. THEREAFTER, HARDWARE REPAIR SERVICES WILL BE PROVIDED BY SELLER TO CUSTOMER ON A TIME AND MATERIAL BASIS FOR A PERIOD OF [***] FROM THE DATE OF PRODUCT PURCHASE, UNLESS CUSTOMER ELECTS TO PURCHASE AN HMP AT THE FEES SET FORTH IN EXHIBIT A. SUCH HMP CAN ONLY BE PURCHASED DURING THE TERM OF THIS AGREEMENT.

2.2 Seller shall:

2.2.1 IN THE EVENT A DEFECT OCCURS, EITHER (I) REPAIR THE DEFECTIVE HARDWARE OR (II) REPLACE SAID HARDWARE WITH NEW OR REFURBISHED PRODUCT. ANY ITEM REPLACED WILL BE DEEMED TO BE ON AN EXCHANGE BASIS, AND ANY ITEM RETAINED BY SELLER THROUGH REPLACEMENT WILL

2.2.2 [***] OF RECEIPT OF A DEFECTIVE FIELD REPLACEABLE UNIT (FRU) FROM CUSTOMER, SHIP THE REPLACEMENT FRU TO CUSTOMER, OR WITHIN [***] OF RECEIPT OF A DEFECTIVE FRU FROM CUSTOMER, SHIP A REPAIRED FRU TO CUSTOMER. EQUIPMENT NOT MANUFACTURED BY SELLER

WILL BE REPAIRED OR REPLACED AS PROMPTLY AS ARRANGEMENTS WITH THE MANUFACTURERS OR VENDORS THEREOF PERMIT.

2.2.3 ISSUE A RETURN MATERIAL AUTHORIZATION ("RMA") NUMBER TO CUSTOMER PRIOR TO CUSTOMER'S RETURN OF THE DEFECTIVE BOARD.

2.2.4 PAY ALL TRANSPORTATION CHARGES FOR THE RETURN OF THE REPAIRED OR REPLACEMENT FRU TO CUSTOMER.

2.2.5 PROVIDE TECHNICAL SUPPORT DURING BUSINESS HOURS, 8:00 A.M. TO 5:00 P.M. PACIFIC STANDARD TIME, MONDAY THROUGH FRIDAY AND PROVIDE PAGER SERVICE AFTER HOURS, WEEKENDS AND HOLIDAYS WITH A RESPONSE TIME OF WITHIN ONE HOUR.

2.3 Customer shall:

2.3.1 CONTACT SELLER VIA TELEPHONE, EMAIL OR FAX TO OBTAIN AN RMA PRIOR TO RETURNING A DEFECTIVE FRU.

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

2.3.2 PACKAGE FIELD REPLACEABLE UNIT IN A MANNER TO PREVENT DAMAGE DURING SHIPMENT. IDENTIFY RMA NUMBER ON OUTSIDE OF PACKAGE.

2.3.3 PACKAGE THE EQUIPMENT BEING RETURNED IN A MANNER NO LESS PROTECTIVE TO SUCH EQUIPMENT THAN THE MANNER IN WHICH EQUIPMENT IS PACKAGED BY SELLER.

2.3.4 SHIP THE DEFECTIVE FRU TO AN AUTHORIZED SELLER SERVICE CENTER DESIGNATED BY SELLER.

2.3.5 PAY ALL COSTS OF TRANSPORTATION FOR SENDING THE DEFECTIVE FRU TO SELLER.

2.3.6 IF SELLER HAS SHIPPED A FRU IN ADVANCE OF THE CUSTOMER RETURNING THE DEFECTIVE FRU TO SELLER, CUSTOMER AGREES TO INSURE AND PROVIDE CONFIRMATION OF SHIPMENT OF SUCH DEFECTIVE FRU, FREIGHT PREPAID, TO SELLER AT THE AFOREMENTIONED ADDRESS WITHIN 5 DAYS OF SHIPMENT FROM SELLER OF THE FRU. CUSTOMER AGREES TO PROMPTLY PAY SELLER'S INVOICE FOR THE THEN CURRENT PRICE OF THE FRU SHIPPED TO CUSTOMER IF THE DEFECTIVE FRU IS NOT RETURNED WITHIN THE SPECIFIED 5 DAY PERIOD.

2.3.7 BE RESPONSIBLE FOR THE INITIAL IDENTIFICATION OF PRODUCT PROBLEMS DOWN TO THE FRU LEVEL AND FOR THE REMOVAL, REPLACEMENT AND SHIPMENT OF THE MALFUNCTIONING FRU, PACKED IN A MANNER TO PREVENT DAMAGE TO FRU.

2.4 On-Site Repair

On-Site Repair can be performed at an additional charge. Such charge will be quoted to Customer and agreed upon in writing before dispatch of personnel.

2.5 Service Limitations

2.5.1 SELLER SHALL HAVE NO RESPONSIBILITY TO REPAIR OR REPLACE BOARDS WHICH HAVE BEEN REPAIRED IN AN UNAUTHORIZED MANNER OR WHICH HAVE HAD THE BARCODE, SERIAL NUMBER, OR OTHER IDENTIFYING MARK MODIFIED, REMOVED OR OBLITERATED THROUGH ACTION OR INACTION OF CUSTOMER.

2.5.2 IN THE EVENT THAT CUSTOMER SENDS A FRU TO SELLER WHICH HAVE NO DEFECTS OR FAILURES, SELLER MAY INVOICE CUSTOMER AT THE THEN CURRENT FEE FOR THE SERVICES RENDERED DURING THE EVALUATION

PROCESS PROVIDED THAT SELLER'S TECHNICAL SUPPORT HAS NOT INSTRUCTED CUSTOMER IN WRITING THAT THE FRU BE REPLACED.

3. SOFTWARE MAINTENANCE PROGRAM

The following details Seller's Software Maintenance Program ("SMP"). Annual SMP fees are shown on Exhibit A or an Amendment thereto. SMP is included in the Purchase Price of each SpotLight unit purchased for the Initial Term (Section 3.2.1 describes the Initial Term).

3.1 Definitions

Terms which are capitalized have the meanings set forth below or, absent definition herein, as contained in the Purchase Agreement.

Certification	the approval by Seller that Customer's current Software is in acceptable condition for coverage under SMP.
Feature	an innovation or performance improvement to Software that is made available to all users of the current Software release. Features are licensed to Customer individually and may be at additional cost.

Firmware	Software in object-code form that is implanted/imbedded in hardware.
Major Release	indicates a new version of Software that adds new Features (excluding Optional Features) or major enhancements to the currently existing release of Software.
Point Release	indicates a modification to Software resulting from planned revisions to the current release, or corrections and/or fixes to the current release of Software.
Rehosting	the integration of Special Project (SP) Software into Customer's current release of Software.
Software	the object-code computer programs, licensed by Seller for use solely in conjunction with Seller's Products, which enables a Seller Product to perform its functions in accordance with the specifications set forth in Exhibit B (Performance Specifications). Software includes Major Releases, Point Releases and, if applicable, Features made available to Customer under SMP.
Software Patch	Software that corrects or removes a reproducible anomaly or "bug" in an existing Major Release.
SP Software	a Software Feature developed by Seller pursuant to a specific Customer request or Customer funding of accelerated development of a planned Software Feature.

3.2 Term

3.2.1 THE INITIAL TERM OF SMP IS [***] FROM THE DATE OF EXECUTION OF THE CERTIFICATE OF FINAL ACCEPTANCE FOR EACH PRODUCT ("INITIAL TERM"). THEREAFTER, SMP IS PROVIDED BY SELLER TO CUSTOMER PURSUANT TO THE TERMS HEREIN AND IS INCLUDED IN THE SMP ANNUAL FEE SET FORTH IN EXHIBIT A FOR A PERIOD OF [***]. ANY SOFTWARE PROVIDED TO CUSTOMER DURING THE TERM OF THE SMP WILL BE PROVIDED PURSUANT TO SELLER'S SOFTWARE LICENSE AS SET FORTH IN THE SOFTWARE LICENSE EXHIBIT OF THE PURCHASE AGREEMENT.

3.3 Scope

3.3.1 DURING THE TERM OF SMP, ALL MAJOR RELEASES, POINT RELEASES, SOFTWARE PATCHES AND STANDARD FEATURES MADE GENERALLY AVAILABLE BY SELLER SHALL BE AVAILABLE TO CUSTOMER AT NO ADDITIONAL CHARGE. CUSTOMER SHALL INSTALL SUCH SOFTWARE PROMPTLY UPON RECEIPT.

3.3.2 OPTIONAL FEATURES AND CERTAIN SIGNIFICANT ENHANCEMENTS SHALL BE AVAILABLE AT AN ADDITIONAL CHARGE. OPTIONAL FEATURES SHALL BE CARRIED FORWARD FROM RELEASE TO RELEASE AND NEW RELEASES MAY INCLUDE FIXES AND ENHANCEMENTS TO OPTIONAL FEATURES.

3.3.3 CERTAIN OPTIONAL FEATURES SHALL BE SOLD ON A PER-PLATFORM BASIS AND MAY HAVE PRICE LEVELS THAT REFLECT PLATFORM CAPACITY.

[***] CERTAIN INFORMATION ON THIS PAGE(S) HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS.

3.3.4 SELLER SHALL ALSO, AT SELLER'S THEN CURRENT PRICE, REHOST CUSTOMER'S SP SOFTWARE INTO CUSTOMER'S CURRENT RELEASE OF SOFTWARE. SUCH REHOSTED SP SOFTWARE IS THEREAFTER PART OF CUSTOMER'S SOFTWARE FOR THAT RELEASE.

3.3.5 CUSTOMER WILL BE RESPONSIBLE FOR THE FIRST LEVEL OF MAINTENANCE, INCLUDING BUT NOT LIMITED TO PROBLEM IDENTIFICATION OF REPRODUCIBLE SOFTWARE MALFUNCTIONS. IN THE EVENT OF ANY SUCH SOFTWARE MALFUNCTION, CUSTOMER SHALL NOTIFY SELLER PROMPTLY OF THE FAILURE THROUGH CALLING SELLER'S CUSTOMER SUPPORT.

3.3.6 SELLER SHALL PROVIDE, AT A SELLER AUTHORIZED REPAIR DEPOT, SUCH SERVICE AS IS NECESSARY TO CORRECT SOFTWARE DEFECTS IN ACCORDANCE WITH THE APPLICABLE DOCUMENTATION PROVIDED BY SELLER AS SOON AS IS POSSIBLE AND ON A PRIORITY BASIS ACCORDING TO THE SEVERITY OF THE PROBLEM.

3.3.7 SELLER SHALL PROVIDE TECHNICAL SUPPORT 24-HOUR A DAY, 7 DAYS A WEEK. ADDITIONALLY, SELLER SHALL PROVIDE TELEPHONE ASSISTANCE AND GUIDANCE DURING THE INSTALLATION OF NEW SOFTWARE.

3.3.8 SELLER SHALL SUPPORT THE CURRENT MAJOR RELEASE AS WELL AS THE TWO IMMEDIATELY PRECEDING MAJOR RELEASES.

3.3.9 SELLER SHALL HAVE NO OBLIGATION TO SUPPORT ANY SOFTWARE WHICH IS OLDER THAN THE TWO IMMEDIATELY PRECEDING MAJOR RELEASES. HOWEVER, ANY SUPPORT PROVIDED BY SELLER FOR SOFTWARE OLDER THAN THE IMMEDIATELY PRECEDING MAJOR RELEASE SHALL BE ON A TIME AND

MATERIAL BASIS. AN OPEN PURCHASE ORDER WILL BE REQUIRED BEFORE ANY SUCH SERVICES ARE RENDERED.

ANNEX A: PROCEDURES FOR METAWAVE'S HARDWARE MAINTENANCE PROGRAM

A. METAWAVE'S CUSTOMER SUPPORT CENTER

Services Center: (8:00 a.m.- 5:00 p.m. PST, Monday through Friday) after hours, weekends, and holidays via pager. Customer Support is available 365 days per year.

Domestic phone: 888-642-2455
International phone: 425-702-6550

B. RETURN MATERIAL AUTHORIZATION (RMA):

The Customer must contact the Customer Support Center via telephone, e-mail or fax to obtain a Return Material Authorization (RMA) number. Seller may return shipments without a RMA number to the Customer unrepaired and at Customer's cost.

The RMA number must be written on the outside of the package.

A RMA number will not be issued until a purchase order is provided for the repair price for those items not covered under warranty.

C. Return Address:

All Field Replaceable Units (FRUs) must be shipped to:

Metawave Communications Corporation
8700 148/th/ Avenue NE
Redmond, WA 98052 USA

D. PACKING INSTRUCTIONS:

Customer must pack all returned equipment (including loaners and pre-exchange equipment) in a manner no less protective to such equipment than the manner in which Seller packages similar equipment.

E. Purchase Orders:

Purchase orders are required in the following instances:

1. When the Customer requests Emergency Expedite Service for out of warranty equipment.

2. When the Customer returns out of warranty equipment for repair.

3. When Seller sends loaner or pre-exchange equipment to the Customer prior to the defective board being received at Seller and the equipment is out of warranty.

Note: The purchase order will only be invoiced against if the Customer FRU to be exchanged for the loaner or the pre-exchange equipment is not returned

within 5 days (19 days for international Customers) after the date Seller has shipped the repaired or replacement FRUs to Customer.

Under these circumstances, a facsimile copy of the purchase order may be transmitted to be followed up by a confirming hard copy in the mail. The terms and conditions of the Purchase Agreement between Seller and the Customer shall prevail notwithstanding any variance with the terms and conditions of any purchase orders submitted by Customer.

F. PRICING AND INVOICING:

In Warranty Emergency Expedite Request:

Seller does not charge an Emergency Expedite Fee for equipment covered under original warranty or covered by the Hardware Maintenance Program.

Out of Warranty Emergency Expedite Request:

Seller charges an Emergency Expedite Fee of [***] per FRU (plus the standard Out of Warranty Repair rates shown below) plus freight for emergency service for equipment not covered under HMP.

In Warranty Repair:

Seller does not charge for the repair or return shipment of equipment that is covered under original warranty.

Out of Warranty Repair:

All out of warranty repairs will be calculated on a time and materials basis at [***]. If the estimated cost to repair the defective FRU exceeds 50% of the price of a new unit, Seller will call Customer to inform them prior to repairing defective unit.

Testing Fees:

Seller charges a testing fee [***] per FRU when the Customer requests loaner Seller equipment in support of out of warranty equipment.

Invoices:

Invoices are payable in accordance with the terms of the Purchase Agreement between Seller and Customer.

G. EMERGENCY EXPEDITE SERVICE:

Within 24 hours of notification from Customer of an Emergency, Seller will ship a replacement Field Replaceable Unit. Customer must either provide Seller with a new Purchase order (a facsimile copy of the purchase order may be transmitted to be followed up by a confirming hard copy in the mail) or have already provided Seller with a blanket Purchase Order if an out of warranty item (s). An "Emergency" will constitute at least one sector losing more than 50% of its nominal capacity.

Emergency service Monday through Friday 8:00 a.m. to 5:00 p.m. PST will be handled by the Seller's Customer Support Center who can be reached at 888-642-2455 domestically or 425-702-6550 internationally.

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After Hours, weekends and holidays via pager with a response-time of within one hour.

H. LOANER AND PRE-EXCHANGE ORDERS:

Customer may request loaner equipment that may be used while Customer's equipment is being repaired. Loaners are Supplied at no cost to the Customer when equipment is covered by warranty. Seller charges a testing fee when the Customer requests loaner Seller equipment in Support of out of warranty equipment. Customer must ship defective equipment within 30 days of the date of Seller's shipment of loaner equipment to Customer and ship loaner equipment within 30 days of the date of Seller's shipment of the repaired equipment to Customer.

I. FREIGHT:

In Warranty:

Customer shall ship the equipment to Seller on a prepaid basis and Seller will return the equipment to the Customer on a prepaid basis, not billing Customer for freight.

Out of Warranty:

Customer shall ship the FRU to Seller for repair on a prepaid basis and Seller will prepay and invoice the Customer for return freight.

J. DUTIES AND TAXES:

All duties, customs clearance fees and any and all taxes will be the responsibility of the Customer.

K. NON-COMPLIANCE:

Failure to comply with any of the procedures may result in delay or non-delivery of the equipment.

L. CONFLICTING TERMS:

In the event that the terms contained herein conflict with the terms of the Purchase Agreement between Seller and Customer, the terms of the Purchase Agreement shall govern.

EXHIBIT F: ACCEPTANCE TEST PROCEDURE (ATP)

(for the SpotLight Multibeam Antenna Platform)

TO THE AGREEMENT

BETWEEN

METAWAVE COMMUNICATIONS CORP. ("SELLER")

AND

ST. PETERSBURG TELECOM ("CUSTOMER")

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

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SpotLight Multibeam Antenna Platform Acceptance Test Procedure

SPOTLIGHT ACCEPTANCE TEST PROCEDURE

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EXHIBIT G: RESPONSIBILITY MATRIX

TO THE PURCHASE AGREEMENT

BETWEEN

METAWAVE COMMUNICATIONS CORP. ("SELLER")

AND

ST. PETERSBURG TELECOM ("CUSTOMER")

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
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EXHIBIT H: PROJECT SCHEDULE

TO THE PURCHASE AGREEMENT

BETWEEN

METAWAVE COMMUNICATIONS CORP. ("SELLER")

AND

ST. PETERSBURG TELECOM ("CUSTOMER")

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, WA 98052 USA
Tel. 425 702-5600
Fax 425 702-5970
http://www.metawave.com

Product Maintenance Program

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PROJECT SCHEDULE

METAWAVE SHALL USE REASONABLE EFFORTS TO ACCELERATE THE ATTACHED SCHEDULE. PERFORMANCE OF THE ATTACHED SCHEDULE IS SUBJECT TO THE TERMS AND CONDITIONS

OF THE AGREEMENT BETWEEN THE PARTIES.

[No Schedule Attached]

EXHIBIT 10.13

LOAN AGREEMENT

THIS LOAN AGREEMENT is entered into as of October 14, 1997 (this "Loan Agreement") between METAWAVE COMMUNICATIONS CORPORATION, a Delaware corporation (herein called "Borrower"), and IMPERIAL BANK (herein called "Bank").

1. COMMITMENT.

A. FACILITY-A COMMITMENT. Subject to all the terms and conditions of this Loan Agreement and prior to the termination of its commitment as hereinafter provided, Bank hereby agrees to make loans (each a "Facility-A Loan") to Borrower, from time to time and in such amounts as Borrower shall request pursuant to this SECTION 1.A., up to an aggregate principal amount outstanding under the Facility-A Loan Account (as hereinafter defined) not to exceed the least of: (a) Eighty percent (80%) of Eligible Accounts (the "Borrowing Base") or (b) $5,000,000.00 (the "Facility-A Commitment"). If at any time or for any reason, the outstanding principal amount of the Facility-A Loan Account is greater than the least of: (x) the Borrowing Base or (y) the Facility-A Commitment, Borrower shall immediately pay to Bank, in cash, the amount of such excess. Any commitment of Bank, pursuant to the terms of this Loan Agreement, to make Facility-A Loans shall expire on the Facility-A Maturity Date (as hereinafter defined), subject to Bank's right to renew said commitment in its sole and absolute discretion at Borrower's request. Any such renewal of said commitment shall not be binding upon Bank unless it is in writing and signed by an officer of Bank. Provided that no Event of Default (as hereinafter defined) has occurred and is continuing, all or any portion of the Facility-A Loans advanced by Bank which are repaid by Borrower shall be available for reborrowing in accordance with the terms hereof. Borrower promises to pay to Bank the entire outstanding unpaid principal balance (and all accrued unpaid interest thereon) of the Facility-A Loan Account on October 14, 1999 ("Facility-A Maturity Date").

(1) FACILITY-A LOANS. The amount of each Facility-A Loan made by Bank to Borrower hereunder shall be debited to the loan ledger account of Borrower maintained by Bank for the Facility-A Commitment (herein called the "Facility-A Loan Account") and Bank shall credit the Facility-A Loan Account with all loan repayments in respect thereof made by Borrower. When Borrower desires to obtain a Facility-A Loan, Borrower shall notify Bank (which notice shall be signed by an officer of Borrower and shall be irrevocable) in accordance with SECTION 2 hereof, to be received no later than 3:00 p.m. Pacific time one (1) Banking Day (as hereinafter defined) before the day on which the Facility-A Loan is to be made. Facility-A Loans may only be used for working capital purposes and the issuance of letters of credits.

(a) LETTER OF CREDIT USAGE AND SUBLIMIT. Subject to the

availability of the Facility-A Commitment and in reliance on the representations and warranties of Borrower set forth herein, at any time and from time to time from the date hereof through the Banking Day immediately prior to the Facility-A Maturity Date, Bank shall issue for the account of Borrower such standby and commercial letters of credit ("Letters of Credit") as Borrower may request, which request shall be made by delivering to Bank a duly executed letter of credit application on Bank's standard form; provided, however, that the outstanding and undrawn amounts under all such Letters of Credit (i) shall not at any time exceed $3,000,000.00 and (ii) shall be deemed to constitute Facility-A Loans for the purpose of calculating availability under the Facility-A Commitment. Unless Borrower shall have deposited with Bank cash collateral in an amount sufficient to cover all undrawn amounts under each such Letter of Credit and Bank shall have agreed in writing, no Letter of Credit shall have an expiration date that is later than the Facility-A Maturity Date. All Letters of Credit shall be in form and substance acceptable to Bank in its sole discretion and shall be subject to the terms and conditions of Bank's application and letter of credit agreement, in the form of EXHIBIT B attached hereto and incorporated herein by this reference. Borrower will pay any standard issuance and other fees that Bank notifies Borrower will be charged for issuing and processing Letters of Credit for Borrower.

(2) LIMITATION ON ADVANCE OF ANY FACILITY-A LOAN. Notwithstanding any of the provisions contained in SECTION 1.A hereof, prior to any advance of a Facility-A Loan, a representative of Bank shall have conducted an audit of Borrower's books and records relating to the Collateral and made extracts therefrom, and arranged for verification of the Accounts, directly with the account debtors or otherwise, all with results reasonably satisfactory to Bank, the cost of such audit of which shall be at Borrower's sole expense. Based on Bank's review of such audit, and prior to the advance of a

Facility-A Loan in accordance with the terms of SECTION 1.A hereof, Bank may adjust the Borrowing Base percentage, in its sole and reasonable discretion, as provided for under SECTION 9.B. hereof.

(3) NON-FORMULA AVAILABILITY. Provided that no Event of Default has occurred and is continuing, and subject to the availability of the Facility-A Commitment and in reliance on the representations and warranties of Borrower set forth herein, at any time from the date hereof through April 30, 1998, Bank hereby agrees to make Facility-A Loans to Borrower in such amounts as Borrower shall request pursuant to this SECTION 1.A.(3), in an aggregate principal amount not to exceed $2,500,000.00 (the "Non-Formula Availability"); provided, however, that the outstanding amounts under this Non-Formula Availability shall be deemed to constitute Facility-A Loans for the purpose of calculating availability under the Facility-A Commitment.

(4) INTEREST PAYMENTS ON FACILITY-A LOANS. Borrower further promises to pay to Bank from the date of the advance of the initial Facility-A Loan through the Facility-A Maturity Date, on or before the tenth (10th) day of each month, interest on the average daily unpaid balance of the Facility-A Loan Account during the immediately preceding month at a rate of interest equal to

the rate of interest per annum which Bank has announced as its prime lending rate (the "Prime Rate"), which shall vary concurrently with any change in the Prime Rate. Interest shall be computed at the above rate on the basis of the actual number of days during which the principal balance of the Facility-A Loan Account is outstanding divided by 360, which shall for interest computation purposes be considered one (1) year.

2. LOAN REQUESTS. Requests for Loans hereunder shall be in writing duly executed by Borrower in the form of EXHIBIT C attached hereto and incorporated herein by this reference and shall contain a certification setting forth the matters referred to in SECTION 1, which shall disclose that Borrower is entitled to the amount and type of Loan being requested. Bank is hereby authorized to charge Borrower's deposit account with Bank for all principal and interest due Bank under this Loan Agreement.

3. DELIVERY OF PAYMENTS. Payment to Bank of all amounts due hereunder shall be made at its Santa Clara Valley Regional office, or at such other place as may be designated in writing by Bank from time to time. If any payment date fall on a day that is not a day that Bank is open for the transaction of business ("Banking Day"), the payment due date shall be extended to the next Banking Day.

4. LATE CHARGE. If any interest payment, principal payment or principal balance payment required hereunder is not received by Bank on or before ten (10) days from the date in which such payment becomes due, Borrower shall pay to Bank, a late charge equal to the lesser of (a) five percent (5.0%) of the amount of such unpaid payment, in addition to said unpaid payment or (b) the maximum amount permitted to be charged by applicable law, until remitted to Bank; provided; however, nothing contained in this SECTION 4, shall be construed as any obligation on the part of Bank to accept payment of any past due payment or less than the total unpaid principal balance of the Facility-A Loan Account following the FacilityA Maturity Date. All payments shall be applied first to any late charges due hereunder, next to accrued interest then payable and the remainder, if any, to reduce any unpaid principal due under the Facility-A Loan Account.

5. DEFAULT INTEREST. From and after the Facility-A Maturity Date, or such earlier date as all sums owing under the Facility-A Loan Account becomes due and payable by acceleration or otherwise, or upon the occurrence of an Event of Default, at the option of Bank all sums owing under the Facility-A Loan Account shall bear interest until paid in full at a rate equal to the lesser of (a) five percent (5.0%) per annum in excess of the then applicable interest rate provided for in SECTION 1.A.(3) hereof or (b) the maximum amount permitted to be charged by applicable law, until all obligations hereunder are repaid in full or the Event of Default is waived or cured to the satisfaction of Bank, as applicable.

6. DEFINITIONS. As used in this Loan Agreement and unless otherwise defined herein, all initially capitalized terms shall have the meanings set forth on EXHIBIT A attached hereto and incorporated herein by this reference.

