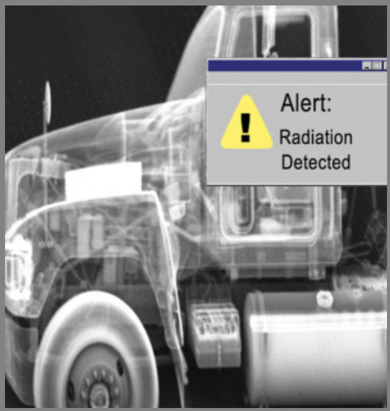
AMERICAN SCIENCE AND ENGINEERING, INC.

2003 ANNUAL REPORT

FORM 10K/A



Change is the law of life. And those who look only to the past or present are certain to miss the future — John F. Kennedy

To Our Shareholders:

Things have changed since 1958. In AS&E's forty-five years, the global economy has hit highs and lows. Markets have shifted. People and products have come and gone. In all of these years, there has been one constant — AS&E's innovative, unique technology. Today, AS&E is a world-class provider of X-ray inspection systems for combating crime and terrorism at ports, borders, military bases and high threat facilities worldwide.

The Year in Review

Fiscal year 2003 brought considerable challenges and changes to the AS&E community. Revenues were down due to several external factors, including delayed approval of the Federal Budget, which slowed MobileSearch™ awards, and the Iraqi War, which caused work stoppage on a major CargoSearch™ project in the Middle East. We prematurely ramped up post-9/11 and were forced to realign the business with actual revenues. Key administrative changes took place throughout the year, including the replacement of the president and chief executive officer. Despite the challenges, the significant orders and technology milestones of the past year should not be ignored. AS&E received multiple orders for force protection applications, including a $7.1 million contract with the U.S. Government for a Shaped Energy™ Detection System to protect the Pearl Harbor Naval Base. In addition, AS&E launched Radioactive Threat Detection™ (RTD) technology, to combat the threat of dirty bombs and nuclear devices in cargo, as well as the Model 66Z*PLUS*™, a compact X-ray inspection system for mail and small parcels.

Looking Ahead

AS&E achieved profitability in the first quarter of fiscal year 2004. We are extremely pleased with the results, but we must continue to move AS&E in a positive direction. To guide us in the current fiscal year and beyond, we have established three goals.

Goal 1: *Sustain Profitability*

Our primary goal is to maintain profitability for our shareholders, customers and employees. AS&E is in the black for the first time in two years, and maintains strong cash flow and zero debt. Finished goods inventory is down, and field service margins have dramatically improved. Our California-based High Energy Systems Division is a steady contributor to AS&E's bottom line, and will double capacity at a new facility in the coming months. We are encouraged by recent orders, including $22 million in MobileSearch systems from the U.S. Government, as well as international CargoSearch orders and steady ParcelSearch™ contracts from high threat facilities. The first Z® Backscatter Van™ (ZBV) was introduced and sold in the first quarter. RTD technology is operating in the field, and has been ordered on fourteen MobileSearch systems to date. We are working to increase efficiency in all facets of the organization by refining internal processes, assessing advanced supply chain practices, and reinforcing the sales and marketing effort.

Goal 2: *Strengthen Customer Relationships*

Continuous communication with our customers is essential. To facilitate an open dialog, I have been involved in discussions with many of our key clients. Additionally, the first *AS&E Users Conference* this month will give us another opportunity to connect with our clients, while they share experiences and best practices. Through increased communication with customers, and subsequent investment in research and development, we can effectively meet market demand with AS&E technology.

Goal 3: *Manage in a Positive Way*

AS&E has talented and dedicated employees, committed to quality in every department, at every level. We are working to create an environment that fosters the achievement of both personal and professional objectives. Furthermore, we are actively recruiting a permanent president and chief executive officer who will promote job satisfaction, and who will uphold the company goals with both integrity and determination.

By embracing change, and working together to accomplish these goals, we will keep AS&E on course for a successful fiscal year 2004 and beyond. Thank you for your continued support.

Sincerely,

Roger Heinisch

Dr. Roger P. Heinisch
Interim President and Chief Executive Officer

Form 10-K/A

AMERICAN SCIENCE & ENGINEERING INC - ASE
Filed: July 29, 2003 (period: March 31, 2003)

Amendment to a previously filed 10-K

Table of Contents

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

FORM 10-K/A

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

For the fiscal year ended March 31, 2003

or

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

Commission file number 1-6549

AMERICAN SCIENCE AND ENGINEERING, INC.
(Exact name of registrant as specified in its charter)

Massachusetts (State or other jurisdiction of incorporation or organization)	**04-2240991** (IRS Employer Identification No.)
829 Middlesex Turnpike, Billerica, Massachusetts (Address of principal executive offices)	**01821** (Zip Code)

(978) 262-8700
(Registrant's telephone number, including area code)

Title of each class	Name of each exchange on which registered
Common Stock ($.66 2/3 par value)	American Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

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 an accelerated filer (as defined in Rule 12b-2 of the Securities Exchange Act of 1934) Yes ☒ No ☐

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

This Form 10-K/A to the 2003 Form 10-K of American Science and Engineering, Inc. is being filed to report the information required by Items 10, 11, 12 and 13 of Part III of Form 10-K.

The aggregate market value of voting stock held by non-affiliates of the registrant on July 15, 2003 was $68,880,555.

6,936,323 shares of Registrant's Common Stock were outstanding on July 15, 2003.

PART I

ITEM 1. BUSINESS

American Science and Engineering, Inc., a Massachusetts corporation formed in 1958 (together with its subsidiaries, the "Company" or "AS&E"), develops, manufactures, markets, sells, and maintains and provides research, engineering and training services with respect to X-ray inspection systems.

The Company's sophisticated X-ray inspection products are used for critical detection and security applications by seaport and border authorities, federal facilities and military bases, airports and corporations in the United States and around the globe. These security applications include X-ray inspection and screening systems for combating terrorism, drug and weapon smuggling, trade fraud and illegal immigration.

