FORM 10-K

Annual report pursuant to section 13 and 15(d)

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ANCOR COMMUNICATIONS INC /MN/

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Mailing Address
6130 BLUE CIRCLE DR
MINNETONKA MN 55343

Business Address
6130 BLUE CIRCLE DR
MINNETONKA MN 55343
6129324000

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-K
Annual Report Under Section 13 or 15(d)
of the Securities Exchange Act of 1934

(Mark One)

[X] Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the year ended December 31, 1998

[ ] Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Commission File Number 1-2982

ANCOR COMMUNICATIONS, INCORPORATED
(Exact name of registrant as specified in its charter)

Minnesota	41-1569659
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
6130 Blue Circle Drive Minnetonka, Minnesota	55343
(Address of principal executive offices)	(Zip code)

Registrant's Telephone number, including area code (612) 932-4000

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, par value $.01 per share	Pacific Exchange, Inc.

Securities registered pursuant to Section 12(g) of the Act:
Preferred Share Purchase Rights

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ]

As of March 15, 1999, the Company had 24,056,140 shares of Common Stock outstanding. The aggregate market value of the 23,998,840 shares of Common Stock held by non-affiliates of the Company was $133,505,547, based on the closing share price on March 15, 1999 on the Nasdaq SmallCap Market.

Documents incorporated by reference: Certain responses to Part III are incorporated herein by reference to information contained in the Company's definitive proxy statement for its 1999 annual meeting of shareholders to be filed with the Securities and Exchange Commission on or before April 30, 1999.

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PART I

Item 1. Business

General

Ancor Communications, Incorporated ("the Company"), incorporated in 1986, is recognized as a leading developer of Fibre Channel products. Fibre Channel is a high bandwidth, low latency advance in data storage communications technology, developed under the auspices of the American National Standards Institute (ANSI), currently enabling the transfer of data at speeds of one Gigabit per second. The Company develops, manufactures, and markets Fibre Channel switches and application specific integrated circuits (ASICs).

Since its inception, the Company's core technology has been built around the utilization of fiber optic cable for data transmission. In 1992, the Company delivered its first prototype Fibre Channel products, and commercial deliveries began in 1993. The Company's Fibre Channel products are used by organizations worldwide for enhanced network performance, scalability and connectivity. Today the Company -- an active member of the ANSI Fibre Channel committee and the Fibre Channel Association -- focuses entirely on the development of Fibre Channel solutions.

Prior to 1998, the Company focused its business and products on the local area network (LAN) market, developing and marketing Fibre Channel switches and adapter cards for the LAN market. However, in 1998 the Company completed the refocusing of its business and its Fibre Channel products from the local area network market to the storage area network (SAN) market. With Gigabit Ethernet the technology of choice for local area networks and with high quality, low-cost Fibre Channel host adapters now available from other sources, the Company discontinued that portion of its business to intensify its pursuit of the emerging Fibre Channel SAN market.

Over the last decade, applications and computer processing performance have increased by many orders of magnitude. Additionally, with computer networks running more business critical applications, access to, and availability of, the associated data is strategic to business operations. Historically, the devices storing the required data were directly attached to individual servers on the LAN. However, LAN data paths often do not have the necessary performance to address storage requirements, resulting in network bottlenecks and overall system degradation. Thus, separate networks of storage devices are being developed.

A SAN is a dedicated network optimized for storage-related functions over which information is permitted to be accessed, managed, and shared among various storage devices and servers. Although SANs are usually connected to the more widely accessed LAN, the SAN operates complementary to the LAN. Overall enterprise network performance improves because the LAN is free from the cumbersome overhead associated with file access, retrieval, storage, and data backup functions which place significant demands on network bandwidth. These functions are instead more effectively and efficiently performed by a network optimized for the demands of storage functions.

The components of a typical SAN are software to manage and control the SAN, storage devices, network interface cards which are inserted into the servers, and a hub or switch to facilitate the

interconnection between the servers and storage devices. The Company develops and markets Fibre Channel switches.

Products

The Company currently sells Fibre Channel switches under the Gigworks trademark. The Company has also developed ASICs which are a component of its switches, but which may be sold as separate products. The Company's current switches enable very large SANs to be built by linking multiple switches in 8 and 16 node increments. Through the Fibre Channel switch, users are able to establish multiple simultaneous connect links.

During 1998 the Company introduced its GigWorks MKII 8-port switch, complementing its MKII 16-port switch and previous-generation switches. Net sales of all types of switches accounted for approximately $3.0 million of revenue in 1998, $4.2 million of revenue in 1997, and $4.2 million of revenue in 1996.

Prior to 1999 the Company sold interface adapters. Adapter net sales totaled approximately $746 thousand of revenue in 1998, $3.5 million of revenue in 1997, and $1.8 million of revenue in 1996.

The Company's ASICs provide building blocks at the chip level for implementing Fibre Channel technology. These ASICs combine a number of Fibre Channel functions in a single chip and thereby substantially reduce the number of components needed to implement Fibre Channel switches. Although the Company's ASICs may be sold as a separate product, the Company has not done so in recent years. The Company has, however, licensed the use of the ASIC to a third party, and may sell its ASICs as a separate product in the future.

Fibre Channel Market

The increased demand for higher storage capacity has stimulated demand for Fibre

Channel products due to Fibre Channel's high bandwidth characteristics and its ability to accommodate large numbers of attached computers and storage systems communicating over long distances. Fibre channel products currently are incorporated primarily in high-end storage applications such as with RAIDs (redundant array of inexpensive disks). In response to this market demand, the Company increased its focus on the high-end storage applications. Fibre Channel switches and hubs provide for increased (and simplified) storage device scalability, true hot plugging of storage subsystems, and security and isolation between functions. Various market research firms, such as EMF Associates; Ryan, Hankin, Kent Inc.; and International Data Corporation estimate the market for Fibre Channel adaptors, hubs and switches in the year 2000 will be over $1.0 billion.

Sales and Marketing

The Company markets its products through an internal sales force which focuses on original equipment manufacturers ("OEMs") and system integrators. Sales efforts are concentrated in North America, Europe and Japan. In addition to direct selling, various marketing and

promotional techniques are employed to increase sales, including seminars, trade shows, and media advertising.

In 1998 the Company shifted its efforts to concentrate on the SAN market by selling through OEMs or system integrators which the Company believes are most appropriate for its products. The Company has historically sold its products in the LAN market through resellers or directly to end users. In Japan the Company uses an exclusive distributor. In light of the financial condition of its previous Japanese distributor, Hucom, Inc., the Company re-evaluated its distribution plans in Japan and in August 1998 entered into a distribution agreement with Netmarks, Inc., to represent the Company in the Japanese marketplace. For purposes of discussion and analysis, Netmarks and Hucom will collectively be referred to as the Company's "Japanese distributors."

A significant portion of the Company's revenues were generated by three customers. Netmarks generated 22% of the Company's revenue in 1998. Hucom generated 4% of the Company's revenue in 1998, 88% in fiscal 1997, and 41% in fiscal 1996. Additionally, Boeing Company generated 50% of revenue in fiscal 1998, 9% in fiscal 1997, and 1% in fiscal 1996. Product purchased from the Company by the Company's Japanese distributors is remarketed to OEMs or end users. A significant portion of the Company's Japanese distributors' sales of the Company's products in fiscal 1998, fiscal 1997 and fiscal 1996 were to one end user. In future periods, the Company's Japanese distributors' sales of the Company's products to this specific end user are expected to decline from current levels. Additionally, general economic conditions in Japan make future sales to the Company's Japanese distributors uncertain. Sales to Boeing are expected to remain at current levels for 1999. The Company's revenues in the future may also be generated by a small number of significant customers. See Note 4 to the financial statements.

As of February 28, 1999, the sales organization was made up of fifteen field sales and application engineering personnel and ten marketing and support professionals.

Competition

The Company's Fibre Channel products encounter competition from other Fibre Channel products in addition to competition from other network technology products. For example, Brocade Communications Systems, Inc., Vixel, and McData have developed Fibre Channel switches. Other companies may also be developing switches. In addition, a number of companies, including Emulex Corp, Q Logic Corp., JNI, Gadzoox Corp., G2 Corp., and Interphase Corp. are developing Fibre Channel products other than switches, such as adapters or hubs, and the Company anticipates that these and other companies will introduce commercial Fibre Channel products in the near future. In the event that Fibre Channel technology gains wider market acceptance, it is likely that an increasing number of competitors will begin developing and marketing Fibre Channel products. Some of the companies that produce or may produce Fibre Channel products competitive with the Company's products have substantially greater financial, technological and marketing resources than the Company.

The Company's current products are all designed to comply with the applicable Fibre Channel standards and to compete as a switching device in high performance SAN markets. The

emergence of the Fibre Channel SAN market offered the Company a significant opportunity to reduce its focus on the LAN market and focus primarily on switches for the SAN market.

In the SAN market, adoption of Fibre Channel requires computer systems manufacturers to convert from the lower level SCSI interconnect currently being used by many manufacturers. Many computer systems manufacturers have announced their intentions to convert to Fibre Channel as the interconnect protocol for their products. However, there can be no assurance that this conversion will happen, or that other computer systems manufacturers will adopt the Fibre Channel protocol.

Within the SAN market switches and hubs are both being marketed as connectivity solutions in a Fibre Channel network. However, the only SAN implementation that consistently meets the performance objectives of Fibre Channel technology is switched architecture. Only a switched network or "fabric" can provide full bandwidth to each connected device simultaneously.

Hub architectures, which often precede switched architectures, are shared media, meaning that each device on the hub must share bandwidth. Hubs can be either managed or unmanaged. Managed hubs use additional hardware and software to provide greater stability and other features competitive with switches. However, each device on the managed hub must continue to share bandwidth. Also, as management features typically found in switches were added to hubs, the cost of hubs increased. Thus, while hubs were considered much less expensive than switches, with the introduction of the Company's MKII 8-port switch, and as switch volumes have increased, the switch price is now approaching that of a managed hub. The Company expects that the price for both hubs and switches will decrease in the future.

The key to a switch's performance is the ASIC. A more integrated ASIC is better performing, more reliable and easier to manufacture. The Company's current ASIC supports four ports of a switch, whereas previous versions supported only two ports. The Company believes that greater performance with fewer components resulting in lower cost will attract OEMs.

Intellectual Property Rights

The Company's success will depend in part on its ability to protect its proprietary rights and to operate without infringing on the proprietary rights of third parties. The Company currently holds one U.S. patent covering certain aspects of one of its Fibre Channel switches. This patent will expire February 6, 2007. The Company may also receive additional patents in the future.

In addition to patents, the source code for the software contained in its products is protected by copyright law. The Company also intends to rely upon unpatented trade secrets, the know-how and expertise of its employees and on non-disclosure and confidentiality agreements with its employees, vendors and customers. The Company has registered four trademarks with the United States Patent and Trademark Office (the "PTO") and has filed for registration of four additional marks in which it claims trademark rights, one of which has been allowed. United States trademark rights are acquired by use rather than by registration, and there can be no assurance that others do not have conflicting or superior rights to the Company's unregistered trademarks.

