

SECURITIES AND EXCHANGE COMMISSION

FORM 10-Q

Quarterly report pursuant to sections 13 or 15(d)

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RAE SYSTEMS INC

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2008

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number: 001-31783

RAE SYSTEMS INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3775 North First Street
San Jose, California
(Address of principal executive offices)

77-0280662
(I.R.S. Employer
Identification No.)

95134
(Zip Code)

408-952-8200
(Registrant's telephone number, including area code)

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 for 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 No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at July 31, 2008
Common stock, \$0.001 par value per share	59,423,627 shares

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PART I. Financial Information**Item 1. Financial Statements****RAE Systems Inc.****Condensed Consolidated Balance Sheets
(in thousands, except share and par value data)
(unaudited)**

	<u>June 30, 2008</u>	<u>December 31, 2007</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$13,783	\$ 15,906
Trade notes receivable	3,236	2,793
Accounts receivable, net of allowances of \$2,523 and \$2,060, respectively	22,247	22,749
Accounts receivable from affiliate	97	21
Inventories	20,240	17,542
Prepaid expenses and other current assets	4,268	2,930
Income taxes receivable	1,929	2,069
Total current assets	<u>65,800</u>	<u>64,010</u>
Property and equipment, net	12,499	12,258
Intangible assets, net	3,564	3,827
Goodwill	3,346	3,143
Investments in unconsolidated affiliates	391	425
Other assets	2,117	1,680
Total assets	<u>\$87,717</u>	<u>\$ 85,343</u>
LIABILITIES, MINORITY INTEREST IN CONSOLIDATED ENTITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$7,210	\$ 6,071
Accounts payable to affiliate	435	411
Payable to Fushun shareholder	504	609
Bank lines of credit	2,489	2,618
Accrued liabilities	12,792	12,098
Notes payable to related parties, current	392	191
Income taxes payable	875	674
Deferred revenue, current	532	488
Total current liabilities	<u>25,229</u>	<u>23,160</u>
Deferred revenue, non-current	480	514
Deferred tax liabilities, non-current	287	277
Deferred gain on sale of real estate, non-current	5,396	5,794
Other long-term liabilities	1,413	1,487
Notes payable to related parties, non-current	1,989	2,370
Total liabilities	<u>34,794</u>	<u>33,602</u>

COMMITMENTS AND CONTINGENCIES (NOTE 5)

MINORITY INTEREST IN CONSOLIDATED ENTITIES	5,714	5,385
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SHAREHOLDERS' EQUITY:

Common stock, \$0.001 par value, 200,000,000 shares authorized; 59,429,213 and 59,171,980 shares issued and outstanding, respectively	59	59
Additional paid-in capital	61,795	60,957
Accumulated other comprehensive income	6,953	4,135
Accumulated deficit	(21,598)	(18,795)
Total shareholders' equity	<u>47,209</u>	<u>46,356</u>
Total liabilities, minority interest in consolidated entities and shareholders' equity	<u>\$87,717</u>	<u>\$ 85,343</u>

See accompanying notes to condensed consolidated financial statements.

RAE Systems Inc.

Condensed Consolidated Statements of Operations
(in thousands, except per share data)
(unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2008	2007	2008	2007
Net sales	\$24,647	\$20,056	\$42,516	\$37,990
Cost of sales	11,556	10,069	20,570	18,869
Gross profit	13,091	9,987	21,946	19,121
Operating expenses:				
Sales and marketing	5,421	6,148	10,801	11,302
Research and development	1,545	1,811	3,281	3,496
General and administrative	5,627	3,978	9,923	9,091
Adjustment to lease abandonment accrual	-	16	-	(596)
Total operating expenses	12,593	11,953	24,005	23,293
Operating income (loss) from continuing operations	498	(1,966)	(2,059)	(4,172)
Other income (expense):				
Interest income	38	55	86	119
Interest expense	(99)	(84)	(201)	(153)
Other, net	(225)	70	82	85
Equity in gain (loss) of unconsolidated affiliate	(27)	(57)	(36)	(75)
Income (loss) from continuing operations before income taxes and minority interest	185	(1,982)	(2,128)	(4,196)
Income tax expense	(469)	(259)	(665)	(132)
Loss before minority interest	(284)	(2,241)	(2,793)	(4,328)
Minority interest in (income) loss of consolidated subsidiaries	(188)	18	(25)	39
Loss from continuing operations	(472)	(2,223)	(2,818)	(4,289)
Gain (loss) from discontinued operations, net of tax	5	(232)	15	(485)
Net loss	<u>\$ (467)</u>	<u>\$ (2,455)</u>	<u>\$ (2,803)</u>	<u>\$ (4,774)</u>
Basic net loss per share				
Continuing operations	\$(0.01)	\$(0.04)	\$(0.05)	\$(0.07)
Discontinued operations	-	(0.01)	-	(0.01)
Basic net loss per share	<u>\$(0.01)</u>	<u>\$(0.05)</u>	<u>\$(0.05)</u>	<u>\$(0.08)</u>
Diluted net loss per share				
Continuing operations	\$(0.01)	\$(0.04)	\$(0.05)	\$(0.07)
Discontinued operations	-	(0.01)	-	(0.01)
Diluted net loss per share	<u>\$(0.01)</u>	<u>\$(0.05)</u>	<u>\$(0.05)</u>	<u>\$(0.08)</u>
Weighted-average common shares outstanding-basic and diluted	<u>59,178</u>	<u>58,769</u>	<u>59,089</u>	<u>58,764</u>

See accompanying notes to condensed consolidated financial statements.

RAE Systems Inc.

Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	<u>Six Months Ended June 30,</u>	
	<u>2008</u>	<u>2007</u>
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$(2,803)	\$(4,774)
Gain (loss) from discontinued operations	15	(485)
Loss from continuing operations	(2,818)	(4,289)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,600	1,779
Gain on disposal of property and equipment	(338)	-
Stock based compensation expense	864	940
Equity in loss of unconsolidated affiliate	36	75
Minority interest in (income) loss of consolidated subsidiary	25	(39)
Deferred income taxes	-	(51)
Adjustment to lease abandonment accrual	-	(596)
Amortization of discount on notes payable to related parties	26	114
Changes in operating assets and liabilities:		
Accounts receivable	1,417	(310)
Accounts receivable from affiliate	(75)	(51)
Trade notes receivable	(271)	371
Inventories	(1,691)	(1,270)
Prepaid expenses and other current assets	(1,199)	(1,108)
Income taxes receivable	150	(245)
Other assets	(405)	(1,038)
Accounts payable	881	(784)
Accounts payable to affiliate	4	(148)
Accrued liabilities	582	(360)
Income taxes payable	166	-
Deferred revenue	11	(215)
Deferred gain on sale of real estate, non-current	(318)	-
Other liabilities	(98)	(56)
Net cash used in operating activities of continuing operations	(1,451)	(7,281)
Net cash provided by (used in) operating activities of discontinued operations	7	(382)
Net cash used in operating activities	(1,444)	(7,663)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from sales and maturities of investments	-	3,247
Business acquisitions, net of cash acquired	-	(1,715)
Acquisition of property and equipment	(679)	(1,135)
Proceeds from sale of net assets	116	-
Net cash (used in) provided by investing activities	(563)	397
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from the exercise of stock options	10	73
Proceeds from bank loans	431	2,024
Repayments of bank loans	(712)	-
Repurchases of common stock	(35)	-
Payments on notes payable to related parties	(430)	(2,605)
Net cash used in financing activities	(736)	(508)
Effect of exchange rate changes on cash and cash equivalents	620	89
Decrease in cash and cash equivalents	(2,123)	(7,685)
Cash and cash equivalents at beginning of period	15,906	18,119
Cash and cash equivalents at end of period	<u>\$13,783</u>	<u>\$10,434</u>

Non-cash investing activities:

Unpaid property and equipment

\$23

\$-

See accompanying notes to condensed consolidated financial statements.

**Notes to Condensed Consolidated Financial Statements
(Unaudited)**

Note 1. Summary of Significant Accounting Policies

The Company

Founded in 1991, RAE Systems Inc. (the “Company” or “RAE Systems”), a Delaware company, develops and manufactures rapidly-deployable, multi-sensor chemical and radiation detection monitors and networks for industrial applications and homeland security. The Company’s products are based on proprietary technology, and include portable, wireless and fixed chemical detection monitors and radiation detectors.

Basis of Presentation

The financial information presented in this Form 10-Q is unaudited and is not necessarily indicative of the future consolidated financial position, results of operations or cash flows of RAE Systems. The unaudited condensed consolidated financial statements contained in this Form 10-Q have been prepared on the same basis as the annual consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to present fairly the Company’s financial position at the date of the interim balance sheets, results of operations and its cash flows for the stated periods, in conformity with the accounting principles generally accepted in the United States of America. The consolidated balances at December 31, 2007 were derived from the audited consolidated financial statements included in the Company’s Annual Report (“Annual Report”) on Form 10-K for the year ended December 31, 2007. The condensed consolidated financial statements included in this report should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2007 included in the Annual Report.

Principles of Consolidation

The consolidated financial statements include the accounts of RAE Systems and its subsidiaries. The ownership of other interest holders of consolidated subsidiaries is reflected as minority interest. All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results may differ materially from these estimates and assumptions.

Revenue Recognition

The Company recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectibility is reasonably assured. A provision for estimated product returns is established at the time of sale based upon historical return rates adjusted for current economic conditions. Historically, the Company has experienced an insignificant amount of sales returns. The Company generally recognizes revenue upon shipment to its distributors in accordance with standard contract terms that pass title of all goods upon delivery to a common carrier (Free on board, “FOB” factory) and provides for sales returns under standard product warranty provisions. For non-standard contract terms where title to goods pass upon delivery to the customer (FOB destination), revenue is recognized after the Company has established proof of delivery. Revenues related to services performed under the Company’s extended warranty program are recognized as earned based upon contract terms, generally ratably over the term of service. The Company records project installation work in Asia using the percentage-of-completion method. Net sales also include amounts billed to customers for shipping and handling. The Company’s shipping costs are included in cost of sales.

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Stock-Based Compensation Expense

Effective January 1, 2006, the Company adopted the provisions of Statement of Financial Accounting Standards No. 123(R), *Share-Based Payment*, (“SFAS 123(R)”). The fair value of each option award is estimated on the date of grant using the Black-Scholes-Merton valuation method. Accordingly, stock-based compensation cost is measured at grant date based on the fair value of the award and recognized in expense over the requisite service period, which is generally the vesting period.

The impact on the Company’s results from continuing operations of recording stock-based compensation by function for the three and six months ended June 30, 2008 and 2007 was as follows:

<i>(in thousands)</i>	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2008	2007	2008	2007
Cost of sales	\$ 1	\$25	\$9	\$45
Sales and marketing	11	49	20	101
Research and development	70	91	171	164
General and administrative	385	335	664	630
Total	<u>\$467</u>	<u>\$500</u>	<u>\$864</u>	<u>\$940</u>

In addition, the Company recorded stock-based compensation expense from discontinued operations of zero for the three and six months ended June 30, 2008. During the three and six months ended June 30, 2007, the Company recorded stock-based compensation expense from discontinued operations of \$48,000 and \$95,000 for sales and marketing and \$4,000 and \$8,000 for research and development, respectively. These costs are included in the loss from discontinued operations, net of tax, on the Company’s Condensed Consolidated Statement of Operations.

Stock Option Plans

In June 2007, the shareholders of RAE Systems approved the Company’s 2007 Equity Incentive Plan (the “2007 Plan”) at the annual meeting of shareholders. The 2007 Plan replaces the Company’s existing 2002 Stock Option Plan (the “2002 Plan”). A total of 4,000,000 shares of the Company’s common stock is authorized for issuance under the 2007 Plan. The maximum number of shares that may be issued under the 2007 plan will be increased from time to time by shares subject to options granted under the 2002 Plan that expire or are terminated and by shares acquired under the 2002 Plan that are forfeited or repurchased by the Company for the option holder’s purchase price. However, no more than 1,500,000 additional shares may be authorized for issuance under the 2007 Plan as a result of these adjustments.