The Company's objective is to distinguish itself from its competitors through technical innovations and a superior approach to detection. The Company's patented Z® Backscatter and Shaped Energy™ technologies detect plastic explosives, plastic weapons, illegal drugs, and other contraband, even when concealed in complex backgrounds by terrorists and smugglers. In addition, AS&E's new Radioactive Threat Detection (RTD) technology combats dirty bombs and nuclear devices while producing Z Backscatter and transmission images simultaneously.

Historically, the Company has focused its product development and marketing efforts on two broad markets: (i) the protection of high-risk government personnel and facilities; and (ii) the inspection and clearance of cargo, trucks and cars at seaports, borders and airports. These markets are driven by domestic and global trends in terrorism; the continued global proliferation of drug and people smuggling; and the continuing increase in global trade which creates greater incentives and opportunities to evade duties or perpetrate trade fraud by wrongly declaring cargo shipping manifests.

In the wake of the terrorist attacks on September 11, 2001, the proliferation of global terrorism, as well as the potential threat of terrorism posed by post-war Iraq, homeland security and force protection concerns have become of paramount importance in the United States and around the world. Despite delays in funding homeland defense initiatives (in fiscal year 2003), the Company believes that homeland defense, force protection and military security initiatives will result in new revenue opportunities with increased growth in the seaports and borders, federal and military facilities, force protection, and corporate security markets.

High Energy Systems Division In August 1998 the Company established the High Energy Systems division ("HES"). HES, located in Santa Clara, California, develops and manufactures linear accelerators for a variety of applications and products, including a proprietary high-energy linear accelerator for the Company's Shaped Energy technology. The linear accelerators generate high-energy X-rays by accelerating electrons from energy of approximately 20 keV to energy of several MeV using microwave fields created in an evacuated accelerating structure. The accelerated electrons either strike a heavy metal target to generate high energy X-rays, or are extracted in air to produce a propagating high-energy electron beam for various applications. The applications for HES's linear accelerators include dense cargo screening, medical, scientific, and military, electron beam curing, and non-destructive testing.

Technology and Products

The Company's product line utilizes a variety of technologies including proprietary Z Backscatter technology, traditional transmission X-ray, Shaped Energy and the recently introduced Radioactive Threat Detection (RTD).

Z® Backscatter Technology All of the Company's X-ray systems utilize AS&E's patented Z Backscatter technology. Backscattered X-rays refer to those X-rays that are directed toward an object and are scattered, rather than absorbed by that object. Z Backscatter captures these scattered X-rays and uses them to create highly readable, photo-like images. A key aspect of Z Backscatter is that objects that are organic in content (low atomic number or "low Z"), such as drugs, explosives, plastic weapons, or people, scatter X-rays very well. These organic items stand out as bright objects in the Z Backscatter images, making them easy to identify in even the most complex X-ray backgrounds. As a result, the Z Backscatter images show these potential threats clearly. When used in combination with transmission X-ray technology, Z Backscatter adds significant interpretability to a transmission image, enabling an inspector to perform a quicker and more thorough examination of the object in question.

Transmission X-ray Technology Transmission X-rays are used in combination with Z Backscatter in many of the Company's products. A standard transmission X-ray image results when X-rays are absorbed rather than scattered as they pass through the object under examination. When transmission X-rays pass through the parcel, container or vehicle being scanned, and are viewed on the transmission monitor, they create a "shadowgram" image, similar to the result of a medical X-ray exam. Shadowgram images are generally high resolution, and result from the X-ray beam penetrating through, and being absorbed by, objects of varying densities. With transmission technology, the more objects or clutter in the path of the beam, the less differentiation of those objects is achieved.

The best method for X-ray inspection is viewing Z Backscatter and transmission X-ray images simultaneously, giving inspectors more information about the contents of the parcel or container by differentiating dense objects, such as metal, from low Z materials, such as explosives.

Shaped Energy™ Technology This patented technology is specifically designed for use in examining densely loaded cargo containers at seaports and border crossings, and is available in various fixed or modular system configurations. The Shaped Energy (SE) detection system combines the penetration capability of a high-energy X-ray source (3.5 MeV) with the photo-like quality and material discrimination features of the Company's Z Backscatter imaging technology.

An important characteristic of Shaped Energy technology is that it allows for optimal penetration while maintaining one of the smallest footprints and radiation exclusion zones in the industry. Historically, high-energy X-ray systems were constrained by the necessity for large exclusion zones and heavy shielding in order to protect against the hazards of excessive radiation. The Shaped Energy linear accelerator, designed and produced by the Company's HES division, incorporates an X-ray system design that eliminates the need for cumbersome shielding and exclusion zones.

Radioactive Threat Detection Technology An AS&E cargo system enhanced with Radioactive Threat Detection (RTD) can be used to find radioactive threats in vehicles and cargo containers. RTD is highly sensitive to both gamma rays and neutrons—typically associated with dirty bomb materials (such as Cesium 137) or fissile material such as weapons grade plutonium. RTD is particularly important in light of the potential terrorist threat of explosives packaged with radioactive material that scatters upon deployment, commonly referred to as "dirty bombs." AS&E's RTD technology is unique as the X-ray system can perform radioactive material detection while simultaneously producing Z Backscatter and transmission X-ray images thereby maintaining optimum throughput.

The Company's product line currently includes 13 models. These models can be broadly grouped into two categories including the CargoSearch™ family and the ParcelSearch™ family.

CargoSearch™ Inspection Systems The CargoSearch family of systems includes high-energy and medium-energy non-intrusive inspection and screening devices for the X-ray scanning of trucks, cars, cargo containers, pallets and air cargo primarily at border crossings, seaports, railroad centers, airports, and cargo and transportation hubs. These systems are designed to combat trade fraud, drug trafficking, weapons smuggling and terrorism. In addition, the Company recently introduced the Z Backscatter Van, an effective, low-cost and high-speed X-ray inspection tool for screening vehicles and cargo in crowded environments. AS&E currently has 75 CargoSearch inspection systems deployed in 12 countries. The CargoSearch family includes:

Shaped Energy Detection System, an X-ray inspection system incorporating high-energy transmission and Z Backscatter imaging ideal for ports, borders and high-threat facilities.