Research and Development

The storage area network market is characterized by rapid technological change, including changes in customer requirements, frequent new product introductions and enhancements, and evolving industry standards. The Company's success will depend in part on its ability to keep pace with technological developments and emerging industry standards and to respond to customer requirements by enhancing its current products and developing and introducing new products. The Company's current efforts are focused on development of additional switches and ASICs, and to achieve interoperability with more devices utilizing Fibre Channel technology. As a result, the Company has developed and capitalized, and is currently utilizing, its own internally-built test tooling and software to assist in further development of its products.

While the Company's capital and human resource requirements are minimized through its strategic design development and contract manufacturing relationships, the Company will continue to dedicate substantial expenditures to research and development. Research and development expenditures were $5,450,942, $4,271,393, and $3,198,155 in 1998, 1997 and 1996 respectively.

Manufacturing

The Company subcontracts the majority of its production activities, including the manufacture, assembly and testing of the Company's proprietary Fibre Channel switch and ASIC designs, to organizations specializing in contract manufacturing. Utilization of subcontractors results in dependence on the timely delivery of high quality products from these manufacturers and may leave the Company with less flexibility and control over the manufacturing process than if it conducted all of these operations internally. However, the Company conducts its own development, design and production management efforts. Purchases from a major subcontractor were approximately $4,071,000, $6,480,000, and $5,086,000 in 1998, 1997 and 1996, respectively, which included obligations for excess and obsolete inventory (see Note 2).

The majority of the components used in the Company's products are generally available from multiple sources. However, certain of the components used in the Company's products are available only from a single supplier or from a limited number of suppliers. The unavailability of adequate quantities of components, a reduction or interruption in component supply, a disruption of existing supplier relationships, an inability to develop alternative sources or a significant increase in the price of components could each have a material adverse effect on the Company's ability to produce and market its products successfully.

Employees

As of February 28, 1999, the Company had 79 full time employees and 3 part time employees, including 43 in engineering and product development, 25 in sales and marketing, 6 in manufacturing and 8 in general administration and finance. None of the Company's employees is represented by a labor union or subject to any collective bargaining agreement. The Company has never experienced any work stoppages and it believes its employee relations are good.

Item 2.   Properties

The Company's offices are located in Minnetonka, Minnesota, where it leases 27,560 square feet of space under a lease that expires in April 1999. The annual rent is approximately $207,000. To meet its increasing space requirements, the Company is in the process of negotiating new lease space, which it plans to occupy in the second half of 1999. The Company believes its rental cost will increase when it occupies new lease space. The Company intends to rent its current space on a month-to-month basis after April 1999 until it occupies new lease space. The current facility, in the opinion of management, is adequately covered by insurance.

Item 3.   Legal Proceedings

Ancor was a defendant in a consolidated class action captioned In re Ancor Communications, Inc. Securities Litigation, Case No. 97-CV-1696 (D. Minn.) alleging violations of the federal securities laws. The lawsuit was settled in November 1998 and dismissed by the district court on February 5, 1999. Pursuant to the terms of the settlement, a fund was created in the amount of $1,650,000.

The Company paid $250,000 of the total settlement and the remaining $1,400,000 was paid by the Company's insurer. The $250,000 payment by the Company was recorded as an expense in the third quarter of 1998.

The Company is also a defendant in a lawsuit brought by Hoyt Properties, Inc. ("Hoyt") venued in Hennepin County District Court in the State of Minnesota. Hoyt, as Landlord, and the Company, as Tenant, entered into an Agreement on May 29, 1998 which provided that Hoyt would build and lease to the Company an office building to be located in Eden Prairie, Minnesota, subject to certain contingencies, conditions, and agreements. Hoyt claims that the Company breached the Agreement, and asserts damages in excess of $2,500,000. The Company denies all liability, and alleges that Hoyt refused to provide improvements desirable and necessary to the Company's occupancy of the proposed leased space, and multiple contingencies, conditions, and agreements did not occur and no binding agreement exists. The Company is vigorously defending the case. There has been no discovery completed to date. However, there is no assurance that any judgment, order or decree against the Company arising out of this action will not have a material adverse effect on the Company or its business. The Company is unable to determine at this time if there will be a material adverse outcome. No provision has been made for any loss that may occur as a result of an adverse outcome of the suit.

Item 4. Submission of Matters to a Vote of Security Holders

None.

Part II

Item 5. Market for Registrant's Common Equity and Related Shareholder Matters

The Company's common stock has been quoted on the Nasdaq SmallCap Market and the Pacific Exchange, Inc., since its initial public offering on May 3, 1994. The following table sets forth the high and low sale prices of the Company's common stock for each full quarterly period within the two most recent fiscal years, as reported by the Nasdaq SmallCap Market.

Quarterly Stock Prices

	Sale Price	
	High	Low
Quarter of 1997:		
First	$ 16 7/8	$ 3
Second	9	3 13/16
Third	12 1/2	7
Fourth	10 13/16	3 9/16
Quarter of 1998:		
First	$ 9 1/8	$ 4 7/16
Second	7 5/16	2 1/2
Third	4	1
Fourth	4 7/16	1 1/16

Holders.

As of February 23, 1999, there were 310 holders of record of the Company's common stock and the Company estimates there were approximately 10,000 beneficial holders at such date. As of March 15, 1999, the last sale price of the Company's common stock as reported by the Nasdaq SmallCap Market was $5.563.

Dividends.

The Company has never paid cash dividends on its common stock and has no current intentions to do so.

Item 6. Selected Financial Data

The information set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and with the financial statements, related notes thereto and other financial information included in this Report.

<TABLE>
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Statements of Operations Data:

	Year Ended December 31,				
	1998	1997	1996	1995	1994
	(in thousands, except per share data)				
<S>	<C>	<C>	<C>	<C>	<C>
Net sales	$ 4,393	$ 7,924	$ 6,258	$ 4,673	$ 4,761
Cost of sales	6,431	5,991	3,566	2,533	2,743
Gross profit (loss)	(2,038)	1,933	2,692	2,140	2,018
Operating expenses					
Selling, general and administrative	7,195	7,685	4,944	2,785	2,377
Research and development	5,451	4,271	3,198	2,542	2,056
Total operating expenses	12,646	11,956	8,142	5,327	4,433
Operating loss	(14,684)	(10,023)	(5,450)	(3,187)	(2,415)
Interest expense	(34)	(19)	(64)	(153)	(275)
Other income (expense), net	220	219	224	71	95
Income taxes	0	0	0	0	0
Net loss	(14,498)	(9,823)	(5,290)	(3,269)	(2,595)
Accretion on convertible preferred stock	(762)	(345)	(331)	0	0
Net loss attributable to common shareholders	$(15,260)	$(10,168)	$ (5,621)	$ (3,269)	$ (2,595)
Basic and diluted net loss per share(1)	$ (1.04)	$ (0.93)	$ (0.60)	$ (0.44)	$ (0.47)
Weighted average common shares outstanding	14,741	10,963	9,351	7,449	5,516

Balance Sheet Data:

	At December 31,				
	1998	1997	1996	1995	1994
	(in thousands)				
Working capital	$ 5,598	$ 4,432	$ 6,384	$ 1,561	$ 2,101
Total assets	12,738	10,164	12,262	5,773	4,443
Long-term debt net of current maturities	111	130	178	200	1,657
Shareholders' equity	5,208	8,316	9,907	2,759	1,299

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(1) See Note 1 to financial statements.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations - For the Years ended December 31, 1998, 1997 and 1996.

The following table sets forth selected information derived from the Company's

Statement of Operations as a percentage of net sales:

	For the Twelve Months Ended December 31		
	1998	1997	1996
Net sales	100.0%	100.0%	100.0%
Cost of sales	146.4	75.6	57.0
Gross profit (loss)	(46.4)	24.4	43.0
Operating expenses			
Selling, general and administrative	163.8	97.0	79.0
Research and development	124.1	53.9	51.1
Total operating expenses	287.9	150.9	130.1
Operating loss	(334.3)	(126.5)	(87.1)
Nonoperating income (expense)			
Interest expense	(0.8)	(0.2)	(1.0)
Other, net	5.0	2.7	3.6
Net loss	(330.0)%	(124.0)%	(84.5)%

Net Sales Net sales for 1998 decreased by approximately $3,531,000 (45%) from 1997 to approximately $4,393,000. The decrease in net sales is attributable to: (i) decreased sales to the Company's Japanese distributors; and (ii) the Company's shift in emphasis to opportunities in the storage area networks market resulting in diminished sales to customers in the high-performance local area networking market. Net sales to the Company's Japanese distributors decreased 84% from approximately $6,983,000 (88% of total sales) in 1997 to $1,141,000 (26% of total sales) in 1998. General economic conditions in Japan continue to make future sales to the Company's Japanese distributors uncertain. The decline in net sales to the Company's Japanese distributors was partially offset by net sales of approximately $967,000 to Boeing and license fee revenue of approximately $312,000 from INRANGE Technologies Corporation (see Liquidity and Capital Resources) generated during the fourth quarter.

The Company's shift in marketing focus to opportunities in the storage area network market has resulted in diminished revenues from customers in the high-performance local area network market. Although the Company intends to continue to offer its Fibre Channel products to select

customers in the high-performance network market, the Company plans to focus its resources on the storage area network market. The slower-than-anticipated market development in the storage area network market combined with the lack of orders from the Company's Japanese distributors and diminished revenues from the local area network market, will likely result in continued weak revenues until the storage area network market develops.

Net sales for 1997 increased by approximately $1,666,000 (27%) from 1996 to $7,924,000. The increase in net sales was due primarily to a significant increase in net sales to the Company's Japanese distributors, offset by a decrease in sales domestically. International net sales increased $4,063,000 (124%) from approximately $3,277,000 in 1996 to $7,340,000 in 1997, representing 93% of total net sales for the year. Net sales to the Company's Japanese distributors increased from $2,585,000 (79% of international sales) in 1996 to $6,983,000 (95% of international sales) in 1997, and represented 88% of total net sales for the year. Domestic sales volume decreased by approximately $2,397,000 (80%) from 1996 to $584,000, as several large sales transactions included in revenue for 1996 were not replaced in 1997.

The increase in net sales for 1997 included the effect of an allowance against sales of $1,500,000 for product returns and customer stock rotation. There was no addition to the allowance recorded in 1998. The Company does not generally provide customers with a right of return at the date of sale; however, in response to significant pressure from the marketplace, the Company has allowed product returns in the past from certain customers as a marketing concession to stimulate a positive impression of the Company and its products in the marketplace. In addition, resellers have incorrectly anticipated the configuration needed by end user equipment purchasers and have requested that purchased but unused product be exchanged for the product needed to meet the end user requirements. Further, certain end users have requested that they purchase their initial products from the Company, instead of the reseller, which resulted in credits issued to the resellers in the first quarter of 1997. Additionally, in the fourth quarter 1997, the Company recorded additional reserves for sales returns and allowances which may occur as a result of the Company's shift in marketing focus to OEMs and resellers who are more experienced in and are focused on specific vertical markets that the Company believes are most appropriate for its products. As a result of all of these factors, the Company's 1997 net assets included a reserve to provide for potential future return of product sold in 1997 and previous periods. The reserve balance at December 31, 1997, was approximately $695,000 ($1,050,000 gross sales less the estimated value of the product to be returned). The reserve was fully utilized during 1998 with a resulting balance of zero at December 31, 1998.