As of June 30, 2008, the Company has reserved 124,750 shares of common stock for issuance under its 1993 Stock Option Plan, 2,543,126 shares under the 2002 Plan and 1,454,167 shares under the 2007 Plan. As of June 30, 2008, 371,256 shares have been added to the balance available for grant under the 2007 Plan as a result of grants cancelled under the 2002 Plan and 2,767,089 shares of common stock remain available for future grants under the 2007 Plan.

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The following is a summary of options (*in thousands, except weighted-average exercise price*):

	Options Outstanding	
	Number of Shares	Weighted-Average Exercise Price
Balance as of January 1, 2008	3,723	\$ 3.05
Granted	59	2.22
Exercised	—	—
Canceled	(225)	3.04
Balance as of March 31, 2008	3,557	3.04
Granted	1,140	1.48
Exercised	(124)	1.45
Canceled	(451)	4.24
Balance as of June 30, 2008	<u>4,122</u>	2.57

The fair value of the Company's stock options granted to employees for the three and six months ended June 30, 2008 and 2007 were estimated using the following weighted-average assumptions:

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2008	2007	2008	2007
Expected volatility	60%	65%	60-65%	65%
Expected dividend yield	0%	0%	0%	0%
Risk-free interest rate	3.2-3.6%	4.6-5.0%	2.7-3.6%	4.6-5.0%
Expected term in years	6.0	5.5	5.5-6.0	5.5
Weighted-average grant date fair value	\$0.84	\$1.71	\$0.89	\$1.71

In May 2008, the Company granted an aggregate of 150,000 shares of common stock to non-employee directors under the 2007 Plan. The weighted-average grant date fair value of these awards is \$1.40. The shares were not subject to vesting. As of June 30, 2008 no unvested grants of restricted stock were outstanding under the 2007 Plan.

Non-Plan Stock Options

In 2002, the Company granted certain of its directors options to purchase an aggregate of 400,000 shares of non-plan restricted common stock at a weighted-average exercise price of \$0.99. Twenty five percent of these options vested after one year with the remainder vesting monthly over the following three years. The options were exercisable over ten years with respect to vested shares. As of June 30, 2008, options to purchase 100,000 shares of restricted common stock remained unexercised at a weighted-average exercise price of \$1.06.

Non-Plan Restricted Stock

In August 2006, the Company granted an aggregate of 536,000 shares of restricted stock to four individuals as an inducement to enter the Company's employ. Twenty five percent of the restricted stock, or 134,000 shares, vested in July 2007 with the remainder vesting quarterly over the following three years. The weighted-average fair value of these awards is \$2.81. In August 2007, concurrent with discontinuing the Company's mobile digital video recording ("DVR") business, the Company terminated two of these individuals. As a result, the remainder of their restricted stock awards of 203,571 shares vested immediately.

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The following is a summary of activity for the non-plan stock awards (*in thousands, except weighted-average amounts*):

	Restricted Stock Awards	
	Number of Shares	Weighted-Average Grant Date Fair Value
Unvested as of January 1, 2008	182	\$ 2.81
Granted	—	—
Vested	(26)	2.81
Forfeited	—	—
Unvested as of March 31, 2008	156	2.81
Granted	—	—
Vested	(15)	2.81
Forfeited	—	—
Unvested as of June 30, 2008	<u>141</u>	2.81

Earnings Per Common Share

Basic earnings per common share is computed by dividing income available to common shareholders by the weighted-average number of common shares outstanding for the period. Diluted earnings per common share reflects the potential dilution of common stock equivalents such as options and warrants, to the extent the impact is dilutive. Anti-dilutive shares excluded from diluted earnings per common share calculated for the three and six months ended June 30, 2008 were 3,865,676 and 3,740,742, respectively. Anti-dilutive shares excluded from diluted earnings per common share calculated for the three and six months ended June 30, 2007 were 3,860,162 and 3,676,713, respectively.

Segment Reporting

Statement of Financial Accounting Standard (“SFAS”) No. 131, *Segment Reporting*, establishes standards for public business enterprises to report information about operating segments in their annual financial statements and requires that those enterprises report selected information about operating segments in subsequent interim financial reports issued to shareholders. It also established standards for related disclosure about products and services, geographic areas, and major customers. Operating segments are components of an enterprise, which are evaluated regularly by the chief operating decision-maker in deciding how to allocate and assess resources and performance. The Company’s chief operating decision-makers are the Chief Executive Officer and the Chief Financial Officer. Although the Company’s operating segments consist of entities geographically based in the Americas, Asia and Europe, the Company is in a single reporting segment worldwide in sale of portable and wireless gas and radiation detection products and related services. Accordingly, the Company operated as one reportable segment during the six months ended June 30, 2008 and 2007.

Variable Interest Entities

S.A.R.L RAE France (“RAE France”) was identified by management as a variable interest entity. The Company is the primary beneficiary through its ownership of RAE Europe ApS. RAE France distributes and sells RAE products exclusively in France. RAE France had total sales of \$781,000 and \$375,000 in the three months ended June 30, 2008 and 2007, respectively, and total sales of \$1,346,000 and \$801,000 in the six months ended June 30, 2008 and 2007, respectively. The Company has consolidated RAE France since December 2004.

Recent Accounting Pronouncements

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*, (“SFAS 157”). SFAS 157 defines fair value to measure assets and liabilities, establishes a framework for measuring fair value, and requires additional disclosures about the use of fair value. SFAS 157 is applicable whenever another accounting pronouncement requires or permits assets and liabilities to be measured at fair value. SFAS 157 does not expand or require any new fair value measures. In February 2008, the FASB issued FASB Staff Position (“FSP”) SFAS 157-1, *Application of FASB Statement No. 157 to FAS Statement No. 13 and Its Related Interpretive Accounting Pronouncements That Address Leasing Transactions*, and FSP SFAS 157-2, *Effective Date of FASB Statement No. 157*.

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FSP SFAS 157-1 removes leasing from the scope of SFAS No. 157. FSP SFAS 157-2 delays the effective date of SFAS No. 157 from 2008 to 2009 for all nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). The Company adopted SFAS 157 on January 1, 2008. The adoption of SFAS 157 had no impact on the Company's consolidated financial statements due to the deferral of the effective date to January 1, 2009 for the Company's assets and liabilities. The Company is currently evaluating the impact of adoption of SFAS 157 as it relates to nonfinancial assets and nonfinancial liabilities.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities—Including an Amendment of FASB Statement No. 115* ("SFAS 159"). SFAS 159 expands the use of fair value accounting but does not affect existing standards which require assets or liabilities to be carried at fair value. The objective of SFAS 159 is to improve financial reporting by providing companies with the opportunity to mitigate volatility in reported earnings caused by measuring related assets and liabilities differently without having to apply complex hedge accounting provisions. Under SFAS 159, a company may elect to use fair value to measure eligible items at specified election dates and report unrealized gains and losses on items for which the fair value option has been elected in earnings at each subsequent reporting date. Eligible items include, but are not limited to, accounts and loans receivable, available-for-sale and held-to-maturity securities, equity method investments, accounts payable, guarantees, issued debt and firm commitments. The Company adopted SFAS 159 on January 1, 2008 for its financial assets and liabilities.

In December 2007, the FASB issued SFAS No. 141(R), *Business Combinations* ("SFAS 141(R)"). This statement changes the accounting for acquisition transaction costs by requiring them to be expensed in the period incurred, and also changes the accounting for contingent consideration, acquired contingencies and restructuring costs related to an acquisition. SFAS 141(R) is effective for fiscal years beginning on or after December 15, 2008. While the Company is currently evaluation the impact of adopting SFAS 141(R), management does not expect that it will have a material impact on our financial condition and results of operations.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements—an amendment of ARB No. 51* ("SFAS 160"). This statement will change the accounting and reporting for minority interests, which will be recharacterized as noncontrolling interests and classified as a component of equity. SFAS 160 is effective for fiscal years beginning on or after December 15, 2008. While the Company is currently evaluating the impact of adopting SFAS 160, management does not expect that it will have a material effect on our financial condition and results of operations.

Note 2. Composition of Certain Financial Statement Items

Inventories

Inventories are stated at the lower of cost or market and include material, labor and manufacturing overhead costs. The components of inventories were as follows:

<i>(in thousands)</i>	June 30, 2008	December 31, 2007
Raw materials	\$5,882	\$ 5,278
Work-in-progress	3,807	2,759
Finished goods	10,551	9,505
	<u>\$20,240</u>	<u>\$ 17,542</u>

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Prepaid expenses and other current assets

<i>(in thousands)</i>	<u>June 30, 2008</u>	<u>December 31, 2007</u>
Supplier advances and deposits	\$2,365	\$ 1,162
Prepaid insurance	425	428
Other current assets	1,478	1,340
	<u>\$4,268</u>	<u>\$ 2,930</u>

Property and equipment, net

<i>(in thousands)</i>	<u>June 30, 2008</u>	<u>December 31, 2007</u>
Buildings and improvements	\$6,176	\$ 5,905
Equipment	5,045	4,646
Computer equipment	4,706	4,346
Automobiles	1,345	1,180
Furniture and fixtures	332	325
Construction in progress	3,759	3,428
	<u>21,363</u>	<u>19,830</u>
Less: Accumulated depreciation	<u>(8,864)</u>	<u>(7,572)</u>
	<u>\$12,499</u>	<u>\$ 12,258</u>

Intangible assets, net

<i>(in thousands)</i>	<u>June 30, 2008</u>			<u>December 31, 2007</u>		
	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Net Carrying Amount</u>	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Net Carrying Amount</u>
Customer list	\$5,012	\$ (2,083)	\$ 2,929	\$4,714	\$ (1,574)	\$ 3,140
Trade name	1,349	(714)	635	1,267	(580)	687
	<u>\$6,361</u>	<u>\$ (2,797)</u>	<u>\$ 3,564</u>	<u>\$5,981</u>	<u>\$ (2,154)</u>	<u>\$ 3,827</u>

Amortization expense associated with intangible assets was \$250,000 and \$355,000 for the three months ended June 30, 2008 and 2007, respectively and \$493,000 and \$703,000 for the six months ended June 30, 2008 and 2007, respectively. Based on the carrying amount of intangible assets as of June 30, 2008, and assuming no future impairment of the underlying assets, the estimated future amortization is as follows *(in thousands)*:

<u>Years Ended December 31,</u>	
Remainder of 2008	\$508
2009	857
2010	836
2011	577
2012	332
Thereafter	454
Total amortization	<u>\$3,564</u>

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Accrued liabilities

<i>(in thousands)</i>	June 30, 2008	December 31, 2007
Compensation and related benefits	\$3,889	\$ 4,377
Accrued commission	2,090	2,091
Accrued professional fees	1,476	924
Customer deposits	1,577	445
Other	3,760	4,261
	<u>\$12,792</u>	<u>\$ 12,098</u>

Note 3. Income Tax

The Company estimates its annual effective tax rate for the year and applies that rate to the year to date profit before tax to determine the quarterly and year to date tax expense. Certain loss subsidiaries are excluded from the calculation of annual estimated effective tax rate if the Company anticipates that it will not be able to recognize a benefit from those loss subsidiaries at year end. Certain expenses are accounted for as discrete to the quarter and excluded from the estimated annual effective tax rate. The Company has a full valuation allowance on its deferred tax assets.

The effective tax rate for the six months ended June 30, 2008 was 31.0% of pretax loss, compared to 3.0% of pretax loss for the same period in 2007.

The effective tax rate is highly dependent upon the geographic distribution of the Company's worldwide earnings or loss, tax regulations in each geographic region, the availability of tax credits and carry-forwards, and the effectiveness of its tax planning strategies. The Company regularly monitors the assumptions used in estimating its annual effective tax rate and adjusts its estimates accordingly. If actual results differ from its estimates, future income tax expense could be materially affected.

The Company's valuation allowance was determined in accordance with the provisions of SFAS 109, which requires an assessment of both positive and negative evidence when determining whether it is more likely than not that deferred assets are recoverable, with such assessment being required on a jurisdiction by jurisdiction basis. Management believes that sufficient uncertainty exists with regard to the realizability of these tax assets such that a valuation allowance is necessary. Factors considered in providing a valuation allowance include the lack of a significant history of consistent profits, the current belief of continued weakness in the overall market thereby potentially impacting the Company's ability to sustain or grow revenues and earnings, and the length of carryback and carryforward periods.