CargoSearch™ System, a fixed-site inspection system with applications at borders and seaports.

ISOSearch™ System, which offers all the benefits of a fixed-site CargoSearch system in a relocatable, modular system configured for the inspection of trucks and shipping containers.

MobileSearch™ System, a truck-mounted, cargo and vehicle X-ray inspection system that adds flexibility, mobility and the ability to inspect cars (from one or both sides) to the basic CargoSearch concept.

PalletSearch™ System, which allows for the inspection of pallets to detect contraband, weapons and explosives for high security facilities where high confidence inspection is a requirement.

Z® Backscatter Van (ZBV) is an extremely mobile X-ray screening system built into a commercially available delivery van. It utilizes AS&E's patented Z Backscatter X-ray technology to produce photo-like images of the contents of a vehicle or cargo container, highlighting organic materials such as plastic explosives or other anomalies.

ParcelSearch™ Inspection Systems ParcelSearch systems are designed for the non-intrusive X-ray scanning of parcels, baggage and mail. They are primarily located in government, airports, and commercial office buildings, high-security federal facilities (research facilities and military bases) and convention centers. The Model 66Z*plus™* was introduced in Q4 of fiscal year 2003. This system is based on the first generation Model 66Z™ X-ray inspection system, and offers significant hardware upgrades, as well as improved electronics and power supply. There are currently in excess of 1,750 ParcelSearch systems deployed in over 125 countries. The ParcelSearch family includes:

Model 101VAN™, a self-contained, conveyer based parcel inspection system housed in a standard van, and designed and built to the rigorous specifications of the U.S. Customs Service.

Models 101Z™, 101ZZ™, 101GT™ and 101XL™, conveyor-based systems allowing rapid inspection of high volumes of luggage and other packages.

Model 66Zplus™, a compact system designed to handle small packages, including briefcases, carry-on luggage and mail.

In addition the Company manufactures the BodySearch™ Personnel Inspection System. The BodySearch system offers a fast, safe, and non-intrusive way to screen individuals for weapons, drugs, and illegal contraband concealed under clothing, providing a viable alternative to pat or strip searches.

Intellectual Property

The Company relies on a combination of patent, copyright, trademark, contract and trade secret laws to establish and protect its proprietary rights in its technology. The Company has patents either issued and/or pending in the United States, Germany, Japan, the United Kingdom, China and Egypt and under the Patent Cooperation Treaty.

In general, we pursue a policy of obtaining patent protection both in the United States and in selected foreign countries for subject matter we consider patentable and important to our business strategy. We have 47 unexpired patents issued by, and have 14 patent applications pending with, the U.S. Patent and Trademark Office, as well as a number of international patents and patent applications. Of our issued patents, over half have been issued in the last five years.

Generally, patents issued in the United States are effective for:

- the longer of 17 years from the date of issue or 20 years from the earliest effective filing date of the corresponding patent application if filed prior to June 8, 1995; and
- 20 years from the earliest filing date for patent applications filed on or after June 8, 1995.

The duration of foreign patents varies in accordance with applicable local law. While the duration of our patents varies, we believe that the duration of our patents is adequate relative to the expected lives of our products.

The Company believes that its patents, proprietary technology, know-how, and trademarks provide substantial protection for the Company's competitive position and the Company intends to aggressively protect its intellectual property assets, by litigation or other means, as appropriate. Nevertheless, there can be no assurances that the steps taken by the Company in this regard will be adequate to prevent misappropriation or infringement of its technology or that the Company's competitors will not independently develop technologies that are substantially equivalent or superior to the Company's technology. Effective protection of intellectual property rights may be limited or unavailable in certain foreign countries.

Sales and Marketing

The Company's X-ray products are marketed to private and governmental organizations through a sales force that contacts potential customers and responds to public tenders and other expressions of interest. This sales force includes Company personnel based in the United States and abroad as well as independent representatives under contracts to sell in foreign countries who are generally compensated on a commission basis.

Many of the Company's systems are built for existing orders, and the Company maintains an inventory of common parts and sub-assemblies for these systems in order to meet expected customer delivery requirements and spares requirements.

Customers

The Company has a customer list consisting of government and commercial clients from both the U.S. and abroad. Domestically, the Company's primary client base is comprised of agencies of the U.S. Government. International sales primarily to foreign governments accounted for approximately 15%, 30% and 53% of the Company's total sales in fiscal 2003, 2002 and 2001, respectively. The international market will continue to remain a high priority for the Company as part of its long-term growth strategy, however the events of September 11th have shifted the focus of spending and efforts domestically for the short-term.

During fiscal 2003, approximately 75% of sales of X-ray products were under (i) direct contracts with the U.S. Government, or (ii) subcontracts with prime contractors working under direct contracts with the U.S. Government. Some of the Company's contracts with the government are on a cost reimbursement plus basis, and virtually all are cancelable at the government's discretion. Thus far, the Company has not experienced any material losses as the result of such contractual provisions. The Company is heavily dependent upon sales to agencies of the U.S. Government and reductions or delays in procurement of the Company's systems by these agencies may have a material adverse effect on the Company.

Notwithstanding the longer sales cycles and project financing requirements often associated with international sales, the Company continues to focus on these sales as a means of reducing its dependence on sales to the U.S. Government. The Company manages its overseas risk in a number of ways, including actively increasing the number of opportunities it is pursuing at any one time and by working with international funding sources to help customers finance and secure funding of these projects. The majority of international contracts are bid in U.S. dollars. For those contracts that are bid in other currencies, the Company would consider engaging in hedging contracts to control foreign exchange risk. There were no hedging activities ongoing at March 31, 2003.