Gross Profit Gross profit in 1998 decreased to a loss of approximately $2,038,000 or a negative 46% of sales, from a profit of approximately $1,933,000, or 24% of sales in 1997. The decrease in gross profit for 1998 from the prior year was primarily attributable to special charges of approximately $4,428,000 recorded in the cost of sales for the second quarter. These charges included: (i) $4,015,000 provision for excess or obsolete inventory, (ii) $243,000 provision for future commitments to purchase excess or obsolete inventory, and (iii) $170,000 fee for canceling an order for excess or obsolete inventory. The Company made these provisions because its shift in focus from local area networks to storage area networks and lack of demand in Japan have caused it to believe its inventory of certain product exceeds current and future market demands. Gross profit for 1998 excluding the effects of the special charges was $2,389,786 (54%). A similar lesser provision was recorded in 1997.

The decrease in gross margin is also due in part to the decreased sales volume and is affected by indirect costs, such as normal scrap and overhead allocations, the impact of which is decreased as sales increase. Gross profit percentage is impacted by the mix of product sold within a period. In general, adapter cards have lower margins than switch and service revenue and different switch types have different margins. For 1998, the gross margin percentage was positively impacted because the mix of product sold during the period carried greater margins than that sold in the comparable periods in 1997. However, due to the significantly lower sales volume, the indirect costs caused the overall gross profit percentage to decrease over 1997.

Gross profit in 1997 decreased to approximately $1,933,000, or 24% of sales, from approximately $2,692,000, or 43% in 1996. Although a higher mix of switches versus adapters was sold in 1997 than 1996, the higher gross margins on the switches were offset by provisions made for excess and obsolete inventory. Included in the cost of sales for 1997 is $1,000,000 provision for excess and obsolete inventory which had the effect of decreasing gross profit as a percentage of sales by 13%. The Company made this provision because changes in the Fibre Channel market caused it to believe (i) its inventory of certain host bus adapter cards exceeded market demands as customers transitioned to newer server and workstation platforms; and (ii) its inventory of certain component parts used for earlier version switches was made obsolete by newer generation of switches. For these same excess and obsolescence reasons, when calculating the allowance for potential returns, the Company reduced the estimated value of the product to be returned.

Operating Expenses The Company's operating expenses for 1998 were approximately $12,646,000, or 288% of net sales, compared to approximately $11,956,000, or 151% of net sales, in 1997. The Company believes that the level of expense incurred is appropriate to address the opportunities available to it in the OEM storage and high-performance networking marketplaces. The decrease in selling, general and administrative ("SGA") expenses is primarily due to a change in the process of allocation of depreciation and a decrease in indirect marketing efforts, offset by increases in the cost for personnel. Although the

Company did not change its methods of depreciation, it did change its process for allocating total depreciation to reflect the usage of the related assets, such that approximately $586,000 of depreciation expense was reclassified in 1998 from SGA to research and development when compared to 1997. Additionally, the shift in the Company's marketing focus required changes in marketing tactics, employing direct contact with potential OEM customers through increased sales staff and less indirect contact through seminar presentations and advertising. Thus, indirect marketing expenses decreased approximately $528,000 in 1998 compared to 1997. However, reorganization and a 14% growth in personnel, particularly in sales and marketing senior management positions, resulted in personnel and related expenses increasing approximately $558,000 in 1998 as compared with 1997. Further, the shareholder litigation against the Company received final settlement approval by the District Court on February 5, 1999, for which the Company recorded a charge in the 1998 SGA expenses of $250,000 (see Shareholder Litigation section below). In addition to the $586,000 depreciation allocation described above, the Company's ongoing commitment to product development and enhancements, including the cost of additional engineering personnel, caused an increase in development expenses of approximately $536,000 in 1998 as compared with 1997.

The Company's operating expenses for 1997 were approximately $11,956,000 (151% of net sales), compared to approximately $8,142,000 (130% of net sales) in 1996. The increase in

operating expense is due to an increase in the cost for personnel, increased marketing and sales expenses to prepare for the OEM storage market, and increased depreciation. Personnel and related expenses increased approximately $2,017,000 in 1997 as compared with 1996. This increase was caused in part by a 10% increase in the number of employees at December 31, 1997 than at December 31, 1996. Also included in this increase is a third quarter 1997 charge of $250,000, recorded to reflect compensation owed to a former executive of the Company whose services were discontinued. The amount of the accrual was based on the compensation payable to such executive under the terms of the executive's employment contract. Additionally, the Company's ongoing aggressive commitment to front end spending for marketing and sales tactics resulted in advertising and marketing expense increasing approximately $946,000 over 1996. Further, primarily due to amortization of capitalized software development costs, depreciation and amortization expense increased approximately $460,000 as compared with 1996.

Other Income (Expense) Interest expense increased to approximately $34,000 in 1998 from approximately $19,000 in 1997 as a result of the Company's payments on an increased level of capitalized lease obligations. However, the 1997 interest expense of approximately $19,000 decreased from approximately $64,000 in 1996 as a result of the Company's repayment of a $1.5 million note payable in June 1996. Interest income of approximately $220,000, $218,000 and $224,000 in 1998, 1997 and 1996, respectively, was earned from the investment of the net proceeds of preferred stock offerings occurring in the first quarter of each year.

Liquidity and Capital Resources

The Company's principal source of liquidity at December 31, 1998 was cash, cash equivalents and short term investments of approximately $7,447,000. This compares to approximately $2,001,000 at year end 1997, and to approximately $1,511,000 at year end 1996. Net cash used in operating activities of approximately $4,354,000 in 1998 decreased from approximately $6,057,000 in 1997 and from approximately $8,058,000 in 1996. The primary reason for the decrease in 1998 was the receipt of approximately $6,000,000 by the Company as part of the technology license agreement the Company signed with INRANGE Technologies, Inc., which will be performed over the next five years (see below). This was offset by the operating loss and excess and obsolete inventory purchase commitments incurred. In 1997, the decrease was due to collections of accounts receivable, offset by the operating loss, net payments to vendors and inventory purchases in anticipation of future sales. Additionally, customers are also encouraged to install the Company's products through a free evaluation period lasting over a number of months. This equipment remains the property of the Company, thus increasing inventory, unless the evaluation is converted into a sale.

Cash flow used in investing activities totaled approximately $4,626,000 in 1998, as compared with approximately $527,000 in 1997 and approximately $2,536,000 in 1996. Increases in investing activities was a result primarily of purchases of short-term investments using a portion of the Company's private placement proceeds. Capital expenditures in 1997 included upgrades to and additions of desktop systems, development of salable software, and continued internal construction of internally-built testing and tooling equipment. Major capital expenditures in 1996 included upgrades and additions to facilities, development of a new worldwide management information system, upgrades of desktop systems, development of salable software

and internally-built testing and tooling equipment for the next generation of Fibre Channel switching products.

On September 24, 1998, the Company entered into a technology licensing agreement with INRANGE Technologies Corporation ("INRANGE"), a unit of General Signal Corporation. INRANGE will develop a series of Fibre Channel enhancements to their successful CD/9000 Channel Director. Under the agreement, INRANGE, a worldwide provider of data center networking connectivity technologies, is to pay the Company $9,000,000 in three equal installments: on September 25, 1998, December 15, 1998, and March 31, 1999. The $9,000,000 is comprised of (i) approximately $6,200,000 for licensing fees; (ii) approximately $800,000 (as valued using the Black-Scholes methodology) in warrants to purchase 750,000 shares of the Company's common stock at prices ranging from $2.50 to $10.00; and (iii) $2,000,000 prepaid royalties. The $6,200,000 licensing fee will be recognized as revenue evenly over 60 months, which is the term over which the Company has agreed to support and keep current the technology which INRANGE has licensed. The $800,000 in warrants has been recorded as an increase to Additional Paid in Capital. The $2,000,000 royalty will be recorded as revenue as INRANGE products ship and royalties are earned. Any additional royalties after this first $2,000,000 will result in both additional royalty revenue and cash payments to the Company.

On February 19, 1998, the Company completed a private placement of $11,000,000 (1,100 shares) of Series C Preferred Stock which resulted in net proceeds of approximately $10,239,724. The Securities were privately sold to accredited investors by Dunwoody Brokerage Services, Inc. ("Dunwoody"). As consideration for its services, Dunwoody received a fee equal to 6% of the gross proceeds, plus a five-year warrant to purchase 90,644 shares of Common Stock at a price per share equal to $7.281. The securities were sold pursuant to Rule 506 under Regulation D.

The Series C Preferred Stock is convertible into Common Stock of the Company, subject to certain restrictions, at a variable conversion rate equal to the lower of (i) the Maximum Conversion Price (as defined below) or (ii) the average of the three lowest closing bid prices of the Common Stock during the applicable pricing Period (as defined below). The Maximum Conversion Price for the first year is $11.00. After the first year, the Maximum Conversion Price is equal to the lesser of $11 and the average closing bid price of the five Wednesdays immediately preceding the first anniversary of the date the Series C Preferred Stock was issued ($7.575). The applicable Pricing Period is a number of consecutive trading days immediately preceding the date of conversion of the Series C Preferred Stock initially equal to twelve and increased by one additional consecutive trading day for each full calendar month which has elapsed since February 19, 1998.

The Company believes that the proceeds received from the private placement and the INRANGE agreement, together with interest earned thereon, and anticipated revenues from operations will provide adequate liquidity to fund growth, operations, and capital expenditures for 1999. However, the Company anticipates the need to secure additional financing in order to fund operating and working capital requirements thereafter. There can be no assurance that additional financing can be obtained with terms acceptable to the Company. Any additional equity financings may be dilutive to existing shareholders, and any debt financing may contain restrictive covenants. The Company's inability to obtain additional financing if and when needed could adversely affect the Company and its operations.

Litigation. Ancor was a defendant in a consolidated class action captioned In re Ancor Communications, Inc. Securities Litigation, Case No. 97-CV-1696 (D. Minn.) alleging violations of the federal securities laws. The lawsuit was settled in November 1998 and dismissed by the district court on February 5, 1999. Pursuant to the terms of the settlement, a fund was created in the amount of $1,650,000. The Company paid $250,000 of the total settlement and the remaining $1,400,000 was paid by the Company's insurer. The $250,000 payment by the Company was recorded as an expense in the third quarter of 1998.

The Company is also a defendant in a lawsuit brought by Hoyt Properties, Inc. ("Hoyt") venued in Hennepin County District Court in the State of Minnesota. Hoyt, as Landlord, and the Company, as Tenant, entered into an Agreement on May 29, 1998 which provided that Hoyt would build and lease to the Company an office building to be located in Eden Prairie, Minnesota, subject to certain contingencies, conditions, and agreements. Hoyt claims that the Company breached the Agreement, and asserts damages in excess of $2,500,000. The Company denies all liability, and alleges that Hoyt refused to provide improvements desirable and necessary to the Company's occupancy of the proposed leased space, and multiple contingencies, conditions, and agreements did not occur and no binding agreement exists. The Company is vigorously defending the case. There has been no discovery completed to date. However, there is no assurance that any judgment, order or decree against the Company arising out of this action will not have a material adverse effect on the Company or its business. The Company is unable to determine at this time if there will be a material adverse outcome. No provision has been made for any loss that may occur as a result of an adverse outcome of the suit

Option Repricing. In order to retain its employees in a competitive employment market, and given the price of the Company's common stock at the time, on October 21, 1998, the Company's Board of Directors voted and approved to reprice outstanding options to purchase 1,091,333 shares of common stock held by active employees to an exercise price of $1.78, the closing price of the Company's common stock on that day. These options were originally issued before May 1, 1998 to employees at a weighted average exercise price of $7.16. The repriced options may not be exercised until October 21, 1999, at which point the options are exercisable subject to the vesting schedule of the original option agreements.