Based on the absence of sufficient positive objective verifiable evidence at December 31, 2007, the Company concluded that it was appropriate to establish a full valuation allowance for its net deferred tax assets and continues to maintain the full valuation allowance at June 30, 2008. The Company expects to provide a full valuation allowance on future tax benefits until it can sustain a level of profitability that demonstrates its ability to utilize these assets. The amount of the deferred tax asset valuation allowance, however, could be reduced in future periods to the extent that future taxable income is realized.

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Note 4. Comprehensive Income (Loss)

The components of comprehensive income (loss) were as follows:

<i>(in thousands)</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2008	2007	2008	2007
Net loss	\$(467)	\$(2,455)	\$(2,803)	\$(4,774)
Other comprehensive income:				
Change in foreign currency translation	813	455	2,818	759
Change in unrealized loss on investments, net of tax	–	–	–	1
Comprehensive income (loss)	\$346	\$(2,000)	\$15	\$(4,014)

The Company's accumulated other comprehensive income consists of the following:

<i>(in thousands)</i>	June 30, 2008	December 31, 2007
Foreign currency translation adjustments	\$6,953	\$ 4,135
Unrealized loss on investments, net of tax	–	–
Accumulated other comprehensive income	\$6,953	\$ 4,135

Note 5. Commitments and Contingencies

Legal proceedings

Polimaster Ltd. et al. v. RAE Systems Inc., United States District Court for the Northern District of California, Case No. 05-CV-01887-JF, United States Court of Appeals for the Ninth Circuit, No. 08-15708

Polimaster Ltd. and Na&Se Trading Company, Ltd. (“Polimaster”) filed a complaint against the Company on May 9, 2005, in the United States District Court for the Northern District of California in a case titled Polimaster Ltd., et al. v. RAE Systems Inc. (Case No. 05-CV-01887-JF). The complaint alleges, among other things, that the Company breached its contract with Polimaster and infringed upon Polimaster's intellectual property rights. The dispute is subject to a contractual arbitration agreement, although the federal court has retained jurisdiction over the matter pending completion of the arbitration.

In September 2007, a Final Award was issued in the arbitration. The arbitrator ruled that Polimaster failed to prove its claims and was not entitled to any relief; that the Company had proven its counterclaims and was awarded damages of approximately \$2.4 million; and that as the prevailing party, the Company was entitled to recover costs in the amount of \$46,000. On October 5, 2007, RAE Systems filed a motion to confirm the Final Award. On October 17, 2007, Polimaster filed an opposition to RAE Systems' motion to confirm the Final Award and filed its own motion to vacate the Final Award. Both motions were heard on December 7, 2007, and the district court confirmed the Final Award by an order dated February 25, 2008.

Although the Company has been awarded damages, attorney's fees and costs, the Company is currently unable to determine whether it will be able to collect these amounts due to uncertainty regarding Polimaster's financial condition and other factors.

On March 26, 2008, Polimaster filed a Notice of Appeal in the district court. The Ninth Circuit has set a Time Schedule Order for this appeal, in a case entitled Polimaster Ltd., et al. v. RAE Systems Inc., No. 08-15708. Polimaster submitted its opening brief on August 22, 2008, and RAE Systems' brief is due on September 22, 2008. Polimaster's reply is tentatively due on October 6, 2008. Oral argument has not been scheduled at this time.

On June 5, 2008, RAE Systems filed a procedural motion in the Ninth Circuit to request its leave to permit the Northern District of California to make corrections. Polimaster filed its response on June 19, 2008, and RAE Systems replied on June 30, 2008. The Ninth Circuit has not yet issued its decision. RAE Systems filed a motion for corrections in the Northern District of California on July 25, 2008. Polimaster opposed this motion on August 8, 2008, and RAE Systems submitted its Reply on August 15, 2008. The requested corrections relate to the enforcement of the Arbitration Award, and a hearing on this motion is set for August 29, 2008 in the Northern District of California.

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Notwithstanding the Polimaster proceeding described above, from time to time, the Company is engaged in various legal proceedings incidental to its normal business activities. Although the results of litigation and claims cannot be predicted with certainty, the Company believes the final outcome of such matters will not have a material adverse effect on its financial position, results of operations or cash flows.

Leases

As of June 30, 2008, the Company had an equipment lease in San Jose, California that was classified as a capital lease in accordance with SFAS No. 13, *Accounting for Leases* ("SFAS 13"). As of June 30, 2008, the current portion of the lease was \$72,000 and was included in accrued liabilities and the long term portion of the lease was \$19,000 and was included in other long-term liabilities in the Condensed Consolidated Balance Sheets. The equipment lease bears an interest rate of 9.7%.

The Company and its subsidiaries lease certain manufacturing, warehousing and other facilities under operating leases. The leases generally provide for the lessee to pay taxes, maintenance, insurance and certain other operating costs of the leased property. Total rent expense for the three months ended June 30, 2008 and 2007 was \$455,000 and \$292,000, respectively. Total rent expense for the six months ended June 30, 2008 and 2007 was \$934,000 and \$511,000, respectively. Excluding the Sunnyvale, California abandoned building lease as described below, future minimum annual payments under non-cancellable leases were as follows as of June 30, 2008 (*in thousands*):

Years Ended December 31,	Capital	Operating
Remainder of 2008	\$39	\$1,173
2009	58	1,917
2010		1,498
2011		1,385
2012		1,301
Thereafter		6,104
Total minimum payments	97	\$13,378
Less: Amount representing interest	(6)	
Present value of minimum lease payments	\$91	

In December 2004, the Company moved into its current corporate headquarters in San Jose, California and abandoned a leased facility in Sunnyvale, California. During the second quarter of 2005, the Company accrued a restructuring reserve of approximately \$2.0 million for the remaining lease term of the former headquarters in Sunnyvale. The discount rate used was 4.85% and the liability was not reduced for any anticipated future sublease income. In March 2007, due to improved conditions for office rentals, the Company revised the estimated loss on abandonment of the lease and reduced operating expense by \$595,000. During the second quarter of 2007, a sublease was executed with rents commencing in June 2007. As of June 30, 2008, future discounted lease payments related to the Sunnyvale building are included in accrued liabilities totaling \$288,000 and other long-term liabilities totaling \$106,000. Rent payments for three months ended June 30, 2008 and 2007 were \$128,000 and \$98,000, respectively, for the Sunnyvale building with sublease income of \$44,000 and \$14,000 for the three months ended June 30, 2008 and 2007, respectively. Rent payments for six months ended June 30, 2008 and 2007 were \$233,000 and \$196,000, respectively, for the Sunnyvale building with sublease income of \$87,000 and \$14,000 for the six months ended June 30, 2008 and 2007, respectively. Future minimum lease payments through expiration of the lease are \$257,000 and \$439,000 in 2008 and 2009, respectively. Estimated income to be generated from the sublease is \$224,000.

Guarantees

The Company is permitted under Delaware law and in accordance with its Bylaws to indemnify its officers and directors for certain events or occurrences, subject to certain limits, while the officer is or was serving at the Company's request in such capacity. The term of the indemnification period is for the officer's or director's lifetime. The maximum amount of potential future indemnification is unlimited; however, the Company has a Director and Officer Insurance Policy that limits its exposure and enables it to recover a portion of any future amounts paid. To date the Company has not incurred any losses under these agreements.

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The Company occasionally agrees to indemnify its customers for any expenses or liability resulting from claimed infringements of patents, trademarks or copyrights of third parties. The terms of these indemnification agreements are generally perpetual any time after execution of the agreement. The maximum amount of potential future indemnification is unlimited. To date, the Company has not paid any amounts to settle claims or defend lawsuits.

Note 6. Warranty Reserves

The Company sells the majority of its products with a 12 to 24 month repair or replacement warranty from the date of shipment. The Company provides an accrual for estimated future warranty costs based upon the historical relationship of warranty costs to sales. The estimated future warranty obligations related to product sales are recorded in the period in which the related revenue is recognized. The following is a summary of the changes in these liabilities during the three and six months ended June 30, 2008 and 2007:

<i>(in thousands)</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2008	2007	2008	2007
Warranty reserve at beginning of period	\$709	\$587	\$884	\$553
Provision for warranty	4	16	31	97
Utilization of reserve	(282)	(89)	(507)	(138)
Foreign currency translation effects	7	2	30	4
Warranty reserve at end of period	<u>\$438</u>	<u>\$516</u>	<u>\$438</u>	<u>\$516</u>

Warranty reserves are included in “Accrued liabilities” on the Condensed Consolidated Balance Sheets.

Note 7. Revolving Credit Agreement

The Company maintains several credit facilities to support its operations in the United States and China.

In the United States, the Company had a \$15 million revolving credit agreement as of December 31, 2007, which expires in March 2009. The revolving credit agreement provides for borrowings up to \$3.5 million based on a blanket security interest in the Company’s assets in the United States. An additional \$11.5 million borrowing capacity is available based on a percentage of specific qualifying assets. The Company is required to comply with certain reporting requirements whenever the outstanding loan balance exceeds \$3.0 million, in addition to the ongoing requirement to submit quarterly financial statements. As of June 30, 2008 and December 31, 2007 no amounts were outstanding against loan agreements in the United States. Interest accrues at the floating prime bank lending rate minus 50 basis points. In addition, the Company pays 0.25% annually of the average unused portion of the facility.

In May 2007, the Company obtained an unsecured line of credit for Renminbi 20 million or approximately \$2.9 million to provide working capital in China. As of June 30, 2008, Renminbi 4 million or approximately \$582,000 was outstanding under the line of credit. Interest accrues on this balance at a fixed rate of 6.84%. The outstanding balance was repaid on July 24, 2008. In May 2008, the Company obtained a new unsecured loan for Renminbi 3 million or approximately \$437,000 to replace the May 2007 facility when it expired in July 2008. Interest accrues on this balance at a fixed rate of 7.47%. The outstanding balance is due on May 29, 2009.

In October 2007, the Company obtained a second unsecured line of credit for Renminbi 10 million or approximately \$1.5 million to provide working capital in China. As of June 30, 2008 Renminbi 10 million or approximately \$1.5 million was outstanding under the line of credit. Interest accrues on this balance at a fixed rate of 8.019%. The outstanding balance is due on August 31, 2008.

Note 8. Related Party Transactions

The Company accounts for its 40% ownership in Renex Technologies Ltd. (“Renex”), a Hong Kong company, using the equity method starting January 1, 2002. The Company’s total investment in Renex at June 30, 2008 and December 31, 2007 was \$369,000 and \$405,000, respectively. The Company recorded losses of \$27,000 and \$57,000 in Renex for the three months ended June 30, 2008 and 2007, respectively, and losses of \$36,000 and \$75,000 in Renex for the six months ended June 30, 2008 and 2007, respectively.

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The Company pays a 7.5% royalty to Renex for using certain modems developed by Renex. The Company made royalty payments amounting to zero and \$17,000 for the three months ended June 30, 2008 and 2007, respectively and zero and \$35,000 for the six months ended June 30, 2008 and 2007, respectively. The Company also paid \$92,000 and \$37,000 to Renex for a research project for the three months ended June 30, 2008 and 2007, respectively and \$92,000 and \$50,000 for the six months ended June 30, 2008 and 2007, respectively.

In conjunction with the original and subsequent additional investment in RAE Beijing, unsecured notes payable were established for the previous RAE Beijing shareholders as part of the purchase price agreement in May 2004 and July 2006. As of June 30, 2008 and December 31, 2007, \$392,000 and \$191,000, respectively, were included in notes payable – related parties and \$1,989,000 and \$2,370,000, respectively, were included in long term notes payable – related parties.

The notes issued in conjunction with the original RAE Beijing purchase in May 2004 were non-interest bearing and were recorded at net present value using a discount rate of 5.5%. In conjunction with the additional investment in RAE Beijing in July 2006, 11.0 million shares of preferred stock were issued to four shareholders of RAE Beijing. In accordance with SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity*, these preferred shares were classified as liabilities and were recorded as long-term notes payable – related parties. Although, these preferred shares bear a dividend yield rate of 3% per annum, the notes payable were discounted using a market interest rate of 6.48%.

Scheduled payments of principal under the notes from 2008 through maturity in 2011 are \$201,000, \$1,059,000, \$550,000 and \$571,000, respectively.