In fiscal year 2003, the Company had sales to one major customer, an agency of the U.S. Government, which accounted for 17% of total sales. In fiscal year 2002, the Company had sales to one major customer, an agency of the U.S. Government, which accounted for 28% of total sales.

Competition

The Company has many competitors in the X-ray product market, including several large and well-established manufacturers of security X-ray equipment with financial and other resources greater than those of the Company. Certain X-ray security system customers select such systems based largely on price. Other customers, notably the U.S. Government and users in countries with high levels of concern over security, tend to select systems based largely on performance and detection capability. The Company's systems offer premium performance and have historically been priced higher than many competing systems. The Company believes that its patented and proprietary technology gives it a strong competitive position in the sale of security systems to customers concerned with performance and detection. The Company also believes that its strategy of concentrating on differentiable products with unique features, including Z Backscatter and Shaped Energy, and/or competitive pricing will give it a strong position to increase its sales of X-ray systems. However, a number of companies have developed products that compete with the Company's X-ray inspection products. (See "Forward-Looking Information and Factors Affecting Future Performance").

ISO 9001 Certification

In March 2001, the Company announced that its Quality Management System had been registered under the ISO 9001 standard of the International Organization for Standardization. ISO 9001 is an internationally recognized quality management and assurance standard. In qualifying, the Company met or exceeded the standards for preventing non-conformity at every level of the product life cycle, from development and design, through production and installation, to service support. The audit was conducted by Zurich Quality Management (a United Kingdom Accreditation Service auditor), which will also perform ongoing compliance audits to provide assurance of measurement systems, performance and continuous improvement.

In August 2002, the Company announced that its west coast division, HES, had been registered under the ISO 13485 standard of the International Organization for Standardization. ISO 13485 is the internationally recognized quality management system standard for medical devices. In April 2003, the Company announced that HES had been registered under the ISO 9001 standard. For both qualifications, HES met or exceeded the standards' requirements for development, production, and servicing industrial products and medical devices. The audits of HES were conducted by TUV America (a Registrar Accreditation Board and an American National Standards Institute auditor) who will also perform ongoing compliance audits.

The Company believes that demonstrating continuous quality improvement is vital for building customer satisfaction and making business processes more efficient in order to increase its competitive edge.

Raw Material Availability

The Company has not experienced during the last year, and does not currently anticipate, any hardware delivery delays due to raw material shortages. Most procured material is from U.S. sources. However, the Company is dependent upon certain overseas providers of important components. No rare or exotic materials are utilized. Following the events of September 11, demand for X-ray system subcomponents increased significantly across the security industry. In response, the Company has taken steps to mitigate sourcing risks by working closely with its vendors to secure future raw material availability. In some cases, the Company chooses to stock certain inventory components to assure future availability. These efforts also included identifying and qualifying second-source providers for several critical components on all of its product lines.

Regulatory Compliance

The Company complies with applicable Health and Human Services regulations outlined under the "Regulations for the Administration and Enforcement of the Radiation Control for Health and Safety Act of 1968" (21CFR 1020.40), published by the U.S. Department of Health and Human Services. All X-ray products of the Company comply with all applicable U.S. Government regulatory standards.

Research and Development

The Company spent approximately $6,419,000 of its own funds for research and development during fiscal 2003, compared to $7,136,000 and $5,060,000 in fiscal 2002 and 2001, respectively. The principle focus of 2003 research and development was on new products including the Shaped Energy Gantry, the Z Backscatter Van and Radioactive Threat Detection. In addition funds were invested to enhance existing products, to develop new applications and for conceptualization of new products.

In addition, during fiscal 2003 and 2002, the Company conducted government-sponsored research primarily focused on technologies for the detection of illicit drugs, explosives, and other security issues. The Company recognized revenues of $747,000 and $635,000, in fiscal 2003 and 2002, respectively for these efforts. No government-sponsored research projects were performed in fiscal 2001. A significant amount of the Company's government sponsored research and development work is obtained via contracts or subcontracts that typically provide for a fixed fee or a reimbursement of allowable costs plus a fixed fee. The Company's contracts in these areas are obtained by submitting research and development proposals to various organizations, sometimes in response to requests for such proposals. The Company's contract research ranges from advances in X-ray systems and image analysis to integrated system development for niche security inspection problems.

Personnel

As of March 31, 2003 the Company had 304 employees as compared to 373 employees at the end of the prior year. It is the Company's policy to have employees sign nondisclosure agreements as a condition of employment. None of the Company's employees are represented by labor unions.

Sales Backlog

The Company's firm (under signed contracts) sales backlog was $38,765,000, $40,735,000 and $40,150,000 at March 31, 2003, March 31, 2002 and March 31, 2001, respectively.

A majority of the Company's contracts with the U.S. Government contain clauses permitting the government to terminate the contract for convenience upon certain terms and conditions, including partial payment to the Company for work performed. The total of such contracts in the backlog was $17,751,000, $22,233,000 and $15,462,000 at March 31, 2003, March 31, 2002 and March 31, 2001, respectively. It is estimated that approximately 71% of the 2003 backlog will be filled within the fiscal year ending March 31, 2004.

Financial Information About Foreign and Domestic Operations and Export Sales

Most export sales are made in U.S. dollars, and many are either secured by irrevocable letters of credit or paid in advance. Export sales are believed by the Company to be at least as profitable as similar domestic sales. The following chart provides information about the breakdown between domestic and export sales in dollars and percentages of total sales for the indicated fiscal years. With the exception of small amounts of spares inventory and cash accounts maintained at foreign locations (less than 1% of the Company's assets), all assets are maintained within the United States.