Year 2000 Issue. The Company has completed an assessment of Year 2000 compliance for its critical operating and application systems, specifically its enterprise-wide information systems, analysis tools, computer-aided design systems and supporting operating system infrastructure. As a result of this assessment, it has been determined that through normal recurring system upgrades, the vast majority of the Company's systems are currently, or will be by early 1999, Year 2000 compliant. During fiscal 1996 the Company purchased from a world-wide supplier and developer of information systems an enterprise-wide information system. The developer of this information system has provided its clients written assurance that the system will correctly function across the year 2000, as verified by previous system tests and Year 2000 certification by the International Technology Association of America. Additionally, the Company's products, including software, are not date sensitive as to functionality. Since Year 2000 compliance with regard to the Company's internal systems has been, or will be, significantly achieved through normal system upgrades and not through accelerated or dedicated efforts, the costs of becoming Year 2000 compliant has not had and is not expected to have a material effect on the Company's financial position, operations or cash flow.

Ultimately, the potential impact of the Year 2000 issue will depend not only on the Company's internal Year 2000 compliance, but also on the way in which the Year 2000 is addressed by customers, vendors, service utilities, government and other external entities. The Company is communicating with such external parties to determine how they are addressing the Year 2000 issue and to evaluate any likely impact on the Company. The Company has requested commitment dates from these parties as to their Year 2000 readiness. This process will continue in fiscal 1999. The efforts of third parties are not within the Company's control, however, and their failure to remedy Year 2000 issues successfully could result in business disruption, loss of revenue and increased operating cost. At the present time, it is not possible to determine whether any such events are likely to occur, or to quantify any potential negative impact they may have on the Company's future results of operations and financial condition. The Company has not currently established contingency plans, but has established a committee to assess its need for contingency plans during 1999.

The foregoing discussion regarding Year 2000 contains forward-looking statements which are based on management's best estimates derived using various assumptions. These forward-looking statements involve inherent risks and uncertainties, and actual results could differ materially from those contemplated by such statements. Factors that might cause material differences include, but are not limited to, (i) the Company's ability to obtain alternative manufacturing sources should its current sources' operations be disrupted due to Year 2000 complications, and (ii) the Company's ability to respond to unforeseen Year 2000 complications. Such material differences could result in, among other things, business disruption, operational problems, financial loss, legal liability and similar risks.

New Accounting Pronouncements. In June 1998, the Financial Accounting Standards Board issued SFAS 133, "Accounting for Derivative Instruments and Hedging Activities." This statement establishes standards for derivative instruments and hedging activities. The Company is required to adopt SFAS 133 in the first quarter of fiscal year 2000. The Company does not anticipate that SFAS 133 will have a material impact on its financial statements.

Safe Harbor Cautionary Statement

Statements made in this Management's Discussion and Analysis that are not historical in nature, including statements regarding the level of future revenues and expenses, are "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995 and are subject to risks and uncertainties. Factors that may affect the Company's future performance and results are set forth in the Company's filings with the Securities and Exchange Commission and include the level of market acceptance of Fibre Channel technology and the Company's products and the timing of such acceptance, the ability of the Company to successfully market and sell its products to OEMs and others, the Company's ability to compete with others providing Fibre Channel technology, the timing of customer orders, including whether customers will purchases products form the Company at the rates and times projected by those customers, the success of the products incorporating the Company's technology marketed by INRANGE, the ability of the Company to develop enhancements to its products and technology and keep pace with technological developments, the Company's ability to manage growth, the Company's ability to attract and retain qualified personnel and the ability of the Company's products to interoperate with products manufactured by others. Retention of $2.0 million of prepaid royalties from

INRANGE is contingent upon the Company's completion of certain deliverables defined in the Company's technology license agreement with INRANGE.

Item 7A. Quantitative and Qualitative Disclosures about Market Risks

The Company has no history of, and does not anticipate in the future, investing in derivative financial instruments, derivative commodity instruments or other such financial instruments. Contracts with international customers are entered into in US dollars, precluding the need for foreign currency hedges. Additionally, the Company invests in money market funds and in U.S. government obligations (primarily U.S. Treasury bills) which experience minimal volatility. Thus, the exposure to market risk is immaterial.

Item 8. Financial Statements and Supplementary Data

The following financial statements are included as a separate section following the signature page to this Form 10-K:

INDEX TO FINANCIAL STATEMENTS

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

PART III

Item 10. Directors, Executive Officers, Promoters and Control Persons: Compliance with Section 16(a) of the Exchange Act

The information set forth under the heading "ELECTION OF DIRECTORS," "EXECUTIVE OFFICERS" and "SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE" in the Company's definitive proxy statement for its 1999 Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission on or before April 30, 1999 (the "Proxy Statement") is hereby incorporated by reference.

Item 11. Executive Compensation

The information set forth under the heading "EXECUTIVE COMPENSATION" in the Proxy Statement referred to in Item 10 above is hereby incorporated by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management

The information set forth under the heading "PRINCIPAL SHAREHOLDERS" in the Proxy Statement referred to in Item 10 above is hereby incorporated by reference.

Item 13. Certain Relationships and Related Transactions

The information set forth under the heading "CERTAIN TRANSACTIONS" in the Proxy Statement referred to in Item 10 above is hereby incorporated by reference.

Part IV

Item 14. Exhibits, Financial Statements, Schedules and Reports on Form 8-K

(a.) The following documents are filed as part of this Annual Report on Form 10-K

1. Financial Statements: The financial statements filed as part of this report are listed in the "Index to Financial Statements" on Page F-1 hereof.

2. Financial Statement Schedules. The financial statement schedule filed as part of this report is listed in the "Index to Financial Statements" on Page F-1 hereof.

3. Exhibits

3.1(a) Second Amended and Restated Articles of Incorporation of the Company.

3.2(a)   Amended Bylaws of the Company.

3.3(k)   Amendment to Second Amended and Restated Articles of Incorporation of the Company relating to an increase of the number of authorized shares.

3.4(m)   Amendment to Bylaws adopted October 21, 1998.

4.1(a)   Loan and Warrant Purchase Agreement, dated as of June 24, 1992, between Ancor Communications, Incorporated and International Business Machines Incorporated.

4.2(a)   Agreement and Amendment to Loan and Warrant Purchase Agreement, dated March 10, 1994, by and among Ancor Communications, Incorporated, International Business Machines Corporation and IBM Credit Corporation.

4.3(b)   Second Amendment to Loan and Warrant Purchase Agreement dated April 25, 1994, by and among Ancor Communications, Incorporated, International Business Machines Corporation and IBM Credit Corporation.

4.4(a)   Shareholders Agreement, dated as of June 24, 1992, among Ancor Communications, Incorporated, International Business Machines Incorporated and the shareholders of the Company named on the signature page thereto.

4.5(c)   Representative's Warrant.

4.6   [Reserved.]

4.7(d)   Form of Warrant issued April 28, 1995.

4.8   [Reserved.]

4.9(e)   Form of Warrant issued to John G. Kinnard & Company on October 23, 1995.

4.10(f)   Certificate of Designation of Series A Preferred Stock.

4.11(f)   Form of Warrant issued to Swartz Investments, Inc. on March 7, 1996.

4.12(g)   Form of Warrant issued to Dunwoody Brokerage Services, Inc. on March 24, 1997.

4.13(g)   Form of Warrant issued to Purchasers of the Company's Series B Preferred Stock.

4.14(g)   Certificate of Designation of Series B Preferred Stock.

4.15(i)   Certificate of Designation of Series C Preferred Stock.

4.16(j)   Form of Warrant issued to Dunwoody Brokerage Services, Inc. on February 19, 1998.

4.17(l)   Form of Warrant issued to Inrange Technologies, Inc. on September 24, 1998.

10.1   [Reserved.]

*10.2(a)   Ancor Communications, Incorporated 1990 Stock Option Plan.

*10.3(a)   Ancor Communications, Incorporated 1994 Long-Term Incentive and Stock Option Plan.

10.4   [Reserved.]

*10.5(a)   Employment Agreement, dated January 1, 1994, between Ancor Communications, Incorporated and Stephen C. O'Hara.

10.6   [Reserved.]

10.7 [Reserved.]

10.8(a) Sublease, dated March 29, 1988, by and between Anderson Cornelius and Unisys Corporation, formerly known as Burroughs Corporation.

10.9(a) Sublease, Amendment Agreement, dated March 8, 1989, by and between Anderson Cornelius and Unisys Corporation, formerly known as Burroughs Corporation.

10.10(a) Sublease, Amendment Agreement, dated August 31, 1992, by and between the Company and Unisys Corporation, formerly known as Burroughs Corporation.

10.11 [Reserved.]

10.12 [Reserved.]

10.13 [Reserved.]

10.14 [Reserved.]

10.15 [Reserved.]

10.16 [Reserved.]

*10.17(e) Ancor Communications, Inc. 1995 Employee Stock Purchase Plan.

*10.18(m) Amendment to Ancor Communications, Inc., 1995 Employee Stock Purchase Plan, effective September 1, 1998.

*10.19(e) Ancor Communications, Inc. Non-Employee Director Stock Option Plan.

10.20 [Reserved.]

10.21 [Reserved.]

10.22 [Reserved.]

10.23(g) Form of Subscription Agreement between the Company and Purchasers of the Company's Series B Preferred Stock (March 1997).

10.24(g) Registration Rights Agreement dated March 24, 1997 between the Company, Swartz Investments, Inc. and Purchasers of the Company's Series B Preferred Stock.

*10.25(h) Letter Employment Agreement with Kenneth E. Hendrickson dated July 25, 1997.

*10.26(h) Letter Employment Agreement with Steven E. Snyder dated September 23, 1997.

10.27(i) Form of Subscription Agreement, dated as of February 19, 1998, between Ancor Communications, Incorporated and each purchaser of Series C Preferred Stock.

10.28(i) Registration Rights Agreement, dated as of February 19, 1998, by and between Ancor Communications, Incorporated, the placement agent and each purchaser of Series C Preferred Stock.

*10.29(j) Termination of Employment Agreement dated August 29, 1997, between the Company and Dale C. Showers.

10.30(j) Sublease, Amendment Agreement, dated February 11, 1998, by and between the Company and Unisys Corporation, formerly known as Burroughs Corporation.

*10.31(j) Separation and General Release Agreement between the Company and Lee B. Lewis.

*10.32(j) Amendments to Ancor Communications, Inc. Non-Employee Director Stock Option Plan filed as exhibit 10.18.