In addition to its 40% ownership in Renex, the Company has investments in two distributors of RAE Systems products, RAE Benelux and RAE Spain. The Company owns 10% and 19% of RAE Benelux and RAE Spain, respectively. These investments are accounted for under the cost method.

The Liaoning Coal Industry Group, Ltd. (“Liaoning Group”) owns a 30% interest in RAE Fushun and is also a supplier to RAE Fushun.

Transactions and balances with the Company’s related parties were as follows:

(in thousands)	Three Months Ended June 30,		Six Months Ended June 30,			June 30, 2008	December 31, 2007
	2008	2007	2008	2007			
Sales:					Accounts receivable:		
Renex	\$71	\$98	\$119	\$155	Renex	\$97	\$ 21
RAE Benelux	852	268	1,453	587	RAE Benelux	314	287
RAE Spain	131	69	351	145	RAE Spain	206	202
	<u>\$1,054</u>	<u>\$435</u>	<u>\$1,923</u>	<u>\$887</u>		<u>\$617</u>	<u>\$ 510</u>
Purchases:					Accounts payable:		
Liaoning Group	\$12	\$–	\$13	\$–	Liaoning Group	\$338	\$ 566
Renex	202	315	302	497	Renex	435	411
	<u>\$214</u>	<u>\$315</u>	<u>\$315</u>	<u>\$497</u>		<u>\$773</u>	<u>\$ 977</u>

The Company’s Director of Information Systems, Lien Chen, is the wife of our Chief Executive Officer, Robert Chen. Ms. Chen was paid a salary and bonus of \$30,000 and \$26,000 for the three months ended June 30, 2008 and 2007, respectively, and \$54,000 and \$52,000 for the six months ended June 30, 2008 and 2007, respectively. Ms. Chen also receives standard employee benefits offered to all other full-time U.S. employees. Ms. Chen does not report to Robert Chen and compensation decisions regarding Ms. Chen are performed in the same manner as other U.S. employees, with Robert Chen having the final approval signatory on compensation recommendations.

Note 9. Discontinued Operations

On August 24, 2007, the Board of Directors approved the discontinuation of the Company's DVR business in order to reduce expenses and concentrate its resources on the gas and radiation detection business. The Company's mobile DVR business was acquired in the purchases of Aegison and Securay.

On August 28, 2007, the Company notified its DVR customers, terminated all personnel not reassigned to continuing operations and suspended the related production and sales activities. The Company retained the acquired intellectual property; however, because the DVR business operated at a substantial loss, during 2007 management liquidated the tangible assets, mainly inventories of component parts, and impaired the remaining value of the intangible assets and goodwill.

In accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, the financial results of the DVR business are reported as discontinued operations for all periods presented. The financial results included in discontinued operations were as follows:

<i>(in thousands)</i>	Three Months Ended June 30,		Six Months Ended June 30,	
	2008	2007	2008	2007
Net sales	\$-	\$36	\$3	\$90
Gain (loss) from discontinued operations before income taxes	5	(306)	15	(640)
Income tax benefit	-	74	-	155
Gain (loss) from discontinued operations	<u>\$5</u>	<u>\$(232)</u>	<u>\$15</u>	<u>\$(485)</u>

The carrying amounts of the major classes of assets and liabilities included as part of the disposal group were as follows:

<i>(in thousands)</i>	June 30, 2008	December 31, 2007
Total current assets	<u>\$9</u>	<u>\$ 59</u>
Total current liabilities	<u>\$5</u>	<u>\$ 63</u>

The Company anticipates collecting the remaining assets and settling the remaining liabilities during the third quarter of 2008.

Note 10. Fair Value Measurements

The Company uses the following methods and assumptions in estimating the fair value of financial assets and liabilities:

Cash and cash equivalents and bank line of credit: The carrying amounts reported in the balance sheet approximate fair value due to the short-term maturity of these instruments.

Notes payable to related parties: The fair value was determined by discounting these non-interest bearing notes payables at an interest rate commensurate with commercial borrowing rates available to the Company in China.

SFAS 157 requires that assets and liabilities carried at fair value will be classified and disclosed in one of the following three categories:

Level 1: Quoted market prices in active markets for identical assets or liabilities.

Level 2: Observable market based inputs or unobservable inputs that are corroborated by market data.

Level 3: Unobservable inputs that are not corroborated by market data.

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The following table reflects the carrying amounts and fair values of the Company's financial assets and liabilities as of June 30, 2008 and December 31, 2007:

<i>(in thousands)</i>	<u>Category</u>	<u>June 30, 2008</u>		<u>December 31, 2007</u>	
		<u>Carrying Amounts</u>	<u>Fair Value</u>	<u>Carrying Amounts</u>	<u>Fair Value</u>
Bank line of credit	Level 1	2,489	2,489	2,618	2,618
Notes payable to related parties	Level 2	2,381	2,381	2,561	2,561

Note 11. Subsequent Event

In July 2008, the Company repaid the outstanding balance of Renminbi 4 million or approximately \$582,000 due under an expiring line of credit in China.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements. In some cases, readers can identify forward-looking statements by terminology such as "may," "will," "should," "could," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," or "continue." These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from those stated herein. Although management believes that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, performance, or achievements. For further information, refer to the sections entitled "Risk Factors" in "Part II Item 1A" of this Form 10-Q. The following discussion should be read in conjunction with the condensed consolidated financial statements and the notes thereto included elsewhere in this Form 10-Q.

Overview

We are a leading global developer and manufacturer of rapidly-deployable, multi-sensor chemical and radiation detection monitors and networks. Founded in 1991 to develop technologies for the detection and early warning of hazardous materials, today we offer a full line of portable chemical and radiation detection solutions. These solutions have been deployed in over 85 countries on 6 continents and range from small personal protection devices to handheld monitors to rapidly deployable wireless systems to fixed, wall mounted facility and fence-line safety solutions.

We are currently focused on delivering world wide solutions in four strategic markets:

The Energy Market; which includes oil, natural gas, coal, and nuclear power.

The Industrial Safety Market; which includes metals production, chemical, plastics and industrial processes.

The Environmental Market; which includes both regulatory compliance and environmental clean-up or remediation.

And the Government Market; which includes solutions for emergency response, public safety, homeland security and military applications.

Recent Developments

In China, we continue to focus on increased industrial worker safety, mine safety and environmental remediation, which we believe will have a positive impact on our future opportunities in China. We sell fixed and wireless combustible and toxic gas monitors for both new installations and facility upgrades. The demand for our high-end products such as wireless equipped combustible and toxic gas monitors, including our AreaRAE Rapid Deployment Kits, continues to grow. In China, we have contracts with long-term and new customers to provide gas monitors for production expansion and new facilities. Our largest industrial customers in China are steel and chemical plants.

During 2007, our coal mine safety unit, RAE Fushun, began operations and is contributing to the 2008 growth of our China operations. In 2007, the Chinese Government began closing smaller unsafe coal mining operations and is expected to close up to 10,000 smaller and unsafe mines by the end of 2008. During the next 12 to 18 months, we expect to see an increase in the purchase of safety equipment as part of the government's plan to improve coal mine safety. As a response to this market, RAE Systems has developed a digital mine safety monitoring, communication and control system. The first complete system is expected to be deployed late in the third quarter of 2008.

In Europe and the Middle East, we continue to penetrate the industrial market with single gas, ToxiRAE 3 detectors, four gas QRAE II monitors and our wireless AreaRAE Steel Rapid Deployment Kits. The Zone 1 certification, for hazardous working environments, of our AreaRAE Steel monitors, has opened additional sales opportunities for off-shore oil platforms in this region. Key to our success in Europe has been the ATEX, or hazardous environment intrinsic safety certification, for our MiniRAE 3000 and ppbRAE 3000 next generation photoionization detectors for volatile organic compounds.

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In the Americas, we are focused on growth in the energy sector. With the introduction of eight new products in the last year, we now offer a full suite of gas detection solutions for the oil production market. In addition, the MultiRAE Plus continues to be purchased by the U.S. military for aviation safety in the handling and detection of highly toxic and flammable jet fuel. We continue to benefit from deployment of AreaRAE and PlumeRAE monitoring systems for public venue protection and hazardous material emergency response.

Critical Accounting Policies and Significant Management Judgments

The preparation of consolidated financial statements in conformity with generally accepted accounting principles in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. On an on-going basis, we evaluate these estimates, including, but not limited to, those related to our revenue recognition, allowance for doubtful accounts, valuation of goodwill and other intangible assets, inventory valuation, valuation of deferred tax assets and stock-based compensation expense. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect our more significant judgments or estimates used in the preparation of our condensed consolidated financial statements.

Revenue Recognition

We recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectibility is reasonably assured. A provision for estimated product returns is established at the time of sale based upon historical return rates adjusted for current economic conditions. Historically, we have experienced an insignificant amount of sales returns. We generally recognize revenue upon shipment to our distributors in accordance with standard contract terms that pass title of all goods upon delivery to a common carrier (FOB factory) and provide for sales returns under standard product warranty provisions. For non-standard contract terms where title to goods passes upon delivery to the customer (FOB destination), revenue is recognized after we have established proof of delivery. Revenues related to services performed under our extended warranty program are recognized as earned based upon contract terms, generally ratably over the term of service. We record project installation work in Asia using the percentage-of-completion method. Net sales also include amounts billed to customers for shipping and handling. Our shipping costs are included in cost of sales.

Accounts Receivable, Trade Notes Receivable and Allowance for Doubtful Accounts

We grant credit to our customers after undertaking an investigation of credit risk for all significant amounts. An allowance for doubtful accounts is provided for estimated credit losses at a level deemed appropriate to adequately provide for known and inherent risks related to such amounts. The allowance is based on reviews of loss, adjustments history, current economic conditions and other factors that deserve recognition in estimating potential losses. We generally do not require collateral for sales on credit. While management uses the best information available in making our determination, the ultimate recovery of recorded accounts receivable is also dependent upon future economic and other conditions that may be beyond management's control. If there was a deterioration of a major customer's credit-worthiness or if actual defaults were higher than what have been experienced historically, additional allowances would be required.

Trade notes receivables are presented to us from some of our customers in China as a payment against the outstanding trade receivables. These notes receivables are bank guarantee promissory notes which are non-interest bearing and generally mature within six months.

Inventory

Inventory is stated at the lower of cost, using the first-in, first-out method, or market. We are exposed to a number of economic and industry factors that could result in portions of our inventory becoming either obsolete or in excess of anticipated usage, or saleable only for amounts that are less than their carrying amounts. These factors include, but are not limited to, technological changes

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in the market, competitive pressures in products and prices, and the availability of key components from our suppliers. We have established inventory reserves when conditions exist that suggest that our inventory may be in excess of anticipated demand or is obsolete based upon assumptions about future demand for our products and market conditions. When recorded, reserves are intended to reduce the carrying value of the inventory to its net realizable value. If actual demand for specified products deteriorates, or market conditions are less favorable than those projected, additional reserves may be required.

Share-Based Payments

Effective January 1, 2006, we adopted SFAS 123(R), which requires companies to recognize in their statement of operations all share-based payments, including grants of stock options, based on their grant date fair value and requires the fair value of each option outstanding to be adjusted to reflect only those shares outstanding that are actually expected to vest. Our implementation of SFAS 123(R) used the modified-prospective transition method where the compensation cost related to each unvested option outstanding as of January 1, 2006 was recalculated and any necessary adjustments were reflected in the first quarter of adoption. We estimate the fair value of each share-based payment on the date of grant using the Black-Scholes-Merton valuation method.

We made the following estimates and assumptions in determining fair value:

Valuation and amortization method – We estimates the fair value of stock options granted using the Black-Scholes-Merton option-pricing formula and a single option award approach. This fair value is then amortized on a straight-line basis over the requisite service periods of the awards, which is generally the vesting period.

Expected Term – Our expected term represents the weighted-average period that our stock-based awards are expected to be outstanding. Prior to 2007, we applied the “Simplified Method” as defined in the Securities and Exchange Commission’s Staff Accounting Bulletin No. 107. From the first quarter of 2007, we have used the historical exercise patterns of previously granted options in relation to the Company’s stock price to estimate expected exercise patterns as we expected that the “Simplified Method” would be disallowed by December 31, 2007.

Expected Volatility – The Company’s expected volatilities are based on historical volatility of the Company’s stock, adjusted where determined by management for unusual and non-representative stock price activity not expected to recur.