Net Sales and Contract Revenues

	Fiscal Year					
	2003		2002		2001	
	(Dollars in thousands)					
Domestic	$ 52,834	85%	$ 45,932	70%	$ 31,958	47%
Export	$ 9,124	15%	$ 19,464	30%	$ 35,416	53%
Net Sales and Contract Revenues	$ 61,958	100%	$ 65,396	100%	$ 67,374	100%
Percent of Export Revenue by Major Region:						
Middle East & Africa	70.6%		59.0%		66.5%	
Europe	16.8		28.1		13.8	
Mexico	—		7.7		6.9	
Pacific Rim	11.7		4.4		12.7	
All Other	0.9		0.8		0.1	

ITEM 2. PROPERTIES

The Company's executive offices are located in Billerica, MA and its research, manufacturing and warehouse facilities are located in Billerica, MA and Santa Clara, CA. In Billerica, the Company occupies 118,300 square feet of space in a 160,000 square foot single-story, concrete and brick building owned by an unaffiliated real estate limited partnership. The remaining space is currently unoccupied and is available for lease from the building owner. The Company occupies the space under a long-term lease with a ten-year initial term that commenced March 1, 1995, and an option to extend for an additional ten-year term.. In October 1999, the Company leased an additional 56,000 square feet of manufacturing and office space in an office park near the main office. This lease has a term of five years.

Located in Santa Clara, CA, HES leases 11,700 square feet of manufacturing, research and office space. The original lease had a term of three years that commenced on August 18, 1998**.** In August 2001, the Company exercised a one-year extension option to this lease and has since been on a month-to-month lease cancelable with a 30-day notice. On June 24, 2003, the Company signed a lease for a facility in Mountain View, CA. This facility has 24,733 square feet of manufacturing, research and development, test and office space. The initial term of the lease will be seven years, with an option to extend for an additional five-year period. The Company plans to move into its new facility in October 2003.

The Company's facilities are currently utilized on a one-shift basis. The Company can add additional capacity by adding second and third shifts if necessary.

ITEM 3. LEGAL PROCEEDINGS

In a decision issued December 29, 1999, the United States Court of Appeals for the Federal Circuit in Washington, D.C. ruled that the Company may pursue a patent infringement claim against Vivid Technologies ("Vivid"), which produces X-ray detection devices used in baggage scanning equipment. The Appeals Court overturned a 1998 decision in Vivid's favor by the Massachusetts Federal District Court. The lawsuit, filed by Vivid Technologies in May 1996, concerned whether Vivid's X-ray detection devices infringed on AS&E's patent. The District Court had ruled that AS&E could not assert a claim that Vivid's devices infringed on AS&E's patent. The Appeals Court also reversed the district court's finding on summary judgment that Vivid did not infringe on AS&E's patent, as well as the district court's denial of AS&E's request for discovery to oppose Vivid's summary judgment motion. Vivid was acquired by PerkinElmer in 2000.

In September 1998, the Company filed suit against EG&G Astrophysics Research Corp. ("EG&G") in U.S. District Court in Boston, Massachusetts alleging that EG&G infringed upon at least two patents owned by the Company and that EG&G had misappropriated certain trade secrets of the Company. In February 1999, the Company filed a related action in the same court against the U.S. Customs Service ("Customs") alleging that Customs had either misappropriated the Company's trade secrets or facilitated their misappropriation by EG&G and that Customs had improperly entered into a contract with EG&G for the acquisition of a product functionally equivalent to the Company's MobileSearch™ X-ray inspection system. In May 1999, the Court held a hearing on the Company's motion for a preliminary injunction against both Customs and EG&G prohibiting further performance of the contested contract and preventing EG&G from utilizing the Company's trade secrets. In August 1999, the Court issued a ruling denying the request for the preliminary injunction. In December 1999, EG&G filed a Motion for Summary Judgment that EG&G did not misappropriate the Company's trade secrets and in March 2000 EG&G filed a Motion for Summary Judgment that EG&G did not infringe the Company's patents. In February 2001 the Court denied EG&G's and the Company's motions for Summary Judgment. The suit against U.S. Customs Service was subsequently dismissed.

In a related matter, EG&G filed a request with the U.S. Patent and Trademark Office ("USPTO") for reexamination of the two patents that were at issue in the patent infringement action described above. The Company filed oppositions to the re-examination requests and the Company was advised by the USPTO that both its MobileSearch X-ray inspection and its Z® Backscatter X-ray inspection technology patent were upheld in all material respects on January 30, 2001.

In June 2002, the assets of EG&G were sold by PerkinElmer to L-3 Communications.

In March 2003 the Company entered into a Partial Settlement Agreement and Release with PerkinElmer, the parent of EG&G, with respect to the above-referenced litigation. The Partial Settlement Agreement and Release covers claims and counter-claims in the EG&G and Vivid actions up to June 14, 2002, the date of closing on the sale of EG&G by PerkinElmer to L-3. Certain aspects of the EG&G litigation remain pending in the District Court at this time.

The Company is also subject to various legal proceedings and claims that arise in the ordinary course of business. The Company currently believes that resolving these matters will not have a material adverse impact on its financial condition or results of operations.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matter was submitted to a vote of the Company's security holders during the fourth quarter of the fiscal year covered by this report.

PART II

ITEM 5. MARKET FOR THE COMPANY'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

The Company's Common Stock is listed on the American Stock Exchange (ticker symbol: ASE). The market price range for the Common Stock for the last two fiscal years follows:

Fiscal Year	Quarter Ended	High	Low
2003	March 31, 2003	$ 13.23	$ 6.80
	December 31, 2002	14.25	9.10
	September 30, 2002	15.90	9.05
	June 30, 2002	23.50	13.95
2002	March 31, 2002	$ 18.10	$ 13.75
	December 31, 2001	25.20	17.10
	September 30, 2001	15.25	5.70
	June 30, 2001	6.35	5.50

As of June 3, 2003, there were approximately 1,018 holders of record of the Company's Common Stock.

No cash dividends have been declared in the two most recent fiscal years and the Board of Directors does not contemplate paying any dividends in the immediate future. The Company's credit facility restricts the payment of dividends (except in shares of the Company's stock) without the consent of the bank.