23.1(m) Consent of KPMG Peat Marwick LLP

23.2(m) Consent of McGladrey & Pullen, LLP.

27.1(m) Financial Data Schedule.

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* Indicates management contract or compensatory plan or agreement.

a Incorporated by reference to the Company's Registration Statement on form SB-2 filed March 11, 1994.

b Incorporated by reference to Amendment No. 2 to the Company's Registration Statement on form SB-2 Filed April 28, 1994.

c Incorporation by reference to the Company's Form 10-QSB filed for the quarterly period ended March 31, 1994.

d Incorporated by reference to the Company's form 10-QSB filed for the quarterly period ended March 31, 1995.

e Incorporated by reference to the Company's form 10-QSB filed for the quarterly period ended September 30, 1995.

f Incorporated by reference to the Company's Form 10-KSB filed for the fiscal year ended December 31, 1995.

g Incorporated by reference to the Company's form 10-Q filed for the quarterly period ended March 31, 1997.

h Incorporated by reference to the Company's form 10-Q filed for the quarterly period ended September 30, 1997.

i Incorporated by reference to the Company's form 8-K filed February 23, 1998.

j Incorporated by reference to the Company's Form 10-K filed for the fiscal year ended December 31, 1997.

k Incorporated by reference to the Company's form 10-Q filed for the quarterly period ended June 30, 1998.

l Incorporated by reference to the Company's form 10-Q filed for the quarterly period ended September 30, 1998.

m Included herewith.

(b.) Reports on Form 8-K

Form 8-K (Item 5 - Other Events) filed November 3, 1998, reporting the declaration of a dividend of one preferred share purchase right per share of common stock outstanding in connection with the adoption of the Company's Shareholders Rights Plan

(c.) See subitem (a.) above.

(d.) See subitem (a.) above.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Exchange Act, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ANCOR COMMUNICATIONS, INCORPORATED

By /S/Kenneth E. Hendrickson

Kenneth E. Hendrickson
Chairman of the Board & CEO

Dated: March 19, 1999

Pursuant to the requirements of the Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Name	Title	Date
/S/Kenneth E. Hendrickson Kenneth E. Hendrickson	Chairman, Director and CEO (principal executive officer)	March 19, 1999
/S/Steven E. Snyder Steven E. Snyder	Chief Financial Officer (principal financial officer)	March 19, 1999
/S/Amyl Ahola Amyl Ahola	Director	March 19, 1999
/S/Gerald M. Bestler Gerald M. Bestler	Director	March 19, 1999
/S/John F. Carlson John F. Carlson	Director	March 19, 1999
/S/Thomas F. Hunt, Jr. Thomas F. Hunt, Jr.	Director	March 19, 1999
/S/Michael Huntley Michael Huntley	Director	March 19, 1999
/S/Paul Lidsky Paul Lidsky	Director	March 19, 1999

INDEX TO FINANCIAL STATEMENTS

INDEPENDENT AUDITORS REPORT

THE BOARD OF DIRECTORS AND SHAREHOLDERS --ANCOR COMMUNICATIONS, INC.

We have audited the accompanying balance sheet of Ancor Communications, Inc. as of December 31, 1998, and the related statements of operations, shareholders' equity and cash flows for the year then ended. 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 audit.

We conducted our audit 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 audit provides a reasonable basis for our opinion.

In our opinion, the 1998 financial statements referred to above present fairly, in all material respects, the financial position of Ancor Communications, Inc. as of December 31, 1998, and the results of its operations and its cash flows for the year then ended, in conformity with generally accepted accounting principles.

KPMG Peat Marwick LLP.

Minneapolis, Minnesota
February 5, 1999

INDEPENDENT AUDITORS REPORT

To the Board of Directors
Ancor Communications, Incorporated
Minnetonka, Minnesota

We have audited the accompanying balance sheet of Ancor Communications, Incorporated as of December 31, 1997 and the related statements of operations, shareholders' equity, and cash flows for each of the two years in the period ended December 31, 1997. 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 Ancor Communications, Incorporated as of December 31, 1997 and the results of its operations and its cash flows for each of the two years in the period ended December 31, 1997, in conformity with generally accepted accounting principles.

McGLADREY & PULLEN, LLP

Minneapolis, Minnesota
February 19, 1998

ANCOR COMMUNICATIONS, INCORPORATED
BALANCE SHEETS

<TABLE>
<CAPTION>

	December 31, 1998	December 31, 1997
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 3,477,236	$ 2,001,404
Short-term investments	3,970,137	--
Accounts receivable, less allowances of $39,492 and $804,000, respectively	442,600	1,499,634
Inventories	1,288,868	2,493,722
Prepaid expenses and other current assets	110,398	154,983
Total current assets	9,289,239	6,149,743
Equipment, at cost	5,865,404	5,875,424
Less accumulated depreciation	2,744,786	2,601,896
	3,120,618	3,273,528
Patents, prepaid royalties, and other assets, net of accumulated amortization	195,668	269,190
Capitalized software development costs, less accumulated amortization of $470,581 and $342,900, respectively	132,568	471,043
	328,236	740,233
TOTAL ASSETS	$ 12,738,093	$ 10,163,504
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities:		
Current maturities of long-term debt	$ 139,791	$ 65,145
Accounts payable	448,383	963,321
Accrued compensation and benefits	577,206	477,464
Other accrued liabilities	378,470	210,526
Unearned revenue, current	2,146,936	1,000
Total current liabilities	3,690,786	1,717,456
Long-term unearned revenue, less current	3,727,919	--
Long-term debt, less current maturities	110,997	129,702
Commitments and Contingencies		
Shareholders' Equity		
Preferred stock, par value $.01 per share, authorized 5,000,000 shares; issued and outstanding		
Series A, 0 shares in 1998 and 42 shares in 1997	--	1
Series B, 0 shares in 1998 and 440 shares in 1997	--	4
Series C, 229 shares in 1998 and none issued in 1997, liquidation value of $2,290,000	2	
Common stock, par value $.01 per share, authorized 40,000,000 shares; issued and outstanding 23,265,819 shares in 1998 and 11,778,006 shares in 1997	232,658	117,780
Additional paid-in capital	46,566,386	35,290,763
Accumulated deficit	(41,590,655)	(27,092,202)
Total shareholders' equity	5,208,391	8,316,346
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$ 12,738,093	$ 10,163,504

</TABLE>

See notes to Financial Statements

ANCOR COMMUNICATIONS, INCORPORATED
STATEMENTS OF OPERATIONS

<TABLE>
<CAPTION>

	Years Ended December 31		
	1998	1997	1996
Net sales	$ 4,393,197	$ 7,924,001	$ 6,257,840
Cost of goods sold	6,431,411	5,990,661	3,565,393
Gross profit (loss)	(2,038,214)	1,933,340	2,692,447
Operating expenses			
Selling, general and administrative	7,195,294	7,684,638	4,944,166
Research and development	5,450,942	4,271,393	3,198,155
Total operating expenses	12,646,236	11,956,031	8,142,321
Operating loss	(14,684,450)	(10,022,691)	(5,449,874)
Nonoperating income (expense)			
Interest expense	(33,532)	(18,717)	(63,896)
Other, primarily interest income	219,529	218,408	224,086
Net loss	(14,498,453)	(9,823,000)	(5,289,684)
Accretion on convertible preferred stock	(761,704)	(344,939)	(331,334)
Net loss attributable to common shareholders	$(15,260,157)	$(10,167,939)	$ (5,621,018)
Basic and diluted net loss per common share	$ (1.04)	$ (0.93)	$ (0.60)
Weighted average common shares outstanding	14,741,431	10,963,416	9,351,060

</TABLE>

See notes to Financial Statements

ANCOR COMMUNICATIONS, INCORPORATED
STATEMENTS OF SHAREHOLDERS' EQUITY
Years Ended December 31, 1998, 1997 and 1996

<TABLE>
<CAPTION>

	Preferred Stock			
	Series A		Series B	
	Shares	Amount	Shares	Amount
Balance, December 31, 1995	--	$ --	--	$ --
Sales of Series A Preferred Stock (net of issuance costs of $756,466)	1,030	10	--	--

Conversions of Series A Preferred Stock	(856)	(8)	--	--
Exercise of stock options and warrants (net of issuance costs of $33,915)	--	--	--	--
Employee stock purchases	--	--	--	--
Net loss	--	--	--	--
Balance, December 31, 1996	174	2	--	--
Sales of Series B Preferred Stock (net of issuance costs of $602,253)	--	--	855	8
Conversions of Series A Preferred Stock	(132)	(1)	--	--
Conversions of Series B Preferred Stock	--	--	(415)	(4)
Exercise of stock options and warrants	--	--	--	--
Employee stock purchases	--	--	--	--
Net loss	--	--	--	--
Balance, December 31, 1997	42	1	440	4
Sales of Series C Preferred Stock (net of issuance costs of $791,814)	--	--	--	--
Warrants issued in connection with license agreement	--	--	--	--
Conversions of Series A Preferred Stock	(42)	(1)	--	--
Conversions of Series B Preferred Stock	--	--	(440)	(4)
Conversions of Series C Preferred Stock	--	--	--	--
Exercise of stock options and warrants	--	--	--	--
Employee stock purchases	--	--	--	--
Net loss	--	--	--	--
Balance, December 31, 1998	--	$ --	--	$ --

</TABLE>

See notes to Financial Statements

<TABLE>
<CAPTION>

Series C		Common Stock		Additional		
Shares	Amount	Shares	Amount	Paid-In Capital	Accumulated Deficit	Total
<S>	<C>	<C>	<C>	<C>	<C>	<C>
--	$ --	8,273,426	$ 82,734	$ 14,656,203	$(11,979,518)	$ 2,759,419
--	--	--	--	9,543,524	--	9,543,534
--	--	1,352,494	13,525	(13,517)	--	--
--	--	773,519	7,735	2,832,061	--	2,839,796
--	--	8,248	83	53,549	--	53,632
--	--	--	--	--	(5,289,684)	(5,289,684)
--	--	10,407,687	104,077	27,071,820	(17,269,202)	9,906,697
--	--	--	--	7,947,739	--	7,947,747
--	--	407,444	4,074	(4,073)	--	--
--	--	876,383	8,764	(8,760)	--	--
--	--	74,775	748	222,925	--	223,673
--	--	11,717	117	61,112	--	61,229
--	--	--	--	--	(9,823,000)	(9,823,000)
--	--	11,778,006	117,780	35,290,763	(27,092,202)	8,316,346
1,100	11	--	--	10,208,175	--	10,208,186
--	--	--	--	768,064	--	768,064
--	--	134,268	1,343	(1,342)	--	--
--	--	3,999,976	40,000	(39,996)	--	--
(871)	(9)	7,196,487	71,965	(71,956)	--	--
--	--	58,020	580	215,301	--	215,881
--	--	99,062	990	197,377	--	198,367
--	--		--	--	(14,498,453)	(14,498,453)
229	$ 2	23,265,819	$ 232,658	$ 46,566,386	$(41,590,655)	$ 5,208,391