7. REPRESENTATIONS AND WARRANTIES. Borrower represents and warrants to Bank: (a) That Borrower is a corporation, duly organized and existing in the State of its incorporation and the execution, delivery and performance of each of the Loan Documents are within Borrower's corporate powers, have been duly authorized and are not in conflict with law or the terms of any charter, by-law or other incorporation papers, or of any indenture, agreement or undertaking to which Borrower is a party or by which Borrower is bound or affected; (b) Borrower is, and at the time the Collateral becomes

subject to Bank's security interest will be, the true and lawful owner of and has, and at the time the Collateral becomes subject to Bank's security interest will have, good and clear title to the Collateral, subject only to Bank's rights therein and to Permitted Liens; (c) Each Account is, and at the time the Account comes into existence will be, a true and correct statement of a bona fide indebtedness incurred by the debtor named therein in the amount of the Account for either merchandise sold or delivered (or being held subject to Borrower's delivery instructions) to, or services rendered, performed and accepted by, the account debtor; (d) That there are and will be no defenses, counterclaims, or setoffs which may be asserted against the Accounts from time to time represented by Borrower to be Eligible Accounts, except as permitted in the definition thereof; (e) Any and all financial information, including information relating to the Collateral, submitted by Borrower to Bank, whether previously or in the future, is and will be true and correct in all material respects; (f) There is no material litigation or other proceeding pending or threatened against or affecting Borrower, and Borrower is not in default with respect to any order, writ, injunction, decree or demand of any court or other governmental or regulatory authority; (g) (i) The consolidated balance sheets of Borrower dated as of September, 1997, and the related consolidated profit and loss statements for the fiscal year then ended, copies of which have heretofore been delivered to Bank by Borrower, and all other statements and data submitted in writing by Borrower to Bank in connection with Borrower's request for credit are true and correct, and said balance sheet and profit and loss statement accurately present the financial condition of Borrower as of the date thereof and the results of the operations of Borrower for the period covered thereby, and have been prepared in accordance with GAAP, (ii) since such date, there have been no material adverse changes in the financial condition of Borrower, and (iii) Borrower has no knowledge of any material liabilities, contingent or otherwise, which are not reflected in said balance sheet, and Borrower has not entered into any special commitments or substantial contracts which are not reflected in said balance sheet, other than in the ordinary and normal course of its business, which may have a Material Adverse Effect upon its financial condition, operations or business as now conducted; (h) Borrower has no material liability for any delinquent local, state or federal taxes, and, if Borrower has contracted with any government agency, it has no liability for renegotiation of profits; and (i) to the best of its knowledge, Borrower, as of the date hereof, possesses all necessary trademarks, trade names, copyrights, patents, patent rights, and licenses to conduct its business as now operated, without any known conflict with valid trademarks, trade names, copyrights, patents, patent rights

and license rights of others.

8. NEGATIVE COVENANTS. Borrower agrees that so long as any loans, obligations or liabilities remain outstanding or unpaid to Bank or the commitment of Bank hereunder is in effect, neither Borrower, nor any of its subsidiaries ("Subsidiaries") will, without the prior written consent of Bank, which will not be unreasonably withheld:

A. Make any substantial change in the character of its business as now conducted;

B. Create, incur, assume or permit to exist any Indebtedness other than loans from Bank except obligations now existing as shown in the financial statements referenced in SECTION 7.(G)(I), excluding those being refinanced by Bank, Subordinated Debt and Permitted Indebtedness; or sell or transfer, either with or without recourse, any accounts or notes receivable or any monies due or to become due;

C. Create, incur, assume or permit to exist any mortgage, pledge, encumbrance, lien or charge of any kind (including the charge upon property at any time purchased or acquired under conditional sale or other title retention agreement) upon any asset now owned or hereafter acquired by it, other than Permitted Liens and liens in favor of Bank;

D. Sell, dispose of or grant a security interest in any of the Collateral other than to Bank (other than the disposing of such Collateral in the ordinary and normal course of its business as now conducted, such Collateral which is disposed in connection with the sale of Network Services Division or other assets which are obsolete or otherwise considered surplus), or execute any financing statements covering the Collateral in favor of any secured party or Person other than Bank;

E. Sell, transfer, assign, mortgage, pledge, license (except in the ordinary and normal course of its business as it is now conducted), lease, grant a security interest in, or otherwise encumber any of its Intellectual Property;

F. Make any loans or advances to any Person or other entity other than in the ordinary and normal course of its business as now conducted (provided that such loans or advances are not made to any Person or entity which is controlled by or under common control with Borrower);

G. Purchase or otherwise acquire all or substantially all of the assets or business of any Person or other entity; or liquidate, dissolve, merge or consolidate, or commence any proceedings therefore; or, except in the ordinary and normal course of its business as now conducted, sell (including, without limitation, the selling of any property or other asset accompanied by the leasing back of the same) any assets including any fixed assets, any property, or other assets necessary for the continuance of its business as now

conducted; and

H. Declare or pay any dividend or make any other distribution on any of its capital stock now outstanding or hereafter issued or purchase, redeem or retire any of such stock other than in dividends or distributions payable in Borrower's or any such Subsidiary's capital stock, except for the repurchase of Borrower's capital stock from officers, directors, employees or consultants of Borrower upon termination of their employment with or rendering of services to Borrower.

9. AFFIRMATIVE COVENANTS. Borrower affirmatively covenants that so long as any loans, obligations or liabilities remain outstanding or unpaid to Bank or the commitment of Bank hereunder is in effect, it will:

A. Furnish Bank from time to time such financial statements and information as Bank may reasonably request and inform Bank immediately upon the occurrence of a material adverse change therein;

B. Notwithstanding the provisions contained in SECTION 1.A.(2) hereof, permit representatives of Bank to conduct annual audits of Borrower's books and records relating to the Collateral and make extracts therefrom, with results satisfactory to Bank, provided that Bank shall use its best efforts to not interfere with the conduct of Borrower's business, and to the extent possible to arrange for verification of the Accounts directly with the account debtors obligated thereon or otherwise, all under reasonable procedures acceptable to Bank and at Borrower's sole expense. Borrower hereby acknowledges and agrees that upon completion of any such audit, including any such audit conducted in accordance with the provisions of SECTION 1.A.(2) hereof, Bank shall have the right to adjust the Borrowing Base percentage based on its review of the results of such Collateral audit, if in its reasonable discretion the Accounts have a lower likelihood of collection than Bank previously believed prior to such Collateral audit;

C. Promptly notify Bank of any attachment or other material legal process levied against any of the Collateral and any information received by Borrower relative to the Collateral, including the Accounts, the account debtors or other Persons obligated in connection therewith, which may in any way affect the value of the Collateral or the rights and remedies of Bank in respect thereto;

D. Reimburse Bank upon demand for any and all legal costs, including reasonable attorneys' fees, and other expense incurred in collecting any sums payable by Borrower under the Facility-A Loan Account or any other obligation secured hereby, enforcing any term or provision of this Loan Agreement or otherwise or in the checking, handling and collection of the Collateral and the preparation and enforcement of any agreement relating thereto;

E. Notify Bank of each location and of each office of Borrower at which records of Borrower relating to the Accounts are kept;

F. Provide, maintain and deliver to Bank policies insuring the

Collateral against loss or damage by such risks and in such amounts, forms and companies as Bank may require (to the extent customarily maintained by businesses similar to Borrower) and with loss payable to Bank, and, in the event Bank takes possession of the Collateral, the insurance policy or policies and any unearned or returned premium thereon, to the extent necessary to repay any indebtedness owed to Bank, shall at the option of Bank become the sole property of Bank, such policies and the proceeds of any other insurance covering or in any way relating to the Collateral, whether now in existence or hereafter obtained, being hereby assigned to Bank;

G. In the event the unpaid balance of the Facility-A Loan Account shall exceed the maximum amount of outstanding loans to which Borrower is entitled under SECTION 1 hereof, as applicable, Borrower shall immediately pay to Bank for credit to the Facility-A Loan Account the amount of such excess;

H. Maintain and preserve all rights, franchises and other authority adequate and necessary for the conduct of its business and maintain and preserve its existence in the State of its incorporation and any other state(s) in which Borrower conducts its business, except with respect to such other state(s), as the failure to do so would not have a Material Adverse Effect;

I. Maintain public liability, property damage and workers compensation insurance and insurance on all its insurable property against fire and other hazards with responsible insurance carriers to the extent usually maintained by similar businesses. Borrower shall provide evidence of property insurance in amounts and types acceptable to Bank, and certificates naming Bank as a loss payee;

J. Pay and discharge, before the same becomes delinquent and penalties accrue thereon, all taxes, assessments and governmental charges upon or against it or any of its properties, and any of its other liabilities at any time existing, except to the extent and so long as: (1) the same are being contested in good faith and by appropriate proceedings in such manner as not to cause any Material Adverse Effect or the loss of any right of redemption from any sale thereunder; and (2) it shall have set aside on its books reserves (segregated to the extent required by GAAP);

K. Maintain a standard and modern system of accounting in accordance with GAAP on a basis consistently maintained; permit Bank's representatives to have access to, and to examine its properties, books and records at all reasonable times; provided that Bank shall use its best efforts to not interfere with the conduct of Borrower's business;

L. Maintain its properties, equipment and facilities in good order and repair;

M. Prior to allowing any of Borrower's raw materials, work in process, finished goods inventory and property, plant and equipment to be

transported to or be held at any contract manufacturer, warehouse or other location (other than with bona fide distributors and retail accounts), Borrower shall provide notice to Bank and Borrower shall have complied with such filing and notice requirements as shall, in Bank's opinion, assure Borrower's and Bank's priority in such property over creditors of such contract manufacturer, warehouseman or operator of such other location, including, without limitation, making filings under California Commercial Code (S)2326, providing notice under California Commercial Code (S)9114 and making filings and publications as required under California Civil Code (S)3440.1 and (S)3440.5 All such filings, notices and publications shall be in form and substance satisfactory to Bank.

10. FINANCIAL COVENANTS AND INFORMATION. All financial covenants and financial information referenced herein shall be interpreted and prepared in accordance with GAAP as used in the United States of America applied on a basis consistent with previous years. Compliance with the financial covenants shall be calculated and monitored on a monthly basis, except as shall be expressly stated to the contrary. Borrower affirmatively covenants that so long as any loans, obligations or liabilities remain outstanding or unpaid to Bank or any commitment is outstanding hereunder, it will, on a consolidated basis:

A. At all times, maintain a Minimum Tangible Net Worth (meaning all assets, excluding any value for goodwill, trademarks, patents, copyrights, organization expense and other similar intangible items, less all liabilities, plus Subordinated Debt) of not less than $6,000,000.00.

B. At all times maintain a Maximum Ratio of Total Liabilities (meaning all liabilities, excluding Subordinated Debt) to Tangible Net Worth (as defined in SECTION 10.A. hereof) not to exceed 1.50:1.00;

C. At all times maintain a Minimum Quick Ratio (meaning all cash plus Accounts divided by current liabilities) of not less than 1.00:1.00;

D. As soon as it is available, but not later than twenty-five (25) days after and as of the end of each month, deliver to Bank an internally-prepared financial statement consisting of a balance sheet and profit and loss statement, in form satisfactory to Bank, and a Compliance Certificate in the form of EXHIBIT D attached hereto and incorporated herein by this reference, certified by an officer of Borrower;

E. As soon as it is available, but not later than one hundred twenty (120) days after the end of Borrower's fiscal year, deliver to Bank unqualified copies of Borrower's consolidated financial statements together with changes in financial position audited by an independent certified public accountant selected by Borrower but acceptable to Bank;

F. So long as the Facility-A Commitment shall be outstanding or any amounts remain outstanding and unpaid under the Facility-A Loan Account, as soon as it is available, but not later than twenty-five (25) days after and as of the

end of each month, deliver to Bank, in such form and detail as Bank may require, statements showing aging of the Accounts and Borrower's accounts payable, together with a Borrowing Base Certificate in the form of EXHIBIT E attached hereto and incorporated herein by this reference, certified by an officer of Borrower. Notwithstanding the foregoing, as a condition to any request for a FacilityA Loan, Borrower shall have delivered to Bank said aging statements as well as a Borrowing Base Certificate covering the most recent month then ended prior to the date of Borrower's request for an advance for a FacilityA Loan;

G. Upon the reasonable request of Bank, deliver to Bank current budgets, sales projections, operating plans and other financial exhibits and information in form and substance satisfactory to Bank; and

H. Upon any officer becoming aware, deliver immediately to Bank written notice of any pending or threatened litigation claiming, or reasonably likely to result in, damages against Borrower in an amount in excess of $150,000.00.

11. LOAN FEE. Borrower has paid, and Bank hereby acknowledges receipt of a loan fee in the amount of Twenty-five Thousand Dollars ($25,000.00).

12. DEFAULT AND REMEDIES. The occurrence of any one or more of the following shall constitute an "Event of Default": (a) Default be made in the payment of any obligation by Borrower under any Loan Document; (b) Except for any failure to pay as described in clause (a) above, material breach be made in any warranty, statement, promise, term or condition, contained herein or in any other Loan Document and the same shall not have been cured to the satisfaction of Bank within fifteen (15) days after Borrower shall have become aware thereof, whether by written notice from Bank, or otherwise, (except that no cure period shall exist for breaches in respect of Borrower's obligations under SECTION 8, SUBSECTIONS 9.A., 9.B., 9.C., 9.F., 9.G. and 9.H., SUBSECTIONS 10.A., 10.B. and 10.C. of this Loan Agreement, and SECTIONS 1 and 2 of the General Security Agreement and a cure period of five (5) days shall exist for SUBSECTIONS 9.I., 10.D., 10.E. and 10.F.); (c) Any statement, warranty or representation made by Borrower at any time proves materially false; (d) Borrower defaults in the repayment of any principal of or the payment of any interest on any indebtedness exceeding in the aggregate principal amount $100K or breaches or violates any term or provision of any promissory note, loan agreement, mortgage, indenture or other evidence of such indebtedness pursuant to which amounts outstanding in the aggregate exceed $2.0M if the effect of such breach is to permit the acceleration of such indebtedness, whether or not waived by the note holder or obligee, and such failure shall not have been cured to Bank's satisfaction within fifteen (15) calendar days after Borrower shall become aware thereof, whether by written notice from Bank or otherwise, or there has in fact been an acceleration of such indebtedness; (e) Borrower becomes insolvent or makes an assignment for the benefit of creditors; (f) Any proceeding be commenced by Borrower under any bankruptcy, reorganization, arrangement, readjustment of debt or moratorium law or statute or, any such a proceeding is commenced against Borrower and is not dismissed or stayed within ten (10) days (provided that no Loans will be made prior to the dismissal of such proceeding); (g) Any money judgment, writ of attachment, garnishment, execution or other legal process be

entered against Borrower or issued against any material property of Borrower which is not fully covered by insurance (subject to reasonable deductibles) and remains unvacated, unbonded, unstayed or unpaid or undischarged for more than fifteen (15) days (whether or not consecutive) or in any event later than five (5) days prior to the date of any proposed sale thereunder, or if any assessment for taxes against Borrower other than against any of its real property, is made by the Federal or State government or any department thereof; or (h) Any change in Borrower's financial condition, prospects or operations which has a Material Adverse Effect. Upon the occurrence and during the continuance of an Event of Default, Bank may, at its option and without demand first made and without notice to Borrower, do any one or more of the following: (i) Terminate its obligation to make loans to Borrower as provided in SECTION 1 hereof; (ii) Declare all sums secured hereby immediately due and payable; (iii) Immediately take possession of the Collateral wherever it may be found, using all legally permissible means to do so, or require Borrower to assemble the Collateral and make it available to Bank at a place designated by Bank which is reasonably convenient to Borrower and

Bank, and Borrower waives all claims for damages due to or arising from or connected with any such taking; (iv) Proceed in the foreclosure of Bank's security interest and sale of the Collateral in any manner permitted by law, or provided for herein; (v) Sell, lease or otherwise dispose of the Collateral at public or private sale, with or without having the Collateral at the place of sale, and upon terms and in such manner as Bank may determine, and Bank may purchase same at any such sale; (vi) Retain the Collateral in full satisfaction of the obligations secured thereby to the extent permitted under the Uniform Commercial Code; (vii) Exercise any remedies of a secured party under the Uniform Commercial Code; or (viii) Immediately record the IP Security Agreement with the United States Patent and Trademark Office, the Register of Copyrights and/or the UCC Division of the California Secretary of State, to perfect Bank's security interests created and assignment granted in the Intellectual Property thereunder. Prior to any such disposition, Bank may, at its option, cause any of the Collateral to be repaired or reconditioned in such manner and to such extent as Bank may deem advisable, and any sums expended therefor by Bank shall be repaid by Borrower and secured hereby. Bank shall have the right to enforce one or more remedies hereunder successively or concurrently, and any such action shall not estop or prevent Bank from pursuing any further remedy which it may have hereunder or by law. If a sufficient sum is not realized from any such disposition of the Collateral to pay all obligations secured by this Loan Agreement, Borrower hereby promises and agrees to pay Bank any deficiency.

13. RECORDS RETENTION. Borrower authorizes Bank to destroy all invoices, delivery receipts, reports and other types of documents and records submitted to Bank in connection with the transactions contemplated herein at any time subsequent to four (4) months from the time such items are delivered to Bank.

14. ATTORNEYS' FEES. Borrower agrees to reimburse Bank for its reasonable attorneys' fees and expenses incurred in connection with the negotiation,

preparation, execution and delivery of the Loan Documents.

15. GOVERNING LAW; JUDICIAL REFERENCE.

A. GOVERNING LAW. This Agreement shall be deemed to have been made in the State of California and the validity, construction, interpretation, and enforcement hereof, and the rights of the parties hereto, shall be determined under, governed by, and construed in accordance with the internal laws of the State of California, without regard to principles of conflicts of law.

B. JUDICIAL REFERENCE.

(1) Other than (a) nonjudicial foreclosure and all matters in connection therewith regarding security interests in real or personal property; or (b) the appointment of a receiver, or the exercise of other provisional remedies (any and all of which may be initiated pursuant to applicable law), each controversy, dispute or claim between the parties arising out of or relating to this Loan Agreement or the other Loan Documents, which controversy, dispute or claim is not settled in writing within thirty (30) days after the "Claim Date" (defined as the date on which a party subject to this Loan Agreement gives written notice to all other parties that a controversy, dispute or claim exists), will be settled by a reference proceeding in California in accordance with the provisions of Section 638 et seq. of the California Code of Civil Procedure, or their successor section ("CCP"), which shall constitute the exclusive remedy for the settlement of any controversy, dispute or claim concerning this Loan Agreement, including whether such controversy, dispute or claim is subject to the reference proceeding and except as set forth above, the parties waive their rights to initiate any legal proceedings against each other in any court or jurisdiction other than the Superior Court in the County where the real property, if any, is located or Santa Clara County, if none (the "Court"). The referee shall be a retired Judge of the Court selected by mutual agreement of the parties, and if they cannot so agree within forty-five (45) days after the Claim Date, the referee shall be promptly selected by the Presiding Judge of the Court (or his/her representative). The referee shall be appointed to sit as a temporary judge, with all of the powers for a temporary judge, as authorized by law, and upon selection should take and subscribe to the oath of office as provided for in Rule 244 of the California Rules of Court (or any subsequently enacted Rule). Each party shall have one peremptory challenge pursuant to CCP (S) 170.6. The referee shall (x) be requested to set the matter for hearing within sixty (60) days after the date of selection of the referee and (y) try any and all issues of law or fact and report a statement of decision upon them, if possible, within ninety (90) days of the Claim Date. Any decision rendered by the referee will be final, binding and conclusive and judgement shall be entered pursuant to CCP (S) 644 in any court in the State of California having jurisdiction. Any party may apply for a reference proceeding at any time after thirty (30) days following notice to any other party of the nature of the controversy, dispute or claim, by filing a petition for a hearing and/or trial. All discovery

permitted by this Loan Agreement shall be completed no later than fifteen (15) days before the first hearing date established by the referee. The referee may extend such period in the event of a party's refusal to provide requested discovery for any reason whatsoever, including, without limitation, legal objections raised to such discovery or unavailability of a witness due to absence or illness. No party shall be entitled to "priority" in conducting discovery. Depositions may be taken by either party upon seven (7) days written notice, and request for production or inspection of documents shall be responded to within ten (10) days after service. All disputes relating to discovery which cannot be resolved by the parties shall be submitted to the referee whose decision shall be final and binding upon the parties. Pending appointment of the referee as provided herein, the Superior Court is empowered to issue temporary and/or provisional remedies, as appropriate.

(2) Except as expressly set forth in this Loan Agreement, the referee shall determine the manner in which the reference proceeding is conducted including the time and place of all hearings, the order of presentation of evidence, and all other questions that arise with respect to the course of the reference proceeding. All proceedings and hearings conducted before the referee, except for trial, shall be conducted without a court reporter except that when any party so requests, a court reporter will be used at any hearing conducted before the referee. The party making such a request shall have the obligation to arrange for and pay for the court reporter. The costs of the court reporter at the trial shall be borne equally by the parties.

(3) The referee shall be required to determine all issues in accordance with existing case law and the statutory laws of the State of California. The rules of evidence applicable to proceedings at law in the State of California will be applicable to the reference proceeding. The referee shall be empowered to enter equitable as well as legal relief, to provide all temporary and/or provisional remedies and to enter equitable orders that will be binding upon the parties. The referee shall issue a single judgment at the close of the reference proceeding which shall dispose of all of the claims of the parties that are the subject of the reference. The parties hereto expressly reserve the right to contest or appeal from the final judgment or any appealable order or appealable judgment entered by the referee. The parties hereto expressly reserve the right to findings of fact, conclusions of laws, a written statement of decision, and the right to move for a new trial or a different judgment, which new trial, if granted, is also to be a reference proceeding under this provision.

(4) In the event that the enabling legislation which provides for appointment of a referee is repealed (and no successor statute is enacted), any dispute between the parties that would otherwise be determined by the reference procedure herein described will be resolved and determined by arbitration. The arbitration will be conducted by a retired judge of the Court, in accordance with the California Arbitration Act, (S) 1280 through (S) 1294.2 of the CCP as amended from time to time. The limitations with respect to discovery as set forth hereinabove shall apply to any such arbitration proceeding.

16. MISCELLANEOUS PROVISIONS.

A. Borrower agrees that it will review the products and services offered by Bank and use its best efforts to establish its primary banking accounts with Bank, provided, that the products and services offered by Bank are satisfactory to Borrower.

B. Nothing herein shall in any way limit the effect of the conditions set forth in any other security or other agreement executed by Borrower, but each and every condition hereof shall be in addition thereto.

C. No failure or delay on the part of Bank, in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof.

D. All rights and remedies existing under this Loan Agreement or any other Loan Document are cumulative to, and not exclusive of, any rights or remedies otherwise available.

E. All headings and captions in this Loan Agreement and any related documents are for convenience only and shall not have any substantive effect.

F. This Loan Agreement may be executed in any number of counterparts, each of which when so delivered shall be deemed an original, but all such counterparts shall constitute but one and the same instrument. Each such

agreement shall become effective upon the execution of a counterpart hereof or thereof by each of the parties hereto and telephonic notification that such executed counterparts has been received by Borrower and Bank.

BANK:	BORROWER:
IMPERIAL BANK	METAWAVE COMMUNICATIONS CORPORATION, A DELAWARE CORPORATION
By: /s/ James E. Ellison	/s/ Vito Palermo
Senior Vice President/Manager	Chief Financial Officer and Secretary

LIST OF EXHIBITS AND SCHEDULES

EXHIBIT A: Definitions
SCHEDULE 1 TO EXHIBIT A: List of Specific Permitted Indebtedness

SCHEDULE 2 TO EXHIBIT A: List of Specific Permitted Liens

EXHIBIT B: Form of Application and Letter of Credit Agreement

EXHIBIT C: Loan Request Form

EXHIBIT D: Compliance Certificate

EXHIBIT E: Borrowing Base Certificate

EXHIBIT A

DEFINITIONS

"ACCOUNTS" means any right to payment for goods sold or leased, or to be sold or to be leased, or for services rendered or to be rendered no matter how evidenced, including accounts receivable, contract rights, chattel paper, instruments, purchase orders, notes, drafts, acceptances, general intangibles and other forms of obligations and receivables.

"CAPITAL LEASE" means, as to any Person, any lease of any Property by such Person as lessee that is, or should be in accordance with Financing Accounting Standards Board Statement No. 13, classified and accounted for as a "capital lease" on the balance sheet of such Person prepared in accordance with GAAP.

"CAPITAL LEASE OBLIGATION" means, with respect to any Capital Lease, the amount of the obligation of the lessee thereunder that, in accordance with GAAP, would appear on a balance sheet of such lessee in respect of such Capital Lease or otherwise be disclosed in a note to such balance sheet.

"COLLATERAL" means any and all personal property of Borrower which is assigned or hereafter is assigned to Bank as security or in which Bank now has or hereafter acquires a security interest hereunder (including, without limitation, the Accounts), or pursuant to the terms of the General Security Agreement, the Intellectual Property Security Agreement (upon its recordation in accordance with SECTION 12(VIII) hereof) or otherwise.

"CONTINGENT OBLIGATION" means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any indebtedness, lease, dividend, letter of credit or other obligation of another, including, without limitation, any such obligation directly or indirectly guaranteed, endorsed (otherwise than for collection or deposit in the ordinary course of business), comade or discounted or sold with recourse by that Person,

or in respect of which that Person is otherwise directly or indirectly liable, including, without limitation, any such obligation for which that Person is in effect liable through any agreement (contingent or otherwise) to purchase, repurchase or otherwise acquire such obligation or any security therefor, or to provide funds for the payment or discharge of such obligation (whether in the form of loans, advances, capital stock purchases, capital contributions or otherwise), or to maintain the solvency of the obligor of such obligation, or to make payment for any products, materials or supplies or for any transportation, services or lease regardless of the nondelivery or nonfurnishing thereof, in any such case if the purpose or intent of such agreement is to provide assurance that such obligation will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such obligation will be protected (in whole or in part) against loss in respect thereof. The amount of any Contingent Obligation of any Person shall be deemed to be an amount equal to the maximum amount of such Person's liability with respect to the stated or determinable amount of the primary obligation for which such Contingent Obligation is incurred or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof (assuming such Person is required to perform thereunder).

"ELIGIBLE ACCOUNTS" means such of Borrower's Accounts as Bank in its sole reasonable discretion shall determine are eligible from time to time; provided, however, that in no event shall Eligible Accounts include the following:

(1) all domestic and pre-approved international (foreign) Accounts under which payment is not received within the earlier of (a) 90 days from the applicable invoice date and (b) 60 days from the applicable payment due date;

(2) all Accounts against which the account debtor or any other Person obligated to make payment thereon asserts any defense, offset, counterclaim or other right to avoid or reduce the liability represented by the Accounts;

(3) any Accounts if the account debtor or any other Person liable in connection therewith is insolvent, subject to bankruptcy or receivership proceedings or has made an assignment for the benefit of creditors or whose credit standing is unacceptable to Bank and Bank has so notified Borrower;

(4) Accounts with respect to which the account debtor is an officer, director, shareholder, employee or Subsidiary;

(5) Accounts due from an account debtor if more than twenty-five percent (25%) of the aggregate amount of Accounts of such account debtor have at that time remained unpaid for more than the earlier of (a) ninety (90) days from the applicable invoice date and (b) sixty (60) days from the applicable payment due date;

(6) Accounts with respect to international (foreign) transactions unless (a) such Accounts are insured or covered by a letter of credit in a manner and form acceptable to the Bank, (b) the account debtors of such Accounts are foreign companies with sales greater than Five Hundred Million Dollars ($500,000,000) per year, or (c) Bank shall have otherwise permitted in writing in its sole and absolute direction;

(7) salesperson's accounts for promotional purposes;

(8) the amount by which the aggregate of all Accounts of an account debtor exceeds thirty-five percent (35%) of the total accounts receivable balance;

(9) Accounts where the account debtor is a seller to borrower, to the extent that a potential offset exists; and

(10) Accounts where the account debtor is a federal governmental entity, federal agency or instrumentality thereof.