Expected Dividend – The Black-Scholes-Merton valuation model calls for a single expected dividend yield as an input. The Company currently pays no dividends and does not expect to pay dividends in the foreseeable future.

Risk-Free Interest Rate – The Company bases the risk-free interest rate on the implied yield currently available on United States Treasury zero-coupon issues with an equivalent remaining term.

Estimated Forfeitures – To estimate forfeitures, we apply our historical rate of option forfeitures. Estimated forfeiture rates are trued-up to actual forfeiture results as the stock-based awards vest.

Business Combinations

In accordance with business combination accounting standards, we allocate the purchase price of acquired companies to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values at the date of acquisition. We typically engage third-party appraisal firms to assist management in determining the fair values of certain assets acquired and liabilities assumed. Such a valuation requires management to make significant estimates and assumptions, especially with respect to intangible assets and goodwill.

Management makes estimates of fair value based upon assumptions believed to be reasonable. These estimates are based on historical experience and information obtained from the management of the acquired companies and are inherently uncertain. Critical estimates in valuing certain of the intangible assets include but are not limited to: discount rates; future expected cash flows from maintenance agreements, customer contracts, acquired developed technologies and pending patents; the acquired company’s brand awareness and market position; and assumptions about the period of time an acquired brand will continue to be used in the combined company’s product portfolio. Unanticipated events and circumstances may occur which may affect the accuracy or validity of such assumptions, estimates or actual results.

Income Taxes

We are subject to income taxes in both the United States and numerous foreign jurisdictions. Significant judgment is required in evaluating our tax positions and determining our provision for income taxes.

Our effective tax rates differ from statutory rates primarily due to foreign earnings taxed at lower rates, foreign losses not benefited, non-deductible share-based payment deductions under FAS 123(R) and provision changes for uncertain tax positions. Our future effective tax rates could be adversely affected by earnings being lower than anticipated in countries where we have lower statutory rates and higher than anticipated in countries where we have higher statutory rates, by changes in the valuation of our deferred tax assets or liabilities, or by changes in tax laws, regulations, accounting principles, or interpretations thereof. We regularly assess the likelihood of adverse outcomes resulting from tax examinations to determine the adequacy of our provision for income taxes.

Significant judgment is also required in determining any valuation allowance recorded against deferred tax assets. In assessing the need for a valuation allowance, we consider all available evidence including past operating results, estimates of future taxable income, and the feasibility of tax planning strategies. In the event that we change our determination as to the amount of deferred tax assets that can be realized, we will adjust our valuation allowance with a corresponding impact to the provision for income taxes in the period in which such determination is made.

Recent Accounting Pronouncements

See Note 1 to the Condensed Consolidated Financial Statements in Item 1 of this Form 10-Q for a full description of recent accounting pronouncements, including the expected dates of adoption and estimated effects on results of operations and financial condition, which is incorporated herein by reference.

Results of Operations

Net Sales

<i>(in thousands)</i>	Three Months Ended June 30,			Percentage Change	Six Months Ended June 30,			Percentage Change
	2008	2007	Change		2008	2007	Change	
Net sales	\$ 24,647	\$ 20,056	\$ 4,591	23%	\$ 42,516	\$ 37,990	\$ 4,526	12%

Net sales for the quarter ended June 30, 2008 increased by approximately \$4.6 million or 23% over the quarter ended June 30, 2007. The increases in net sales for the quarter ended June 30, 2008 consisted primarily of increased sales of approximately \$1.9 million (21%) in Asia, \$1.3 million (48%) in Europe and \$1.3 million (16%) in the Americas over the same period in 2007. The \$1.9 million increase in Asia was primarily due to continued growth of product sales in the coal mine safety market at our RAE Fushun operations, and improved distributors' performance throughout Asia. The increased sales in Europe for the quarter ended June 30, 2008 compared with the quarter ended June 30, 2007 was the result of sales from our new product introductions, such as QRAE II, QRAE II P and 3 G PID series, and increased sales due to new certification of existing products. The increase in the Americas was primarily related to strong demand for our MultiRAE and AreaRAE products and the impact of product price increases announced in May 2008.

Net sales for the six months ended June 30, 2008 increased by \$4.5 million or 12% over the same period in 2007. The increases in sales were primarily the result of increases in Asia of \$1.6 million (10%), the Americas of \$0.4 million (2%) and Europe of \$2.5 million (47%). The increase during the six-month period ended June 30, 2008 as compared to the six-month period ended June 30, 2007 in Asia was primarily due to continued growth of product sales in the coal mine safety market at our RAE Fushun operations, and improved distributors' performance throughout Asia. The increased sales in Europe was the result of sales from our new product introductions, such as QRAE II, QRAE II P and 3 G PID series, and increased due to new certification of existing products. The increase in the Americas was primarily related to strong demand for our MultiRAE and AreaRAE products and the impact of product price increases announced in May 2008.

Cost of Sales & Gross Margin

<i>(in thousands)</i>	Three Months Ended June 30,			Percentage Change	Six Months Ended June 30,			Percentage Change
	2008	2007	Change		2008	2007	Change	
Cost of sales	\$ 11,556	\$ 10,069	\$ 1,487	15%	\$ 20,570	\$ 18,869	\$ 1,701	9 %
Gross profit	\$ 13,091	\$ 9,987	\$ 3,104	31%	\$ 21,946	\$ 19,121	\$ 2,825	15%
Gross margin	53 %	50 %			52 %	50 %		

Cost of sales for the quarter ended June 30, 2008 increased by approximately \$1.5 million or 15% over the quarter ended June 30, 2007 primarily as a result of increases in cost of sales due to the overall increased sales volume. Gross margin increased by approximately 3% for the quarter ended June 30, 2008 compared to the quarter ended June 30, 2007. The increase in gross margin was primarily due to increases in U.S. prices in May 2008 and the increase in the sales of higher margin products by RAE Beijing.

Cost of sales for the six months ended June 30, 2008 increased by \$1.7 million or 9% over the same period in 2007 primarily due to overall increase in sales volume. Gross margin increased by approximately 2% for the six months ended June 30, 2008 compared with the six months ended June 30, 2007. The increase in gross margin was primarily due to an increase in U.S. prices in May 2008 and an increase in sales of higher margin products by RAE Beijing.

Sales and Marketing Expense

<i>(in thousands)</i>	Three Months Ended June 30,			Percentage Change	Six Months Ended June 30,			Percentage Change
	2008	2007	Change		2008	2007	Change	
Sales and marketing	\$ 5,421	\$ 6,148	\$ (727)	-12%	\$ 10,801	\$ 11,302	\$ (501)	-4%
Percentage of net sales	22 %	31 %			25 %	30 %		

Sales and marketing expenses decreased by approximately \$0.7 million or 12% for the quarter ended June 30, 2008 compared to the quarter ended June 30, 2007 primarily due to company-wide cost-control initiatives and a workforce reduction that was put in place at the end of the first quarter of 2008.

Sales and marketing expenses decreased by approximately \$0.5 million or 4% for the six months ended June 30, 2008 over the same period during 2007 primarily due to company-wide cost-control initiatives and a workforce reduction that was put in place at the end of the first quarter of 2008.

Research and Development Expense

<i>(in thousands)</i>	Three Months Ended June 30,			Percentage Change	Six Months Ended June 30,			Percentage Change
	2008	2007	Change		2008	2007	Change	
Research and development	\$ 1,545	\$ 1,811	\$ (266)	-15%	\$ 3,281	\$ 3,496	\$ (215)	-6%
Percentage of net sales	6 %	9 %			8 %	9 %		

Research and development expenses decreased by approximately \$0.3 million or 15% during the quarter ended June 30, 2008 compared to the quarter ended June 30, 2007 primarily due to \$0.1 million decrease in project expenses at RAE Fushun with the completion of projects initiated in early 2007 to obtain safety certificates. As a result of discontinuing the DVR business in August 2007, amortization expenses decreased as the intangible assets related to the purchase of Aegison in July 2006 and Securay in January 2007 were written off.

Research and development expenses decreased by approximately \$0.2 million or 6% for the six months ended June 30, 2008, primarily due to \$0.1 million decrease in project expenses at RAE Fushun with the completion of projects initiated in early 2007 to

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obtain safety certificates of products. As a result of discontinuing the DVR business in August 2007, amortization expenses decreased as the intangible assets related to the purchase of Aegison in July 2006 and Securay in January 2007 were written off.

General and Administrative Expense

(in thousands)	Three Months Ended June 30,			Percentage Change	Six Months Ended June 30,			Percentage Change
	2008	2007	Change		2008	2007	Change	
General and administrative	\$ 5,627	\$ 3,978	\$ 1,649	41%	\$ 9,923	\$ 9,091	\$ 832	9%
Percentage of net sales	23 %	20 %			23 %	24 %		

General and administrative expenses increased by \$1.6 million or 41% in the quarter ended June 30, 2008 compared to the quarter ended June 30, 2007 primarily due to \$0.9 million increase in professional service expenses accrued for an internal investigation being conducted under the supervision of our Audit Committee of the Board of Directors and an increase in accounting and consulting expenses. Bad debt expenses increased by \$0.3 million due to an increase in accounts receivable at RAE Fushun and RAE Beijing.

General and administrative expenses increased by approximately \$0.8 million or 9% for the six months ended June 30, 2008 over the same period during 2007 primarily due to \$0.4 million of bad debt expenses related to an increase in accounts receivable at RAE Fushun and RAE Beijing. A \$0.4 million decrease in professional service expenses is primarily due to a \$0.7 million increase in professional expenses related to an internal investigation being conducted under the supervision of the Audit Committee of our Board of Directors, offset by the absence of \$1.4 million legal costs associated with the Polimaster arbitration incurred in the first six months of 2007. A \$0.3 million increase in facility expenses was primarily due to moving to a larger facility in Europe in late 2007. Payroll and related expenses increased by \$0.2 million due to new stock option grants in the second quarter of 2008.

Adjustment to Lease Abandonment Accrual

(in thousands)	Three Months Ended June 30,			Percentage Change	Six Months Ended June 30,			Percentage Change
	2008	2007	Change		2008	2007	Change	
Adjustment to lease abandonment accrual	\$ -	\$ 16	\$ (16)	-100%	\$ -	\$ (596)	\$ 596	-100%
Percentage of net sales	0%	0 %			0%	-2 %		

In March 2007, we revised the estimated loss on abandonment of the lease related to our former headquarters in Sunnyvale, California and reduced operating expenses by \$0.6 million. The change in estimate primarily reflected management's expectation that the premises would be subleased under current market conditions for office rentals. During the second quarter of 2007, a sublease was executed with rents commencing in June.

Other Income/(Expense)

(in thousands)	Three Months Ended June 30,			Percentage Change	Six Months Ended June 30,			Percentage Change
	2008	2007	Change		2008	2007	Change	
Interest income	\$ 38	\$ 55	\$ (17)	-31 %	\$ 86	\$ 119	\$ (33)	-28 %
Interest expense	(99)	(84)	(15)	18 %	(201)	(153)	(48)	31 %
Other, net	(225)	70	(295)	-421 %	82	85	(3)	-4 %
Equity in loss of unconsolidated affiliate	(27)	(57)	30	-53 %	(36)	(75)	39	-52 %
Total other income (expense)	\$ (313)	\$ (16)	\$ (297)	1856 %	\$ (69)	\$ (24)	\$ (45)	188 %

For the quarter ended June 30, 2008, total other expense increased by \$0.3 million compared to \$16,000 for the quarter ended June 30, 2007. The increase was primarily the result of realized and unrealized currency exchange losses in Europe and Asia.

For the six months ended June 30, 2008, total other expense increased by \$45,000 or 188%, compared to \$24,000 for the six months ended June 30, 2007. The increase was primarily the result of lower interest income due to our cash investments primarily in

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China since the first quarter of 2006 and net losses incurred in 2007. In addition, interest expense increased due to new lines of credits in China to support operations. Other expense was offset by a lower equity loss from an unconsolidated affiliate.