Equity Compensation Plan Information

The following table provides the information about the Company's common stock that may be issued upon the exercise of options and rights under all existing equity compensation plans as of March 31, 2003. The Company has the following stock option plans outstanding as of March 31, 2003: 1984 Stock Option Plan, the 1993, 1994-1995 and 1996 Stock Option Plans for Non-employee Directors; three CEO Employment Agreement Plans; 1995 Combination Plan; 1997 and 1998 Non-Qualified Option Plan; 1994-95 Stock Option Plan for New Employees, a 1999 Combination Plan, a 2000 Combination Plan and a 2002 Combination Plan.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights as of March 31, 2003	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans as of March 31, 2003 (excluding securities reflected in column(a))
Equity compensation plans approved by security holders:			
1984 Stock Option Plan	2,400	$ 5.44	—
1993 Plan for New Non-Employee Directors	5,000	$ 6.38	—
1995 Combination Plan	164,066	$ 9.65	2,466
1999 Combination Plan	460,600	$ 8.53	45,533
2000 Combination Plan	219,504	$ 10.16	76,200
2002 Combination Plan	258,750	$ 10.30	93,000

Equity compensation plans not approved by security holders:			
1994-1995 Plan for New Employees	32,000	$ 7.25	—
1994-1995 Plan for Non-Employee Directors	28,000	$ 5.87	—
1996 Plan for Non-Employee Directors	119,000	$ 10.52	102,833
1997 Non-Qualified Option Plan	141,700	$ 8.99	13,250
1998 Non-Qualified Option Plan	228,840	$ 11.60	1,333
1996, 1999 and 2002 Employment Agreements between the Company and the former Chief Executive Officer, Ralph Sheridan	500,000	$ 11.34	10,000
Total	2,159,860	$ 10.03	344,615

In addition, the Company has a common stock installment purchase plan under which the Board of Directors may grant key personnel the right to purchase shares of the Company's common stock at fair market value and to pay the purchase price in twelve equal monthly installments. As of March 31, 2003, no shares have been reserved or granted under this plan.

The Company has instituted two common stock purchase plans. The Executive Equity Incentive Plan allows an executive officer of the Company to buy original issue Company common stock in any dollar amount up to the gross amount of the annual bonus granted to the Officer and to receive half the number of shares purchased in restricted stock which vests after 3 years. If the employee leaves the Company prior to 3 years then the shares revert back to the Company. As of both March 31, 2003 and 2002, 2,251 shares have been reserved and restricted under this plan. The Reload Option Plan allows any eligible employee designated by the Board of Directors to receive new stock options (at an exercise price equal to the fair market value of the common stock on the date of sale of the stock by the employee) for every share of Company common stock sold or used to exercise stock options.

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data is qualified by reference to, and should be read in conjunction with, the consolidated financial statements, including the notes thereto, and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Annual Report.

Fiscal Year	**2003**	**2002**	**2001**	**2000**	**1999**
			(Dollars in thousands, except per share amounts)		
Net sales and contract revenues	$ 61,958	$ 65,396	$ 67,374	$ 60,896	$ 57,295
Net income (loss)	(7,951)	(4,512)	660	1,459	2,045
Income (loss) per share—diluted	(1.20)	(0.87)	0.13	0.29	0.40
Total assets	47,316	50,241	44,310	38,205	30,204
Obligations under capital leases	—	—	—	16	40
Stockholders' investment	32,358	23,129	22,634	21,375	19,347

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with our consolidated financial statements and notes thereto which appear elsewhere in this Annual Report on Form 10-K. The following discussion contains forward-looking statements and should also be read in conjunction with "Forward Looking Information and Factors Affecting Future Performance" beginning on page 19.

2003 Compared to 2002

Overview

Net sales and contract revenues for fiscal 2003 decreased by 5% to $61,958,000 compared to fiscal 2002 net sales and contract revenues of $65,396,000. The Company had a loss before taxes of $5,495,000 in fiscal 2003 compared to a loss before taxes of $4,512,000 in the previous year. Net loss for fiscal 2003 was $7,951,000 ($1.20 per share, on a diluted basis) as compared to a net loss of $4,512,000 ($0.87 per share, on a diluted basis) in fiscal 2002. Backlog at March 31, 2003 was $38,765,000, a 5% decrease from the backlog reported at the previous fiscal year end.

Results of Operations Net sales and contract revenues decreased by $3,438,000 or 5% in fiscal year 2003 as compared to fiscal 2002. The decrease in revenues was due primarily to a decrease of approximately $13,170,000 to $24,791,000 in sales of CargoSearch systems and upgrades, as numerous projects ongoing in fiscal 2002 were completed in the current year and new engagements experienced significant delays as government agencies (both U.S. and foreign) work to determine the best solution for security in the post-September 11th environment. In addition, a significant project to install a CargoSearch system in the Middle East was halted during the Iraqi conflict resulting in lower than anticipated fourth quarter revenues. In contrast, ParcelSearch sales increased by $6,306,000 to $20,835,000 due to an immediate increase in demand following September 11th that resulted in higher ParcelSearch system sales in the third and fourth quarters of fiscal 2002 and continuing through the second quarter of fiscal 2003. The third and fourth quarters of fiscal 2003 showed slightly lower ParcelSearch revenues but still remain higher than the average pre-September 11th levels. The sale of aftermarket parts remained relatively consistent year over year at approximately $3.0 million. Aftermarket field services revenues increased by 42% to $9,064,000 as compared to $6,387,000 in fiscal 2002 as a result of new post-warranty service contracts on installed machines. Service revenues had previously been less than 10% of total revenues and were not separately disclosed; however, due to the increase in the current year are now reflected separately on the Company's statement of operations. The Company earned $747,000 in contract research and engineering revenues in fiscal 2003 as compared to $635,000 in fiscal 2002. The Company's HES division increased revenues to external customers by $711,000 to $3,615,000 fiscal 2003 as compared to $2,904,000 in fiscal 2002. There was a shift in the geographical mix of revenues in fiscal 2003 as domestic revenues increased from 70% of total revenues in fiscal 2002 to 85% of total revenues in fiscal 2003. This increase is due primarily to the domestic focus on homeland defense and security in the wake of the terrorist events of September 11th. One customer, an agency of the U.S. Government, accounted for 17% of revenues during fiscal 2003.