==
</TABLE>

See notes to Financial Statements

ANCOR COMMUNICATIONS, INCORPORATED
STATEMENTS OF CASH FLOWS

<TABLE>
<CAPTION>

	Years Ended December 31,		
	1998	1997	1996
<S>	<C>	<C>	<C>
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$(14,498,453)	$ (9,823,000)	$ (5,289,684)
Adjustments to reconcile net loss to net cash used in operating activities:			
Provisions for receivables allowances	--	1,028,000	164,000
Provision for obsolete inventories	4,262,000	1,045,000	50,000
Writedown of equipment	100,538	248,953	--
Depreciation and amortization	1,342,653	1,077,796	617,419
Changes in current assets and liabilities:			
Accounts receivable	1,057,034	1,491,366	(2,360,117)
Inventories	(2,814,146)	(842,761)	(1,926,201)
Prepaid expenses and other	44,585	181,751	(155,886)
Accounts payable	(514,938)	(788,937)	913,569
Accrued liabilities	24,686	323,926	(71,200)
Unearned revenue	6,641,919	1,000	--
Net cash used in operating activities	(4,354,122)	(6,056,906)	(8,058,100)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of equipment	(606,533)	(1,334,183)	(2,202,259)
Purchase of short-term investments	(17,394,136)	(9,469,670)	(1,003,530)
Sale of short-term investments	13,423,999	10,473,200	1,300,178
Capitalized software development costs	--	(125,035)	(577,488)
Other, net	(49,078)	(70,934)	(52,569)
Net cash used in investing activities	(4,625,748)	(526,622)	(2,535,668)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Net proceeds from sale of preferred stock	10,208,186	7,947,747	9,543,534
Net proceeds from exercise of warrants, exercise of options, and employee stock purchases	414,248	284,902	2,893,428
Principal payments on long-term debt	(166,732)	(154,758)	(1,587,628)
Net cash provided by financing activities	10,455,702	8,077,891	10,849,334
Net increase in cash	1,475,832	1,494,363	255,566
Cash, beginning of period	2,001,404	507,041	251,475
Cash, end of period	$ 3,477,236	$ 2,001,404	$ 507,041
Supplemental Cash Flow Disclosures			
Cash payments for interest	$ 33,532	$ 18,717	$ 63,896
Supplemental Schedule of Noncash Investing and Financing Activities:			
Equipment acquired under capital lease	$ 222,673	$ 110,300	$ 87,280

Warrants issued under license agreement	$ 768,064	$ --	$ --

</TABLE>

See notes to Financial Statements

ANCOR COMMUNICATIONS, INCORPORATED

NOTES TO FINANCIAL STATEMENTS

Note 1. Nature of Business and Significant Accounting Policies

Nature of business: Ancor Communications, Incorporated (the Company) operates in one business segment, the development and marketing of various products for the communications market. The Company's products are components in fiber-optic communications networks. The Company also previously designed, produced, and marketed system components used in United States military communications systems. Sales are made to customers throughout the United States, in Japan, and in certain other foreign countries. Credit, including foreign credit, is determined on an individual customer basis.

Accounting estimates: The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Revenue recognition: Revenue on firm customer orders is generally recognized at the time product is shipped or services are provided. Product shipped for customer evaluation is recorded as consigned inventory. In certain circumstances during 1996, revenue was recognized upon completion of production under specific contractual arrangements for billing and delivery. The Company provides an allowance for product returns based on management's periodic assessment of the need for such an allowance. License revenue is recognized when all of the following criteria have been met: there is an executed license agreement, the product has been shipped to the customer, no significant vendor obligations remain, the license fee is fixed and payable within twelve months and collection is deemed probable.

Cash and cash equivalents: For purposes of reporting cash flows, the Company considers all unrestricted cash and any U.S. Treasury bills, commercial paper, and money market funds with an original maturity of three months or less to be cash equivalents. The Company maintains its cash in bank deposit and money market accounts, which, at times, exceed federally insured limits. The Company has not experienced any losses in such accounts.

Short-term investments: Short-term investments consisted primarily of investments in money market funds and in U.S. government obligations (primarily U.S. Treasury bills). Short-term investments are recorded at cost which approximates market.

Inventories: Inventories are stated at the lower of cost (first-in, first-out method) or market. The Company has recorded a reserve for potential obsolete inventory based primarily on management's estimate of future sales levels of products and related components in inventory (see Note 9).

Depreciation and amortization: Equipment purchases are stated at cost. Depreciation is computed by the straight-line method over estimated useful lives of three to five years. Intangible assets consist principally of patents, prepaid royalties, and cost in excess of net assets acquired. Amortization is computed by the straight-line method over estimated useful lives ranging from 5 to 15 years.

The Company reviews its long-lived assets periodically to determine potential impairment by comparing the carrying value of the long-lived assets with the estimated future net undiscounted cash flows

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expected to result from the use of the assets, including cash flows from disposition. Should the sum of the expected future net cash flows be less than the carrying value, the Company would recognize an impairment loss at that date. An impairment loss would be measured by comparing the amount by which the carrying value exceeds the fair value (estimated discounted future cash flows) of the long-lived assets. In connection with such a review, during 1998 and 1997 management wrote down certain assets resulting in a loss of $100,538 and $248,953, respectively.

Fair value of financial instruments: The financial statements include the following financial instruments: cash and cash equivalents, short-term investments, and long-term debt. No separate comparison of fair values versus carrying values is presented for the aforementioned financial instruments since their fair values are not significantly different than their balance sheet carrying amounts.

Income taxes: Deferred taxes are provided on an asset and liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss or tax credit carryforwards and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the amounts of assets and liabilities recorded for income tax and financial reporting purposes. Deferred tax assets are reduced by a valuation allowance when management determines that it is more likely than not that some portion or all of the deferred tax assets and liabilities will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment. Income tax expense or benefit would be the tax payable or refundable for the year plus or minus the change in deferred tax assets and liabilities during the year.

Capitalized software development costs: The Company capitalizes software development costs incurred after the establishment of technological feasibility. These costs are amortized to cost of goods sold at the greater of (i) the amount computed using the ratio of current gross revenues for the product to the total of current and anticipated future gross revenues, or (ii) the straight-line method over the remaining estimated economic life of the product. An original estimated economic life ranging from one to five years is assigned to capitalized software development costs. It is reasonably possible that those estimates of anticipated future gross revenues, the remaining estimated economic life of the product, or both, could be reduced as a result of the rapid technological changes occurring in the markets in which the Company sells its products.

Research and development: Research and development costs applicable to both present and future products are charged to operations as incurred.

Net loss per share: The FASB has issued Statement No. 128, Earnings Per Share, which supersedes APB Opinion No. 15. Statement No. 128 requires the presentation of earnings per share by all entities that have common stock or potential common stock, such as options, warrants and convertible securities, outstanding that trade in a public market. Those entities that have only common stock outstanding are required to present basic earnings per-share amounts. Basic per-share amounts are computed, generally, by dividing net income or loss, as adjusted for by the weighted-average number of common shares outstanding. All other entities are required to present basic and diluted per-share amounts. Diluted per-share amounts assume the conversion, exercise, or issuance of all potential common stock instruments unless the effect is anti-dilutive, thereby reducing the loss or increasing the income per common share.

The Company initially applied Statement No. 128 for the year ended December 31, 1997, and, as required by the statement, has restated all per-share information for the prior years to conform to the statement. In calculating the basic loss per share, the premium earned by the preferred shareholders ($761,704 in 1998, $344,939 in 1997 and $331,334 in 1996) was added to the net loss in all years presented. Potential common shares, consisting of options, warrants and convertible preferred stock for all periods, were not included in the computation as their effect was anti-dilutive. Basic and diluted loss per-share amounts are the same in each period presented.

New Accounting Pronouncements: Statement of Financial Accounting Standard No. 131, "Disclosures About Segments of an Enterprise and Related Information" was adopted by the Company in 1998. This statement establishes standards for the reporting of information concerning operating segments in the financial statements.

Note 2. Inventories

Inventories at December 31, 1998 and 1997, consisted of:

	1998	1997
Raw materials	$ 4,031,546	$ 2,398,066
Finished goods consigned to customers and others	779,054	527,078
Finished goods	1,289,577	663,500
Reserve for obsolescence	(4,811,309)	(1,094,922)
	$ 1,288,868	$ 2,493,722

During the quarter ended June 30, 1998 the Company recorded the following special charges relating to excess and obsolete inventory: (i) $4,015,000 provision-for excess or obsolete inventory, (ii) $243,000 provision for future commitments to purchase excess or obsolete inventory, and (iii) $170,000 fee for canceling an order for excess or obsolete inventory. The Company made these charges due to its shift in focus from local area networks to storage area networks, along with a lack of demand in Japan for this old technology, causing the Company to believe its inventory of certain products is in excess of market demands.

Note 3. Notes Payable and Long-term Debt

Long-term debt consists of the following at December 31, 1998 and 1997:

	1998	1997
Note payable to shareholder (1)	$ 81,946	$ 85,642
Capital lease obligations (2)	168,842	109,205
	250,788	194,847
Less current maturities	139,791	65,145
	$ 110,997	$ 129,702

(1) Payments are made to the note holder in an amount equal to 0.94 percent of Company sales in excess of $4,000,000 in any calendar year.

(2) The Company has capitalized certain equipment held under capital leases with a capitalized cost of $396,855 and $296,796 and accumulated depreciation of $133,752 and $99,745 at December 31, 1998 and 1997, respectively. The related obligations are recorded in the accompanying financial statements based on the present value of the future minimum lease payments based on an implicit interest rate of 13 percent.

Approximate aggregate annual maturities of long-term debt, including capital lease obligations, at December 31, 1998, are as follows:

Years ending December 31:	
1999	$ 131,000
2000	32,000
2001	6,000
Note with no specified maturity	82,000
	$ 251,000

Note 4. Major Customers and Concentration of Credit Risk

Major customers: A summary of major customers follows:

Customer	1998 Sales	1998 Percent to Total	1997 Sales	1997 Percent to Total	1996 Sales	1996 Percent to Total
Boeing	$ 2,193,000	50%	$ 679,000	9%	$ 78,000	1%
Netmarks, Inc.	967,000	22	-	-	-	-
Hucom, Inc.	174,000	4	6,983,000	88	2,585,000	41
Falcon Systems	-	-	-	-	757,000	12

Accounts receivable from major customers totaled approximately $537,000 at December 31, 1998.

Export net sales totaled approximately $1,159,000, $7,340,000, and $3,277,000 in 1998, 1997, and 1996, respectively. The Company's Japanese distributors comprised 98, 95, and 79 percent of export net sales in 1998, 1997, and 1996, respectively.