"EVENT OF DEFAULT" has the meaning set forth in SECTION 12.

"FACILITY-A MATURITY DATE" has the meaning set forth in SECTION 1.A.

"GAAP" means generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other Person as may be approved by the significant segment of the accounting profession, which are applicable to the circumstances as of the date of determination.

"GENERAL SECURITY AGREEMENT" means that certain General Security Agreement (Tangible and Intangible Personal Property) dated of even date herewith, made by Borrower in favor of Bank.

"INDEBTEDNESS" means, as to any Person, without duplication, (a) all indebtedness of such Person for borrowed money, including, without limitation, all of such indebtedness outstanding under this Loan Agreement and any of the other Loan Documents, (b) all Capital Lease Obligations of such Person, (c) to the extent of the outstanding indebtedness thereunder, any obligation of such Person representing an extension of credit to such Person, whether or not for borrowed money, (d) any obligation of such Person for the deferred purchase price of Property or services (other than (i) trade or other accounts payable in the ordinary course of business in accordance with customary industry terms and (ii) deferred franchise fees), (e) all Contingent Obligations, (f) any obligation of such Person of the nature described in clauses (a), (b), (c), (d) or (e) above, that is secured by a Lien on assets of such Person and which is nonrecourse to the credit of such Person, but only to the extent of the fair market value of the assets so subject to the Lien, (g) obligations of such Person arising under acceptance facilities or under facilities for the discount of accounts receivable of such Person, (h) any obligation of such Person to

reimburse the issuer of any letter of credit issued for the account of such Person upon which a draw has been made, and (i) any lease having the effect of indebtedness, whether or not the same shall be treated as such on the balance sheet of Borrower under GAAP.

"IP SECURITY AGREEMENT" means that certain Collateral Assignment, Patent Mortgage and Security Agreement executed in blank by Borrower in favor of Bank to be filed by Bank in accordance with SECTION 12(VIII) hereof.

"INTELLECTUAL PROPERTY" means collectively, all of Borrower's intellectual property, including, without limitation, the following:

(1) Any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret (collectively, the "Copyrights");

(2) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products;

(3) Any and all design rights which may be available to Borrower;

(4) All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same (collectively, the "Patents");

(5) Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks (collectively, the "Trademarks");

(6) Any and all claims for damages by way of past, present and future infringement of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

(7) All licenses or other rights to use any of the Copyrights, Patents or Trademarks, and all license fees and royalties arising from such use to the extent permitted by such license or rights;

(8) All amendments, renewals and extensions of any of the Copyrights, Patents or Trademarks; and

(9) All proceeds and products of the foregoing, including, without limitation, all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

"LIEN" means any mortgage, pledge, security interest, lien or other charge or encumbrance, including the lien or retained security title of a conditional vendor, upon or with respect to any property or assets.

"LOAN DOCUMENTS" means this Loan Agreement, the General Security Agreement and that certain Agreement to Provide Insurance (Real or Personal Property) dated of even date herewith, each as executed by Borrower in favor of Bank, together with all other documents entered into or delivered pursuant to any of the foregoing (including, without limitation, the IP Security Agreement upon its

recordation in accordance with SECTION 12(VIII) hereof), in each case as originally executed or as the same may from time to time be modified, amended, supplemented or restated.

"LOANS" means the Facility-A Loans advanced pursuant to SECTION 1.

"MATERIAL ADVERSE EFFECT" means any set of circumstances or events which (a) has or could reasonably be expected to have any material adverse effect upon the validity or enforceability of any material provision of any Loan Document, (b) is or could reasonably be expected to be material and adverse to the condition (financial or otherwise) or business operations of Borrower, (c) materially impairs or could reasonably be expected to materially impair the ability of Borrower, to perform its material Obligations, (d) materially impairs or could reasonably be expected to materially impair the value or priority of Bank's security interest in any Collateral or (e) materially impairs or could reasonably be expected to materially impair the ability of Bank to enforce any of its legal remedies pursuant to the Loan Documents.

"PERMITTED INDEBTEDNESS" means the following:

(1) indebtedness of Borrower or Indebtedness and Contingent Obligations of its Subsidiaries in favor of Bank arising under this Loan Agreement and the other Loan Documents;

(2) the existing Indebtedness and Contingent Obligations disclosed on SCHEDULE 1 attached hereto and incorporated herein by this reference; provided that the principal amount thereof is not increased and the terms thereof are not modified to impose more burdensome terms upon Borrower or any of its Subsidiaries;

(3) the Subordinated Debt;

(4) extensions, renewals or refinancings of Indebtedness permitted under this Loan Agreement, other than clause (3) immediately above;

(5) accrued dividends on the preferred stock of Borrower;

(6) interest rate and currency hedging agreements;

(7) guaranties of any Subsidiary's suppliers in connection with the purchase of supplies in the ordinary course of business;

(8) guaranties of lease obligations incurred in the ordinary course of business and to the extent otherwise permitted hereunder;

(9) Contingent Obligations constituting Permitted Liens; and

(10) the indebtedness referred to in clause (3)(a) of the definition

of Permitted Liens.

"PERMITTED LIENS" means the following:

(1) liens and security interests existing as of this date and disclosed in SCHEDULE 2 attached hereto and incorporated herein by this reference;

(2) liens for taxes, fees, assessments or other governmental charges or levies, either not delinquent or being contested in good faith by appropriate proceedings;

(3) liens and security interests (a) upon or in any equipment acquired or held by Borrower to secure the purchase price of such equipment or indebtedness incurred solely for the purpose of financing the acquisition of such equipment and in an amount not greater than the purchase price thereof or (b) existing on such equipment at the time of its acquisition, provided that the lien and security interest is confined solely to the property so acquired and improvements thereon, and the proceeds of such equipment;

(4) liens consisting of leases or subleases and licenses and sublicenses granted to others in the ordinary course of Borrower's business not interfering in any material respect with the business of Borrower and any interest or title of a lessor or licensor under any lease or license, as applicable;

(5) liens securing claims or demands of materialmen, mechanics, carriers, warehousemen, landlords and other like persons or entities imposed without action of such parties;

(6) liens incurred or deposits made in the ordinary course of Borrower's business in connection with worker's compensation, unemployment insurance, social security and other like laws;

(7) liens arising from judgments, decrees or attachments in circumstances not constituting an Event of Default;

(8) easements, reservations, rights-of-way, restrictions, minor defects or irregularities in title and other similar charges or encumbrances affecting real property not interfering in any material respect with the ordinary conduct of Borrower's business;

(9) liens in favor of customs and revenue authorities arising as a matter of law to secure payment of customs duties in connection with the importation of goods;

(10) liens that are not prior to Bank's security interest which constitute rights of set-off of a customary nature;

(11) any interest or title of a lessor in equipment subject to any Capitalized Lease otherwise permitted hereunder; and

(12) any liens arising from the filing of any financing statements relating to true leases otherwise permitted hereunder.

"PERSON" means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, limited liability company, institution, public benefit corporation, firm, joint stock company, estate, entity or governmental agency.

"PROPERTY" means any interest in any kind of property or asset, whether real, personal or mixed, whether tangible or intangible.

"SUBORDINATED DEBT" means indebtedness of Borrower, the repayment of

principal of which is fully subordinated in time and right of payment to the Loans, and has been approved in Bank's sole and absolute discretion and in writing.

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SCHEDULE 1 TO EXHIBIT A

SPECIFIC PERMITTED INDEBTEDNESS

14

SCHEDULE 2 TO EXHIBIT A

SPECIFIC PERMITTED LIENS

15

EXHIBIT B

FORM OF APPLICATION AND LETTER OF CREDIT AGREEMENT

[TO BE PROVIDED AND ATTACHED BY BANK]

16

EXHIBIT C

LOAN REQUEST FORM

[TO BE PROVIDED AND ATTACHED BY BANK]

17

EXHIBIT D

COMPLIANCE CERTIFICATE

The consolidated financial statements dated as of _____ of METAWAVE COMMUNICATIONS CORPORATION, a Delaware corporation ("Borrower") attached hereto and submitted to IMPERIAL BANK ("Bank") pursuant to that certain Loan Agreement dated as of October __, 1997, entered into between Borrower and Bank (the "Loan Agreement"), are in compliance with all financial covenants (unless otherwise noted below) as specified in SECTION 10 therein, as follows:

COVENANT:	ACTUAL:

A. Minimum Tangible Net Worth of:

$6,000,000.00

B. Maximum Liabilities to Tangible Net Worth Ratio:

1.50 : 1.00 _____

C. Minimum Quick Ratio:

1.00 : 1.00 _____

Exceptions: (if none, so state):

The undersigned authorized officer of Borrower hereby certifies that Borrower is in complete compliance with the terms and conditions of the Loan Agreement for the period ending _____, ____, and as of the date of this Compliance Certificate the representations and warranties stated therein are true, accurate and complete as of the date hereof (except as to those representations and warranties which specifically reference a particular date and except as noted above).

The undersigned further certifies that s/he knows of no pending conditions which may cause an Event of Default (as defined in the Loan Agreement) to exist in the next thirty (30) days. The required support documents for this certification are attached and prepared in accordance with GAAP consistently applied.

Date:_____

METAWAVE COMMUNICATIONS CORPORATION,
a Delaware corporation

EXHIBIT E

BORROWING BASE CERTIFICATE

(To be provided and attached by Bank)

EXHIBIT 10.14

AMENDMENT TO LOAN AGREEMENT

This Amendment to Loan Agreement (the "Amendment") is entered into as of May 6, 1998, by and between Imperial Bank ("Bank") and Metawave Communications Corporation ("Borrower").

RECITALS

Borrower and Bank are parties to that certain Loan Agreement dated as of October 14, 1997, as amended from time to time (the "Agreement"). The parties desire to amend the Agreement in accordance with the terms of this Amendment.

NOW, THEREFORE, the parties agree as follows:

1. The reference in Section 1.A of the Agreement to "$5,000,000" is amended to read "$7,500,000". The reference in Section 1.A(3) of the Agreement to "April 30, 1998" is amended to read "June 30, 1998".

2. The reference in Section 10.C of the Agreement to "1.00:1.00" is amended to read "1.50 to 1.00", and Section 10.I is added to the Agreement, as follows: Upon the date (the "Step-Up Date") that is the earlier to occur of December 31, 1998 or the date that Borrower receives not less than $40,000,000 from the sale of its equity securities pursuant to an offering made under a registration statement filed in accordance with the Securities Act of 1933, as amended, Borrower shall maintain, at all times, (i) a Minimum Tangible Net Worth of at least $25,000,000 and (ii) a Minimum Quick Ratio of not less than 1.00 to 1.00. Bank waives Borrower's obligation to comply with Section 10.A and Section 10.B until the Step-Up-Date. The definition of Minimum Quick Ratio in Section 10.C is amended to exclude from current liabilities the obligations under the Notes issued pursuant to the Note Agreement dated as of April 29, 1998 (the "Note Agreement"). The reference in Sections 10(F) and 10(F) to "twenty five (25) days" are amended to read "thirty (30) days".

3. Notwithstanding the provisions of Clause (8) of the defined term "Eligible Accounts", the concentration limit for Accounts owing to Borrower by Alltel, 360 Communications, Millicom, GTE and Airtouch shall be fifty percent (50%). Bank acknowledges that the terms "Permitted Indebtedness" and "Permitted Liens" include the indebtedness incurred under, and the security interests granted in connection with, the Note Agreement and the equipment lease between Borrower and Insight Investment Corp. The priority of Bank's security interest in the Collateral is subject to that certain Intercreditor Agreement (the "Intercreditor Agreement") dated as of April 28, 1998 among Bank and the Creditors named therein. The IP Security Agreement shall terminate, all references in the Agreement to the IP Security Agreement shall be deleted, and

Bank shall return the original of the IP Security Agreement to Borrower; provided that Bank retains a second priority security interest in the Creditor Collateral, as defined in the Intercreditor Agreement. Borrower and Bank shall execute an Amendment to Financing Statement in a mutually acceptable form to clarify that Bank has a first priority security interest in the Imperial Collateral and a second priority security interest in the Creditor Collateral. "Collateral" under the General Security Agreement dated as of October 14, 1997 between Borrower and Bank, shall include all of such Imperial Collateral and Creditor Collateral, subject to the priorities specified in the Intercreditor Agreement.

4. Unless otherwise defined, all capitalized terms in this Amendment shall be defined in the Agreement. Except as amended, the Agreement remains in full force and effect.

5. Borrower represents and warrants that the Representations and Warranties contained in the Agreement are true and correct as of the date of this Amendment (except that the financial statements to which such Representations and Warranties relate shall be those dated as of March 31, 1998, not September 30, 1997, and except such representations and warranties to be expressly true as of a specific date), and that no unwaived or uncured Event of Default has occurred and is continuing.

6. As a condition to the effectiveness of this Amendment, Borrower shall pay Bank a fee equal to $9,375, plus the expenses incurred by Bank in preparing this Amendment. This Amendment may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one instrument.

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the first date above written.

METAWAVE COMMUNICATIONS CORPORATION

By: /s/ Vito E. Palermo

Chief Financial Officer

IMPERIAL BANK

By: /s/ James E. Ellison

Senior Vice President

CORPORATE RESOLUTIONS TO BORROW

BORROWER: Metawave Communications Corporation.

I, the undersigned Secretary or Assistant Secretary of Metawave Communications Corporation (the "Corporation"), HEREBY CERTIFY that the Corporation is organized and existing under and by virtue of the laws of the state of its incorporation.

I FURTHER CERTIFY that at a meeting of the Directors of the Corporation (or by other duly authorized corporate action in lieu of a meeting), duly called and held, at which a quorum was present and voting, the following resolutions were adopted.

BE IT RESOLVED, that ANY ONE (1) of the following named officers, employees, or agents of this Corporation, whose actual signatures are shown below:

NAMES	POSITIONS	ACTUAL SIGNATURES

acting for an on behalf of this Corporation and as its act and deed be, and they hereby are, authorized and empowered:

BORROW MONEY. To borrow from time to time from Imperial Bank ("Bank"), on such terms as may be agreed upon between the officers, employees, or agents and Bank, such sum or sums of money as in their judgment should be borrowed, without limitation, including such sums as are specified in the Amendment to Loan Agreement dated as of May 6, 1998, as amended from time to time by Bank and Corporation (the "Loan Agreement").

EXECUTE NOTES. To execute and deliver to Bank the promissory note or notes of the Corporation, on Bank's forms, at such rates of interest and on such terms as may be agreed upon, evidencing the sums of money so borrowed or any indebtedness of the Corporation to Bank, and also to execute and deliver to Bank one or more renewals, extensions, modifications, refinancing, consolidations, or substitutions for one or more of the notes, or any portion of the notes.

GRANT SECURITY. To grant a security interest to Bank in the Collateral described in the Loan Agreement, which security interest shall secure all of the Corporation's Obligations, as described in the Loan Agreement.

NEGOTIATE ITEMS. To draw, endorse, and discount with Bank all drafts, trade acceptances, promissory notes, or other evidences of indebtedness payable to or belonging to the Corporation or in which the Corporation may have an interest, and either to receive cash for the same or to cause such proceeds to be credited to the account of the Corporation with Bank, or to cause such other disposition of the proceeds derived therefrom as they may deem advisable.

LETTERS OF CREDIT. To execute letters of credit applications and other related documents pertaining to Bank's issuance of letters of credit.

FOREIGN EXCHANGE CONTRACTS. To request Bank to enter into foreign exchange contracts on its behalf.

FURTHER ACTS. In the case of lines of credit, to designate additional or alternate individuals as being authorized to request advances thereunder, and in all cases, to do and perform such other acts and things, to pay any and all fees and costs, and to execute and deliver such other documents and agreements as they may in their discretion deem reasonably necessary or proper in order to carry into effect the provisions of these Resolutions.

BE IT FURTHER RESOLVED, that any and all acts authorized pursuant to these resolutions and performed prior to the passage of these resolutions are hereby ratified and approved, that these Resolutions shall remain in full force and effect and Bank may rely on these Resolutions until written notice of their revocation shall have been delivered to and received by Bank. Any such notice shall not affect any of the Corporation's agreements or commitments in effect at the time notice is given.

I FURTHER CERTIFY that the officers, employees, and agents named above are duly elected, appointed, or employed by or for the Corporation, as the case may be, and occupy the positions set forth opposite their respective names; that the foregoing Resolutions now stand of record on the books of the Corporation; and that the Resolutions are in full force and effect and have not been modified or revoked in any manner whatsoever.

I FURTHER CERTIFY that attached hereto are true and correct copies of the Certificate of Incorporation and Bylaws of the Corporation.

IN WITNESS WHEREOF, I have here unto set my hand as of May ___, 1998, and attest that the signatures set opposite the names listed above are their genuine signatures.

CERTIFIED TO AND ATTESTED BY:

X _____

EXHIBIT 10.15

METAWAVE COMMUNICATIONS CORPORATION

NOTE AGREEMENT

Dated as of April 27, 1998

Re:

$29,000,000 13.75% Senior Secured Bridge Notes

due April 28, 2000

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METAWAVE COMMUNICATIONS CORPORATION

NOTE AGREEMENT

RE: $29,000,000 13.75% SENIOR SECURED BRIDGE NOTES

DUE APRIL 28, 2000

Dated as of April 27, 1998

To the Purchasers named in Schedule I attached hereto that are signatories to this Agreement

Ladies and Gentlemen:

The undersigned, Metawave Communications Corporation, a Delaware corporation (the "Company") agrees with each Purchaser as follows:

SECTION 1. DESCRIPTION OF NOTES; COMMITMENT; WARRANTS.

Section 1.1. Description of Notes. The Company will authorize the issue and sale of $29,000,000 aggregate original principal amount of its 13.75% Senior Secured Bridge Notes due April 28, 2000 (the "Notes") to be dated the date of issue. Interest on the Notes will accrue at the lower of (i) 13.75% per annum (as adjusted pursuant to the next succeeding sentence, the "Base Interest Rate") and (ii) the highest rate permitted by law (such lower amount being referred to as the "Interest Rate"), and will be payable semi-annually on April 28th and October 28th of each year, commencing on October 28, 1998, and at maturity. On the twelve-month anniversary of the Closing Date, and at the end of each subsequent one hundred eighty (180) day period, the Base Interest Rate will increase by 200 basis points, up to a maximum Base Interest Rate of 18.0%. The interest shall be payable at the option of the Company (x) in kind by the issuance to the holders thereof of separate promissory notes (each an "Interest Note," and, collectively, the "Interest Notes"), in each case having a principal amount equal to the amount of interest due and payable on such holder's outstanding Notes on such interest payment date, or (y) in cash; provided that
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the Company will only be entitled to pay such interest in cash if it has irrevocably notified in writing the holders of the Notes of its intention to make a cash interest payment at least ten (10) Business Days before the relevant interest payment date, it being agreed that payment in kind via Interest Notes is the default interest payment method in the absence of such notice. Interest on Interest Notes shall accrue at the same Interest Rate per annum and shall be payable in kind by the issuance of additional Interest Notes or in cash as provided above on the same date as interest is payable in kind or in cash as provided above on the Notes. The unpaid principal balance of all Notes (including Interest Notes), together with accrued but unpaid interest thereon, shall be due and payable in cash on the stated date of maturity of the Notes.

Notwithstanding different issue dates, unless the context clearly requires otherwise, all Interest Notes shall be Notes for all purposes of this Agreement. The Notes will bear interest on overdue principal (including any overdue required or optional prepayment of principal) and premium, if any, and (to the extent legally enforceable) on any overdue installment of interest at the Interest Rate from the date such payment is due, whether by acceleration or otherwise, until paid. The Notes (including the Interest Notes) will mature on April 28, 2000, and will be substantially in the form attached hereto as Exhibit A. Interest on the Notes shall accrue and be computed semi-annually on the basis of a 360-day year of twelve 30-day months. The term "Notes" as used herein shall include each Note (including each Interest Note) delivered at any time pursuant to this Agreement. The terms that are capitalized herein shall have the meanings set forth in Section 8.1 hereof unless the context shall otherwise require or unless they are defined elsewhere herein. The Notes (including Interest Notes) will be senior secured obligations of the Company, ranking pari passu in right of payment with all permitted existing and permitted
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future senior secured Indebtedness of the Company and senior to all unsecured or subordinated Indebtedness of the Company, all non-permitted senior secured indebtedness of the Company and all other senior indebtedness of the Company.

Section 1.2. Commitment, Closing Date. Subject to the terms and conditions hereof and on the basis of the representations and warranties hereinafter set forth in this Agreement and in Exhibit C hereto, the Company agrees to issue and sell to each Purchaser, and each Purchaser agrees to purchase from the Company, the aggregate principal amount of Notes set forth opposite such Purchaser's name on Schedule I attached hereto by delivery of the Purchase Price for such Notes as set forth on Schedule I. On the Closing Date (as defined below), the Company also shall deliver to the Purchasers, pro rata
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in proportion to the number of Notes they purchase on the Closing Date, Warrants to purchase an aggregate of 537,500 shares of the Company's Series D Preferred Stock, par value $.0001 per share (the "Preferred Stock") substantially in the form of Exhibit B hereto (the "Warrants") and registered in the name of each Purchaser or its nominee and in such denominations as reasonably requested by such Purchaser. Delivery of the Notes and Warrants will be made at the offices of Kleinberg, Kaplan, Wolff & Cohen, P.C. against payment therefor, pursuant to the wiring instructions set forth on the Company's signature page S-1 to this Agreement, in immediately available funds in an amount equal to the Purchase Price at 3 P.M., Eastern time on April 28, 1998 (the "Closing Date"). The Notes delivered to each Purchaser on the Closing Date will be registered in the name of such Purchaser or in the name of such nominees and in such denominations as such Purchaser may specify no later than two Business Days prior to the Closing Date and in substantially the form attached hereto as Exhibit A.

Section 1.3. Additional Warrants.

(a) In the event that the Company offers or sells certain Stock, or certain securities convertible into or exchangeable or exercisable for Stock, whether in a public or private offering, while any Notes or Warrants are outstanding and such Stock is valued (based on the consideration directly received by the Company upon such sale, conversion or exchange) at less than $9.25 per share (as presently constituted), then the Company shall issue additional Warrants to then holders of the Warrants and adjust the Warrant exercise price, all as set forth in the Warrants.

(b) On the twelve month anniversary of the Closing Date, and at the end of each subsequent ninety (90) day period, until the Company has completed an Initial Public Offering and redeemed at least one-half of all issued and outstanding Notes (including Interest Notes, if any), the Company will issue to then holders of Notes additional Warrants to purchase two hundred thousand (200,000) shares of Preferred Stock (pro rata in proportion to the principal amount of the Notes then held by the Note holders).

Section 1.4. Limits on Rate of Return. The Company may redeem and repurchase from the Purchasers and all subsequent holders of the Notes, the Warrants and any shares of Preferred Stock issued upon exercise of the Warrants (the "Preferred Shares") all such Notes, Warrants and Preferred Shares if and only if, on or before the earlier of (a) the closing of the Company's first Initial Public Offering, or (b) April 28, 1999, time being of the essence, the

Company shall have completed in all respects the redemption and repurchase of and payment in full for any and all Notes, Warrants and Preferred Shares for an aggregate redemption and repurchase price of $40,600,000 in cash (subject to equitable increase upon the occurrence of any of the adjustment events specified in Section 5 of the Warrants), such redemption price to be allocated first to the redemption of the Notes at their face value, then to the redemption of the Preferred Shares at their liquidation value, and any excess to the redemption of the Warrants. This right is (a) subject to the Company's obligation to give all record holders of the Notes, Warrants and Preferred Shares as much notice as is reasonably possible (but in no event less than 15 Business Days' notice) of its intention to so redeem and repurchase on or before April 28, 1999; (b) further subject, if the Company is to use all or part of the proceeds from an Initial Public Offering for such redemption, to the Company's affirmative obligation to so inform all such record holders on the first day following the day a registration statement relating to the Initial Public Offering is first filed (in preliminary, final, confidential or other form) with the Securities and Exchange Commission; and (c) further subject to the receipt by the holders of the Notes, the Warrants and the Preferred Shares of an opinion of outside counsel to the Company, in form and content satisfactory to such holders, that such redemption and payment (i) does not violate the charter, by-laws or any agreement to which the Company is a party or by which its property is bound, (ii) is not in violation of any law, rule, regulation or statute, and (iii) is not a void or voidable (or similar) transfer under applicable federal or state law (and a representation of the Company to that effect is also given to such holders). To the extent the Company is obligated to give notice under (a) above after its Initial Public Offering, it may also give notice to the public via a press release. With respect to any Warrants, Warrant Shares or Common Shares which have been sold by a Purchaser prior to the completion of the redemption set forth in this Section 1.4, such Warrants, Warrant Shares and Common Shares shall be subject to the Company's redemption rights in this Section 1.4.

SECTION 2. REDEMPTION OF NOTES.

Section 2.1. Optional Redemption. The Company may at any time and from time to time and at its option redeem all or, on a pro-rata basis, less than all (but not less than one-half of all) the then outstanding Notes (including Interest Notes) by (a) payment in cash of the aggregate principal amount thereof plus all accrued and unpaid interest thereon to the date of such

redemption, plus (b) the issuance of all Warrants required to be issued hereunder and under the Warrants on or before such redemption date. The Company may also redeem all or part of the Notes as provided in Sections 5.9(viii) and 5.14.

Section 2.2. Notice of Redemption. The Company will give irrevocable written notice of any redemption of the Notes pursuant to Section 2.1 to the holders thereof not less than 30 days nor more than 60 days before the date fixed for such redemption specifying (a) such date, (b) the aggregate principal amount of the Notes to be redeemed, (c) accrued and unpaid interest, if any, payable to the redemption date and (d) Warrants required to be issued pursuant

to Section 2.1(b). Notice of redemption having been so given, the aggregate principal amount (or portion thereof) specified in such notice, together with accrued and unpaid interest, if any, shall become due and payable, and such Warrants shall become issuable, on the redemption date.