Cost of sales and contracts of $51,009,000 in fiscal 2003 increased by $1,652,000 or 3% from the previous year. Cost of sales and contracts represented 82% of revenues during fiscal 2003, compared to 75% in fiscal 2002. This percentage increase in the cost of sales was due primarily to $3,400,000 in provisions for inventory obsolescence recorded in fiscal 2003 and, to a lesser extent, excess manufacturing capacity as a result of the sharp decline in CargoSearch sales. The Company, in response to the events of September 11th and the anticipated increase in demand for security systems, had committed to significant volume purchases of raw materials in late fiscal 2002 and increased production of CargoSearch and ParcelSearch systems. The result was a significant increase in inventory levels at the end of fiscal 2002. The events of September 11th raised considerable interest in the Company's products and in the first quarter of fiscal 2003 the Company signed a three-year $500 million blanket purchase agreement with the U.S. Department of Defense. This level of interest continued into the second quarter of fiscal 2003 as the first orders for three MobileSearch trucks under the blanket purchase agreement were received as well as contracts for two Shaped Energy CargoSearch systems. Despite these facts, however, the level and product mix of orders the Company was projecting in late fiscal 2002 did not materialize to the levels anticipated. In the third quarter of fiscal 2003 the Company experienced a sharp decline in order levels that continued through the fourth quarter and significantly impacted the fourth quarter revenues. The Company continued to complete a certain number of systems, which were in progress despite the lack of related orders, resulting in an increase in finished goods inventory at the end of fiscal 2003. As a result of these continued order delays and in conjunction with its 2004 budgetary process in the fourth quarter of fiscal 2003, the Company reassessed its expected inventory usage and required reserve levels. Based upon this analysis, the Company provided a provision for inventory valued above the lower of its cost or market value or not expected to be utilized within a reasonable period of time.

Selling, general and administrative expenses of $12,409,000 were $344,000 lower than the previous year and represented 20% of revenues, which was consistent with the prior year. In fiscal 2003, the Company increased its investment in marketing and sales by approximately $600,000 by adding personnel and increasing its demo, trade show and road show activities and incurred increases in insurance and consulting costs of approximately $500,000. Offsetting these costs was a $1.6 million decrease in legal fees as the result of the settlement of a patent litigation matter that had significant legal costs during fiscal 2002.

Company funded research and development spending decreased to $6,419,000 in fiscal 2003, a 10% decrease compared to the $7,136,000 in spending in fiscal 2002. Research and development spending in fiscal 2003 and fiscal 2002 was 10% and 11% of revenues, respectively. The Company had invested significantly in research and development spending in fiscal 2002 in the development of new products and product enhancements, most notably its Shaped Energy technology, as well as product upgrades to improve manufacturability and to address vendor obsolescence issues. In fiscal 2003, the Company worked to control its research and development spending focusing on specific initiatives such as the Shaped Energy Gantry system, the Z Backscatter Van and Radiation Threat Detection technology.

Other income (expenses) was $2,384,000 in income in fiscal 2003 as compared to $662,000 in expense in fiscal 2002. In May of 2002, the Company closed on a private placement offering of common stock and warrants. A total of 1,115,000 shares were sold to accredited investors at a price of $17.64 each. Proceeds from this offering were used in part to pay off the Company's line of credit resulting in a decrease in interest expense of $390,000 during the year. In addition, warrants to purchase an additional 295,475 shares of common stock at a price of $23.52 were issued. These warrants included certain conversion features that require "mark to market" adjustment that resulted in a credit to other income in the year of $2.3 million.

The Company experienced pre-tax operating losses in the current year as a result of the decreased revenue, excess capacity and inventory reserves. The Company has reviewed its deferred tax assets as a whole to determine what would be realized over the next three to five years in light of the historical losses incurred and has recorded a valuation reserve of $2,456,000 against its remaining deferred tax asset at March 31, 2003.

The Company recorded a net loss of $7,951,000 for fiscal year 2003 as compared to a loss of $4,512,000 in the previous year.

2002 Compared to 2001

Overview

Net sales and contract revenues for fiscal 2002 decreased by 3% to $65,396,000 versus fiscal 2001 net sales and contract revenues of $67,374,000. The Company had a loss before taxes of $4,512,000 compared to $805,000 in income before taxes in the previous year. Net loss for fiscal 2002 was $4,512,000 ($0.87 per share, on a diluted basis) as compared to income of $660,000 ($0.13 per share, on a diluted basis) in fiscal 2001. Backlog at March 31, 2002 was $40,735,000, a 1% increase from the backlog reported at the previous fiscal year end.

Results of Operations Net sales and contract revenues decreased by $1,978,000 or 3% during fiscal year 2002. The decrease in revenues was due primarily to a $7,937,000 decline in sales of CargoSearch systems and upgrades which had been experiencing declines prior to September 11th and has experienced additional procurement delays as government agencies (both U.S. and foreign) determine the best security solution and budgets for security in the post-September 11th environment. In contrast, ParcelSearch experienced an immediate increase in demand following September 11th that resulted in increased ParcelSearch system sales in the third and fourth fiscal quarters and a $4,354,000 increase in ParcelSearch system revenues for the year. In addition, aftermarket field services and parts experienced increased revenues compared to fiscal 2001 due to an increased installed base. Service revenues totaled $6,387,000 for the fiscal year ended March 31, 2002 and parts revenue totaled $2.9 million for the fiscal year ended March 31, 2002. The Company earned $635,000 in contract research and engineering revenues in fiscal 2002. There were no contract research and engineering revenues in fiscal 2001. The Company's High Energy Systems division decreased revenues to external customers by $1,491,000 to $2,904,000 in fiscal 2002 as compared to $4,395,000 in fiscal 2001 due to decreased demand from its primary customer. Domestic revenues increased from 47% of total revenues in fiscal 2001 to 70% of total revenues in fiscal 2002. This increase is due primarily to the increase in domestic sales immediately following the events of September 11th. One customer, an agency of the U.S. Government, accounted for 28% of revenues during the fiscal year ended March 31, 2002.