Income Tax Benefit/(Expense)

<i>(in thousands)</i>	Three Months Ended June 30,			Percentage Change	Six Months Ended June 30,			Percentage Change
	2008	2007	Change		2008	2007	Change	
Income tax benefit (expense)	\$ (469)	\$ (259)	\$ (210)	81%	\$ (665)	\$ (132)	\$ (533)	404%
Effective tax rate	-254%	13 %			31 %	3 %		

Income tax expense for the six months ended June 30, 2008 was \$0.7 million or 31% of income before income taxes, minority interest, discontinued operations and the cumulative effect on change in accounting principle, compared to tax expense of \$0.1 million or 3% of the income before income taxes and minority interest in the same period of 2007. At December 31, 2007, we concluded that it was appropriate to establish a full valuation allowance for our net deferred tax assets and continue to maintain the full valuation allowance as of June 30, 2008. We calculated our interim income tax expense based on the estimated annual effective tax rate for the Company. However, as required by FASB Interpretation 18, "Accounting for Income Taxes in Interim Periods" ("FIN 18"), the impact of items of tax expense (or benefit) that do not relate to "ordinary income" in the current year generally should be accounted for discretely in the period in which it occurs and be excluded from the effective tax rate calculation. The tax rate for the second quarter of fiscal year 2008 differed from the U.S. statutory rate primarily due to foreign earnings taxed at lower rates, nondeductible stock compensation deductions under FAS 123(R) and additional provisions for uncertain tax positions applicable to fiscal year 2007. The tax rate for the second quarter of fiscal year 2007 differed from the U.S. statutory rate primarily due to foreign earnings taxes at lower rates, foreign losses not benefited, and nondeductible stock compensation deductions under FAS 123(R).

Minority Interest in (Income)/Loss of Consolidated Entities

<i>(in thousands)</i>	Three Months Ended June 30,			Percentage Change	Six Months Ended June 30,			Percentage Change
	2008	2007	Change		2008	2007	Change	
Minority interest in (income) loss of consolidated subsidiaries	\$ (188)	\$ 18	\$ (206)	-1144%	\$ (25)	\$ 39	\$ (64)	-164%

For the quarter ended June 30, 2008, minority interest in income of consolidated entities increased \$0.2 million from a loss of \$18,000 for the quarter ended June 30, 2007. The increase in minority interest income of consolidated entities was mainly due to RAE Fushun becoming profitable in the second quarter of 2008 and improved profitability from RAE France. The minority ownership was 4% of RAE Beijing, 30% of RAE Fushun and 51% of RAE France.

For the six months ended June 30, 2008, minority interest in income of consolidated entities increased \$64,000 or 164% from a loss of \$39,000 for the six months ended June 30, 2007. The increase in minority interest income of consolidated entities was mainly due to RAE France becoming profitable in 2008. The minority ownership was 4% of RAE Beijing, 30% of RAE Fushun and 51% of RAE France.

Gain/(Loss) From Discontinued Operations

On August 24, 2007, the Board of Directors approved the discontinuation of the Company's mobile DVR business in order to reduce expenses and concentrate resources on the Company's gas and radiation detection business. On August 28, 2007, we notified our DVR customers, terminated all personnel not reassigned to continuing operations and suspended the DVR related production and sales activities. Because the DVR business operates at a substantial loss, management intends to liquidate the tangible assets, mainly inventories of component parts. Accordingly, the value of these assets has been adjusted to reflect the anticipated disposals.

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As a result of discontinuing the DVR business, management impaired the remaining value of the intangible assets and goodwill acquired in the purchases of Aegison in July 2006 and Securary in January 2007. The recognized gain in the quarter ended June 30, 2008 totaled \$5,000 and \$15,000 for the six months ended June 30, 2008 mainly due to sale of inventory previously reserved.

In accordance with SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets," the financial results of the DVR business are reported as discontinued operations for all periods presented. The financial results included in discontinued operations were as follows:

<i>(in thousands)</i>	Three Months Ended June 30,		Change	Percentage Change	Six Months Ended June 30,		Change	Percentage Change
	2008	2007			2008	2007		
Gain (loss) from discontinued operations before income taxes	\$ 5	\$ (307)	312	-102 %	\$ 15	\$ (640)	655	-102 %
Income tax benefit	—	75	(75)	-100 %	—	155	(155)	-100 %
Gain (loss) from discontinued operations, net of tax	\$ 5	\$ (232)	\$ 237	-102 %	\$ 15	\$ (485)	\$ 500	-103 %

Liquidity and Capital Resources

We have financed our operations primarily through cash flow from operations, proceeds from the issuance of equity securities, and bank borrowings. As of June 30, 2008, we had \$13.8 million in cash and cash equivalents compared with \$15.9 million of cash and cash equivalents at December 31, 2007. At June 30, 2008, we had \$40.6 million of working capital and had a current ratio of 2.6 to 1.0 compared to \$40.9 million of working capital and a current ratio of 2.8 to 1.0 at December 31, 2007.

We maintain lines of credit to support our operations. In the United States, we had two lines of credit totaling \$10 million as of December 31, 2006. In March 2007, these agreements were replaced with a single \$15.0 million revolving credit agreement, which expires in March 2009.

We are required to comply with certain financial covenants and reporting requirements in addition to the ongoing requirement to submit quarterly financial statements. As of June 30, 2008, we were in full compliance with all of the borrowing requirements, including certain financial covenants. As of June 30, 2008 and December 31, 2007, no amounts were outstanding against loan agreements in the United States. Interest accrues at the floating prime bank lending rate minus 50 basis points.

In May 2007, we obtained an unsecured line of credit for Renminbi 20 million or approximately \$2.9 million to provide working capital in China. As of June 30, 2008, Renminbi 4 million or approximately \$582,000 was outstanding under the line of credit. Interest accrues on this balance at a fixed rate of 6.84%. The outstanding balance was repaid in July 2008. In May 2008, we obtained a new unsecured loan for Renminbi 3 million or approximately \$437,000 to replace the May 2007 facility when it expired in July 2008. Interest accrues on this balance at a fixed rate of 7.47%. The outstanding balance is due on May 29, 2009.

In October 2007, we obtained a second unsecured line of credit for Renminbi 10 million or approximately \$1.5 million to provide working capital in China. As of June 30, 2008, Renminbi 10 million or approximately \$1.5 million was outstanding under the line of credit. Interest accrues on this balance at a fixed rate of 8.019%. The outstanding balance is due on August 31, 2008.

As of June 30, 2008, we had \$0.3 million of long term deferred tax liabilities. The settlement period for our income tax liabilities cannot be determined; however, they are not expected to be due within the next twelve months. We will continue to accrue for uncertain tax positions during 2008 using the effective tax rate.

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A summary of our Condensed Consolidated Statement of Cash Flows follows:

<i>(in thousands)</i>	Six Months Ended	
	June 30,	
	2008	2007
Net cash provided by (used in):		
Operating activities	\$(1,444)	\$(7,663)
Investing activities	(563)	397
Financing activities	(736)	(508)
Effect of exchange rate changes on cash and cash equivalents	620	89
Net decrease in cash and cash equivalents	<u>\$(2,123)</u>	<u>\$(7,685)</u>

Operating Activities

Net cash used by operating activities for the six months ended June 30, 2008, was \$1.4 million compared with \$7.7 million for the six months ended June 30, 2007. The \$6.2 million improvement in operating cash flows for the six months ended June 30, 2008, was primarily due to decreased losses after adjusting for non-cash items of \$1.4 million offset by a positive change in working capital of \$3.9 million, which consisted primarily of a lower trade accounts receivable and notes receivable of \$1.1 million and increases in trade liabilities of \$2.6 million, a reduction in other assets of \$0.6 million and the result of \$0.5 million in cash used in the first six months of 2007 to support operations that were subsequently discontinued.

Investing Activities

Net cash utilized by investing activities for the six months ended June 30, 2008, was \$0.6 million compared with net cash provided by investing activities of \$0.4 million for the six months ended June 30, 2007. The change for the six months ended June 30, 2008 compared with the six months ended June 30, 2007, was primarily due to the sale of investments in 2007 of \$3.2 million and lower spending on acquisitions and capital equipment of approximately \$2.2 million during the first six months of 2008 as compared to the first six months of 2007.

Financing activities

Net cash used in financing activities was \$0.7 million for the six months ended June 30, 2008 as compared to \$0.5 million for the six months ended June 30, 2007. Changes consisted primarily of \$2.2 million in lower payments on related party notes during the first six months of 2008 as compared to the first six months of 2007, partially offset by the net cash used to retire loans in 2008 of \$0.3 million compared to \$2.0 million of proceeds from bank loans during the first six months of 2007.

We believe our existing balances of cash and cash equivalents, together with cash generated from product sales, will be sufficient to meet our cash needs for working capital and capital expenditures for at least the next twelve months. Our future capital requirements will depend on many factors that are difficult to predict, including the size, timing and structure of any future acquisitions, future capital investments, and future results of operations. Any future financing we may require may be unavailable on favorable terms, if at all. Any difficulty in obtaining additional financial resources could force us to curtail our operations or could prevent us from pursuing our growth strategy. Any future funding may dilute the ownership of our stockholders.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The following discussion analyzes our disclosure of market risk related to concentration of credit risk, changes in interest rates and foreign currency exchange rates.

Concentration of Credit Risk

Currently, we have cash and cash equivalents deposited with major financial institutions in the countries where we conduct business. Our deposits may exceed the amount of insurance available to cover such deposits. To date, we have not experienced any losses of deposits of cash and cash equivalents. Management regularly reviews our deposit amounts and the credit worthiness of the financial institution which hold our deposits.

Interest Rate Risk

As of June 30, 2008, we had cash and cash equivalents of \$13.8 million. Changes to interest rates over time may reduce or increase our interest income from our short-term investments but the impact on our cash and cash equivalents is expected to be insignificant.

Foreign Currency Exchange Rate Risk

For the six months ended June 30, 2008, a substantial portion of our recognized revenue was generated by our Asia operations (42%) and was primarily denominated in Renminbi (“RMB”). Revenue denominated in U.S. dollars is generated primarily from operations in the Americas (40%), and revenue from our European operations (18%) is primarily denominated in Euros. We manufacture a majority of our component parts at our manufacturing facility in Shanghai, China. Since January 2007, our operations in China have been affected by currency fluctuations due to an approximate 13.6% appreciation of the RMB relative to the U.S. dollar.

Our strategy has been to increase overseas manufacturing and research and development activities to capitalize on lower cost capacity and efficiencies in supply-chain management. In 2004 and 2006, we made strategic investments in China with the acquisition of a 96% interest in RAE Beijing, a Beijing-based manufacturer and distributor of environmental safety and security equipment and the formation of RAE Fushun in late 2006 to capitalize on increases in demand for safety equipment in the mining and energy market sectors in China. There has been continued speculation in the financial press that China’s currency, the RMB, will be subject to a further market adjustment relative to the U.S. dollar and other currencies. If, for example, there was a hypothetical 10% change in the RMB relative to the U.S. dollar, the effect on our profits would have been approximately \$0.4 million for the six months ended June 30, 2008. If the currencies in all other countries in Europe and Asia where we have operations were to change in unison with the RMB by a hypothetical 10% against the U.S. dollar, the approximate effect on our profits would be \$0.3 million for the six months ended June 30, 2008. The reduction in the impact of the RMB is due to the offset of changes in reported net sales in our other units resulting from changes in those countries local currencies.

Furthermore, to the extent that we engage in international sales denominated in U.S. dollars in countries other than China, any fluctuation in the value of the U.S. dollar relative to foreign currencies could affect our competitive position in the international markets. Although we continue to monitor our exposure to currency fluctuations and, when appropriate, may use financial hedging techniques in the future to minimize the effect of these fluctuations, we cannot be certain that exchange rate fluctuations will not adversely affect our financial results in the future.

Item 4. Controls and Procedures

Evaluation of Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, the Company evaluated the effectiveness of its disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). The evaluation considered the procedures designed to ensure that information required to be disclosed by us in the reports filed or submitted by the Company under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms and communicated to our management as appropriate to allow timely decisions regarding required disclosure. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective as of June 30, 2008.

There were no changes in our internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f) during the six months ended June 30, 2008 that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting.

PART II. Other Information

Item 1. Legal Proceedings

Polimaster Ltd., et al. v. RAE Systems Inc., United States District Court for the Northern District of California, Case No. 05-CV-01887-JF, United States Court of Appeals for the Ninth Circuit, No. 08-15708.