Section 2.3. Mandatory Redemption.

(a) Upon the completion of an Initial Public Offering, the Company shall redeem one-half of the aggregate principal amount of the Notes (including Interest Notes) outstanding, together with accrued but unpaid interest thereon, pro rata among the holder of the Notes.

(b) As soon as reasonably practicable, but in no event later than the date following the date on which the registration statement related to the Initial Public Offering is first filed with the Securities and Exchange Commission (in preliminary, final, confidential or other form), the Company shall give the holders of Notes written notice (containing reasonable detail) of the Company's intention (subject to the successful completion of the Initial Public Offering) as to the use of the proceeds of such Initial Public Offering with respect to the Notes, including as to the optional redemption of any Notes in excess of the one-half to be mandatorily redeemed pursuant to paragraph 2.3(a).

Section 2.4. Change of Control. Upon the public announcement or other notification pursuant to this Section 2.4 of a Change of Control transaction, a holder of Notes will, at any time after such public announcement or notification, have the right to cause the Company to redeem all or part of such holder's outstanding Notes by payment by the Company in respect of such redeemed Notes to such holder in immediately available funds by wire transfer equal to 101% of the principal amount plus accrued but unpaid interest on such Notes. The Company, upon learning of the impending Change of Control transaction, will promptly notify the holders of Notes in writing of any impending Change of Control transaction, specifying in reasonable detail all material terms thereof. If such notice is given after the Initial Public Offering, the Company may also inform the public and the markets via a press release. Upon any such request for redemption by a holder of the Notes under this Section 2.4, the Company shall so redeem such holder's Notes within three Business Days of that request.

SECTION 3. REPRESENTATIONS.

Section 3.1. Representations of the Company. The Company represents and warrants that all representations and warranties set forth in the form of certificate attached hereto as Exhibit C are true and correct as of the date hereof, and shall be true and correct on the Closing Date, and agrees that all such representations and warranties are incorporated herein by reference with the same force and effect as though herein set forth in full.

Section 3.2. Representations of the Purchasers. Each Purchaser severally represents, warrants and agrees for itself only that:

(a) Such Purchaser is acquiring its Notes for the purpose of investment for the Purchaser's own account and not with a view to the resale or distribution thereof, and that such Purchaser has no present intention of selling, negotiating or otherwise disposing of its Notes except in accordance with applicable securities laws.

(b) No part of the funds to be used by such Purchaser to purchase the Notes constitutes assets allocated to any "separate account" maintained by it. As used in this Section 3.2(b), the term "separate account" shall have the meaning assigned to it in ERISA.

(c) Such Purchaser is duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization with all requisite power and authority to execute, deliver and perform its obligations under this Agreement and to consummate the transactions contemplated hereby.

(d) No approval, consent or withholding of objection on the part of any regulatory body, state, federal or local, or any other third party is necessary in connection with the execution by such Purchaser of the Agreement or its acceptance of its Notes or compliance by such Purchaser with any of the provisions of the Agreement or the Notes, unless such consent or approval has already been obtained.

(e) The execution, delivery and performance by such Purchaser of this Agreement and all other instruments and documents to be executed and delivered by such Purchaser in connection herewith are not (and will not be or result) in material conflict with or in material contravention or material violation of any law (including common law), rule or regulation by which such Purchaser is bound or to which it is subject or any material agreement to which it is a party.

(f) The Company has advised the Purchaser that the Notes have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), or any state securities laws by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent and the accuracy of the Purchaser's representations as expressed herein, and the Notes may not be sold, transferred or otherwise disposed of by such Purchaser without such registration or an exemption therefrom. The Purchaser understands that the Securities are "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to these laws, the

Purchaser must hold the Securities indefinitely unless they are registered with the Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available. Such Purchaser is either an accredited investor within the meaning of Rule 501 of the Securities Act or a qualified institutional buyer within the meaning of Rule 144A of the Securities Act.

(i) The Purchaser is aware of the Company's business

affairs and financial condition only to the extent disclosed in writing to the Purchaser by the Company. Nothing in this Section 3.2(g) shall limit the rights of any Purchaser or its assignees or successors in interest to rely on the representations, warranties and covenants of the Company without investigation.

(ii) The Purchaser understands that no public market now exists for any of the securities issued by the Company, and that the Company has made no assurances that a public market will ever exist for the Notes.

(iii) The Purchaser understands that the Notes, Warrants and Preferred Shares, and any securities issued in respect thereof or exchange therefor, may bear the legends shown on the forms attached hereto as exhibits. The parties agree that such legend(s) shall be removed at such time as, in the reasonable judgment of counsel for the Company, or as in the reasonable opinion delivered to the Company of counsel to such Purchaser or holder, they are no longer required by law.

SECTION 4. CLOSING CONDITIONS.

Each Purchaser's obligation to purchase the Notes on the Closing Date shall be subject to the performance by the Company of its agreements hereunder that are to be performed at or prior to the time of delivery of the Notes, and to the following further conditions precedent:

Section 4.1. Closing Certificate. Such Purchaser shall have received a certificate dated such Closing Date, signed by an Officer of the Company substantially in the form attached hereto as Exhibit C.

Section 4.2. Company's Existence and Authority. Such Purchaser shall have received, in form and substance satisfactory to it, such documents and evidence with respect to the Company as such Purchaser may reasonably request in order to establish the existence and good standing of the Company and the authorization of the transactions contemplated by this Agreement.

Section 4.3. Consents. Any consents or approvals required to be obtained by the Company or any of its Subsidiaries that are necessary to permit the consummation of the transactions contemplated hereby on such Closing Date shall have been obtained.

Section 4.4. Opinion. Each Purchaser shall have received an opinion dated the Closing Date from Venture Law Group, counsel for the Company, substantially in the form of Exhibit D.

Section 4.5. Security Interest. Each Purchaser shall have a valid and perfected, first priority security interest in all of the Collateral (except (a) for accounts receivable and inventory, in which each Purchaser shall have a valid and perfected second priority security interest in favor of Imperial Bank to the extent of Imperial Bank's first $7,500,000 in secured interest under the Liquidity Facility, and the holders of the Notes shall have a first priority, perfected secured interest in all other accounts receivable and inventory; (b)

for equipment subject to bona-fide purchase money security interests for fair value, in which each Note holder shall have a valid and perfected second priority security interest in favor of the seller or lessor of such equipment, such seller's or lessor's first security interest and rights being limited to the unpaid amount of such fair value) and shall have received a Security Agreement and inter-creditor agreement with Imperial Bank in form and content acceptable to each Purchaser.

Section 4.6. No Default; Representations and Warranties. There will not exist on the Closing Date an Event of Default or Default. The representations and warranties contained in paragraph 3.1 hereof shall be true and not false or misleading on and as of the Closing Date.

Section 4.7. Compliance with this Agreement. The Company shall have executed and delivered the Notes, the Warrants and the Security Agreement as contemplated herein, in form and content acceptable to Purchaser; and the Company shall have performed and complied with all agreements, covenants and conditions contained herein which are required to be performed or complied with by it on or before the Closing Date.

Section 4.8. No Material Adverse Change. Between December 31, 1997 and the Closing Date (a) there shall have been no change constituting a Material Adverse Effect, (b) the business and affairs of the Company shall have been and will have been conducted and carried on only in the ordinary course of business consistent with past practices and (c) the properties and facilities owned or leased by the Company shall not have suffered in the aggregate any material destruction or damage, regardless of whether or not any loss suffered was insured.

Section 4.9. Consents, Permits, Etc. The Company shall have received all material permits and other authorizations, and made all such material filings and declarations, as may be required to be obtained or filed prior to the Closing Date from any Person pursuant to any law, statute, regulation or rule (federal, state, local and foreign), or pursuant to any agreement, order or decree to which it is a party or to which it is subject, in connection with, or in order to effectuate, the transactions related to this Agreement and the issuance of the Notes and Warrants.

Section 4.10. Purchase Permitted by Applicable Laws. The purchase of and payment for the Notes and the Warrants to be purchased by the Purchasers or their designees hereunder on the terms and conditions provided herein shall not be prohibited by any applicable law, court order or governmental regulation and shall not subject any Purchaser to any tax (other than possible income and capital gains tax upon the sale thereof or possible OID), penalty, assessment or withholding liability under or pursuant to any applicable law or governmental regulation, and the Purchasers shall have received such certificates or other evidence as they may reasonably request to establish compliance with this condition.

Section 4.11. Due Diligence. The Purchasers, acting on their own or

through their advisers, agents, engineers, environmental consultants, personnel, counsel, accountants or other representatives designated by them, shall have been afforded full and complete opportunity to examine the books and records, titles and leases to properties, and documents and information relating to patents, loans and other agreements, any pending or threatened litigation, and other matters pertaining to the legal structure, regulatory compliance (including, without limitation, environmental (including Phase I and Phase II reports, if any), health and safety and employee benefit regulatory compliance), assets, capital and obligations of the Company. A satisfactory conclusion, in the opinion of the Purchasers and their counsel, of such examination is a condition precedent to the obligations of the Purchasers under this Agreement.

Section 4.12. Financial Statements. The Purchasers shall have received copies of the audited financial statements of the Company for the fiscal year ended December 31, 1997 and the report thereon of Ernst & Young, LLP, in form and content satisfactory to the Purchasers.

Section 4.13. Legal Fees. The Company shall have paid, by wire transfer of immediately available funds, the reasonable legal fees and disbursements of counsel to the Purchasers incurred in connection with the negotiation and preparation of this Agreement, the Notes, the Warrants, the Security Agreement and related documentation and services rendered in connection therewith.

Section 4.14. Subsidiary. The Company represents that it has no Subsidiaries, and covenants that at Closing it shall have no Subsidiaries.

SECTION 5. COMPANY COVENANTS.

From and after the date of this Agreement and continuing so long as any amount remains unpaid on any Note or any Warrant remains outstanding:

Section 5.1. Corporate Existence, Etc. The Company will preserve and keep in force and effect its corporate existence, and will cause each Subsidiary, if any, to preserve and keep in force and effect its corporate, partnership or other existence in accordance with the respective organizational documents of each such Subsidiary, and the rights and franchises of the Company and its Subsidiaries, provided that (a) the Company shall not be required to preserve any such right or franchise, or the existence, right or franchise of any of its Subsidiaries, if (i) the Board of Directors of the Company shall determine that the preservation thereof is no longer desirable in the conduct of the businesses of the Company and its Subsidiaries and (ii) such lack of preservation shall not prejudice the rights of any holder of the Notes, the Warrants or the Preferred Shares and (b) the provisions of this Section 5.1 shall not limit the ability of the Company or any Subsidiary of the Company to engage in any transaction permitted by Section 5.8 hereof.

Section 5.2. Insurance. The Company will maintain, and will cause each Subsidiary to maintain, insurance coverage by financially sound and reputable insurers in such forms and

amounts and against such risks as are customary for corporations of established reputation engaged in the same or a similar business and owning and operating similar properties.

Section 5.3. Taxes. The Company will pay or discharge or cause to be paid or discharged, before the same shall become delinquent, all material taxes, assessments and governmental charges levied or imposed upon the Company or any of its Subsidiaries or upon the income, profits or property of the Company or of any such Subsidiary; provided, however, that the Company shall not be required to pay or discharge or cause to be paid or discharged any such tax, assessment or charge whose amount, applicability or validity is being contested in good faith by appropriate proceedings and for which adequate provision has been made in the Company's financial statements.

Section 5.4. Maintenance, Etc. The Company will cause all material properties owned by or leased to it or any of its Subsidiaries and material to the business of the Company and its Subsidiaries to be maintained and kept in normal condition and working order (ordinary wear and tear excepted) and will from time to time cause to be made all necessary repairs, renewals, and replacements thereof, all as in the reasonable judgment of the Company may be necessary, so that the business carried on in connection therewith may be properly conducted; provided, however, that (a) nothing in this Section 5.4 shall prevent the Company from discontinuing the use, operation or maintenance of any of such properties, or disposing of any of them, if such discontinuance or disposal is, in the judgment of its Board of Directors or of the Board of Directors, board of trustees or managing partners of the Subsidiary concerned, in the best interests of the Company or any such Subsidiary (provided that any such disposal is in an arms-length transaction for a fair value after taking into account all circumstances involved in the decision to dispose of such property); and (b) the provisions of this Section 5.4 shall not limit the ability of the Company or any Subsidiary to engage in any transaction permitted by Section 5.8 hereof.

Section 5.5. Limitations on Indebtedness. Except as approved in writing by the holders of a majority in principal amount of the Notes outstanding, the Company will not, and will not permit any Subsidiary to, create, assume or incur any Indebtedness except:

(a) Indebtedness evidenced by the Notes;

(b) Indebtedness not to exceed $7,500,000 under the Liquidity Facility;

(c) Indebtedness of the Company outstanding as of the date of this Agreement and listed on Schedule 5.5 hereto;

(d) Indebtedness relating to insurance premium financing or in respect of workers' compensation claims, in each case incurred in the ordinary course of business;

(e) Future Indebtedness between a Subsidiary, if any, and the Company or between Subsidiaries in amounts not to exceed $100,000 in the aggregate; and

(f) Indebtedness up to $2,500,000 (exclusive of equipment leases disclosed in the Schedules to this Agreement) under equipment leases.

In no event will the Company or any Subsidiary incur or allow to exist Indebtedness that is in any respect senior to or pari passu with the Notes, except as expressly and explicitly provided in Section 4.5 of this Agreement.

Section 5.6. Limitation on Liens. Except as otherwise expressly and explicitly provided in Section 4.5 of this Agreement, the Company will not, and will not permit any Subsidiary to, create, incur, assume or suffer to exist any Liens on its Stock or the Collateral. Notwithstanding this provision, the Company shall be permitted to contest in good faith bona fide disputed tax amounts (not to exceed $50,000 in the aggregate) with taxing authorities upon advance written notice to the holders of the Notes, provided that the Company also so delivers to the holders of the Notes a Certificate, signed by the Chief Financial Officer of the Company, confirming that such contest is in good faith and is a bona fide dispute.

Section 5.7. Restricted Payments. The Company will not, and will not permit any Subsidiary, to make any distribution or declare or pay any dividends (in cash or other property, other than capital Stock) on, or purchase, redeem or otherwise retire any of the Company's or any of its Subsidiaries' capital Stock, whether now or hereafter outstanding, except any Subsidiary may declare and pay dividends or other distributions to, or purchase, redeem or otherwise retire any capital Stock from, the Company or any Subsidiary; provided, however, that this restriction shall not apply to the repurchase of shares of Common Stock (in an aggregate amount not to exceed $500,000 plus the aggregate exercise price hereafter received by the Company for all options granted under the plans referred to in (i) and (ii) below which are exercised after the date hereof) from current or former employees, officers, directors, consultants or other persons performing services for the Company pursuant to either (i) the Company's Stock Option Plans or (ii) the 1995 Stock Repurchase Agreements between the Company and, respectively, Douglas Reudink and Tom Huseby; provided that no such repurchases may be made while any Event of Default or Default exists under this Agreement, the Notes or the Security Agreement.

Section 5.8. Mergers, Consolidations and Sales of Assets. Other than in accordance with Section 2.4, the Company will not, and will not permit any Subsidiary to (1) consolidate with or be a party to a merger with any other corporation (except that if no Default or Event of Default exists hereunder, under the Notes or under the Security Agreement, the Company, subject to the other provisions of this Agreement, may make acquisitions of businesses for fair value as determined in good faith by its Board of Directors), (2) sell, lease or otherwise dispose of all or a material part of the assets of the Company or any

of its Subsidiaries, or (3) issue any securities or any rights or options to purchase securities for less than fair value as determined in good faith by the Board of Directors; provided, however, that provided that the rights of the holders of the Notes, the Warrants and the Preferred Shares are not prejudiced:

(a) any Subsidiary may merge or consolidate with or into the Company or any other Subsidiary; and

(b) any Subsidiary may sell, lease or otherwise dispose of its assets, or issue securities, to the Company or any Subsidiary.

Section 5.9. Transactions with Affiliates. Without the written approval of the holders of the majority in principal amount of the outstanding Notes, the Company will not, and will not permit any Subsidiary to, enter into any transaction (or series of related transactions) (a "Transaction") with any holder (or any Affiliate of such holder) of 2% or more of any class of capital Stock of the Company or with any Affiliate of the Company, involving payments by the Company or any Subsidiary (including, without limitation, any sale, purchase, lease or loan or any other direct or indirect payment, transfer or other disposition) in excess of $1,000,000 in the aggregate, other than the following Transactions:

(a) transactions between or among the Company and its Subsidiaries or between or among such Subsidiaries;

(b) transactions the terms of which are at least as favorable as the terms that could be obtained by the Company or such Subsidiary, as the case may be, in a comparable transaction made on an arm's-length basis between unaffiliated parties (in each case as determined in good faith by a majority of the directors of the Company unaffiliated with such holder or Affiliate);

(c) transactions in which the Company or any Subsidiary delivers to the holders of the Notes a written opinion of an independent nationally recognized investment banking firm stating that such Transaction is fair to the Company or such Subsidiary from a financial point of view;

(d) the performance by the Company of its obligations hereunder and under the Notes, the Warrants and the Security Agreement;

(e) the payment consistent with past practice of reasonable and customary compensation or fees (including, without limitation, options or related stock appreciation rights or similar securities issued pursuant to any Stock Based Plan) to officers, directors, and employees of the Company or any of its Subsidiaries, in each case as determined by the Company's Board of Directors in good faith;

(f) purchases (for equal to or less than fair value) or sales (for equal to or more than fair value) of goods and services made in the ordinary course of business;

(g) transactions permitted by, and complying with, the provisions of Section 5.7 hereof;

(i) the sale to stockholders of the Company existing as of the date of this Agreement of Stock in no respect senior to or having rights relatively greater or relatively more favorable than the Preferred Shares, unless all of the proceeds thereof are promptly used to redeem outstanding Notes.

Section 5.10. Financial Statements, etc. The Company shall deliver to the holders of the Notes as soon as available, but in any event within 30 days after the end of each of the first three quarters during each of the Company's fiscal years, a company prepared balance sheet, income statement, and statement of cash flow covering the Company's operations during such period; and (b) as soon as available, but in any event within 90 days after the end of each of the Company's fiscal years, financial statements of the Company for each such fiscal year, audited by independent certified public accountants. Such audited financial statements shall include a balance sheet, profit and loss statement, and statement of cash flow and, promptly after receipt and if prepared, such accountants' letter to management. All such financial statements shall be consolidated to the extent required by GAAP.

Section 5.11. Board Representation. If an Initial Public Offering shall not have been completed by the fifteen (15) month anniversary of the Closing Date, the Company shall cause all things necessary to occur in order to elect to the Board of Directors of the Company one director nominated by the holders of a majority of the outstanding Notes for a term to end upon the completion of an Initial Public Offering.

Section 5.12. Indemnification. The Company shall indemnify the Purchasers and all subsequent holders of Notes, Warrants or Preferred Shares (the "Indemnified Parties") for any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind and nature whatsoever, including without limitation reasonable legal fees and disbursements (collectively, "Damages") which may be imposed on, incurred by or asserted against the Indemnified Parties in any way relating to or arising out of this Agreement, the Security Agreement, the Notes, the Warrants, the Preferred Shares or any other documents contemplated by or referred to herein or therein or the transactions contemplated hereby and thereby (including, without limitation, the costs and expenses of counsel for the Indemnified Parties), except for Damages to the extent solely resulting from the Purchaser's bad faith or willful misconduct.

Section 5.13. Subsidiary. The Company agrees that its shall not directly or indirectly create, or directly or indirectly own any interest in, any Subsidiary unless the holders of the Notes shall have received from each Subsidiary, at such time as such Subsidiary is created or is in any manner directly or indirectly owned or controlled by the Company, a written, irrevocable and unconditional guaranty (joint and several with the Company and all other Subsidiaries) of all of the Company's obligations (payment and

performance) under the Notes, under the Security Agreement and under this Agreement, in form and content satisfactory to a majority of the holders of the Notes.

Section 5.14. Covenants. The Company covenants and represents that (i) no Stock shall be issued by the Company which is, directly or indirectly, senior to the Warrant Shares or has, directly or indirectly, any dividend, liquidation, dilution protection, redemption, conversion or other rights or privileges (by contract, charter, by-laws, or otherwise) which are relatively more favorable than those presently existing with respect to the Warrant Shares, unless all of the proceeds thereof are promptly used to redeem outstanding Notes and (ii) no Preferred Stock will be issued by the Company unless the cash purchase price therefor is equal to or greater than the

liquidation and redemption right and preference of such Preferred Stock, unless all of the proceeds thereof are promptly used to redeem outstanding Notes.

SECTION 6. EVENTS OF DEFAULT AND REMEDIES THEREFOR.

Section 6.1. Events of Default. Any one or more of the following shall constitute an "Event of Default" as the term is used herein:

(a) Default shall occur in the payment of interest on any Note when the same shall have become due and such default shall continue for more than 5 Business Days; or

(b) Default shall occur in the making of any payment of principal of any Note at the maturity date or at any date fixed for redemption or prepayment; or

(i) Default shall occur in the observance or performance of any other provision of this Agreement, the Notes, the Warrants or the Security Agreement which is not remedied within 30 days after the date on which written notice thereof is given to the Company by the holders of a majority in aggregate outstanding principal amount of the outstanding Notes, or

(ii) Any judgment or order for the payment of money shall be rendered against the Company or a Material Subsidiary of the Company by a court of competent jurisdiction and shall not be discharged or stayed within 60 days, and the amount thereof that is not directly covered by letters of credit or a bond shall be in excess of $100,000 and either (i) an enforcement proceeding shall have been commenced by any creditor upon such judgment or order or (ii) there shall be any period of 30 consecutive days, after written notice has been given to the Company by the holders of at least 25% in aggregate outstanding principal amount (together with accrued and unpaid interest thereon) of the outstanding Notes, during which a stay of enforcement of such judgment or order, by reason of a pending appeal or otherwise, shall not be in effect, or

(iii) A default occurs which extends beyond any period of grace applicable thereto under any mortgage, indenture or other instrument under

which there may be issued any Indebtedness of the Company or any Material Subsidiary of the Company for borrowed money having, with respect to all such Indebtedness, outstanding principal amounts of $500,000 or more in the aggregate, whether such Indebtedness now exists or shall hereafter be created, if either (i) such default results from the failure to pay principal upon the final maturity of such Indebtedness or (ii) as result of such event of default such Indebtedness has been declared to be due and payable prior to its stated maturity; provided, however, that if such default shall be remedied or cured or
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waived by the holders of such Indebtedness, then the Event of Default hereunder by reason thereof shall be deemed to have been thereupon remedied, cured or waived without further action on the part of the holders of the Notes, or

A. Any default or adverse event occurs with respect to or affecting any of the Collateral (except as expressly provided in Section 5.6 of this Agreement and

paragraphs 5, 6 and 13 of the Closing Certificate), and same is not cured or discharged within 30 days thereof, or

B. Any event allowing or resulting in the redemption, call, put or use of the liquidation preference of any series or class (now existing or hereafter created) of the Company's or a Subsidiary's preferred stock shall have occurred, or

C. Any event of default or default shall have occurred under the Liquidity Facility or any other material agreement of the Company or any Material Subsidiary, and same is not timely cured or results in a right of acceleration thereunder which is not waived, or

(c) The Company or any Material Subsidiary becomes (I) insolvent or is generally not paying its debts as they become due and such situation is not remedied within 45 days or (II) makes an assignment for the benefit of creditors, or the Company or any Material Subsidiary applies for or consents to the appointment of a custodian, trustee, liquidator, or receiver for the Company or such Subsidiary or for the major part of the property of either, or

(d) A custodian, trustee, liquidator, or receiver is appointed for the Company or any Material Subsidiary or for the major part of the property of either and is not discharged within 45 days after such appointment, or

(e) Bankruptcy, reorganization, arrangement or insolvency proceedings, or other proceedings for relief under any bankruptcy or similar law or laws for the relief of debtors, are instituted by or against the Company or any Material Subsidiary and, if instituted against the Company or any Material Subsidiary, are consented to or are not dismissed within 45 days after such institution.

Section 6.2. Notice to Holders. When the Company has knowledge that any Default or Event of Default described in the foregoing Section 6.1 has occurred,

the Company agrees to give notice to the holders of the outstanding Notes within one Business Day of the date on which the Company becomes aware of such Event of Default.

Section 6.3. Acceleration of Maturities. When any Event of Default described in paragraphs (a) through (h), inclusive, of Section 6.1 has happened and is continuing, the holder or holders of 25% or more of the principal amount of outstanding Notes may, by notice to the Company, declare the entire principal and all interest accrued and unpaid, if any, on all Notes to be, and all Notes shall thereupon become, forthwith due and payable, without any presentment, demand, protest or other notice of any kind, all of which are hereby expressly waived. When any Event of Default described in paragraphs (i) through (k) of Section 6.1 has occurred, then the principal amount of all outstanding Notes (together with accrued and unpaid interest, if any) shall immediately become due and payable without presentment, demand or notice of any kind. Upon the Notes becoming due and payable as a result of any Event of Default as aforesaid, the Company will forthwith pay in cash to the holders of the Notes the entire principal amount and interest accrued and unpaid, if any, on the Notes. No course of dealing on the part of any Noteholder nor any delay or failure on the part of any Noteholder to exercise any right shall

operate as a waiver of such right or otherwise prejudice such holder's rights, powers and remedies.

SECTION 7. AMENDMENTS, WAIVERS AND CONSENTS.

Section 7.1. Consent Required. Any term, covenant, agreement or condition of this Agreement relating to the Notes (and not affecting the Warrants or the Preferred Shares) may, with the consent of the Company, be amended or compliance therewith may be waived (either generally or in a particular instance and either retroactively or prospectively), if the Company shall have obtained the consent in writing of the holders of at least a majority in aggregate principal amount of outstanding Notes; provided that without the written consent of the holders of all of the Notes then outstanding, no such waiver, modification, alteration or amendment shall be effective (a) that will change the time of payment of the principal of or the interest on any Note or reduce the principal amount thereof of change the rate or interest thereon or (b) that will change the percentage of holders of the Notes required to consent to any such amendment, modification or waiver of any of the provisions of this Agreement.

Section 7.2. Solicitation of Noteholders. Executed or true and correct copies of any waiver effected pursuant to the provisions of Section 7.1 shall be delivered by the Company to each holder of outstanding Notes forthwith following the date on which the same shall have been executed and delivered by the holder or holders of the requisite percentage of outstanding Notes,

Section 7.3. Effect of Amendment or Waiver. Any such amendment or waiver shall apply equally to all of the holders of the Notes and shall be binding upon them, upon each future holder of any Note and upon the Company, whether or not

such Note shall have been marked to indicate such amendment or waiver. No such amendment or waiver shall extend to or affect any obligation not expressly amended or waived or impair any right consequent thereon.