Note 5. Income Taxes

Deferred tax assets consist of the following components as of December 31, 1998 and 1997:

	1998	1997
Loss carryforwards	$ 14,711,000	$ 8,594,000
Tax credit carryforwards	1,042,000	694,000
Accrued expenses	188,000	51,000
Allowances for obsolete inventory, product returns, and doubtful accounts	2,317,000	833,000
Property, plant and equipment	(440,000)	-
Other Items	-	157,000
	17,818,000	10,329,000
Less valuation allowance	$(17,818,000)	$(10,329,000)
	$ -	$ -

The income tax benefit differed from the statutory federal rate as follows:

	1998	1997	1996

Statutory rate applied to loss before taxes	$ (4,929,000)	$ (3,438,000)	$ (1,851,000)
Current period tax benefits not utilized	4,929,000	3,438,000	1,851,000
	$ -	$ -	$ -

</TABLE>

At December 31, 1998, the Company has net operating loss, research and development credit, and investment tax credit carryforwards (under existing tax laws) as follows:

Carryforward Expiration	Net Operating Loss	Tax Credits
1999	$ -	$ 15,000
2000	900,000	-
2006	1,100,000	82,000
2007	3,100,000	117,000
2008	2,100,000	126,000
2009	3,000,000	138,000
2010	3,500,000	82,000
2011	5,100,000	104,000
2012	7,400,000	278,000
2018	10,600,000	100,000
	$ 36,800,000	$ 1,042,000

Because of the changes in ownership that have occurred in connection with the company's initial public offering (IPO) in 1994, as well as the sales of securities that have occurred subsequent to the IPO, the Company's future use of its net operating loss and tax credit carryforwards are subject to certain annual limitations.

Note 6. Shareholders' Equity

Preferred stock: The Company has authorized 5,000,000 shares of preferred stock at December 31, 1998. There is one series of preferred stock outstanding at December 31, 1998.

Series A: In 1996, the Board of Directors designated 1,100 shares of the authorized preferred stock as Series A Preferred Stock. In March 1996, the Company sold 1,030 shares of Series A Preferred Stock in a private placement transaction which provided proceeds of $9,543,534, net of issuance costs of $756,466. In addition, the placement agent was granted warrants to purchase 111,094 shares of common stock at $6.49 per share.

The Series A Preferred Stock had a stated value and liquidation preference of $10,000, plus an 8 percent per annum premium. The holders of the Series A Preferred Stock were not entitled to vote or to receive dividends. Each share of Series A Preferred Stock was convertible into common stock at the option of the holder based on its stated value at the conversion date divided by a conversion price. The conversion price was defined as the lesser of $6.49 per share or 85 percent of the average closing bid price of the Company's common stock for the five days preceding the conversion date. During 1998, 1997 and 1996, all shares of Series A Preferred Stock were converted into 1,894,206 shares of common stock.

Series B: In 1997, the Board of Directors designated 900 shares of the authorized preferred stock as Series B Preferred Stock. On March 24, 1997, the Company completed a private placement transaction by selling 855 shares of Series B Convertible Preferred Stock which provided proceeds of $7,947,747, net of issuance costs of $602,253. In conjunction with the transaction, the placement agent was granted a five-year warrant to purchase 105,556 shares of common stock at $4.86 per share.

The Series B Preferred Stock had a stated value and liquidation preference of

$10,000, plus a 5 percent per annum premium. The holders of the Series B Preferred Stock were not entitled to vote or to receive dividends. Each share of Series B preferred Stock was convertible into common stock at the option of the holder based on its stated value at the conversion date divided by a conversion price. The conversion price was defined as the lesser of $4.86 per share or 85 percent of the average closing bid price of the Company's common stock for the five days preceding the conversion date. In addition, the investors received warrants to purchase common stock equal to 20 percent of their original investment not converted to common stock as of March 24, 1998, divided by the conversion price then in effect, with an exercise price equal to 115 percent of the average closing bid price for five days ending on the one-year anniversary date. Based on this calculation, warrants to purchase 181,070 shares of common stock were issued with an exercise price of $6.67. During 1998 and 1997, all shares of Series B Preferred Stock were converted into 4,876,359 shares of common stock.

The Series B Preferred Stock also included provisions for (i) adjustment of the conversion rate and price in the event of stock splits, stock dividends, and mergers, (ii) restrictions on the Company's ability to issue capital stock with distribution or liquidation preferences senior to the Series B Preferred Stock, (iii) registration rights, and (iv) redemption by the Company in certain circumstances.

Series C: On February 19, 1998, the Company completed a private placement transaction by selling 1,100 shares of Series C Preferred Stock , that accretes at the rate of 8 percent per year which provided proceeds of $10,208,186, net of issuance costs of $791,814. In conjunction with this transaction, the

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placement agent was granted a five-year warrant to purchase 90,644 shares of common stock at $7.28 per share.

The Series C Preferred Stock is convertible into Common Stock of the Company, subject to certain restrictions, at a variable conversion rate equal to the lower of (i) the Maximum Conversion Price (as defined below) or (ii) the average of the three lowest closing bid prices of the Common Stock during the applicable Pricing Period (as defined below). The Maximum Conversion Price for the first year is $11.00. After the first year, the Maximum Conversion Price is equal to the lesser of $11 per share and the average closing bid price of the five Wednesdays immediately preceding the first anniversary of the date the Series C Preferred Stock was issued ($7.575). The applicable Pricing Period is a number of consecutive trading days immediately preceding the date of conversion of the Series C Preferred Stock initially equal to twelve and increased by one additional consecutive trading day for each full calendar month which has elapsed since February 19, 1998. The Series C Preferred Stock is junior to the Series A and B Preferred Stock.

The Series C Preferred Stock also includes provisions for (i) adjustment of the conversion rate and price in the event of stock splits, stock dividends, and mergers, (ii) restrictions on the Company's ability to issue capital stock with distribution or liquidation preferences senior to the Series C Preferred Stock, (iii) registration rights, and (iv) redemption by the Company in certain circumstances.

Shareholder Rights Plan: The Company declared a dividend of one right for each common share outstanding on November 10, 1998. Each right will entitle a shareholder to buy a fraction of a share of a newly authorized series of preferred stock at an exercise price of $20 per share. The rights will become exercisable in the event that a person or group acquires 15% or more of the Company's common shares or a tender offer is commenced that would result in ownership by a person or group of 15% or more of the Company's common shares (subject to certain exceptions).

If a potential acquiror purchases at least 15% of the Company's outstanding Common Stock, shareholders other than the acquiror would be able to exercise the rights issued under the plan to purchase shares of the Company's Common Stock, or in some cases cash, property or other securities of the Company or shares of the acquiror's common stock, at a 50% discount from the market price. In addition, the Board may elect to exchange the rights for the Company's Common Stock.

The Company's Board of Directors will be entitled to redeem the rights at $.01 per right at any time prior to an acquiror purchasing 15% or more of the Company's Common Stock.

The new purchase rights will be distributed as a non-taxable dividend and will trade with the Company's Common Stock. There will be no rights certificates issued unless the rights become exercisable. The rights will expire on November 3, 2008.

Options and warrants: The Company's 1994 Long-Term Incentive and Stock Option plan provides for the granting of stock options, stock appreciation rights, restricted stock awards, and performance awards to officers, directors, employees, and independent contractors of the Company. The options may be granted at an exercise price of not less than the fair market value of common stock at the date of grant (110 percent for more than 10 percent shareholders).

In order to retain its employees in a competitive employment market, and given the price of the Company's common stock at the time, on October 21, 1998, the Company's Board of Directors voted and approved to reprice outstanding options to purchase 1,091,333 shares of common stock held by active employees to an exercise price of $1.78, the closing price of the Company's common stock on that day. These options were originally issued before May 1, 1998 to employees at a weighted average exercise price of $7.16. The repriced options may not be exercised until October 21, 1999, at which point the options are exercisable subject to the vesting schedule of the original option agreements.

The Company has adopted the disclosure-only provisions of Statement of Financial Accounting Standards No. 123, Accounting for Stock-Based Compensation. Accordingly, no compensation cost has been recognized for the stock option plan. Had compensation cost for the Company's stock option plan been determined based on the fair value at the grant date for awards in 1998, 1997 and 1996 consistent with the provisions of SFAS No. 123, the Company's net loss and net loss per share would have been increased to the pro forma amounts indicated as follows:

<TABLE>
<CAPTION>

	Years Ended December 31		
	1998	1997	1996
<S>	<C>	<C>	<C>
Net loss, as reported	$(14,498,453)	$ (9,823,000)	$(5,289,684)
Net loss, pro forma	(16,750,953)	(11,241,000)	(5,781,684)
Basic and diluted net loss per share, as reported	(1.04)	(0.93)	(0.60)
Basic and diluted net loss per share, pro forma	(1.19)	(1.06)	(0.65)

</TABLE>

The above pro forma effects on net loss and net loss per share are not likely to be representative of the effects on reported net income (loss) for future years because options vest over several years and additional awards generally are made each year.

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions used for grants in 1998, 1997 and 1996:

	Years Ended December 31		
	1998	1997	1996
Expected dividend yield	$ --	$ --	$ --

Expected stock price volatility	131%	124%	82%
Risk-free interest rate	5.11%	6.30%	6.05%
Expected life of options (years)	3.5	3	2

The weighted-average fair value, as determined using the Black-Scholes option pricing model, of options and warrants granted during 1998, 1997 and 1996 was $1.76, $4.53 and $4.70, respectively.

On September 24, 1998, the Company issued a warrant to purchase 750,000 shares of common stock (the "Warrant") to INRANGE Technologies Corporation ("INRANGE") in connection with a Technology License Agreement entered into between the Company and INRANGE on such date. The Warrant is exercisable for a period of five years. Of the 750,000 shares subject to the Warrant, 250,000 may be purchased at an exercise price

of $2.50 per share, 250,000 may be purchased at an exercise price of $5.00 per share and 250,000 may be purchased at an exercise price of $10.00 per share. The Warrant was issued pursuant to Section 4(2) of the Securities Act of 1933, as amended.

Transactions involving stock options and warrants during the three years ended December 31, 1998, are summarized as follows:

	Warrants	Stock Options	Weighted Average Exercise Price Per Share
Balance, December 31,1995	685,500	472,166	$ 4.26
Granted	111,094	471,000	9.39
Exercised	(705,762)	(89,791)	3.72
Expired	-	(12,942)	5.00
Balance, December 31,1996	90,832	840,433	7.31
Granted	105,556	746,500	6.77
Exercised	(25,182)	(60,808)	4.08
Expired	-	(102,459)	8.71
Balance, December 31,1997	171,206	1,423,666	7.15
Granted	1,021,704	2,392,591	2.44
Exercised	-	(58,020)	3.28
Expired	-	(261,063)	7.05
Balance, December 31,1998	1,192,910	3,497,174	$ 2.50
Currently exercisable	1,192,910	162,497	$ 5.93
Not currently exercisable	-	3,334,677	2.32
	1,192,910	3,497,174	$ 2.50

The following tables summarize information about stock options and warrants outstanding as of December 31, 1998:

<TABLE>
<CAPTION>

	Options and Warrants Outstanding			Options and Warrants Exercisable	
Range of Exercise Price	Number of Units Outstanding	Weighted Average Remaining Contractual Life (in Years)	Weighted Average Exercise Price	Number of Units Exercisable	Weighted Average Exercise Price

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

$1.12 - 1.78	2,760,674	7.8	$ 1.76	-	$ -
$2.00 - 5.31	1,226,459	6.1	4.34	699,625	3.95
$5.37 - 13.25	702,951	3.4	7.97	655,782	8.03
	4,690,084	6.7	$ 3.37	1,355,407	$ 5.93

</TABLE>

Note 7. Commitments

Operating leases: The Company leases its office facility and certain equipment under operating leases. The total minimum annual future rentals under these noncancelable operating leases are approximately $98,497 and $12,991 in 1999 and 2000, respectively. The office facility lease requires the Company to pay real estate taxes, insurance and maintenance costs. Total rent expense under the operating lease-arrangements for 1998, 1997 and 1996, was approximately $361,000, $391,000, and $439,000, respectively.