Polimaster Ltd. and Na&Se Trading Company, Ltd. (“Polimaster”) filed a complaint against the Company on May 9, 2005, in the United States District Court for the Northern District of California in a case titled Polimaster Ltd., et al. v. RAE Systems Inc. (Case No. 05-CV-01887-JF). The complaint alleges, among other things, that the Company breached its contract with Polimaster and infringed upon Polimaster’s intellectual property rights. The dispute is subject to a contractual arbitration agreement, although the federal court has retained jurisdiction over the matter pending completion of the arbitration.

In September 2007, a Final Award was issued in the arbitration. The arbitrator ruled that Polimaster failed to prove its claims and was not entitled to any relief; that the Company had proven its counterclaims and was awarded damages of approximately \$2.4 million; and that as the prevailing party, the Company was entitled to recover costs in the amount of \$46,000. On October 5, 2007, RAE Systems filed a motion to confirm the Final Award. On October 17, 2007, Polimaster filed an opposition to RAE’s motion to confirm the Final Award and filed its own motion to vacate the Final Award. Both motions were heard on December 7, 2007, and the district court confirmed the Final Award by an order dated February 25, 2008.

Although the Company has been awarded damages, attorney’s fees and costs, at this time, the Company is unable to determine whether it will be able to collect these amounts due to uncertainty regarding Polimaster’s financial condition and other factors.

On March 26, 2008, Polimaster filed a Notice of Appeal in the district court. The Ninth Circuit has set a Time Schedule Order for this appeal, in a case entitled Polimaster Ltd., et al. v. RAE Systems Inc., No. 08-15708. Polimaster submitted its opening brief on August 22, 2008, and RAE Systems’ brief is due on September 22, 2008. Polimaster’s reply is tentatively due on October 6, 2008. Oral argument has not been scheduled at this time.

On June 5, 2008, RAE Systems filed a procedural motion in the Ninth Circuit to request its leave to permit the Northern District of California to make corrections. Polimaster filed its response on June 19, 2008, and RAE Systems replied on June 30, 2008. The Ninth Circuit has not yet issued its decision. RAE Systems filed a motion for corrections in the Northern District of California on July 25, 2008. Polimaster opposed this motion on August 8, 2008, and RAE Systems submitted its Reply on August 15, 2008. The requested corrections relate to the enforcement of the Arbitration Award, and a hearing on this motion is set for August 29, 2008 in the Northern District of California.

Notwithstanding the Polimaster proceeding described above, from time to time, the Company is engaged in various legal proceedings incidental to its normal business activities. Although the results of litigation and claims cannot be predicted with certainty, the Company believes the final outcome of such matters will not have a material adverse effect on its financial position, results of operations or cash flows.

Item 1A. Risk Factors

You should carefully consider the risks described below before making a decision regarding an investment in our common stock. If any of the following risks actually occur, our business could be harmed, the trading price of our common stock could decline and you may lose all or part of your investment. You should also refer to the other information contained in this report, including our financial statements and the related notes.

Our future revenues are unpredictable, our operating results are likely to fluctuate from quarter-to-quarter, and if we fail to meet the expectations of securities analysts or investors, our stock price could decline significantly.

Our quarterly and annual operating results have fluctuated in the past and are likely to fluctuate significantly in the future due to a variety of factors, some of which are outside of our control. Accordingly, we believe that period-to-period comparisons of our results of operations are not meaningful and should not be relied upon as indications of future performance. Some of the factors that could cause our quarterly or annual operating results to fluctuate include significant shortfalls in revenue relative to our planned expenditures, changes in budget allocations by the federal government for homeland security purposes, changes in world-wide energy production and refining, market acceptance of our products, ongoing product development and production, competitive pressures and

customer retention. It is likely that in some future quarters our operating results may fall below the expectations of investors. In this event, the trading price of our common stock could significantly decline.

We may have difficulty achieving and sustaining profitability and may experience additional losses in the future. If we continue to report losses or are marginally profitable, the financial impact of future events may be magnified and may lead to a disproportionate impact on the trading price of our stock.

We recorded net losses of \$14.7 million, \$1.5 million and \$0.8 million for 2007, 2006 and 2005, respectively. In order to improve our profitability, we will need to continue to generate new sales while controlling our costs. As we plan on continuing the growth of our business while implementing cost control measures, we may not be able to successfully generate enough revenues to return to profitability. Any failure to increase our revenues and control costs as we pursue our planned growth would harm our profitability and would likely result in a negative effect on the market price of our stock. In addition, our financial results have historically bordered at or near profitability, and if we continue to perform at this level, the financial impact may be magnified and we may experience a disproportionate impact on our trading price as a result. If we continue to incur losses, any particular financial event could result in a relatively large change in our financial results or could be the difference between us having a profit or a loss for the particular quarter in which it occurs.

We may require additional capital in the future, which may not be available or may only be available on unfavorable terms.

Our future capital requirements depend on many factors, including potential future acquisitions and our ability to generate revenue and control costs. Should we have the need to raise additional capital, we might not be able to do so at all or on favorable terms. In the case of any future equity financings, dilution to our shareholders could result and, in any case, such securities may have rights, preferences and privileges that are senior to those of our common stock. If we are unable to obtain needed capital on favorable terms, or at all, our business and results of operations could be harmed and our liquidity could be adversely affected.

The market for gas and radiation detection monitoring devices is highly competitive, and if we cannot compete effectively, our business may be harmed.

The market for gas and radiation detection monitoring devices is highly competitive. Competitors in the gas and radiation monitoring industry differentiate themselves on the basis of their technology, quality of product and service offerings, cost and time to market. Our primary competitors in the gas detection market include Industrial Scientific Corporation, Mine Safety Appliances Company, Honeywell (BW Technologies), Ion Science, Draeger Safety Inc., Gastec Corporation and Bacou-Daloz Group. Our competitors in the radiation market include TSA Limited, Polimaster Ltd., Exporanium and Santa Barbara Systems. Several of our competitors such as Mine Safety Appliances Company and Draeger Safety Inc. have longer operating histories, larger customer bases, greater brand recognition and significantly greater financial and marketing resources than we do. In addition, some of our competitors may be able to:

devote greater resources to marketing and promotional campaigns;

adopt more aggressive pricing policies; or

devote more resources to technology and systems development.

In light of these factors, we may be unable to compete successfully.

We may not be successful in the development or introduction of new products and services in a timely and effective manner and, consequently, we may not be able to remain competitive and the results of operations may suffer.

Our revenue growth is dependent on the timely introduction of new products to market. We may be unsuccessful in identifying new product and service opportunities or in developing or marketing new products and services in a timely or cost-effective manner. In developing new products, we may be required to make significant investments before we can determine the commercial viability of the new product. If we fail to accurately foresee our customers' needs and future activities, we may invest heavily in research and development of products that do not lead to significant sales.

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We have expanded our current business of providing gas detection instruments to include radiation detection and wireless systems for local and remote security monitoring. While we perceive a large market for such products, the radiation detection and wireless systems markets are still evolving, and we have little basis to assess the demand for these products and services or to evaluate whether our products and services will be accepted by the market. If our radiation detection products and wireless products and services do not gain broad market acceptance or if we do not continue to maintain the necessary technology, our business and results of operations will be harmed.

In addition, compliance with safety regulations, specifically the need to obtain regulatory approvals in certain jurisdictions, could delay the introduction of new products by us. As a result, we may experience delays in realizing revenues from our new products.

The securities laws and regulations have and are likely to continue to have a significant effect on our costs.

The Sarbanes-Oxley Act of 2002 (the “Act”) and the rules promulgated by the SEC and the American Stock Exchange (“AMEX”) in relation thereto require significant legal, financial and accounting compliance costs, and we expect these costs to continue indefinitely. In particular, given the complexity of our international operations relative to our size, our compliance costs are expected to continue to result in high general and administrative expenses as a percentage of our revenue.

In the event we are unable to satisfy regulatory requirements relating to internal control over financial reporting or, if these controls are not effective, our business and financial results may suffer.

In designing and evaluating our internal control over financial reporting, we recognize that any internal control or procedure, no matter how well designed and operated, can provide only reasonable assurance of achieving desired control objectives. For example, a company’s operations may change over time as the result of new or discontinued lines of business and management must periodically modify a company’s internal controls and procedures to timely match these changes in its business. In addition, management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures and company personnel are required to use judgment in their application. While we continue to improve upon our internal control over financial reporting so that it can provide reasonable assurance of achieving its control objectives, no system of internal controls can be designed to provide absolute assurance of effectiveness.

In our 2006 annual report on Form 10-K, management identified one material weakness relating to assurance that information from our Chinese subsidiaries has been properly adjusted to generally accepted accounting principles in the United States of America (“U.S. GAAP”) for inclusion in our annual or interim financial statements. As a consequence, beginning with the first quarter of 2007, management of the Company initiated steps to implement a number of compensating controls and remediation measures to improve the level of assurance to ensure that the information from our Chinese subsidiaries had properly adjusted to U.S. GAAP. As of December 31, 2007, our management concluded that the previously identified material weakness in our internal control over financial reporting had been remediated. Our internal control over financial reporting and management’s remediation efforts is available under the subheading “Management’s Report on Internal Control over Financial Reporting”, in our annual report of Form 10-K and under the subheading “Controls and Procedures” therein.

Material weaknesses in internal control over financial reporting may materially impact our reported financial results and the market price of our stock could significantly decline. Additionally, adverse publicity related to a material failure of internal control over financial reporting could have a negative impact on our reputation and business.

We are subject to risks and uncertainties of the government marketplace, including the risk that the government may not fund projects that our products are designed to address and that certain terms of our contracts with government agencies may subject us to adverse government actions or penalties.

Our business is dependent in part upon government funded projects. Decisions on what types of projects are to be funded by local, state and federal government agencies may have a material impact on our business. The Federal budget for the Department of Homeland Security, which we refer to as “Homeland Security” herein, is a source for funding for many of our customers either directly or through grants to state and local agencies. However, if the government does not fund projects that our products are designed to address, or funds such projects at levels lower than we expect, our business and results of operations will be harmed.

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From time to time we enter into government contracts that contain provisions which subject us to laws and regulations that provide government clients with rights and remedies not typically found in commercial contracts. For example, a portion of our federal contracting has been done through the Federal Supply Schedules from the United States General Services Administration (GSA). GSA Schedule contracts which we may enter into often include a clause known as the “Price Reductions” clause; the terms of that clause are similar but not identical to a “most favored customer” clause in commercial contracts. Under that clause, we may agree that the prices to the government under the GSA Schedules contract will maintain a constant relationship to the prices charged to certain commercial customers, i.e., when prices to those benchmark customers drop, our prices on our GSA Schedules contract must be adjusted accordingly. Although when we are party to these contracts we undertake extensive efforts to comply with the Price Reductions clause, it is possible that we may have an unreported discount offered to a “Basis of Award” customer and may have failed to honor the obligations of the Price Reductions clause. If that occurs, we could, under certain circumstances, be subject to an audit, an action in fraud, or other adverse government actions or penalties.

We may not be successful in promoting and developing our brand, which could prevent us from remaining competitive.

We believe that our future success will depend on our ability to maintain and strengthen the RAE brand, which will depend, in turn, largely on the success of our marketing efforts and ability to provide our customers with high-quality products. If we fail to successfully promote and maintain our brand, or incur excessive expenses in attempting to promote and maintain our brand, our business will be harmed.

We may face risks from our substantial international operations and sales.

We have significant operations in foreign countries, including manufacturing facilities, sales personnel and customer support operations. For the years ended December 31, 2007 and 2006, approximately 46% and 38% of our revenues, respectively, were from sales to customers located in Asia and approximately 13% and 13% of our revenues, respectively, were from sales to customers located in Europe. We have manufacturing facilities in China and in the United States. A significant portion of our products and components are manufactured at our facility in Shanghai, China.