SECTION 8. INTERPRETATION OF AGREEMENT, DEFINITIONS.

Section 8.1. Definitions. Unless the context otherwise requires, the terms hereinafter set forth when used herein shall have the following meanings and the following definitions shall be equally applicable to both the singular and plural forms of any of the terms herein defined:

(a) "Affiliate" shall mean any Person (a) that directly or indirectly through one or more intermediaries controls, or is controlled by, or is under common control with, any other Person or (b) is an officer, director or employee of any such Affiliate or (c) is a member of the immediate family of any of the foregoing. The term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of Voting Stock, by contract or otherwise.

(b) "Board of Directors " shall mean, with respect to any Person, the Board of Directors of such Person or any committee of the Board of Directors authorized to act for it hereunder.

(c) "Business Day" shall mean any day other than a Saturday, Sunday, statutory holiday or other day on which banks in New York City are required by law to close or are customarily closed.

(d) "Change of Control" shall mean the occurrence of (x) any consolidation or merger of the Company with or into any other corporation or other entity or person (whether or not the Company is the surviving corporation), or any other corporate reorganization or transaction or series of related transactions in which in excess of 50% of the Company's voting power is transferred through a merger, consolidation, tender offer or similar transaction, or (y) an event whereby any person (as defined in Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")), together with its affiliates and associates (as such terms are defined in Rule 405 under the Securities Act, beneficially owns or is deemed to beneficially own (as described in Rule 13d-3 under the Exchange Act without regard to the 60-day exercise period) in excess of 50% of the Company's voting power, or (z) in excess of 50% of the Company's Board of Directors consists of directors not nominated by the prior Board of Directors of the Company.

(e) "Closing Date" shall have the meaning provided in Section 1.2. herein.

(f) "Collateral" shall mean all assets of every kind and nature, both tangible and intangible, of the Company and its Subsidiaries, other than real estate.

(g) "Company" shall mean Metawave Communications Corporation, a Delaware corporation.

(h) "Default" shall mean any event or condition, the occurrence of which would, with the lapse of time or the giving of notice, or both, constitute an Event of Default as defined in Section 6.1.

(i) "ERISA " shall mean the Employee Retirement Income Security Act of 1974, as amended, and any successor statute of similar import, together with the regulations thereunder, in each case as in effect from time to time. References to sections of ERISA shall be construed to also refer to any successor sections.

(j) "Event of Default" shall have the meaning set forth in Section 6.1 hereof.

(k) "Exchange Act" shall mean the Securities Exchange Act of 1934, as amended, and any successor statute thereto.

(l) "Existing Stockholder" means the stockholders of the Company on the date hereof (as listed on Schedule 8.1) and the Related Persons of such stockholders.

(m) "GAAP" shall mean generally accepted accounting principles in the United States as in effect on the date of this Agreement and not including any interpretations or regulations that have been proposed but that have not been enacted.

(n) "Indebtedness" means, without duplication, as to any Person or Persons: (i) indebtedness for borrowed money; (ii) indebtedness for the deferred purchase price of property or services; (iii) indebtedness evidenced by bonds, debentures, notes or other similar instruments; (iv) obligations and liabilities secured by a Lien upon property owned by such Person, whether or not owing by such Person and even though such Person has not assumed or become liable for the payment thereof; (v) Indebtedness directly or indirectly guaranteed by such Person; (vi) obligations or liabilities created or arising under any conditional sales contract or other title retention agreement with respect to property used and/or acquired by such Person; (viii) obligations of such Person as Lessee under capital leases; (ix) net liabilities of such Person under hedging agreements and foreign currency exchange agreements, as calculated on a basis satisfactory to the Purchasers and in accordance with accepted practice; (x) all obligations, contingent or otherwise, of such Person as an account party in respect of letters of credit; (xi) all obligations of such Person in respect of bankers' acceptances; and (xii) obligations with respect to equipment leases.

(o) "Initial Public Offering" shall mean the closing of a public offering of the Company's Common Stock pursuant to an effective registration

statement under the Securities Act.

(p) "Interest Note" shall have the meaning specified in Section 1.1 of this Agreement.

(q) "Interest Rate" shall have the meaning provided under Section 1.1 of this Agreement.

(r) "Lien" shall mean any lien (statutory or otherwise) security interest, mortgage, deed of trust, pledge, charge, conditional sale, title retention agreement, capital lease or other encumbrance or similar right of others, contingent or otherwise, or any agreement to give any of the foregoing.

(s) "Liquidity Facility" shall mean obligations for borrowed money not to exceed $7,500,000 in the aggregate to Imperial Bank under a Loan Agreement dated October 14, 1997, as same may be amended from time to time in a manner not inconsistent with the terms of this Agreement.

(t) "Material Subsidiary" shall mean a Subsidiary of the Company that is a "significant subsidiary" as defined in Rule 1-02(w) of Regulation S-X promulgated under the Securities Act.

(u) "Note" shall have the meaning provided in Section 1.1 of this Agreement.

(v) "Note Register" shall have the meaning provided in Section 9.1 of this Agreement.

(w) "Note Registrar" shall have the meaning provided in Section 9.1 of this Agreement.

(x) "Notice" shall have the meaning provided in Section 1.3 of this Agreement.

(y) "Noteholder" shall mean any of the holders of one or more Notes from time to time.

(z) "Officer" shall mean the Chairman of the Board, the President, any Vice President, the Treasurer, the Secretary or the Controller of any Person.

(aa) "Person" shall mean an individual. partnership, corporation, trust or unincorporated organization, and a government or agency or political subdivision thereof.

(bb) "Purchase Price" with respect to any Note shall mean the Purchase Price thereof, expressed as a percentage of the principal amount thereof and as an amount in U.S. dollars, as set forth on Schedule I attached hereto.

(cc) "Purchaser" shall mean the Persons listed under Schedule I

attached hereto.

(dd) "Related Person" shall mean, with respect to any Person, (A) an Affiliate of such Person, (B) any investment manager, investment advisor or general partner of such Person, and ( ) any investment fund, investment account or investment entity whose investment manager, investment advisor or general partner is such Person or a Related Person of such Person.

(ee) "Securities Act" shall have the same meaning as in Section 3.2(g).

(ff) "Security Agreement" means the security agreement in the form attached hereto as Exhibit E.

(gg) "Stock" means all shares, options, warrants, interests, participations, or other equivalents (regardless of how designated) of or in a corporation or equivalent entity, whether voting or nonvoting, including common stock, preferred stock, or any other "equity security" (as such term is defined in Rule 3a11-1 of the General Rules and Regulations promulgated by the SEC under the Exchange Act).

(hh) "Stock Based Plan" means any stock option plan, stock appreciation rights plan or other similar plan or supplement relating to capital Stock of the Company or any of its Subsidiaries, whether in effect on the date hereof or established hereafter, established for the benefit of employees of the Company or of any Subsidiary of the Company.

(ii) "Subsidiary " shall mean, as to any particular parent corporation, any corporation, partnership, limited liability company, business trust or other entity of which more than 50% (by number of votes) of the Voting Stock shall be owned by such parent corporation and/or one or more corporations which are themselves Subsidiaries of such parent corporation.

(jj) "Transaction" shall have the meaning provided under Section 5.9 herein.

(kk) "Voting Stock" shall mean securities of any class or classes the holders of which are ordinarily, in the absence of contingencies, entitled to elect a majority of the corporate directors (or Persons performing similar functions).

SECTION 9. MISCELLANEOUS.

Section 9.1. Note Register. The Company or the Company's transfer agent (if any), in its capacity as note registrar (the "Note Registrar"), shall cause to be kept a register (the "Note Register") for the registration and transfer of the Notes; provided, however, the Company may at any time upon prior written notice to the Purchasers designate and cause any other Person to act as the Note Registrar in order to maintain the Note Register pursuant to the terms of this Note Agreement. The Note Registrar will register or transfer or cause to be

registered or transferred, as hereinafter provided and under such reasonable regulations as it may prescribe, any Note issued pursuant to this Agreement.

At any time, and from time to time, the holder of any Note which has been duly registered as hereinabove provided may transfer such Note upon surrender thereof with the Note Registrar duly endorsed or accompanied by a written instrument of transfer duly executed by the holder of such Note or its attorney duly authorized in writing.

Promptly upon request of a Noteholder, the Company shall provide such holder, and any qualified institutional buyer designated by such holder, such financial and other information as is necessary in order to permit compliance with the information requirements of Rule 144A(d)(4) under the Securities Act in connection with the resale of Notes, except at such times as the Company is subject to and is in compliance with the reporting requirements of Section 13 or 15(d) of the Exchange Act. For purposes of this paragraph, the term "qualified institutional buyer" shall have the meaning specified in Rule 144A under the Securities Act.

The Person in whose name any Note shall be registered shall be deemed and treated as the owner and holder thereof for all purposes of this Agreement. Payment of or on account of the principal, premium and interest, if any, on any Note shall be made to or upon the written order of such holder.

Section 9.2. Exchange of Notes. At any time and from time to time, upon not less than five (5) Business Days' notice given by the holder of any Note initially delivered or of any Note substituted therefor pursuant to Section 9.1, this Section 9.2 or Section 9.3, and, upon surrender of such Note at its office, the Company will deliver in exchange therefor, without expense to the holder, except as set forth below, Notes for the same aggregate principal amount (together with accrued but unpaid interest) as the then unpaid principal amount (together with accrued but unpaid interest) of the Note so surrendered, dated as of the date to which interest has been paid on the Note so surrendered or, if such surrender is prior to the payment of any interest thereon, then dated as of the date of issue, registered in the name of such Person or Persons as may be designated by such holder, and otherwise of the same form and tenor as the Notes so surrendered for exchange. The Company may require the payment of a sum sufficient to cover any stamp tax or governmental charge imposed upon such exchange or transfer.

Section 9.3. Loss, Theft, Etc. of Notes. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, mutilation or destruction of any Note, and in the case of any such loss, theft, or destruction upon delivery of an indemnity in such form as shall be reasonably satisfactory to the Company, or in the event of such mutilation upon surrender and cancellation of any Note, the Company will make and deliver without expense to the holder thereof, a new Note, of like tenor, in lieu of such lost, stolen, destroyed or mutilated Note.

Section 9.4. Powers and Rights Not Waived; Remedies Cumulative. No delay

or failure on the part of the holder of any Note in the exercise of any power or right shall operate as a waiver thereof; nor shall any single or partial exercise of the same preclude any other or further exercise thereof, or the exercise of any other power or right, and the rights and remedies of the holder of any Note are cumulative to and are not exclusive of any rights or remedies any such holder would otherwise have, and no waiver or consent, given or extended pursuant to Section 7 hereof or otherwise, shall extend to or affect any obligation or right not expressly waived or consented to.

Section 9.5. Notices. All communications provided for hereunder shall be in writing and, if to any Purchaser, delivered or mailed by prepaid overnight air courier, or by facsimile communication, in each case addressed to such Purchaser at its address appearing on Schedule I to this Agreement or such other address as such Purchaser or subsequent holder may designate to the Company in writing, and if to the Company, delivered and mailed by prepaid overnight air courier, or by facsimile communication, in each case to the Company at 8700 148th Avenue N.E., Redmond, Washington 98052; facsimile: (425) 702-5978, Attention: Chief Financial Officer and General Counsel or to such other address as the Company may in writing designate to such Purchaser or subsequent holder; provided, however, that a notice sent by overnight air courier shall only be effective if delivered at a street address designated for such purpose in Schedule 1, and a notice to such Purchaser by facsimile communication shall only be effective if confirmed by a copy thereof by prepaid overnight air courier, in either case, as such Purchaser or a subsequent holder of any Note may designate to the Company in writing.

Section 9.6. Successors and Assigns. This Agreement shall be binding upon the Company and its successors and assigns and shall inure to each Purchaser's benefit and to the benefit of its successors and assigns, including each successive holder or holders of any Notes.

Section 9.7. Integration and Severability. This Agreement embodies the entire agreement and understanding between the Purchasers and the Company, and supersedes all prior agreements and understandings relating to the subject matter hereof. Should any part of this Agreement for any reason be declared invalid or unenforceable, such decision shall not affect the validity of any remaining portion, which remaining portion shall remain in force and effect as if this Agreement had been executed with the invalid or unenforceable portion thereof eliminated (or, if possible, rewritten to the extent necessary to eliminate such invalidity or unenforceability) and it is hereby declared the intention of the parties hereto that they would have executed the remaining portion of this Agreement without including therein any such part, parts or portion which may, for any reason, be hereafter declared invalid or unenforceable.

Section 9.8. Like Treatment of Holders. Neither the Company nor any of its Affiliates shall, directly or indirectly, pay or cause to be paid any consideration, whether by way of interest, fee, payment for redemptions or exchanges of Notes, or otherwise, to any holder of any Notes, for or as an inducement to, or in connection with the solicitation of, any consent, waiver or

amendment of any terms or provisions of the Notes or this Agreement or the Warrants, unless such consideration is required to be paid to all holders of Notes bound by such consent, waiver or amendment whether or not such holders so consent, waiver or agree to amend and whether or not such holders tender their Notes for redemption or exchange. The Company shall not, directly or indirectly, redeem any Notes unless such offer of redemption is made pro rata to all holders of Notes on identical terms.

Section 9.9. Governing Law. This Agreement and the notes and warrants issued and sold hereunder shall be governed by and construed and enforced in accordance with the laws of the State of New York, as applied to contracts made and performed entirely within the State of New York. Each party hereto hereby submits to the exclusive jurisdiction of the United States District Court for the Southern District of New York or the State Courts of New York sitting in New York County for purposes of all legal proceedings arising out of or relating to this Agreement and the notes or the transactions contemplated hereby. Each party hereto irrevocably waives, to the fullest extent permitted by law, any objection which it may now or hereafter have to the laying of the venue of any such proceeding brought in such a court and any claim that any such proceeding brought in such a court has been brought in an inconvenient forum. If any provision of this agreement is determined to be unenforceable under the laws of the State of New York, and if such provision would be enforceable under the laws of the State of Washington, then it is agreed that the Courts of the State of New York shall interpret and enforce such provision pursuant to the laws of the State of Washington.

Section 9.10. Captions. The descriptive headings of the various Sections or parts of this Agreement are for convenience only and shall not affect the meaning or construction of any of the provisions hereof.

Section 9.11. Brokerage Fees. BT Alex. Brown Incorporated has acted as agent for the Company in connection with the transactions contemplated hereby and is being paid a commission by the Company pursuant to a separate letter agreement.

Section 9.12. Intentionally Left Blank.

Section 9.13. Possible Future Notes. If the Company's revenues, expenses, cash flow and other material financial projections for the year ending December 31, 1998 are within ten percent of the revenues, etc. projected in the projected budget provided to and accepted in writing by the Purchasers prior to the date hereof, and if in the Purchasers' judgment neither the Company nor any
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Subsidiary, if any, has experienced or is likely to experience an event materially adverse to the profits, revenues, prospects, operations or condition of the Company or such Subsidiary, and if the Purchasers are otherwise satisfied
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with the adequacy of the Collateral,

and if no Default or Event of Default then exists hereunder or under the

Warrants or the Security Agreement, and if the representations and warranties made by the Company herein are true and correct on and as of December 31, 1998 and on and as of each day thereafter until the completion of the new purchase referred to below, and if the Company has not yet completed an Initial Public Offering, and if the Company has not exercised or expressed its intention to exercise its redemption and repurchase right under Section 1.4 hereof, then, if and only if the Company so chooses, the Purchasers will purchase from the Company (assuming all the conditions of this Section 9.13 are satisfied), and the Company will sell to the Purchasers as soon as reasonably practicable after the later of April 28, 1999 or the date the Purchasers receive the Company's audited financial statements for the year ended December 31, 1998, and using documents substantially similar to those used in these transactions, up to an additional $8 million in aggregate principal amount of new Notes; provided such new Notes will in all respects (except for the accrual and payment of interest between April 28, 1998 and the actual date of their issuance, which accrual and payment shall be suspended through the date of such issuance) be treated as if they had been issued on April 28, 1998. For example, on the 12 month anniversary of the Closing Date, such new Notes would experience a 200 basis point increase in the Base Interest Rate. Additional Warrants to purchase 148,276 additional Preferred Shares (as the same may be adjusted from the date hereof under the terms of the Warrants) shall be issued in respect of such new Notes, such Warrants to be dated the Closing Date. Should any dispute arise as to the meaning, intention or interpretation of any term or provision of this Section 9.13, the determination thereof by MacKay-Shields Financial Corporation shall be final and binding on all parties to this Agreement. The Company acknowledges and agrees that it shall be bound by any such determination of MacKay-Shields Financial Corporation; or if the Company does not agree with such determination, it shall have the right, as its sole and exclusive remedy, to treat all (but not less than all) of the terms and provisions of this Section 9.13 as null and void and of no force and effect. Any action by the Purchasers, or any exercise by the Purchasers of their judgment or requiring the Purchasers to be satisfied, under this Section 9.13 shall require the consent of all of the Purchasers.

The execution hereof by you shall constitute a contract between us for the uses and purposes hereinabove set forth, and this Agreement may be executed in any number of counterparts, each executed counterpart constituting an original but all together only one agreement.

METAWAVE COMMUNICATIONS CORPORATION,
as Company

By: /s/ Vito Palermo

Name: Vito Palermo

Title: Chief Financial Officer

[signature pages continued on next page]

Wiring Instruction to Company:

CITIBANK
111 Wall Street
New York, NY 10005
ABA# 021000089

FOR CREDIT TO:
Morgan Stanley & Co., Inc.
Account #3889-0774

FOR FURTHER CREDIT TO:

ACCOUNT NAME: METAWAVE COMMUNICATIONS

MORGAN STANLEY ACCOUNT: 14-78607

THE BROWN & WILLIAMSON MASTER
RETIREMENT TRUST

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By: /s/ Jeffry B. Platt
Name: Jeffry B. Platt
Title: Director

[signature pages continued on next page]

THE MAINSTAY FUNDS, ON BEHALF OF
ITS STRATEGIC INCOME FUND SERIES

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By: /s/ Jeffry B. Platt

Name: Jeffry B. Platt
Title: Director

[signature pages continued on next page]

HIGHBRIDGE CAPITAL CORPORATION

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By: /s/ Jeffry B. Platt

Name: Jeffry B. Platt
Title: Director

[signature pages continued on next page]

THE MAINSTAY FUNDS, ON BEHALF OF
ITS HIGH YIELD CORPORATE BOND FUND SERIES

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By: /s/ Jeffry B. Platt
_____
Name: Jeffry B. Platt
Title: Director

[signature pages continued on next page]

MAINSTAY VP SERIES FUND INC. ON BEHALF OF ITS HIGH YIELD CORPORATE BOND PORTFOLIO

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By:/s/ Jeffry B. Platt
_____
Name: Jeffry B. Platt
Title: Director

[signature pages continued on next page]

POLICE OFFICERS PENSION SYSTEM OF THE CITY OF HOUSTON

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By:/s/ Jeffry B. Platt
_____
Name: Jeffry B. Platt
Title: Director

[signature pages continued on next page]

VULCAN MATERIALS COMPANY HIGH YIELD ACCOUNT

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By:/s/ Jeffry B. Platt
_____
Name: Jeffry B. Platt
Title: Director

[signature pages continued on next page]

THE 1199 HEALTH CARE EMPLOYEES PENSION FUND

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By:/s/ Jeffry B. Platt

_____

Name: Jeffry B. Platt
Title: Director

[signature pages continued on next page]

BT HOLDINGS (NY), INC.

By:/s/ Edward Burdick

_____

Name: Edward Burdick
Title: Vice President

[signature pages continued on next page]

IMPERIAL BANK

By:/s/ Jim Ellison

_____

Name: Jim Ellison
Title: Senior Vice President

[signature pages continued on next page]

POWERWAVE TECHNOLOGIES, INC.

By:/s/ Bruce C. Edwards

_____

Name: Bruce C. Edwards
Title: President and Chief Executive Officer

[signature pages continued on next page]

BANKAMERICA INVESTMENT CORPORATION

By:/s/ C. Richard Schuler
_____
Name: C. Richard Schuler
Title: Attorney-in-Fact

[signature pages continued on next page]

SCHEDULE I TO NOTE AGREEMENT

Purchaser: THE BROWN & WILLIAMSON MASTER RETIREMENT TRUST

1. Principal Amount $500,000.00 (in U.S. Dollars).

The Purchase Price of the Note will be $500,000.00

2. In the case of cash payments on account of the Notes:

By wire transfer of Federal or other immediately available funds (identifying each payment as to issuer, security and principal or interest) to:

ABA # 0 1 1000028
STATE STREET BANK AND TRUST COMPANY
BOSTON, MASS 02101
FOR CREDIT TO:
ACCT NAME: BROWN & WILLIAMSON MASTER RETIREMENT TRUST
DDA # 09237520
ACCT # ZH23

3. In case of PIK interest payments (Interest Notes) on account of the Note, deliver the Interest Notes to:

CHASE BANK
ACO: STATE STREET BANK & TRUST COMPANY
4 NEW YORK PLAZA
GROUND FLOOR RECEIVING WINDOW
NEW YORK, NEW YORK 10004
ACCT. NO.: ZH23
ACCT. NAME: BROWN & WILLIAMSON
MASTER RETIREMENT TRUST

4. All communications shall be delivered or mailed to:

The Brown & Williamson Master Retirement Trust
c/ o MacKay-Shields Financial Corporation
9 West 57th Street
New York, New York 10019
Attn: Steven Tananbaum
Fax: (212) 758-4735

with a copy to:
Kleinberg, Kaplan, Wolff & Cohen, P.C.
551 Fifth Avenue
New York, New York 10176
Attn: Fredric A. Kleinberg, Esq.
Fax: (212) 986-8866

5. Tax I.D. #: 043216086

6. Notes and Interest Notes are to be registered in the name of the Purchaser, unless otherwise provided below:

Notes and Interest Notes to be registered in the name of Iceship & Co.

Purchaser: THE MAINSTAY FUNDS, ON BEHALF OF ITS STRATEGIC INCOME FUND SERIES

1. Principal Amount $155,000.00 (in U.S. Dollars).

The Purchase Price of the Note will be $155,000.00

2. In the case of cash payments on account of the Notes:

By wire transfer of Federal or other immediately available funds (identifying each payment as to issuer, security and principal or interest) to:

ABA # 021000018
BANK OF NEW YORK/CUST.
GLA 11 1612
FOR CREDIT TO:
ACCT NAME: MAINSTAY STRATEGIC INCOME FUND
ACCT # 267451

3. In case of PIK interest payments (Interest Notes) on account of the Note, deliver the Interest Notes to:

BANK OF NEW YORK
ONE WALL STREET - 3RD FLOOR
WINDOW A
NEW YORK, NEW YORK 10286
FOR CREDIT TO:
ACCT. NAME: MAINSTAY STRATEGIC FUND

ACCT. # 267451

4. All communications shall be delivered or mailed to:

The Mainstay Funds, on behalf of its Strategic Income Fund Series

c/o MacKay-Shields Financial Corporation
9 West 57th Street
New York, New York 10019
Attn: Steven Tananbaum
Fax: (212) 758-4735

with a copy to:
Kleinberg, Kaplan, Wolff & Cohen, P.C.
551 Fifth Avenue
New York, New York 10176
Attn: Fredric A. Kleinberg, Esq.
Fax: (212) 986-8866

5. Tax I.D. #: 133924140

6. Notes and Interest Notes are to be registered in the name of the Purchaser, unless otherwise provided below:

Notes and Interest Notes to be registered in the name of Hare & Co.

Purchaser: HIGHBRIDGE CAPITAL CORPORATION

1 Principal Amount $1,900,000.00 (in U.S. Dollars).

The Purchase Price of the Note will be $1,900,000.00

2. In the case of cash payments on account of the Notes:

By wire transfer of Federal or other immediately available funds (identifying each payment as to issuer, security and principal or interest) to:

ABA # 021-000-089
BEAR STEARNS SECURITIES INC.
ACCT # 09253186
ACCT NAME: HIGHBRIDGE CAPITAL CORPORATION
ACCT # 101-44079-2-6

3. In case of PIK interest payments (Interest Notes) on account of the Note, deliver the Interest Notes to:

NSCCNY WINDOW
55 WATER STREET, CONCOURSE LEVEL, SOUTH BUILDING
ACCT: BEAR STEARNS

FOR FURTHER CREDIT TO: HIGHBRIDGE CAPITAL CORPORATION
ACCT. NO. 101-44079-2-6

4. All communications shall be delivered or mailed to:

Highbridge Capital Corporation
c/o MacKay-Shields Financial Corporation
9 West 57th Street
New York, New York 10019
Attn: Steven Tananbaum
Fax: (212) 758-4735

with a copy to:
Kleinberg, Kaplan, Wolff & Cohen, P.C.
551 Fifth Avenue
New York, New York 10176
Attn: Fredric A. Kleinberg, Esq.
Fax: (212) 986-8866

5. Tax I.D. #: Bear Stearns Securities Corp.-Foreign (no tax i.d.#)

6. Notes and Interest Notes are to be registered in the name of the Purchaser, unless otherwise provided below:

Notes and Interest Notes to be registered in the name of Bear Stearns Securities Corp.

Purchaser: THE MAINSTAY FUNDS, ON BEHALF OF ITS HIGH YIELD CORPORATE BOND FUND SERIES

1. Principal Amount $8,870,000.00 (in U.S. Dollars).

The Purchase Price of the Note will be $8,870,000.00

2. In the case of cash payments on account of the Notes:

By wire transfer of Federal or other immediately available funds (identifying each payment as to issuer, security and principal or interest) to:

ABA # 0 1 1000028
STATE STREET BANK AND TRUST COMPANY
BOSTON, MASS 02101
FOR CREDIT TO:
ACCT NAME: MAINSTAY HIGH YIELD CORPORATE BOND FUND
DDA # 4266 0761
ACCT # SNO4

3. In case of PIK interest payments (Interest Notes) on account of the Note, deliver the Interest Notes to:

CHASE BANK
A/C STATE STREET BANK AND TRUST COMPANY
4 NEW YORK PLAZA
GROUND FLOOR/RECEIVE WINDOW
NEW YORK, NEW YORK 10004
FOR CREDIT TO:
ACCT. NAME: MAINSTAY HIGH YIELD CORPORATE BOND FUND
ACCT. # SN04

4. All communications shall be delivered or mailed to:

The Mainstay Funds, on behalf of its High Yield
Corporate Bond Fund Series
c/o MacKay-Shields Financial Corporation
9 West 57th Street
New York, New York 10019
Attn: Steven Tananbaum
Fax: (212) 758-4735

with a copy to:
Kleinberg, Kaplan, Wolff & Cohen, P.C.
551 Fifth Avenue
New York, New York 10176
Attn: Fredric A. Kleinberg, Esq.
Fax: (212) 986-8866

5. Tax I.D.#: 04-2910780

6. Notes and Interest Notes are to be registered in the name of the Purchaser, unless otherwise provided below:

Notes and Interest Notes to be registered in the name of Daffodil & Co.