Potential contingent consideration: In connection with its 1986 acquisition of Anderson Cornelius Company (subsequently merged into Ancor Communications, Inc.), the Company agreed to pay additional contingent consideration. This additional consideration (up to a remaining maximum of approximately $200,000) is payable annually at 4.0 percent of Company sales in excess of $4,000,000 in any calendar year and is recorded as cost in excess of assets acquired. Amounts payable under this arrangement were not material in any year presented.

Profit sharing plan: The Company has a profit sharing/401(k) plan which provides that an annual contribution, up to the maximum amount allowed as a deduction by the Internal Revenue Code, may be contributed by the Company to the plan. Company contributions to the plan are discretionary as determined by the Board of Directors. No contributions were made by the Company during 1998, 1997, and 1996.

Major supplier: The Company outsources the manufacturing of its products with a contract manufacturer. Purchases from this manufacturer were approximately $4,071,000, $6,480,000, and $5,086,000 in 1998, 1997, and 1996, respectively. Management believes that alternative contract manufacturers are available.

Note 8. Lawsuits

Ancor was a defendant in a consolidated class action captioned In re Ancor Communications, Inc. Securities Litigation, Case No. 97-CV-1696 (D. Minn.) alleging violations of the federal securities laws. The lawsuit was settled in November 1998 and dismissed by the district court on February 5, 1999. Pursuant to the terms of the settlement, a fund was created in the amount of $1,650,000. The Company paid $250,000 of the total settlement and the remaining $1,400,000 was paid by the Company's insurer. The $250,000 payment by the Company was recorded as an expense in the third quarter of 1998.

The Company is also a defendant in a lawsuit brought by Hoyt Properties, Inc. ("Hoyt") venued in Hennepin County District Court in the State of Minnesota. Hoyt, as Landlord, and the Company, as Tenant, entered into an Agreement on May 29, 1998 which provided that Hoyt would build and lease to the Company an office building to be located in Eden Prairie, Minnesota, subject to certain contingencies, conditions, and agreements. Hoyt claims that the Company breached the Agreement, and asserts damages in excess of $2,500,000. The Company denies all liability, and alleges that Hoyt refused to provide improvements desirable and necessary to the Company's occupancy of the proposed leased space, and multiple contingencies, conditions, and agreements did not occur and no binding agreement exists. The Company is vigorously defending the case. There has been no discovery completed to date. However, there is no assurance that any judgment, order or decree against the

Company arising out of this action will not have a material adverse effect on the Company or its business. The Company is unable to determine at this time if there will be a material adverse outcome. No provision has been made for any loss that may occur as a result of an adverse outcome of the suit.

Note 9. Fourth-Quarter Adjustments

1997 fourth-quarter adjustments: After experiencing further difficulties with the collections from certain of its customers, most notably the value added resellers, the Company increased its allowances for both future product returns and bad debts by a total of $543,000 during the quarter ended December 31, 1997. In addition, in connection with a revision to its business plan to not actively promote certain of its products which have been replaced by more technologically advanced versions, the Company increased its allowance for obsolescence by approximately $482,000. These adjustments had the effect of reducing fourth-quarter sales by approximately $530,000 and increasing the fourth-quarter net loss and net loss per common share by approximately $1,025,000 and $0.09 per share, respectively.

1996 fourth-quarter adjustments: In the fourth quarter of 1996, the Company made significant adjustments relating to customer cancellations of sales made in prior 1996 quarters, the recording of product returns reserve (discussed in the accounting policies relating to revenue recognition), inventory reserves and write-offs, and other asset write-offs. These adjustments had the effect of increasing the fourth-quarter net loss and net loss per common share by approximately $944,000 and $0.09 per share, respectively.

SCHEDULE II

ANCOR COMMUNICATIONS, INCORPORATED

VALUATION AND QUALIFYING ACCOUNTS
Year Ended December 31, 1998

<TABLE>
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Description	Balance at Beginning of Period	Charged to Cost and Expenses or Against Net Sales	Deductions	Balance at End of Period
<S>	<C>	<C>	<C>	<C>
Deducted in the balance sheet from the assets to which it applies:				
Allowance for doubtful accounts:				
Year ended December 31, 1998	$ 109,000	$ --	$ 69,508	$ 39,492
Allowance for future product returns:				
Year ended December 31, 1998	695,000(1)	--	695,000(2)	--
Inventory valuation reserve:				
Year ended December 31, 1998	1,094,922	4,183,180	466,793	4,811,309

</TABLE>

(1) The amount at the beginning of the period is net of the estimated value of product returns of $355,000.

(2) The gross sales value of the actual products returned by customers of $1,152,874 is offset by the actual value of the related products which were returned of $457,874, resulting in a net deduction to the allowance of $695,000.

EXHIBIT 3.4

Ancor Communications, Incorporated
Amendments to the Bylaws Adopted by the
Board of Directors on October 21, 1998

RESOLVED, that the current Section 2.10 of the By-Laws is deleted and the following Section 2.10 is hereby added to the By-Laws to read in its entirety as follows:

Section 2.10. Nomination of Directors. Nominations of persons for election as directors may be made at a regular meeting of shareholders (i) by or at the direction of the Board of Directors or (ii) by any shareholder who (A) was a shareholder of record at the time of giving of notice provided for in these bylaws, (B) is entitled to vote at the meeting and (C) gives prior notice of the nomination in the manner herein provided. For a nomination to be properly made by a shareholder, the shareholder must give written notice to the Secretary of the corporation so as to be received at the principal executive offices of the corporation at least 120 days before the date that is one year after the date of the corporation's proxy statement for the prior year's regular meeting. Such notice shall set forth (i) as to the shareholder giving the notice: (A) the name and record address of the shareholder and of the beneficial owner, if any, on whose behalf the nomination will be made, and (B) the class and number of shares of the corporation owned by the shareholder and beneficially owned by the beneficial owner, if any, on whose behalf the nomination will be made and (ii) as to each person the shareholder proposes to nominate: (A) the name, age, business address and residence address of the person, (B) the principal occupation or employment of the person and (C) the class and number of shares of the corporation's capital stock beneficially owned by the person. The chairman of the meeting may refuse to acknowledge the nomination of any person not made in compliance with the foregoing procedure.

RESOLVED, that the current Section 2.11 of the By-Laws is deleted and the following Section 2.11 is hereby added to the By-Laws to read in its entirety as follows:

Section 2.11 Proposals. To be properly brought before a regular meeting of shareholders, business must be (i) specified in the notice of the meeting, (ii) directed to be brought before the meeting by the Board of Directors or (iii) proposed at the meeting by a shareholder who (A) was a shareholder of record at the time of giving of notice provided for in these bylaws, (B) is entitled to vote at the meeting and (C) gives prior notice of the matter, which must otherwise be a proper matter for shareholder action, in the manner herein provided. For business to be properly brought before a regular meeting by a shareholder, the shareholder must give written notice to the Secretary of the corporation so as to be received at the principal executive offices of the corporation at least 120 days before the date that is one year after the date of the corporation's proxy statement for the prior year's regular meeting. Such notice shall set forth (i) the name and record address of the shareholder and of the beneficial owner, if any, on whose behalf the proposal will be made, (ii) the class and number of shares of the corporation owned by the shareholder and beneficially owned by the beneficial owner, if any, on whose behalf the proposal will be made, (iii) a brief description of the business desired to be brought before the regular meeting and the reasons for conducting such business and (iv) any material interest in such business of the shareholder and the beneficial owner, if any, on whose behalf the proposal is made. The chairman of the meeting may refuse to acknowledge any proposed business not made in compliance with the foregoing procedure.

RESOLVED, that the current Section 2.09 of the By-Laws is deleted and the following Section 2.09 is hereby added to the By-Laws to read in its entirety as follows:

Section 2.09 Conduct of Meetings. The presiding officer of the meeting shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such presiding officer, are appropriate for conduct of the meeting. To the extent not prohibited by law, such rules, regulations or procedures may include, without limitation, establishment of (i) an agenda or order of business for the meeting and the method by which business may be proposed, (ii) rules and procedures for maintaining order at the meeting and the safety of those present, (iii) limitations on attendance at or participation in the meeting to shareholders of record of the corporation, their duly authorized proxies or such other persons as the presiding officer of the meeting shall determine, (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof and (v) limitations on the time allotted to questions or comments by participants. Any proposed business contained in the notice of a regular meeting is deemed to be on the agenda and no further motions or other actions shall be required to bring such proposed business up for consideration. Unless and to the extent otherwise determined by the presiding officer of the meeting, it shall not be necessary to follow Robert's Rules of Order or any other rules of parliamentary procedure at the meeting of the shareholders. Following completion of the business of the meeting as determined by the presiding officer of the meeting, the presiding officer of the meeting shall have the exclusive authority to adjourn the meeting.

EXHIBIT 10.18

Ancor Communications, Incorporated
Amendments to 1995 Employee Stock Purchase Plan
Adopted by the Board of Directors on September 1, 1998

WHEREAS, the Company's 1995 Employee Stock Purchase Plan (the "Plan") currently provides for issuance of up to 75,000 shares of Common Stock.

WHEREAS, The Board of Directors believes that it is in its best interests of the Company to amend the Plan to provide for the issuance of an additional 300,000 shares of Common Stock.

RESOLVED, that the Plan is hereby amended to provide for the issuance of an additional 300,000 shares (the "Shares") of Common Stock.

FURTHER RESOLVED, that the Board of Directors authorizes the issuance of the Shares pursuant to the terms of the Plan.

FURTHER RESOLVED, that the Shares issued pursuant to the Plan shall be, upon issuance and payment therefor, duly authorized, validly issued, fully paid and nonassessable.

Exhibit 23.1

INDEPENDENT AUDITORS' CONSENT

The Board of Directors
Ancor Communications, Inc:

We consent to incorporation by reference in the registration statements (file nos. 333-05379, 333-27841, 333-47793, and 333-62969) on form S-3 and in the registration statements (file nos. 333-70539, 33-82976 and 33-95138) on form S-8 of Ancor Communications, Inc., of our report dated February 5, 1999, relating to the balance sheet of Ancor Communications, Inc. as of December 31, 1998, and the related statements of operations, shareholders' equity and cash flows for the year ended December 31, 1998, and related schedule, which report appears in the December 31, 1998, annual report on Form 10-K of Ancor Communications, Inc.

/s/ KPMG Peat Marwick LLP

Minneapolis, Minnesota
March 19, 1999

Exhibit 23.2

CONSENT OF INDEPENDENT ACCOUNTANT

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (file nos. 333-05379, 333-27841, 333-47793, and 333-62969) and in the Registration Statements on Form S-8 (file nos. 333-70539, 33-82976 and 33-95138) of our report, dated February 19, 1998, with respect to the 1996 and 1997 financial statements of Ancor Communications, Incorporated included in this Annual Report on Form 10-K.

/s/ McGladrey & Pullen, LLP

Minneapolis, Minnesota
March 19, 1999

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