Our international operations are subject to economic and other risks inherent in doing business in foreign countries, including the following:

difficulties with staffing and managing international operations;

transportation and supply chain disruptions and increased transportation expense as a result of epidemics, terrorist activity, acts of war or hostility, generally higher oil prices, increased security and less developed infrastructure;

economic slowdown and/or downturn in foreign markets;

international currency fluctuations;

political and economic uncertainty caused by epidemics, terrorism or acts of war or hostility;

legislative and regulatory responses to terrorist activity such as increased restrictions on cross-border movement of products and technology;

legislative, regulatory, police, or civil responses to epidemics or other outbreaks of infectious diseases such as quarantines, factory closures, or increased restrictions on transportation or travel;

increased costs and complexities associated with complying with Section 404 of the Sarbanes-Oxley Act of 2002;

general strikes or other disruptions in working conditions;

labor shortages;

political instability;

changes in tariffs;
generally longer periods to collect receivables;
unexpected legislative or regulatory requirements;
reduced protection for intellectual property rights in some countries;
significant unexpected duties or taxes or other adverse tax consequences;
difficulty in obtaining export licenses and other trade barriers; and
ability to obtain credit and access to capital issues faced by our international customers.

The specific economic conditions in each country will impact our future international sales. For example, approximately half of our recognized revenue has been denominated in U.S. dollars. Significant downward fluctuations in currency exchange rates against the U.S. dollar could result in higher product prices and/or declining margins and increased manufacturing costs. If we do not effectively manage the risks associated with international operations and sales, our business, financial condition and operating results could suffer.

The loss of “Normal Trade Relation” status for China, changes in current tariff structures or adoption of other trade policies adverse to China could have an adverse effect on our business.

Our ability to import products from China at current tariff levels could be materially and adversely affected if the “normal trade relations” (“NTR”, formerly “most favored nation”) status the United States government has granted to China for trade and tariff purposes is terminated. As a result of its NTR status, China receives the same favorable tariff treatment that the United States extends to its other “normal” trading partners. China’s NTR status, coupled with its membership in the World Trade Organization, could eventually reduce barriers to manufacturing products in and exporting products from China. However, we cannot provide any assurance that China’s membership in the World Trade Organization or NTR status will not change. As a result of opposition to certain policies of the Chinese government and China’s growing trade surpluses with the United States, there has been, and in the future may be, opposition to NTR status for China. Also, the imposition of trade sanctions by the United States or the European Union against a class of products imported by us from, or the loss of NTR status with, China, could significantly increase our cost of products imported into the United States or Europe and harm our business. Because of the importance of our international sales and international sourcing of manufacturing to our business, our financial condition and results of operations could be significantly and adversely affected if any of the risks described above were to occur.

The government of China may change or even reverse its policies of promoting private industry and foreign investment, in which case our assets and operations may be at risk.

We currently manufacture and sell a significant portion of our components and products in China. Our existing and planned operations in China are subject to the general risks of doing business internationally and the specific risks related to the business, economic and political conditions in China, which include the possibility that the central government of China will change or even reverse its policies of promoting private industry and foreign investment in China. Many of the current reforms which support private business in China are unprecedented or experimental. Other political, economic and social factors, such as political changes, changes in the rates of economic growth, unemployment or inflation, or in the disparities of per capita wealth among citizens of China and between regions within China, could also lead to further readjustment of the government’s reform measures. It is not possible to predict whether the Chinese government will continue to be as supportive of private business in China, nor is it possible to predict how future reforms will affect our business.

Any failure to adequately protect and enforce our intellectual property rights could harm our business.

We regard our intellectual property as critical to our success. We rely on a combination of patent, trademark, copyright, trade secret laws and non-disclosure agreements and confidentiality procedures to protect our proprietary rights. Notwithstanding these

laws, we may be unsuccessful in protecting our intellectual property rights or in obtaining patents or registered trademarks for which we apply. Although processes are in place to protect our intellectual property rights, we cannot guarantee that these procedures are adequate to prevent misappropriation of our current technology or that our competitors will not develop technology that is similar to our own.

While there is no single patent or license to technology of material significance to the Company, our ability to compete is affected by our ability to protect our intellectual property rights in general. For example, we have a collection of patents related to our photoionization detector technology of which the first of such patents expires in 2012, and our ability to compete may be affected by any competing similar or new technology. In addition, if we lose the licensing rights to a patented or other proprietary technology, we may need to stop selling products incorporating that technology and possibly other products, redesign our products or lose a competitive advantage. We cannot ensure that our future patent applications will be approved or that our current patents will not be challenged by third parties. Furthermore, we cannot ensure that, if challenged, our patents will be found to be valid and enforceable. Any litigation relating to our intellectual property rights could, regardless of the outcome, have a material adverse impact on our business and results of operations.

We may face intellectual property infringement claims that might be costly to resolve and affect our results of operations.

In connection with the enforcement of our own intellectual property rights, the acquisition of third-party intellectual property rights or disputes relating to the validity or alleged infringement of third-party rights, including patent rights, we have been, are currently and may in the future be subject to claims, negotiations or complex, protracted litigation. Intellectual property disputes and litigation are typically very costly and can be disruptive to our business operations by diverting the attention and energies of management and key technical personnel. Although we have successfully defended or resolved past litigation and disputes, we may not prevail in any ongoing or future litigation and disputes. We may incur significant costs in acquiring the necessary third party intellectual property rights for use in our products. Third party intellectual property disputes could subject us to significant liabilities, require us to enter into royalty and licensing arrangements on less favorable terms, prevent us from manufacturing or licensing certain of our products, cause severe disruptions to our operations or the markets in which we compete, or require us to satisfy indemnification commitments with our customers including contractual provisions under various license arrangements any one of which could seriously harm our business. For example, for the last several years we have been involved in a dispute with Polimaster Ltd. which required us to incur substantial professional fees. Although we ultimately prevailed, it is uncertain whether we will be able to recover any of the amounts awarded to us.

Claims of this type, regardless of merit, can be time-consuming to defend, result in costly litigation, divert management's attention and resources or require us to enter into royalty or license agreements. The terms of any such license agreements may not be available on reasonable terms, if at all, and the assertion or prosecution of any infringement claims could significantly harm our business.

Some of our products may be subject to product liability claims which could be costly to resolve and affect our results of operations.

There can be no assurance that we will not be subject to third-party claims in connection with our products or that any indemnification or insurance available to us will be adequate to protect us from liability. A product liability claim, product recall or other claim, as well as any claims for uninsured liabilities or in excess of insured liabilities, could have a material adverse effect on our business and results of operations.

We sell a majority of our products through distributors, and if our distributors stop selling our products, our revenues would suffer.

We distribute our products in the Americas primarily through distributors. We are dependent upon these distributors to sell our products and to assist us in promoting and creating a demand for our products. Distributors are an important sales channel for our future growth. If one or more of our distributors were to experience financial difficulties or become unwilling to promote and sell our products for any reason, including any refusal to renew their commitment as our distributor, we might not be able to replace such lost revenue, and our business and results of operations could be materially harmed.

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Because we purchase a significant portion of our component parts from a limited number of third party suppliers, we are subject to the risk that we may be unable to acquire quality components in a timely manner, which could result in delays of product shipments and damage our business and operating results.

We currently purchase component parts used in the manufacture of our products from a limited number of third party suppliers. We depend on these suppliers to meet our needs for various sensors, microprocessors and other material components. Moreover, we depend on the quality of the products supplied to us over which we have limited control. Should we encounter shortages and delays in obtaining components, we might not be able to supply products in a timely manner due to a lack of components, and our business could be adversely affected.

Future acquisitions that we undertake could be difficult to integrate, disrupt our business, dilute shareholder value or harm our results of operations.

In the last several years, we increased our ownership of RAE Beijing to 96%, acquired Aegison Corporation and Tianjin Securay Technology Co., Ltd. and formed RAE Fushun. In August 2007, we determined to discontinue the Aegison and Securay businesses. We may acquire or make additional investments in complementary businesses, technologies, services or products if appropriate opportunities arise. The process of integrating any acquired business, technology, service or product into our business and operations may result in unforeseen operating difficulties and expenditures. Integration of an acquired company also may consume much of our management's time and attention that would otherwise be available for ongoing development of our business. Moreover, the anticipated benefits of any acquisition may not be realized. Future acquisitions could result in dilutive issuances of equity securities or the incurrence of debt, contingent liabilities or expenses related to goodwill recognition and other intangible assets, any of which could harm our business.

Our ownership interest in Renex will cause us to incur losses that we would not otherwise incur.

We currently own approximately 40% of Renex Technology Ltd. ("Renex"), a wireless systems company still in the research and development stage. We are required to incorporate our share of its expenses as losses in our Consolidated Statements of Operations. If Renex does not begin to generate revenues at the level we anticipate or otherwise incurs greater losses, we could incur greater losses than we anticipate and our results of operations will suffer.

Our business could suffer if we lose the services of any of our executive officers.

Our future success depends to a significant extent on the continued service of our executive officers. We have no formal employment agreements with any of our executives other than the initial offer letter, if applicable. The loss of the services of any of our executive officers could harm our business. We do not have key person life insurance on any of our personnel.

Our officers and directors beneficially own approximately 33% of our common stock and, accordingly, may exert substantial influence over the Company.

Our executive officers and directors, in the aggregate, beneficially own approximately 33% of our common stock as of June 30, 2008. These stockholders acting together have the ability to substantially influence all matters requiring approval by our stockholders. These matters include the election and removal of the directors, amendment of our certificate of incorporation, and any merger, consolidation or sale of all or substantially all of our assets. In addition, they may dictate the management of our business and affairs. Furthermore, this concentration of ownership could have the effect of delaying, deferring or preventing a change in control, or impeding a merger or consolidation, takeover or other business combination and may substantially reduce the marketability of our common stock.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None

Item 3. Defaults Upon Senior Securities

None

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

At our annual meeting on June 18, 2008, the stockholders elected the nominees for Class III directors to our Board of Directors. The votes were as follows:

Nominee:	For	Withheld Authority
Mr. Robert I. Chen	53,814,144	807,648
Ms. Sigrun Hjelmquist	46,832,265	7,789,528

The terms for Robert I. Chen and Sigrun Hjelmquist will continue until the Annual Meeting of Stockholders in 2011 and their successors are elected and qualified. The following directors' terms of office continue until their successors are elected and qualified at the Annual Meeting of Stockholders indicated: Peter C. Hsi, James W. Power and A. Marvin Strait (Class I term expires at the 2009 annual meeting) and Lyle D. Feisel and Neil W. Flanzraich (Class II term expires at the 2010 annual meeting).

The following matter was also submitted to and approved by a vote of the stockholders with the results of the voting being as shown:

Proposal to ratify the appointment of Deloitte & Touche LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2008:

	Share Represented	Percent
For	54,166,987	99.2%
Against	372,604	0.7 %
Abstained	82,204	0.2 %

Item 5. Other Information

None

Item 6. Exhibits

The following is a list of exhibits filed as part of this Report on Form 10-Q.

Exhibit Number	Description of Document
31.1	Certification of Robert I. Chen, President, Chief Executive Officer and Chairman of the Board of the Registrant, furnished pursuant to Rule 13a-14(a) adopted under the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Randall Gausman, Vice President and Chief Financial Officer of the Registrant, furnished pursuant to Rule 13a-14(a) adopted under the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Robert I. Chen, President, Chief Executive Officer and Chairman of the Registrant, furnished pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Randall Gausman, Vice President and Chief Financial Officer of the Registrant, furnished pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

August 29, 2008

RAE SYSTEMS INC.

By: /s/ Randall Gausman
Randall Gausman
Vice President and Chief Financial Officer

Exhibit Index

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32.2	Certification of Randall Gausman, Vice President and Chief Financial Officer of the Registrant, furnished pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

CERTIFICATION

I, Robert I. Chen, certify that:

1. I have reviewed this quarterly report on Form 10-Q of RAE Systems Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors:
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

August 29, 2008

By: /s/ Robert I. Chen
Robert I. Chen
President, Chief Executive Officer and Chairman
of the Board

CERTIFICATION

I, Randall Gausman, certify that:

1. I have reviewed this quarterly report on Form 10-Q of RAE Systems Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors:
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

August 29, 2008

By: /s/ Randall Gausman

Randall Gausman

Vice President and Chief Financial Officer

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of RAE Systems Inc. (the "Company") on Form 10-Q for the period ended June 30, 2008, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, in the capacities and on the date indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 29, 2008

By: /s/ Robert I. Chen
Robert I. Chen
President, Chief Executive Officer and Chairman
of the Board

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of RAE Systems Inc. (the "Company") on Form 10-Q for the period ended June 30, 2008, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, in the capacities and on the date indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 29, 2008

By: /s/ Randall Gausman
Randall Gausman
Vice President and Chief Financial Officer