Purchaser: MAINSTAY VP SERIES FUND, INC., ON BEHALF OF HIGH YIELD CORPORATE BOND PORTFOLIO

1. Principal Amount $2,500,000.00 (in U.S. Dollars).

The Purchase Price of the Note will be $2,500,000.00

2. In the case of cash payments on account of the Notes:

By wire transfer of Federal or other immediately available funds (identifying
---- --------
each payment as to issuer, security and principal or interest) to:

ABA # 021000018
BANK OF NEW YORK/CUST.
GLA 11 1612

FOR CREDIT TO:
ACCT NAME: MAINSTAY V.P. SERIES HIGH YIELD
CORPORATE BOND FUND
ACCT # 274467

3. In case of PIK interest payments (Interest Notes) on account of the Note, deliver the Interest Notes to:

BANK OF NEW YORK
1 WALL STREET
3RD FLOOR, WINDOW A
ACCT. NO. 274467
ACCT. NAME: MAINSTAY VP SERIES HIGH YIELD CORPORATE BOND FUND
[NOTIFY: SYLVIA ORTIZ]

4. All communications shall be delivered or mailed to:

Mainstay VP Series Fund, Inc., on behalf of High Yield
Corporate Bond Portfolio
c/o MacKay-Shields Financial Corporation
9 West 57th Street
New York, New York 10019
Attn: Steven Tananbaum
Fax: (212) 758-4735

with a copy to:
Kleinberg, Kaplan, Wolff & Cohen, P.C.
551 Fifth Avenue
New York, New York 10176
Attn: Fredric A. Kleinberg, Esq.
Fax: (212) 986-8866

5. Tax I.D. #: 13-3818793

6. Notes and Interest Notes are to be registered in the name of the Purchaser, unless otherwise provided below:

Notes and Interest Notes to be registered in the name of Hare & Co.

Purchaser: POLICE OFFICERS PENSION SYSTEM OF THE CITY OF HOUSTON

1. Principal Amount $500,000.00 (in U.S. Dollars).

The Purchase Price of the Note will be $500,000.00

2. In the case of cash payments on account of the Notes:

By wire transfer of Federal or other immediately available funds (identifying each payment as to issuer, security and principal or interest) to:

ABA # 071-000-152
NORTHERN TRUST/CHGO TRUST
FOR CREDIT TO:
ACCT # 5186061000
ACCT NAME: POLICE OFFICERS PENSION SYSTEM OF THE
CITY OF HOUSTON
ACCT # 26-41113

3. In case of PIK interest payments (Interest Notes) on account of the Note, deliver the Interest Notes to:

NORTHERN TRUST COMPANY
40 BROAD STREET
8TH FLOOR
NEW YORK, NEW YORK 10004
ACCT. NO. 26-41113
ACCT. NAME: POLICE OFFICERS PENSION SYSTEM OF THE
CITY OF HOUSTON
NOTIFY: GLEN JOHNSON

4. All communications shall be delivered or mailed to:

Police Officers Pension System of the City of Houston
c/o MacKay-Shields Financial Corporation
9 West 57th Street
New York, New York 10019
Attn: Steven Tananbaum
Fax: (212) 758-4735

with a copy to:
Kleinberg, Kaplan, Wolff & Cohen, P.C.
551 Fifth Avenue
New York, New York 10176
Attn: Fredric A. Kleinberg, Esq.
Fax: (212) 986-8866

5. Tax I.D. #: 74-6036541

6. Notes and Interest Notes are to be registered in the name of the Purchaser, unless otherwise provided below:

Notes and Interest Notes to be registered in the name of Booth & Co.

Purchaser: VULCAN MATERIALS COMPANY HIGH YIELD ACCOUNT

1. Principal Amount $75,000.00 (in U.S. Dollars).

The Purchase Price of the Note will be $75,000.00

2. In the case of cash payments on account of the Notes:

By wire transfer of Federal or other immediately available funds (identifying each payment as to issuer, security and principal or interest) to:

ABA # 071-000-152
NORTHERN TRUST/CHGO TRUST
FOR CREDIT TO:
ACCT # 5186061000
ACCT NAME: VULCAN MATERIALS
ACCT # 22-00065

3. In case of PIK interest payments (Interest Notes) on account of the Note, deliver the Interest Notes to:

NORTHERN TRUST COMPANY
40 BROAD STREET
8TH FLOOR
NEW YORK, NEW YORK 10004
ACCT. NO. 22-00065
ACCT. NAME: VULCAN MATERIALS
NOTIFY: GLEN JOHNSON

4. All communications shall be delivered or mailed to:

Vulcan Materials Company High Yield Account
c/o MacKay-Shields Financial Corporation
9 West 57th Street
New York, New York 10019
Attn: Steven Tananbaum
Fax: (212) 758-4735

with a copy to:
Kleinberg, Kaplan, Wolff & Cohen, P.C.
551 Fifth Avenue
New York, New York 10176
Attn: Fredric A. Kleinberg, Esq.
Fax: (212) 986-8866

5. Tax I.D. #: 751867619

6. Notes and Interest Notes are to be registered in the name of the Purchaser, unless otherwise provided below:

Notes and Interest Notes to be registered in the name of Booth & Co.

Purchaser: THE 1199 HEALTH CARE EMPLOYEES PENSION FUND

1. Principal Amount 1,500,000.00 (in U.S. Dollars).

The Purchase Price of the Note will be $1,500,000.00

2. In the case of cash payments on account of the Notes:

By wire transfer of Federal or other immediately available funds (identifying each payment as to issuer, security and principal or interest) to:

ABA # 071-000-152
NORTHERN TRUST/CHGO TRUST
FOR CREDIT TO:
ACCT # 5186061000
ACCT NAME: LOCAL 1199 HEALTHCARE
ACCT # 26-44894

3. In case of PIK interest payments (Interest Notes) on account of the Note, deliver the Interest Notes to:

NORTHERN TRUST COMPANY
40 BROAD STREET
8TH FLOOR
NEW YORK, NEW YORK
ACCT. NO. 26-44894
ACCT. NAME: 1199 HEALTH CARE FUND
NOTIFY: GLEN JOHNSON

4. All communications shall be delivered or mailed to:

The 1199 Health Care Employees Pension Fund
c/o MacKay-Shields Financial Corporation
9 West 57th Street
New York, New York 10019
Attn: Steven Tananbaum
Fax: (212) 758-4735

with a copy to:
Kleinberg, Kaplan, Wolff & Cohen, P.C.
551 Fifth Avenue
New York, New York 10176
Attn: Fredric A. Kleinberg, Esq.
Fax: (212) 986-8866

5. Tax I.D. #: 13-3604862

6. Notes and Interest Notes are to be registered in the name of the Purchaser, unless otherwise provided below:

Notes and Interest Notes to be registered in the name of Booth & Co.

Purchaser: IMPERIAL BANK

1. Principal Amount $2,000,000.00 (in U.S. Dollars).

The Purchase Price of the Note will be $2,000,000.00

2. In the case of cash payments on account of the Notes:

By wire transfer of Federal or other immediately available funds (identifying each payment as to issuer, security and principal or interest) to:

ABA # 122201444
IMPERIAL BANK
FOR CREDIT TO:
ACCT NAME: IMPERIAL BANK
ACCT # 736000021
ATTN: DONALD ROBERTS RE: METAWAVE

3. In case of PIK interest payments (Interest Notes) on account of the Note, deliver the Interest Notes to:

Imperial Bank
Attn.: Etta Tucker #2560
9920 La Cienega Bl. #628
Inglewood, CA 90301
Fax: 310-338-6110

with a copy to:

Imperial Bank
777 108th Avenue NE
Bellevue, Washington 98004-6672
Attn: Jim Ellison
Senior Vice President
Fax: (425) 454-6224

4. All communications shall be delivered or mailed to:

Imperial Bank
777 108th Avenue NE
Bellevue, Washington 98004-6672
Attn: Jim Ellison
Senior Vice President
Fax: (425) 454-6224

with a copy to:

Imperial Bank
Attn: Donald Roberts

226 Airport Parkway
San Jose, CA 95110
Fax: (408) 451-8524

5. Tax I.D. #: 95-2247354

6. Notes and Interest Notes are to be registered in the name of the Purchaser, unless otherwise provided below:

Notes and Interest Notes to be registered in the name of [_____

_____] (if other than Purchaser).

Purchaser: POWERWAVE TECHNOLOGIES, INC.

1. Principal Amount $2,500,000.00 (in U.S. Dollars).

The Purchase Price of the Note will be $2,500,000.00

2. In the case of cash payments on account of the Notes:

By wire transfer of Federal or other immediately available funds (identifying each payment as to issuer, security and principal or interest) to:

ABA # 121000358
BANK OF AMERICA NT&SA
SAN FRANCISCO, CALIFORNIA
FOR CREDIT TO:
ACCT NAME: POWERWAVE TECHNOLOGIES, INC.
ACCT # 09326-00675

3. In case of PIK interest payments (Interest Notes) on account of the Note, deliver the Interest Notes to Purchaser at its address provided below.

4. All communications shall be delivered or mailed to:

Powerwave Technologies, Inc.
2026 McGaw Avenue
Irvine, California 92614
Attn: Kevin Michaels
Fax: (714) 757-6675

with a copy to:

5. Tax I.D. #: 11-2723423

6. Notes and Interest Notes are to be registered in the name of the Purchaser,

unless otherwise provided below:

Notes and Interest Notes to be registered in the name of [_____
_____] (if other than Purchaser).

Purchaser: BT HOLDINGS (NY), INC.

1. Principal Amount $4,500,000.00 (in U.S. Dollars).

The Purchase Price of the Note will be $4,500,000.00

2. In the case of cash payments on account of the Notes:

By wire transfer of Federal or other immediately available funds (identifying each payment as to issuer, security and principal or interest) to:

ABA # 021 001 033
Bankers Trust Co.
FOR CREDIT TO: BT Holdings (NY), Inc.
ACCT # 01-418-767
ACCT NAME: Ref: Metawave
Profit Center 808425

3. In case of PIK interest payments (Interest Notes) on account of the Note, deliver the Interest Notes to:

BT Alex Brown Inc.
14 Wall Street, 7th Floor
New York, New York 10005
Attn: Fran Lombardi
Ref: Metawave Communications Corporation (Acct. No.: 215 69 001)

4. All communications shall be delivered or mailed to:

BT Holdings (NY), Inc.
c/o Bankers Trust Corp.
130 Liberty Street, 29th Floor
New York, New York 10006
Attn: Christine Barbella-Foggia
Phone: 212-250-6751
Fax: 212-669-1502

5. Tax I.D. #: 13-3311934

6. Notes and Interest Notes are to be registered in the name of the Purchaser, unless otherwise provided below:

Notes and Interest Notes to be registered in the name of BT Alex Brown Inc.

Purchaser: BANKAMERICA INVESTMENT CORPORATION

1. Principal Amount $4,000,000.00 (in U.S. Dollars).

The Purchase Price of the Note will be $4,000,000.00

2. In the case of cash payments on account of the Notes:

By wire transfer of Federal or other immediately available funds (identifying each payment as to issuer, security and principal or interest) to:

BANK OF AMERICA ILLINOIS
231 SOUTH LASALLE STREET
CHICAGO, IL 60697
ABA # 071-000-039
A/C NAME: BANKAMERICA INVESTMENT CORP.
DDA ACCOUNT # 72-50967
REF: METAWAVE COMMUNICATIONS

3. In case of PIK interest payments (Interest Notes) on account of the Note, deliver the Interest Notes to:

BankAmerica Investment Corporation,
a subsidiary of BankAmerica Corporation
231 South LaSalle Street - 19th Floor
Chicago, IL 60697
Attn: Rosemary E. Szurko

(PLEASE MAIL ALL HARDCOPY CONFIRMATIONS)

4. All communications shall be delivered or mailed to:

BankAmerica Investment Corporation
231 South LaSalle Street
Chicago, IL 60697
Attn: Moira A. Cary, Esq.
Christopher S. Field, Esq.
Fax: (312) 828-5423

with a copy to:

Rosemary E. Szurko
Bank of America NT & SA
231 South LaSalle Street
Chicago, IL 60697
Fax: (312) 828-5423

5. Tax I.D. #: 36-3101574

6. Notes and Interest Notes are to be registered in the name of the Purchaser, unless otherwise provided below:

Notes and Interest Notes to be registered in the name of [_____
_____] (if other than Purchaser).

EXHIBIT A

This note has not been registered under the United State Securities Act of 1933, as amended (the "Securities Act"), or any state securities laws. Neither this note nor any interest or participation herein may be reofferred, sold, assigned, transferred, pledged, encumbered or otherwise disposed of in the absence of such registration or unless such transaction is exempt from, or not subject to, registration. The holder of this note by its acceptance hereof agrees to offer, sell or otherwise transfer this note, prior to the date which is two years after the later of the original issue date hereof and the last date on which any issuer, or any affiliate of any issuer, was the owner of this note (or any predecessor of this security) only (A) to the issuer, (B) pursuant to a registration statement which has been declared effective under the Securities Act, (C) for so long as this security is eligible for resale pursuant to Rule 144A under the Securities Act ("Rule 144A"), to a person it reasonably believes is a "qualified institutional buyer" as defined in Rule 144A that purchases for its own account or for the account of a qualified institutional buyer to whom notice is given that the transfer is being made in reliance on Rule 144A, (D) pursuant to offers and sales to non-U.S. Persons that Occur outside the United States within the meaning of Regulation S under the Securities Act, (E) to an institutional "accredited investor," and not with a view to, or for offer or sale in connection with, any distribution in violation of the Securities Act, or (F) pursuant to another available exemption from the registration requirements of the Securities Act, subject to the issuer's right prior to any such offer, sale or transfer pursuant to clause (E) or (F) to require the delivery of an opinion of counsel reasonably satisfactory to it.

METAWAVE COMMUNICATION CORPORATION
13.75% Senior Secured Bridge Note Due April [ ], 2000

No. _____ April [ ],1998

METAWAVE COMMUNICATIONS CORPORATION, a Delaware corporation (the "Company"), for value received, hereby promises to pay to

[_____]

or registered assigns
on the [ ] day of April, 2000
the principal amount of
[_____] ($_____)

Interest on this Note will accrue at a rate equal to the lower of (i)

13.75% per annum (as adjusted in accordance with the following sentence, the "Base Interest Rate") or, (ii) the highest rate permitted by law (such lower amount being referred to as the "Interest Rate"), and be payable semi-annually on April [ ] and October [ ] of each year, commencing on October [ ], 1998, and at maturity. On April [ ], 1999, and at the end of each subsequent one hundred eighty (180) day period, the Base Interest Rate will increase by 200 basis points, to a maximum interest rate of 18.0%. Interest on this Note shall accrue and be computed semi-annually on the basis of a 360-day year of twelve 30-day months.

The interest shall be payable at the option of the Company (x) in kind by the issuance to the holders thereof of separate promissory notes (each an "Interest Note," and, collectively, the "Interest Notes"), in each case having a principal amount equal to the amount of interest due and payable on such date or (y) in cash; provided that the Company will only be entitled to pay in cash if it has irrevocably notified in writing the holders of the Notes of its intention to make a cash interest payment at least ten (10) Business Days before the relevant interest payment date, it being agreed that payment in kind via Interest Notes is the default interest payment method in the absence of such notice. Interest on Interest Notes shall accrue at the same Interest Rate per annum and shall be payable in kind by the issuance of additional Interest Notes or in cash as provided above on the same date as interest is payable on the Notes. The unpaid principal balance of all Notes (including Interest Notes), together with unpaid accrued interest thereon, shall be due and payable in cash on the stated date of maturity of the Notes. Such Interest Notes shall be substantially in the form of this Note. Notwithstanding different issue dates and interest terms, unless the context clearly requires otherwise, all Interest Notes shall be Notes for all purposes of the Agreement.

The Company agrees to pay interest in cash on overdue principal (including any overdue required or optional prepayment of principal) and premium, if any, and (to the extent legally

enforceable) on any overdue installment of interest at the Interest Rate per annum from the date such payment is due, whether by acceleration or otherwise, until paid. At maturity or upon any acceleration of this Note, the principal hereof and accrued but unpaid interest hereon are payable at the principal office of the Company at 8700 148th Avenue NE, Redmond, Washington 98052 in immediately available coin or currency of the United States of America which at the time of payment shall be legal tender for the payment of public and private debts.

If any amount of principal, premium or interest, if any, on or in respect of this Note becomes due and payable on any date which is not a Business Day, such amount shall be payable on the next preceding Business Day. "Business Day" means any day other than a Saturday, Sunday, statutory holiday or other day on which banks in New York City are required by law to close or are customarily closed.

This Note is one of the 13.75% Senior Secured Bridge Notes due April [ ], 2000 of the Company in the aggregate original principal amount of $29,000,000 issued or to be issued under and pursuant to the terms and provisions of the Note Agreement, dated as of April [ ], 1998 (the "Note Agreement"), entered into by the Company with the original purchasers therein referred to and this Note and the holder hereof are entitled equally and ratably with the holders of all other Notes outstanding under the Note Agreement to all the benefits provided for thereby or referred to therein. Capitalized terms used herein and not otherwise defined shall have the meanings provided in the Note Agreement. The consent and waiver provisions contained in Section 7.1 of the Note Agreement are incorporated herein and made a part hereof.

This Note (including Interest Notes) and the other Notes issued under the Note Agreement are senior secured obligations of the Company, ranking pari passu in right of payment with all permitted existing and permitted future senior secured Indebtedness of the Company and senior to all unsecured or subordinated Indebtedness of the Company, all non-permitted senior secured indebtedness of the Company and all other senior indebtedness of the Company.

This Note and the other Notes outstanding under the Note Agreement may be declared due prior to their expressed maturity dates and certain prepayments are required to be made thereon, all in the events, on the terms and in the manner and amounts as provided in the Note Agreement.

The Notes are not subject to prepayment or redemption at the option of the Company prior to their expressed maturity dates except on the terms and conditions and in the amounts and with the premium, if any, set forth in the Note Agreement.

This Note is registered on the books of the Company and is transferable only by surrender thereof at the principal office of the Company duly endorsed or accompanied by a written instrument of transfer duly executed by the registered holder of this Note or its attorney duly authorized in writing, such transfer to be made in accordance with the requirements set forth in this Note and the Note Agreement. Payment of or on account of principal, premium and interest, if any, on this Note shall be made only to or upon the order in writing of the registered holder.

This Note and the Note Agreement are governed by and construed and enforced in accordance with the laws of the State of New York applicable to contracts executed and to be performed entirely in such state. If any provision of this Note is determined to be unenforceable under the laws of the State of New York, and if such provision would be enforceable under the laws of the State of Washington, then it is agreed that the Courts of the State of New York shall interpret and enforce such provision pursuant to the laws of the State of Washington.

METAWAVE COMMUNICATIONS CORPORATION

By:_____
Name:
Title:

EXHIBIT B

This Warrant has not been registered under the Securities Act of 1933, as amended, or any state securities laws. It may not be sold or offered for sale except pursuant to an effective registration statement under said act and any applicable state securities law or an applicable exemption from such registration requirements.

_____

April [ ], 1998

METAWAVE COMMUNICATIONS CORPORATION

_____

Preferred Stock Purchase Warrant

Metawave Communications Corporation, a Delaware corporation (the "COMPANY"), hereby certifies that for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [NAME OF PURCHASER] having an address at [ADDRESS OF PURCHASER] ("PURCHASER") or any other Warrant Holder is entitled, on the terms and conditions set forth below, to purchase from the Company at any time beginning on the date hereof and ending on the second anniversary of the Closing Date, [537,500 IN THE AGGREGATE] fully paid and nonassessable shares of Series D Preferred Stock, par value $.0001 of the Company (the "PREFERRED STOCK"), at a purchase price per share of Preferred Stock equal to $.01 per share (the "PURCHASE PRICE"), as the same may be adjusted pursuant to Section 5 herein.

1. DEFINITIONS.

a) The term "AGREEMENT" shall mean the Note Agreement, dated as of April [ ], 1998, between the Company and the Purchasers signatory thereto.

b) The term "CERTIFICATE" shall mean the Third Amended and Restated Certificate of Incorporation of the Company filed by the Company with the Secretary of State of State of Delaware on August 4, 1997, containing the designations of the Preferred Stock.

c) The term "CLOSING DATE" shall mean April [ ], 1998.

d) The term "INVESTORS' RIGHTS AGREEMENT" shall mean the Third Amended and Restated Investors' Rights Agreement of the Company dated August 6, 1997 with the Investors listed on Schedule A thereto, containing, inter alia, certain registration rights, as in effect on the date hereof.

e) The term "NOTE" shall mean one of the 13.75% Senior Secured Bridge Notes issued pursuant to the Agreement.

f) The term "PREFERRED STOCK" shall mean the Series D Preferred Stock of the Company issued pursuant to the Certificate.

g) The term "WARRANT HOLDER" shall mean the Purchaser or any assignee of all or any portion of this Warrant.

h) The term "WARRANT SHARES" shall mean the Shares of Preferred Stock or other securities issuable upon exercise of this Warrant.

Capitalized terms used but not defined in this Warrant shall have the meanings specified in the Agreement.

2. EXERCISE OF WARRANT.

This Warrant may be exercised by the Warrant Holder, in whole or in part, at any time and from time to time by either of the following methods:

(a) The Warrant Holder may surrender this Warrant, together with the form of subscription at the end hereof duly executed by Warrant Holder ("SUBSCRIPTION NOTICE"), at the offices of the Company or any transfer agent for the Preferred Stock; or

(b) The Warrant Holder may also exercise this Warrant, in whole or in part, in a "cashless" or "net-issue" exercise by delivering to the offices of the Company or any transfer agent for the Preferred Stock this Warrant, together with a Subscription Notice specifying the number of Warrant Shares to be delivered to such Warrant Holder ("DELIVERABLE SHARES") and the number of Warrant Shares with respect to which this Warrant is being surrendered in payment of the aggregate Purchase Price for the Deliverable Shares ("SURRENDERED SHARES"); provided that the Purchase Price multiplied by the number of Deliverable Shares shall not exceed the value of the Surrendered Shares; and provided further that the sum of the number of Deliverable Shares and the number

of Surrendered Shares so specified shall not exceed the aggregate number of Warrant Shares represented by this Warrant. For the purposes of this provision, each Warrant Share as to which this Warrant is surrendered will be attributed a value equal to the fair market value (as defined below) of the Warrant Share minus the Purchase Price of the Warrant Share.

In the event that the Warrant is not exercised in full, the number of Warrant Shares shall be reduced by the number of such Warrant Shares for which this Warrant is exercised and/or surrendered, and the Company, at its expense, shall within five (5) Business Days issue and deliver to or upon the order of Warrant Holder a new Warrant of like tenor in the name of Warrant Holder or as Warrant Holder (upon payment by Warrant Holder of any applicable transfer taxes) may request, reflecting such adjusted Warrant Shares.

3. DELIVERY OF STOCK CERTIFICATES.

a) Subject to the terms and conditions of this Warrant, as soon as practicable after the exercise of this Warrant in full or in part, and in any event within five (5) Business Days thereafter, the Company shall transmit the certificates (together with any other stock or other securities or property to which Warrant Holder is entitled upon exercise) by messenger or overnight delivery service to reach the address designated by such holder within five (5) Business Days after the receipt of the Subscription Notice ("B+5"). If such certificates are not received by the Warrant Holder within B+5, then the Warrant Holder will be entitled to revoke and withdraw its exercise of its Warrant at any time prior to its receipt of those certificates.

b) This Warrant may not be exercised as to fractional shares of Preferred Stock. In the event that the exercise of this Warrant, in full or in part, would result in the issuance of any fractional share of Preferred Stock, then in such event the Warrant Holder shall be entitled to cash equal to the fair market value of such fractional share. For purposes of this Warrant, "fair market value" shall equal the closing trading price of the Common Stock on the New York Stock Exchange, or the American Stock Exchange or the Nasdaq Stock Market, whichever market (any, an "APPROVED MARKET") is the principal trading exchange or market for the Common Stock (the "PRINCIPAL MARKET") on the date of determination, multiplied by the aggregate number of shares of Common Stock into which such Preferred Shares may then be converted, or, if the Common Stock is not listed or admitted to trading on any Approved Market, the average of the closing bid and asked prices on the over-the-counter market as furnished by any New York Stock Exchange member firm reasonably selected from time to time by the Company for that purpose and reasonably acceptable to the Warrant Holder, multiplied by the aggregate number of shares of Common Stock into which such Preferred Shares may then be converted, or, if the Common Stock is not listed or admitted to trading on any Approved Market or traded over-the-counter and the average price cannot be determined as contemplated above, the fair market value of the Preferred Stock shall be as reasonably determined in good faith by the

Company's Board of Directors with the concurrence of the Warrant Holder.

4. (A) REPRESENTATIONS AND COVENANTS OF THE COMPANY.

a) The Company shall comply with its obligations under Section 6 with respect to the Warrant Shares and the Common Stock issuable upon conversion of the Warrant Shares ("COMMON SHARES"), including, without limitation, the Company's obligation, subject to Section 6(a) below, to include the Warrant Shares and the Common Shares in any registration statement registering the Warrant Shares and/or the Common Shares under the Securities Act of 1933, as amended (the "ACT").

b) The Company shall take all necessary action and proceedings as may be required and permitted by applicable law, rule and regulation, including, without limitation (after the Initial Public Offering) the notification of the Principal Market, for the legal and valid issuance of this Warrant and the Warrant Shares to the Warrant Holder under this Warrant and the Common Shares under the Warrant Shares.

c) From the date of the Initial Public Offering through the last date on which this Warrant is exercisable, the Company shall take all steps necessary to insure that the Preferred Stock and the Common Stock remains listed on the Principal Market.

d) The Warrant Shares, when issued in accordance with the terms hereof, and the Common Shares, when issued in accordance with the terms of the Warrant Shares, will be duly authorized and, when paid for or issued in accordance with the terms hereof and thereof, shall be validly issued, fully paid and non-assessable. The Company has authorized and reserved for issuance to Warrant holders and Warrant Share holders the requisite number of shares of Preferred Stock and Common Stock to be issued pursuant to this Warrant and pursuant to the Warrant Shares.

e) The Company shall at all times, commencing within five days from the date hereof, reserve and keep available, solely for issuance and delivery as Warrant Shares hereunder and as Common Shares under the Warrant Shares, one and one-half times such number of shares of Preferred Stock and one and one-half times such number of shares of Common Stock as shall from time to time be issuable hereunder and thereunder.

f) The Company agrees to use its reasonable best efforts to promptly provide to the holders of this Warrant, and the holders of the Warrant Shares, and the holders of the Common Shares, from time to time upon request the information required under Rule 144A under the Securities Act, so as to permit a sale at such time or times of the Warrant and/or the Warrant Shares and/or the Common Shares under said Rule 144A.

g) With a view to making available to Warrant holders, the holders of Warrant Shares and the holders of Common Shares the benefits of Rule 144 promulgated under the Act and any other rule or regulation of the Securities and Exchange Commission ("SEC") that may at any time permit Warrant holders, the holders of Warrant Shares and the holders of Common Shares to sell securities of the Company to the public without registration, the Company agrees to use its reasonable best efforts after the Initial Public Offering to:

i) make and keep public information available, as those terms are understood and defined in Rule 144, at all times;

ii) file with the SEC in a timely manner all reports and other documents required of the Company under the Act and the Securities Exchange Act of 1934, as amended (the "EXCHANGE ACT"); and

iii) furnish to any such holder forthwith upon request a written statement by the Company that it has complied with the reporting requirements of Rule 144 and of the Act and the Exchange Act, a copy of the most recent annual or quarterly report of the Company, and such other reports and documents so filed by the Company as may be reasonably requested to permit any such holder to take advantage of any rule or regulation of the SEC permitting the selling of any such securities without registration.

h) The Company covenants and represents that, so long as any of the Warrants or the Warrant Shares are outstanding (i) the Company will not take any action which will impair or otherwise weaken the rights and privileges of the holders of the Warrants and the

Warrant Shares and (ii) the Company will deliver to the holders of the Warrants and Warrant Shares, at the same time as same is required to be delivered to Investors under the Investors' Rights Agreement, the financial statements of other documents and information referred to in Section 2.1 of the Investors' Rights Agreement.

(B) REPRESENTATIONS AND COVENANTS OF THE PURCHASER.

The Purchaser shall not transfer Warrant Shares, unless such transfer is pursuant to an effective registration statement under the Act or pursuant to an applicable exemption from such registration requirements.

5. ADJUSTMENT OF PURCHASE PRICE AND NUMBER OF SHARES. The number of and kind of securities purchasable upon exercise of this Warrant and the Purchase Price shall be subject to adjustment from time to time as follows:

a) Subdivisions, Combinations and other Issuances. If the Company

shall at any time after the date hereof but prior to the expiration of this Warrant subdivide its outstanding securities as to which purchase rights under this Warrant exist, by split-up, spin-off, or otherwise, or combine its outstanding securities as to which purchase rights under this Warrant exist, the number of Warrant Shares as to which this Warrant is exercisable as of the date of such subdivision, split-up, spin-off or combination shall forthwith be proportionately increased in the case of a subdivision, or proportionately decreased in the case of a combination. Appropriate proportional adjustments (decrease in the case of subdivision, increase in the case of combination) shall also be made to the Purchase Price payable per share, so that the aggregate Purchase Price payable for the total number of Warrant Shares purchasable under this Warrant as of such date shall remain the same as it would have been before such subdivision or combination.

b) Stock Dividend. If at any time after the date hereof the Company declares a dividend or other distribution on Preferred Stock payable in Preferred Stock or other securities or rights convertible into Preferred Stock ("PREFERRED STOCK EQUIVALENTS") without payment of any consideration by holders of Preferred Stock for the additional shares of Preferred Stock or the Preferred Stock Equivalents (including the additional shares of Preferred Stock issuable upon exercise or conversion thereof), then the number of shares of Preferred Stock for which this Warrant may be exercised shall be increased as of the record date (or the date of such dividend distribution if no record date is set) for determining which holders of Preferred Stock shall be entitled to receive such dividends, in proportion to the increase in the number of outstanding shares (and shares of Preferred Stock issuable upon conversion of all such securities convertible into Preferred Stock) of Preferred Stock as a result of such dividend, and the Purchase Price shall be proportionately reduced so that the aggregate Purchase Price for all the Warrant Shares issuable hereunder immediately after the record date (or on the date of such distribution, if applicable), for such dividend shall equal the aggregate Purchase Price so payable immediately before such record date (or on the date of such distribution, if applicable).

c) Other Distributions. If at any time after the date hereof the Company distributes to holders of its Preferred Stock, other than as part of its dissolution, liquidation or the winding up of its affairs, any shares of its capital stock, any evidence of indebtedness or any of its assets (other than Preferred Stock), then the number of Warrant Shares for which this Warrant

is exercisable shall be increased to equal: (i) the number of Warrant Shares for which this Warrant is exercisable immediately prior to such event, (ii) multiplied by a fraction, (A) the numerator of which shall be the fair market value per share of Preferred Stock on the record date for the dividend or distribution, and (B) the denominator of which shall be the fair market value price per share of Preferred Stock on the record date for the dividend or

distribution minus the amount allocable to one share of Preferred Stock of the value (as jointly determined in good faith by the Board of Directors of the Company and the Warrant Holder) of any and all such evidences of indebtedness, shares of capital stock, other securities or property, so distributed. The Purchase Price shall be reduced to equal: (i) the Purchase Price in effect immediately before the occurrence of any event (ii) multiplied by a fraction, (A) the numerator of which is the number of Warrant Shares for which this Warrant is exercisable immediately before the adjustment, and (B) the denominator of which is the number of Warrant Shares for which this Warrant is exercisable immediately after the adjustment.

d) Merger, etc. If at any time after the date hereof there shall be a merger or consolidation of the Company with or into or a transfer of all or substantially all of the assets of the Company to another entity, then the Warrant Holder shall be entitled to receive upon or after such transfer, merger or consolidation becoming effective, and upon payment of the Purchase Price then in effect, the number of shares or other securities or property of the Company or of the successor corporation resulting from such merger or consolidation, which would have been received by Warrant Holder for the shares of stock subject to this Warrant had this Warrant been exercised just prior to such transfer, merger or consolidation becoming effective or to the applicable record date thereof, as the case may be. The Company will not merge or consolidate with or into any other corporation, or sell or otherwise transfer its property, assets and business substantially as an entirety to another corporation, unless the corporation resulting from such merger or consolidation (if not the Company), or such transferee corporation, as the case may be, shall expressly assume, by supplemental agreement reasonably satisfactory in form and substance to the Warrant Holder, the due and punctual performance and observance of each and every covenant and condition of this Warrant to be performed and observed by the Company.

e) Reclassification, etc. If at any time after the date hereof there shall be a reorganization or reclassification of the securities as to which purchase rights under this Warrant exist into the same or a different number of securities of any other class or classes, then the Warrant Holder shall thereafter be entitled to receive upon exercise of this Warrant, during the period specified herein and upon payment of the Purchase Price then in effect, the number of shares or other securities or property resulting from such reorganization or reclassification, which would have been received by the Warrant Holder for the shares of stock subject to this Warrant had this Warrant at such time been exercised.

f) Warrant Share Adjustment. In the event that the Company issues or sells any Additional Stock, as that term is defined in Section 4(d)(ii) of Article IV of the Certificate at an effective purchase price per share of Common Stock ("NEW PRICE") which is less than $9.25 per share ("FIXED PRICE"), as adjusted for stock splits and stock dividends, then in each such case ("DILUTION EVENT"), the number of Warrant Shares which may be purchased upon the exercise

of this Warrant shall be increased by multiplying the number of Warrant Shares which may be purchased upon the exercise of this Warrant by a fraction, the numerator of which is the Fixed Price minus the New Price and the denominator of which is the New Price. However, to the

extent that a Dilution Event results, pursuant to the terms of the Certificate, in the holder of this Warrant being entitled to purchase more Common Shares ("EXCESS SHARES") upon conversion of the Warrant Shares issuable hereunder into Common Shares, then the additional number of Warrant Shares to which the holder hereof would have been entitled to receive pursuant to the immediately preceding sentence of this Section 5(f) with respect to such Dilution Event shall be reduced by the number of Excess Shares to which the holder of this Warrant would then be entitled to receive upon exercise of this Warrant and the conversion of the Warrant Shares issuable hereunder into Common Shares.

6. PIGGYBACK REGISTRATIONS/MARKET STAND-OFF PROVISION.

a) Right to Piggyback. The Company covenants that the Warrant holders and the holders of the Warrant Shares shall at all times have the same piggyback and other rights (other than demand registration rights referred to in Sections 1.2 and 1.12 of the Investor's Rights Agreement) as a "Holder" and as a "Series D Investor" as are contained in the Investors' Rights Agreement, which rights are incorporated herein and made a part hereof.

b) Market Stand-Off Provision. The holders of the Warrants and the Warrant Shares agree to be bound (as an "Investor") by the market stand-off provisions contained in Section 1.15 of the Company's Investors' Rights Agreement on condition that: (i) all officers, directors and "control persons" of the Company, and members of their immediately family, are and remain bound by such provisions, (ii) all persons and entities who have registration rights (piggy-back, demand or otherwise) of any kind with respect to the Company's Stock are and remain bound by such provisions, and (iii) the Company enforces such provisions against all the holders of the Warrants only to the same extent and same degree that it enforces such provisions against all of the persons and entities referred to in (i) and (ii) immediately above. The Company acknowledges that the term "donees" as used in said Section 1.15 shall include successive transferees, assignees, participants and the like.

7. NO IMPAIRMENT. The Company will not, by amendment of its Certificate of Incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant or the terms of the Warrant Shares, but will at all times in good faith assist in the carrying out of all such terms and in the

taking of all such action as may be necessary or appropriate in order to protect the rights of the Warrant Holder and the holder of the Warrant Shares against impairment. Without limiting the generality of the foregoing, the Company (a) will not increase the par value of any Warrant Shares above the amount payable therefor on such exercise, and (b) will take all such action as may be reasonably necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares on the exercise of this Warrant and Common Stock upon conversion of the Warrant Shares.

8. NOTICE OF ADJUSTMENTS. Whenever the Purchase Price or number of Shares purchasable hereunder shall be adjusted pursuant to Section 5 hereof, the Company shall execute and deliver to the Warrant Holder a certificate setting forth, in reasonable detail, the event requiring the adjustment, the amount of the adjustment, the method by which such adjustment was calculated and the Purchase Price and number of shares purchasable hereunder after giving

effect to such adjustment, and shall cause a copy of such certificate to be mailed (by first class mail, postage prepaid) to the Warrant Holder.

9. RIGHTS AS STOCKHOLDER. Prior to exercise of this Warrant, the Warrant Holder shall not be entitled to any rights as a stockholder of the Company with respect to the Warrant Shares, including (without limitation) the right to vote such shares, receive dividends or other distributions thereon or be notified of stockholder meetings. However, in the event of any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right, the Company shall mail to each Warrant Holder, at least 10 Trading Days prior to the date specified therein, a notice specifying the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and the amount and character of such dividend, distribution or right.

10. LIMITATION ON EXERCISE. Notwithstanding anything to the contrary contained herein, this Warrant may not be exercised by the Warrant Holder to the extent that, after giving effect to Warrant Shares to be issued pursuant to a Subscription Notice, the total number of shares of Common Stock deemed beneficially owned by such holder (other than by virtue of ownership of this Warrant, or ownership of other securities that have limitations on the holder's rights to convert or exercise similar to the limitations set forth herein), together with all shares of Common Stock deemed beneficially owned by the holder's "affiliates" (as defined in Rule 144 of the Act) that would be aggregated for purposes of determining whether a group under Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") exists,

would exceed 9.9% of the Common Shares issued and outstanding immediately following such exercise (the "Restricted Ownership Percentage"); provided that
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(w) each Warrant Holder shall have the right at any time and from time to time to reduce its Restricted Ownership Percentage immediately upon notice to the Company or in the event of a Change of Control Transaction, (x) each Warrant Holder shall have the right at any time and from time to time to increase its Restricted Ownership Percentage or otherwise waive in whole or in part the restrictions of this Section 10 upon 61 days' prior notice to the Company or immediately in the event of a Change of Control Transaction, (y) each Warrant Holder can make subsequent adjustments pursuant to (w) or (x) any number of times from time to time (which adjustment shall be effective immediately if it results in a decrease in the Restricted Ownership Percentage or shall be effective upon 61 days' prior written notice or immediately in the event of a Change of Control Transaction if it results in an increase in the Restricted Ownership Percentage) and (z) each Warrant Holder may eliminate or reinstate this limitation at any time and from time to time (which elimination will be effective upon 61 days' prior notice and which reinstatement will be effective immediately). Without limiting the foregoing, in the event of a Change of Control Transaction, any holder may reinstate immediately (in whole or in part) the requirement that any increase in its Restricted Ownership Percentage be subject to 61 days' prior written notice, notwithstanding such Change of Control Transaction, without imposing such requirement on, or otherwise changing such holder's rights with respect to, any other Change of Control Transaction. For this purpose, any material modification of the terms of a Change of Control Transaction will be deemed to create a new Change of Control Transaction. A "CHANGE OF CONTROL TRANSACTION" will be deemed to have occurred upon the earlier of the announcement or consummation of a transaction or series of transactions involving (x) any consolidation or merger

of the Company with or into any other corporation or other entity or person (whether or not the Company is the surviving corporation), or any other corporate reorganization or transaction or series of related transactions in which in excess of 50% of the Company's voting power is transferred through a merger, consolidation, tender offer or similar transaction, or (y) in excess of 50% of the Company's Board of Directors consists of directors not nominated by the prior Board of Directors of the Company, or (z) any person (as defined in Section 13(d) of the Exchange Act, together with its affiliates and associates (as such terms are defined in Rule 405 under the Act), beneficially owns or is deemed to beneficially own (as described in Rule 13d-3 under the Exchange Act without regard to the 60-day exercise period) in excess of 50% of the Company's voting power. The delivery of a Subscription Notice by the Warrant Holder shall be deemed a representation by such holder that it is in compliance with this paragraph.

11. REPLACEMENT OF WARRANT. On receipt of evidence reasonably
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satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction of this Warrant, on delivery of an indemnity agreement reasonably satisfactory in form

to the Company or, in the case of any such mutilation, on surrender and cancellation of such Warrant, the Company at its expense promptly will execute and deliver, in lieu thereof a new Warrant of like tenor.

12. SPECIFIC PERFORMANCE; CONSENT TO JURISDICTION; CHOICE OF LAW.

a) The Company and the Warrant Holder acknowledge and agree that irreparable damage would occur in the event that any of the provisions of this Warrant were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall he entitled to an injunction or injunctions to prevent or cure breaches of the provisions of this Warrant and to enforce specifically the terms and provisions hereof, this being in addition to any other remedy to which either of them may be entitled by law or equity.

b) EACH OF THE COMPANY AND THE WARRANT HOLDER (I) HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK FOR THE PURPOSES OF ALL LEGAL PROCEEDINGS ARISING OUT OF OR RELATING TO THIS WARRANT AND (II) HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY CLAIM THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF SUCH COURT AND ANY OBJECTION WHICH IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF THE VENUE OF ANY SUCH PROCEEDING BROUGHT IN SUCH COURT AND ANY CLAIM THAT ANY SUCH PROCEEDING BROUGHT TO SUCH COURT HAS BEEN BROUGHT IN AN INCONVENIENT FORUM. EACH OF THE COMPANY AND THE WARRANT HOLDER CONSENTS TO PROCESS BEING SERVED IN ANY SUCH SUIT, ACTION OR PROCEEDING BY MAILING A COPY THEREOF TO SUCH PARTY AT THE ADDRESS IN EFFECT FOR NOTICES TO IT UNDER THIS WARRANT AND AGREES THAT SUCH SERVICE SHALL CONSTITUTE GOOD AND SUFFICIENT SERVICE OF PROCESS AND NOTICE THEREOF. NOTHING IN THIS PARAGRAPH SHALL AFFECT OR LIMIT ANY RIGHT TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY APPLICABLE LAW. IF ANY PROVISION OF THIS WARRANT IS DETERMINED TO BE UNENFORCEABLE UNDER THE LAWS OF THE STATE OF NEW YORK, AND IF SUCH PROVISION WOULD BE ENFORCEABLE UNDER THE LAWS OF THE STATE OF WASHINGTON, THEN IT IS AGREED THAT THE COURTS OF THE STATE OF NEW YORK SHALL INTERPRET AND ENFORCE SUCH PROVISION PURSUANT TO THE LAWS OF THE STATE OF WASHINGTON.

c) THE COMPANY AND THE WARRANT HOLDER IRREVOCABLY WAIVE THEIR RIGHT TO TRIAL BY JURY.

d) THIS WARRANT SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF NEW YORK APPLICABLE TO ALL CONTRACTS EXECUTED AND TO BE PERFORMED ENTIRELY WITHIN SUCH STATE.

13. REDEMPTION. This Warrant shall be subject to the provisions of Section 1.4 of the Agreement.

14. ENTIRE AGREEMENT; AMENDMENTS. This Warrant, the Exhibits and the

provisions contained in the Agreement and incorporated into this Warrant and the Warrant Shares contain the entire understanding of the parties with respect to the matters covered hereby and thereby and, except as specifically set forth herein and therein, neither the Company nor the Warrant Holder makes any representation, warranty, covenant or undertaking with respect to such matters. No provision of this Agreement may be waived or amended other than by a written instrument signed by the party against whom enforcement of any such amendment or waiver is sought.

15. NOTICES. Any notice or other communication required or permitted to be given hereunder shall be in writing and shall be effective (a) upon hand delivery or delivery by telex (with correct answer back received), telecopy or facsimile at the address or number designated below (if delivered on a business day during normal business hours where such notice is to be received), or the first business day following such delivery (if delivered other than on a business day during normal business hours where such notice is to be received) or (b) on the second business day following the date of mailing by express courier service, fully prepaid, addressed to such address, or upon actual receipt of such mailing, whichever shall first occur. The addresses for such communications shall be:

to the Company:

Metawave Communications Corporation
8700 148th Avenue NE
Redmond, Washington 98052
Attention: Chief Financial Officer; General Counsel
Facsimile: (425) 702-5970

to the Warrant Holder:

[NAME AND ADDRESS OF WARRANT HOLDER]
Attention:
Facsimile:

with copies to:

Kleinberg, Kaplan, Wolff & Cohen, P.C.
551 Fifth Avenue
New York, New York 10176

Attention: Fredric A. Kleinberg, Esq.
Facsimile: (212) 986-8866

Either party hereto may from time to time change its address for notices under

this Section 14 by giving at least 10 days prior written notice of such changed address to the other party hereto.

16. MISCELLANEOUS. This Warrant and the Warrant Shares and any term hereof or thereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought. The headings in this Warrant are for purposes of reference only, and shall not limit or otherwise affect any of the terms hereof. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

17. ASSIGNMENT. This Warrant may be transferred or assigned, in whole or in part (but not in amounts exercisable for less than 1,000 shares of Preferred Stock unless such smaller amount is all that remains under the Warrant), at any time and from time to time by the then Warrant Holder by submitting this Warrant to the Company together with a duly executed Assignment in substantially the form and substance of the Form of Assignment which accompanies this Warrant and, upon the Company's receipt hereof, and in any event, within three (3) business days thereafter, the Company shall issue a new Warrant to such assignee and a Warrant to the Warrant Holder to evidence that portion of this Warrant, if any as shall not have been so transferred or assigned. By accepting an assignment of this Warrant, the transferee agrees to be bound by the terms and conditions hereof, and shall be entitled to all of the rights and remedies of a holder of this Warrant.

Dated:_____ METAWAVE COMMUNICATIONS CORPORATION

By: _____
Name:
Title:

[CORPORATE SEAL]

Attest:

By: _____
Its

[SIGNATURE BLOCK OF WARRANT HOLDER]

(SIGNATURE PAGE OF METAWAVE COMMUNICATIONS CORPORATION PREFERRED STOCK PURCHASE WARRANT)

(SUBSCRIPTION NOTICE)
FORM OF WARRANT EXERCISE
(TO BE SIGNED ONLY ON EXERCISE OF WARRANT)

TO: METAWAVE COMMUNICATIONS CORPORATION
ATTN: SECRETARY

The undersigned, the holder of the within Warrant, hereby irrevocably elects to exercise this Warrant:

_____(A) for, and to purchase thereunder, _____ shares of Preferred Stock of Metawave Communications Corporation, a Delaware corporation (the "PREFERRED STOCK"), and herewith, or by wire transfer, makes payment of $ _____ therefor; or

_____(B) in a "cashless" or "net-issue exercise" for, and to purchase thereunder , _____ shares of Preferred Stock, and herewith makes payment therefor with _____ Surrendered Warrant Shares.

The undersigned requests that the certificates for such shares be issued in the name of, and delivered to _____, whose address is _____.

Dated:_____

(Signature must conform to name of holder
as specified on the face of the Warrant)

(Address)

Tax Identification Number:_____

_____

FORM OF ASSIGNMENT
(TO BE SIGNED ONLY ON TRANSFER OF WARRANT)

For value received, the undersigned hereby sells, assigns, and transfers unto _____ the right represented by the within Warrant to purchase _____ shares of Preferred Stock of METAWAVE COMMUNICATIONS CORPORATION, a Delaware corporation, to which the within Warrant relates, and appoints _____ Attorney to transfer such right on the books of METAWAVE COMMUNICATIONS CORPORATION, a Delaware corporation, with full power of substitution of premises.

Dated: _____

(Signature must conform to name of holder
as specified on the face of the Warrant)

(Address)

Signed in the presence of:

EXHIBIT E

COMPANY SECURITY AGREEMENT

SECURITY AGREEMENT dated as of the [_] day of April, 1998 by and between METAWAVE COMMUNICATIONS CORPORATION, a Delaware corporation, having its principal place of business at 8700 148th Avenue NE, Redmond, Washington (the "Company") and each other person signatory hereto and their respective successors and assigns (each, a "Secured Party" and together, the "Secured Parties").

RECITALS

A. The Secured Parties and the Company have entered into a Note Agreement, dated as of April [_], 1998 (as the same may be further amended, modified or supplemented from time to time, the "Note Agreement"), pursuant to which the Company will issue Notes (as defined in the Note Agreement) and Warrants (as defined in the Note Agreement) to each Secured Party.

B. To induce the Secured Parties to enter into the Note Agreement with the Company on and after the date hereof as provided in the Note Agreement, the Company wishes to grant each Secured Party a first priority perfected security interest in certain of its assets and a second priority perfected security interest in certain of its assets, and in connection therewith to execute and deliver this Security Agreement.

Accordingly, the parties hereto hereby agree as follows:

DEFINITIONS. Capitalized terms used herein and not otherwise defined herein shall have the meanings assigned to such terms in the Note Agreement.

"Agreement": shall mean this Agreement and shall include all
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amendments, modifications and supplements hereto and shall refer to this Agreement as the same may be in effect at the time such reference becomes

operative.

"Equipment": shall mean all machinery, equipment, office machinery, furniture, fixtures, conveyors, tools, materials, storage and handling equipment, computer equipment and hardware including central processing units, terminals, drives, memory units, printers, keyboards, screens, peripherals and input or output devices, automotive equipment, trucks, molds, dies, stamps, motor vehicles and other equipment of every kind and nature and wherever situated now or hereafter directly or indirectly owned by the Company or in which the Company may have any interest together with all additions and accessions thereto, all replacements and all accessories and parts therefor, all manuals, blueprints, know-how, warranties and records in connection therewith, all rights against suppliers, warrantors, manufacturers, sellers or others in connection therewith, and together with all substitutions for any of the foregoing.

"General Intangibles": shall mean all "General Intangibles," as such term is defined in Section 9-106 of the Uniform Commercial Code of the State of New York, now or hereafter directly or indirectly owned by Company, including, without limitation, present and future trade secrets and other proprietary information; trademarks, trade names and trademark applications, service marks, business names, logos and the goodwill of the business relating thereto; copyrights and copyright applications and all tangible property embodying the copyrights; unpatented inventions (whether or not patentable); designs; research and development results; patent applications and patents; customer contracts; license agreements related to any of the foregoing and the income therefrom; books, records, computer tapes or disks, flow diagrams, specification sheets, source codes, object codes, and other physical manifestations of the foregoing.

"Inventory": shall mean all goods now or hereafter directly or indirectly owned by the Company or in which the Company now or hereafter has an interest intended for sale, lease or other disposition by, or consumption in the business of, the Company of every kind and nature and wherever located, including, without limitation, all raw materials, work in process, finished goods, goods consigned to the Company to the extent of its interest therein as consignee, goods in transit, materials and supplies of any kind, nature or description which are or might be used in connection with the manufacture, packing, shipping, advertising, selling or finishing of any such goods; and all documents of title or documents representing the same and all records, files and writings with respect thereto.

"Investment Adviser": shall mean MacKay-Shields Financial Corporation.

"Receivable": shall mean and include, with respect to the Company, all directly or indirectly right, title and interest of the Company in all present

and future accounts receivable, contract rights, promissory notes, chattel paper, all tax refunds and rights to receive tax refunds, bonds, rights of indemnification, contribution and subrogation, leases, computer tapes, programs and software, computer service contracts, deposits, causes of action, choses in action, judgments, and claims against third parties of every kind or nature, investment securities, notes, drafts, acceptances, letters of credit and rights to receive proceeds (as such term is defined in Section 9-306 of the New York State Uniform Commercial Code) of letters of credit, instruments and deposit accounts, book accounts, credits and reserves and all forms of obligations whatsoever owing, together with all instruments, all documents of title representing any of the foregoing, and all rights in any merchandise or goods which any of the same may represent, all books, ledgers, files and records with respect to any Collateral or security given to the Secured Party hereunder by Company, together with all right, title, security and guaranties with respect to each Receivable, including any right of stoppage in transit.

1. SECURITY

1.01 GRANT OF SECURITY. As security for the Company's obligations under the Note Agreement, the Notes and the Warrants (the "Obligations"), the Company hereby transfers, assigns and grants to the Secured Parties for the ratable benefit of the Secured Parties a first priority perfected lien on and first priority perfected security interest in all of its present and

future property and assets (other than real estate) of every kind and description, both tangible and intangible, including, without limitation, all of its Receivables (except as provided for in the Intercreditor Agreement, dated as of the date hereof, by and among Secured Parties, Imperial Bank and the Company (the "Intercreditor Agreement")) Equipment (except as provided for in any (i) bona fide equipment leases in the ordinary course of business or (ii) bona fide purchase money security agreement for fair value ("PM Security Interest") with respect to any Equipment purchased or financed by the Company from such purchase money secured party, not to exceed $2,500,000 in the aggregate; but only to the extent of such fair value and reduced from time to time by payments with respect thereto), Inventory (except as provided for in the Intercreditor Agreement) and General Intangibles and all proceeds thereof together with all accessions and additions thereto, substitutions and replacements therefor and products and proceeds thereof whether now owned or existing or hereafter arising or acquired and wherever located (collectively, the "Collateral").

1.02 RELEASE AND SATISFACTION. Upon the termination of this Agreement and the payment in full of the Obligations, the Secured Parties shall deliver to the Company upon request therefor and at the Company's expense, releases and satisfactions of all financing statements, notices of assignment and other registrations of security.

1.03 RECORDS; LOCATION OF COLLATERAL. So long as the Company shall have any Obligation to any Secured Party (a) the Company shall not move its chief executive office, principal place of business or office at which is kept its books and records (including computer printouts and programs) from the locations existing on the date hereof and listed on Schedule 1.03 annexed hereto; (b) the Company shall not establish any offices or other places of business at any other location; (c) the Company shall not move any of the Collateral having an aggregate book or market value in excess of $50,000 to any location other than those locations existing on the date hereof and listed on Schedule 1.03 annexed hereto, unless, in each case of clauses (a), (b) and (c) above, (i) the Company shall have given the Secured Parties thirty (30) day's prior written notice of its intention to do so, identifying the new location and providing such other information as the Secured Parties deem reasonably necessary, and (ii) the Company shall have delivered to the Secured Parties financing statements and such other documentation in form and substance reasonably satisfactory to each Secured Party and reasonably required by such Secured Party to preserve the Secured Party's security interest in the Collateral. Notwithstanding the foregoing, the Company may open sales offices at other locations without complying with the above requirements provided that the book or market value of Collateral at each such office does not exceed $15,000, and the aggregate book or market value of all such Collateral does not exceed $100,000.

2. REPRESENTATIONS AND WARRANTIES AND COVENANTS

2.01 REPRESENTATIONS AND WARRANTIES AND COVENANTS. The Company hereby represents and warrants and covenants to each Secured Party with respect to itself as follows:

(a) OWNERSHIP OF COLLATERAL. The Company owns all of the Collateral free and clear of any lien, encumbrance, mortgage, security agreement, pledge or charge, except as described on Schedule 2.01(a) hereto.

(b) TRADEMARKS, PATENTS AND COPYRIGHTS. Annexed hereto as Schedule 2.01(b) is a complete list of all patents, trademarks, trade names, copyrights, applications therefor, and other similar General Intangibles which the Company owns or has the right to use as of the date of this Agreement. The Company is not aware of any assertions or claims challenging the validity or use of any of the foregoing. The Company has no reason to believe that the business of the Company as now conducted conflicts with any patents, patent rights, licenses, trademarks, trademark rights, trade names, trade name rights or copyrights of others. The Company has no reason to believe that there is any infringement of any General Intangible of the Company.

(c) RECEIVABLES. Annexed hereto on Schedule 1.03 is a list showing the chief place of business and chief executive offices of the Company and all places at which Company maintains records relating to its Receivables as of the date of this Agreement.

(d) INVENTORY. Annexed hereto on Schedule 1.03 is a list showing all places where the Company maintains its Inventory as of the date of this Agreement. The Company hereby represents and warrants and covenants that none of its Inventory is currently maintained or will be maintained with any bailee that issues negotiable warehouse receipts or other negotiable instruments therefore.

(e) EQUIPMENT. Annexed hereto on Schedule 1.03 is a list describing all the places where the Equipment of the Company is located.

(f) TRADE NAMES. The Company has not done during the five years prior to this Agreement, and does not currently do, business under fictitious business names or trade names. The Company has not been known under any other name during such five year period. The Company will only change its name or do business under any other fictitious business names or trade names during the term of this Agreement after giving not less than thirty (30) days prior written notice to the Secured Parties.

(g) ENFORCEABILITY OF SECURITY INTERESTS. Upon the execution of this Agreement by the Company and the filing of financing statements describing the Collateral and identifying the Company as debtor and each Secured Party as the secured party in the jurisdictions identified on Schedule 2.01(g)(i) annexed hereto, the security interests and liens granted to the Secured Parties under Section 1.01 hereof shall constitute valid, perfected and first priority security interests and liens in and to the Collateral, other than (i) Collateral listed on Schedule 2.01(g)(ii) which may not be perfected by filing under the Uniform Commercial Code, in each case enforceable against all third parties and securing the payment of all Obligations purported to be secured thereby, (ii) Equipment, subject to a Purchase Money Security Interest, in which the Secured Parties shall have a valid, perfected and second priority security interest and liens in and to such Equipment, and (iii) Inventory and Receivables, in which the Secured Parties shall have a valid, perfected and first and second priority security interest and liens to

such Inventory and Receivables as provided in the Inter-Creditor Agreement. As to the Collateral listed on Schedule 2.01(g)(ii) the Secured Party will have a valid, perfected and first priority securities interest and lien in and to such Collateral upon the taking of such steps as shall be legally required to perfect

such security interest.

(h) SUBSIDIARIES. The Company represents and warrants that it has no subsidiaries. In the event that the Company shall create, own or have any interest in any subsidiary, the Company shall: (i) cause such subsidiary to issue a joint and several guarantee for the benefit of Secured Parties, guaranteeing payment and performance of the Obligations, in form and substance satisfactory to Secured Parties; (ii) cause such subsidiary to grant to Secured Parties, to secure the Obligations, pursuant to a security agreement in form and substance satisfactory to Secured Parties, a first priority perfected lien in all assets of such subsidiary; except where such subsidiary has been acquired by the Company in a transaction where the purchase consideration consisted of the Company's capital stock, in which case such subsidiary shall grant to Secured Parties a perfected lien in all such subsidiary's assets, junior in priority only to perfected liens existing prior to the acquisition; and (iii) pledge to Secured Parties, to secure the Obligations, all outstanding capital stock of such subsidiary.

3. FURTHER RIGHTS OF SECURED PARTY,

3.01 FURTHER ACTIONS. The Company shall do all things, take all further action and deliver all documents and instruments requested by a Secured Party to protect or perfect any security interest, mortgage or lien given hereunder or under any other related document to which it is a party, including, without limitation, financing statements under the Uniform Commercial Code and all documents and instruments necessary under the Federal Assignment of Claims Act and under any applicable foreign law. The Company authorizes each Secured Party or the Investment Advisor to execute, alone, any financing statement or other documents or instruments that such Secured Party may require to perfect, protect or establish any lien or security interest hereunder or under any other related document and further authorizes each Secured Party or the Investment Advisor to sign the Company's name on the same. Upon the occurrence of an Event of Default, the Company appoints each Secured Party or the Investment Advisor or either's designee as the Company's attorney-in-fact to endorse the name of the Company on any checks, notes, drafts or other forms of payment or security that may come into the possession of such Secured Party or the Investment Advisor or either's designee or any affiliate thereof, to sign the Company's name on invoices or bills of lading, drafts against customers, notices of assignment, verifications and schedules and, generally, to do all things necessary to carry out this Agreement. Upon the occurrence and continuance of an Event of Default, such attorney-in-fact may, at any time, notify the Postal Service authorities to change the Company's address of delivery of mail to an address designated by the Secured Party or the Investment Advisor or either's designee. The powers granted herein, being coupled with an interest, are irrevocable until all of the Obligations are irrevocably paid and discharged in full and this Agreement is terminated. No Secured Party, no Investment Advisor nor any attorney-in-fact shall be liable for any act or omission, error in judgment or mistake of law provided the same is not the result of bad faith or willful misconduct.

3.02 INSURANCE AND ASSESSMENTS. In the event the Company shall fail to purchase or maintain insurance, or pay any tax, assessment, government charge or levy, or in the event that any lien, encumbrance or secured interest prohibited hereby shall not be paid in full or discharged, or in the event the Company shall fail to perform or comply with any other covenant, promise or obligation to a Secured Party hereunder, such Secured Party may, but shall not be required to, perform, pay, satisfy, discharge or bond the same for the account of the Company, and all money so paid by such Secured Party, including reasonable attorney's fees, shall be deemed an Obligation of the Company.

3.03 NOTICES. Any Secured Party or the Investment Advisor may at any time after the occurrence and continuance of an Event of Default notify customers or account debtors that the Collateral has been assigned to such Secured Party or of its secured interest therein and to direct such account debtors or customers to make payment of all amounts due or to become due to the Company directly to such Secured Party and upon such notification and at the Company's expense to enforce collection of any such Collateral, and to adjust, compromise or settle for cash, credit or otherwise upon any terms the amount of payment thereof.

3.04 INSPECTION. Any Secured Party or the Investment Advisor or their designee may from time to time examine and inspect the Inventory, Equipment or other Collateral and may from time to time examine, inspect and copy all books and records with respect thereto or relevant to the Collateral and/or Obligations during the Company's normal business hours upon reasonable prior notice to the Company.

3.05 RIGHT OF ENTRY. Upon the occurrence of an Event of Default, any Secured Party may (to the extent not prohibited by law), without charge, enter any of the Company's premises, and until it completes the enforcement of its rights in the Inventory or the Equipment or other Collateral subject to its security interest hereunder and the sale or other disposition of any property subject thereto, take possession of such premises without charge, rent or payment therefor (through self help without judicial process and without having first given notice or obtained an order of any court), or place custodians in control thereof, remain on such premises and use the same for the purpose of completing any work in progress, preparing any Collateral for disposition, and disposition of or collecting any Collateral.

3.06 MORTGAGEE/LANDLORD WAIVERS. The Company shall, promptly following the date hereof, cause each mortgagee of real property owned by the Company and each landlord of real property leased by the Company to execute and

deliver instruments satisfactory in form and substance to each Secured Party by which such mortgagee or landlord waives its rights, if any, in the Collateral and acknowledges the right of such Secured Party to enter the premises to remove the Collateral.

3.07 INDEMNIFICATION. The Company agrees to indemnify each Secured Party and the Investment Advisor and their respective members, managers, partners, officers, directors and employees and hold all of them harmless from and against any and all injuries, claims, damages, judgments, liabilities, costs and expenses (including, without limitation, reasonable fees and disbursements of counsel), charges and encumbrances which may be incurred by or

asserted against them in connection with or arising out of or relating to the Collateral or the Obligations, including any assertion, declaration or defense of their claims, rights or security interest under the provisions of this Agreement, permitting them to collect, settle or adjust Collateral or to deal with account debtors in any way or in connection with the realization, repossession, safeguarding, insuring or other protection of the Inventory, the Equipment or other Collateral or in connection with the collecting, perfecting or protecting each such Secured Party's liens and security interests hereunder, or in connection with this Agreement or the enforcement of this Agreement or the amendment of this Agreement, except to the extent resulting from such secured party's bad faith or willful misconduct.

4. REMEDIES OF SECURED PARTY.

4.01 ENFORCEMENT. Upon the occurrence of any Event of Default, a Secured Party shall have, in addition to all of its other rights under this Agreement by operation of law or otherwise (which rights shall be cumulative), all of the rights and remedies of a secured party under the Uniform Commercial Code and shall have the right to enter upon any premises where such Collateral is kept and retake possession thereof. Upon the occurrence of an Event of Default, a Secured Party or the Investment Adviser or their designee may, without demand, advertising or notice, all of which the Company hereby waives (except as the same may be required by law), sell, lease, dispose of, deliver and grant options to a third party to purchase, lease or otherwise dispose of any and all Equipment, Inventory, Receivables, General Intangibles or other security or Collateral held by it or for its account at any time or times in one or more public or private sales or other dispositions, for cash, on credit or otherwise, at such prices and upon such terms as such Secured Party, in its sole discretion, deems advisable. The Company agrees that if notice of sale shall be required by law such requirement shall be met if such notice is mailed, postage prepaid, to the Company at its address set forth above or such other address as it may have, in writing, provided to the Secured Parties, at least five (5) days before the time of such sale or dispositions. Notice of any public sale shall be sufficient if it describes the security or Collateral to be sold in general

terms, stating the amounts thereof, the nature of the business in which such Collateral was created and the location and nature of the properties covered by the other security interests or mortgages and the prior liens thereon. A Secured Party or the Investment Adviser or their designee may postpone or adjourn any sale of any Collateral from time to time by an announcement at the time and place of the sale to be so postponed or adjourned without being required to give a new notice of sale. A Secured Party or the Investment Adviser or their designee may be the purchaser at any such sale if it is public, free from any right of redemption, which the Company also waives, and payment may be made, in whole or in part, in respect of such purchase price by the application of the Obligations to the Secured Party. The Company, with respect to its property constituting such Collateral, shall be obligated for, and the proceeds of sale shall be applied first to, the reasonable costs of retaking, assembling, finishing, collecting, refurbishing, storing, guarding, insuring, preparing for sale, and selling the Collateral, including the reasonable fees and disbursements of attorneys, auctioneers, appraisers and accountants employed by a Secured Party or the Investment Adviser or their designee. Proceeds shall then be applied to the payment, in whatever order such Secured Party or the Investment Adviser or their designee may elect, of all of the Obligations. Such Secured Party shall return any excess to the Company or to whomever may be fully entitled to receive the

same or as a court of competent jurisdiction may direct. The Company shall remain liable for any deficiency.

4.02 WAIVER. The Company waives any right, to the extent applicable law permits, to receive prior notice of or a judicial or other hearing with respect to any action or prejudgment remedy or proceeding by a Secured Party (or the Investment Advisor or their designee) to take possession, exercise control over, or dispose of any item of the Collateral in any instance (regardless of where the same may be located) where such action is permitted under the terms of this Agreement or by applicable law or of the time, place or terms of sale in connection with the exercise of such Secured Party's rights hereunder and also waives, to the fullest extent permitted by law, any bonds, security or sureties required by any statute, rule or otherwise by law as an incident to any taking of possession by such Secured Party or the Investment Adviser or their designee of property subject to such Secured Party's lien. The Company also waives any damages (direct, consequential or otherwise) occasioned by the enforcement of a Secured Party's rights under this Agreement including the taking of possession of any Collateral all to the extent that such waiver is permitted by law and to the extent that such damages are not caused by such Secured Party's bad faith or willful misconduct. These waivers and all other waivers provided for in this Agreement have been negotiated by the parties and the Company acknowledges that it has been represented by counsel of its own choice and has consulted such counsel with respect to its rights hereunder.

4.03 OTHER RIGHTS. The Company agrees that no Secured Party shall

have any obligation to preserve rights to any Collateral against prior parties or to proceed first against any Collateral or to marshall any Collateral of any kind for the benefit of any other creditors of the Company or any other Person. Each Secured Party is hereby granted, to the extent that the Company is permitted to grant a license or right of use, a license or other right to use, without charge, labels, patents, copyrights, rights of use, of any name, trade secrets, trade names, trademarks and advertising matter, or any property of a similar nature of the Company as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and the Company's rights under all licenses and any franchise, sales or distribution agreements shall inure to each Secured Party's benefit.

4.04 DISPOSITION OF PROCEEDS. The proceeds of any sale or disposition of all or any part of the Collateral shall be applied by each Secured Party in the following order: (i) to the payment in full of the costs and expenses of such sale or sales, collections, and the protection, declaration and enforcement of any security interest granted hereunder including the compensation of such Secured Party's agents and attorneys; (ii) to the payment of the Obligations; and (iii) to the payment to the Company of any surplus then remaining from such proceeds, subject to the rights of any holder of a lien on the Collateral of which such Secured Party has actual notice. In the event that the proceeds of any sale or other disposition of the Collateral are insufficient to cover the principal of, and premium, if any, and interest on, the Obligations secured thereby plus costs and expenses of the sale or other disposition, the Company shall remain liable for any deficiency.

4.05 EXPENSES. The Company agrees that it shall pay all costs and expenses incurred in amending, implementing, perfecting, collecting, defending, declaring and enforcing such Secured Party's rights and security interests in the Collateral hereunder or under the Note Agreement, the Notes, the Warrants or any other related document, or other instrument or agreement delivered in connection herewith or therewith, including, but, not limited to, searches and filings at all times, and such Secured Party's reasonable attorneys fees and disbursements (regardless of whether any litigation is commenced, whether default is declared hereunder, and regardless of tribunal or jurisdiction).

5. GENERAL PROVISIONS

5.01 TERMINATION. This Agreement shall remain in full force and effect until all the Obligations shall have been indefeasible fully paid and satisfied and, until such time, the Secured Party shall retain all security in and title to all existing and future Equipment, Inventory, Receivables and General Intangibles and other Collateral held by it hereunder.

5.02 REMEDIES CUMULATIVE. A Secured Party's rights and remedies under this Agreement shall be cumulative and non-exclusive of any other rights or remedies which it may have under the Note Agreement, the Notes, the Warrants or any other agreement or instrument, by operation of law or otherwise and may be exercised alternatively, successively or concurrently as such Secured Party may deem expedient.

5.03 BINDING EFFECT. This Agreement is entered into for the benefit of the parties hereto and their successors and assigns. It shall be binding upon and shall inure to the benefit of the said parties, their successors and assigns.

5.04 NOTICES. Wherever this Agreement provides for notice to any party (except as expressly provided to the contrary), it shall be given in the manner specified and shall be addressed as set forth in Section 9.5 of the Note Agreement.

5.05 WAIVER. No delay or failure on the part of a Secured Party or the Investment Advisor in exercising any right, privilege, remedy or option hereunder shall operate as a waiver of such or any other right, privilege, remedy or option, by such Secured Party or the Investment Advisor, and no waiver shall be valid as to a Secured Party or the Investment Advisor, unless in writing and signed by an officer or other authorized signatory of such Secured Party or the Investment Advisor and then only to the extent therein set forth.

5.06 MODIFICATIONS AND AMENDMENTS. This Agreement and the other agreements and instruments to which it refers constitute the complete agreement between the parties with respect to the subject matter hereof and may not be changed, modified, waived, amended or terminated orally, but only by a writing signed by the party to be charged.

5.07 SURVIVAL OF REPRESENTATIONS AND WARRANTIES. The representations and warranties of the Company made or deemed made herein shall survive the execution and delivery of this Agreement.

5.08 APPLICABLE LAW; CONSENT TO JURISDICTION; WAIVER OF JURY TRIAL. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, AS APPLIED TO CONTRACTS MADE AND PERFORMED ENTIRELY WITHIN THE STATE OF NEW YORK. EACH PARTY HERETO HEREBY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK OR THE STATE COURTS OF NEW YORK SITTING IN NEW

YORK COUNTY FOR PURPOSES OF ALL LEGAL PROCEEDINGS ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY. EACH PARTY HERETO IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY OBJECTION WHICH IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF THE VENUE OF ANY SUCH PROCEEDING BROUGHT IN SUCH A COURT AND ANY CLAIM THAT ANY SUCH PROCEEDING BROUGHT IN SUCH A COURT HAS BEEN BROUGHT IN AN INCONVENIENT FORUM.

5.09 SEVERABILITY. If any provision hereof shall be held to be void, illegal or unenforceable it shall be deemed severable from the remaining provisions hereof which shall remain in full force and effect.

5.10 EXECUTION IN COUNTERPARTS. This Agreement may be executed in any number of counterparts and by different Parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

5.11 ASSIGNMENT. The Company may not assign or transfer its rights or obligations hereunder without the prior written consent of the Secured Parties. Secured Parties may assign their rights under this Agreement to transferees of the Notes.

5.12 ACTION OF SECURED PARTIES. Any action required or permitted to be taken, or otherwise taken, by the Secured Parties shall be by a vote of a majority-in-interest of the Secured Parties.

5.13 INVESTMENT ADVISOR. The Investment Advisor shall have no obligation or responsibility hereunder of any kind, and may refrain from taking any action for any reason or for no reason without incurring any liability to any party. The Investment Advisor shall not be deemed a fiduciary or agent of any party by virtue of this agreement.

5.14 CONSTRUCTION OF CERTAIN PROVISIONS. If any provision of this Agreement is determined to be unenforceable under the laws of the State of New York, and if such provision would be enforceable under the laws of the State of Washington, then it is agreed that the Courts of the State of New York shall interpret and enforce such provision pursuant to the laws of the State of Washington.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their officers thereunto duly authorized, on the day and year first above written.

METAWAVE COMMUNICATIONS
CORPORATION, as Company

By: _____
Name:
Title:

[SIGNATURE PAGES CONTINUED ON NEXT PAGE]

THE BROWN & WILLIAMSON MASTER
RETIREMENT TRUST

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By: _____
Name:
Title:

[SIGNATURE PAGES CONTINUED ON NEXT PAGE]

THE MAINSTAY FUNDS, ON BEHALF OF
ITS STRATEGIC INCOME FUND SERIES

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By: _____
Name:
Title:

[SIGNATURE PAGES CONTINUED ON NEXT PAGE]

HIGHBRIDGE CAPITAL CORPORATION

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By: _____
Name:
Title:

[SIGNATURE PAGES CONTINUED ON NEXT PAGE]

THE MAINSTAY FUNDS, ON BEHALF OF
ITS HIGH YIELD CORPORATE BOND FUND SERIES

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By: _____
Name:
Title:

[SIGNATURE PAGES CONTINUED ON NEXT PAGE]

MAINSTAY VP SERIES FUND INC. ON BEHALF OF
ITS HIGH YIELD CORPORATE BOND PORTFOLIO

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By: _____
Name:
Title:

[SIGNATURE PAGES CONTINUED ON NEXT PAGE]

POLICE OFFICERS PENSION SYSTEM OF THE CITY OF HOUSTON

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By: _____
Name:
Title:

[SIGNATURE PAGES CONTINUED ON NEXT PAGE]

VULCAN MATERIALS COMPANY HIGH YIELD ACCOUNT

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By: _____
Name:
Title:

[SIGNATURE PAGES CONTINUED ON NEXT PAGE]

THE 1199 HEALTH CARE EMPLOYEES PENSION FUND

By: MacKay-Shields Financial Corporation
Its: Investment Advisor

By: _____

Name: Jeffrey B. Platt
Title: Director

[SIGNATURE PAGES CONTINUED ON NEXT PAGE]

BT HOLDINGS (NY), INC.

By: _____
Name:
Title:

[SIGNATURE PAGES CONTINUED ON NEXT PAGE]

IMPERIAL BANK

By: _____
Name: Jim Ellison
Title: Senior Vice President

[SIGNATURE PAGES CONTINUED ON NEXT PAGE]

POWERWAVE TECHNOLOGIES, INC.

By: _____
Name: Bruce C. Edwards
Title: President and Chief Executive Officer

[SIGNATURE PAGES CONTINUED ON NEXT PAGE]

BANKAMERICA INVESTMENT CORPORATION

By: _____
Name:
Title:

Schedule of Lenders

The Brown & Williamson Master Retirement Trust (Registered holder: Iceship & Co.)
The Mainstay Funds, on behalf of its Strategic Income Fund Series (Registered holder: Hare & Co.)
Highbridge Capital Corporation (Registered holder: Bear Stearns Securities Corp.)
The Mainstay Funds, on behalf of its High Yield Corporate Bond Fund Series (Registered holder: Daffodil & Co.)
Mainstay VP Series Fund Inc., on behalf of its High Yield Corporate Bond Portfolio (Registered holder: Hare & Co.)
Police Officers Pension System of the City of Houston (Registered holder: Booth & Co.)
Vulcan Materials Company High Yield Account (Registered holder: Booth & Co.)
The 1199 Health Care Employees Pension Fund (Registered holder: Booth & Co.)

c/o MacKay-Shields Financial Corporation
9 West 57th Street
New York, New York 10019

BT Holdings (NY), Inc. (Registered holder: BT Alex Brown Inc.)
14 Wall Street
7th Floor
New York, New York 10005

Imperial Bank
777 108th Avenue NE
Bellevue, Washington 98004-6672

Powerwave Technologies, Inc.

2026 McGaw Avenue
Irvine, California 92614

BankAmerica Investment Corporation
231 South LaSalle Street
Chicago, Illinois 60697

EXHIBIT 23.1

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the reference to our firm under the captions "Selected Financial Data" and "Experts" and to the use of our reports dated March 13, 1998, except for Note 13, as to which the date is April 28, 1998, in the Registration Statement (Form S-1) and related Prospectus of Metawave Communications Corporation for the registration of 5,000,000 shares of its common stock.

Ernst & Young LLP

Seattle, Washington
July 22, 1998

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EXHIBIT 99.1

REPORT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS
ON FINANCIAL STATEMENT SCHEDULE

We have audited the financial statements of Metawave Communications Corporation as of December 31, 1997 and 1996, and the related statements of operations, shareholders' equity (deficit) and cash flows for the years then ended and the period from January 19, 1995 (inception) to December 31, 1995, and have issued our report thereon dated March 13, 1998, except for Note 13, as to which the date is April 28, 1998, (included elsewhere in this Registration Statement). Our audits also included the financial statement schedule listed in Item 16(b) of this Registration Statement. This schedule is the reponsibility of the Company's management. Our responsibility is to express an opinion based on our audits.

In our opinion, the financial statement schedule referred to above, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

ERNST & YOUNG LLP

Seattle, Washington
March 13, 1998

EXHIBIT 99.2

<TABLE>
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METAWAVE COMMUNICATIONS CORPORATION
SCHEDULE II VALUATION AND QUALIFYING ACCOUNTS
(in thousands)

COLUMN A	COLUMN B	COLUMN C		COLUMN D	COLUMN E
DESCRIPTION	Balance at Beginning of Period	Charged To Costs and Expenses	Charged to Other Accounts	Deductions	Balance at End of Period
<S>	<C>	<C>	<C>	<C>	<C>
Period from January 16, (Date of formation) through December 31, 1995:					
Balance sheet allowances	$ --	--	--	--	$ --
Inventory reserves	$ --	--	--	--	$ --
Warranty reserves	$ --	--	--	--	$ --
Year ended December 31, 1996:					
Balance sheet allowances	$ --	--	--	--	$ --
Inventory reserves	$ --	--	--	--	$ --
Warranty reserves	$ --	--	--	--	$ --
Year ended December 31, 1997:					
Balance sheet allowances	$ --	467	--	--	$ 467
Inventory reserves	$ --	870	--	--	$ 870
Warranty reserves	$ --	--	--	--	$ --
Period ended June 30 , 1998:					
Balance sheet allowances	$ 467	28	--	200(a)	$ 295
Inventory reserves	$ 870	--	--	96(b)	$ 774
Warranty reserves	$ --	320	--	90(b)	$ 230

</TABLE>

(a) Represents writeoff of assets reserve for disposition of assets

(b) Represents adjustments of estimates