Cost of sales and contracts in fiscal 2002 of $49,357,000 was $1,798,000 lower than the previous year primarily due to the decreased system revenues. Cost of sales and contracts represented 75% of revenues during fiscal 2002, compared to 76% in fiscal 2001. This percentage decrease in the cost of sales was due to a shift in product mix as ParcelSearch sales, a higher margin product line, made up a greater percentage of the overall revenues in fiscal 2002.

Selling, general and administrative expenses of $12,753,000 were $3,065,000 higher than the previous year and represented 20% of revenues, compared to 14% in fiscal 2001. The increased spending level was primarily due to $1.6 million in legal expenses incurred during the year related to the Heimann litigation and increased personnel, financing and insurance related costs.

Company funded research and development spending increased to $7,136,000 in fiscal 2002, a 41% increase compared to the $5,060,000 in spending in fiscal 2001. Research and development spending in fiscal 2002 and fiscal 2001 was 11% and 8% of revenues, respectively. The Company invested significantly in research and development spending in fiscal 2002 in development of new products and product enhancements, most notably its Shaped Energy technology, as well as product upgrades to improve manufacturability to meet anticipated post-September 11th increased demand and to address vendor obsolescence issues.

Other expenses decreased $4,000 in the year to $662,000 in fiscal 2002 as increased borrowings under the Company's line of credit were offset by decreased interest rates during the year.

The Company experienced pre-tax operating losses in the current year as it invested in infrastructure and research and development projects in anticipation of increased demand that did not occur in all product lines. The Company has reviewed its deferred tax assets as a whole for realizability over the next three to five years in light of the uncertain and variable demand seen and has recorded a valuation reserve against its deferred tax asset to bring this asset to an amount which is more likely than not to be realized.

The Company recorded a net loss of $4,512,000 for fiscal year 2002 as compared to income of $660,000 in the previous year.

Liquidity and Capital Resources

Cash and cash equivalents at year-end decreased by $2,006,000 to $5,585,000 at March 31, 2003, compared to $7,591,000 at March 31, 2002. Cash flow used for operations of $4,895,000 was impacted by the following:

- A decrease in inventories of $1,650,000 as the Company utilized the significant purchases of raw materials acquired in the fourth quarter of fiscal 2002.

- An increase in year-end reserves balances for excess and obsolete inventory, accounts receivable and warranties of $2,800,000. A $3,400,000 charge was taken for excess and obsolete inventory in fiscal 2003 based on the Company's forecast of future sales and the recoverability analysis. Warranty reserves are based on actual cost trends and historical data supported a $344,000 increase to the reserve in fiscal 2003. Accounts receivable and contract reserves did not change materially from year to year.

- An increase in accounts receivable of $3,421,000 from the prior year due to the timing of milestone billings on fixed price contracts.

- A decrease in customer deposits of $2,128,000 due to milestones payments received on certain long-term contracts.

- An increase in unbilled costs and fees of $1,113,000 due to longer milestones on certain contracts.

Cash and cash equivalents were $7,591,000 at March 31, 2002 as compared to $1,206,000 at March 31, 2001. Cash used for operating activities of $260,000 was attributable to the following:

- An increase in inventory balances of $7,421,000 as the Company, in response to the events of September 11th and the anticipated increase in demand for security systems, committed to significant volume purchases of raw materials in late fiscal 2002 and increased production of CargoSearch and ParcelSearch systems in the third and fourth quarters of fiscal 2002.

- A decrease in accounts receivable and unbilled cost and fees due to the timing of milestone billings and collections on certain fixed price contracts.

Net cash of $7.6 million was used for investing activities in fiscal 2003. Fiscal 2003 capital expenditures totaled $1.2 million versus $1.1 million for fiscal 2002. Investments in fixed assets were comprised primarily of information technology, a new phone system and furniture and fixtures. The Company invested $4.5 million in short-term investments during the year and at year-end had $1.9 million of restricted cash.

Net cash provided by financing activities was $10.5 million. On November 30, 2000, the Company signed two credit agreements with HSBC Bank USA ("HSBC"). The first agreement was for a $10.0 million domestic revolving credit facility to support the Company's routine working capital and standby letter of credit needs. The second was a $30.0 million export credit and security agreement, guaranteed by the Export-Import Bank of the United States to support the Company's overseas contract, trade finance and working capital needs. On February 14, 2002, these credit agreements were amended to increase the domestic revolving credit facility to $20.0 million and to reduce the export credit facility to $20.0 million in anticipation of higher domestic demand. This agreement was due to expire on November 30, 2002. These agreements were further amended on November 28, 2002 to reduce the domestic revolving credit facility to $5 million, with maximum borrowings set at the lower of: (a) the sum of 85% of eligible domestic accounts receivable plus the lower of: (i) 40% of eligible raw materials and work-in-process inventory; or; (ii) $2 million, or; (b) $5 million. In addition, the interest rate and certain financial covenants were amended and the expiration date of the facility was extended to February 28, 2003. In February 2003 and May 2003, these agreements were further amended to extend expiration to July 31, 2003. The credit facility, as amended, bears an interest rate at the HSBC Bank USA prime rate plus $^{1}/_{4}$% or LIBOR plus 2.0% at the Company's option (4.5% at March 31, 2003). At the end of fiscal 2003, there were no borrowings outstanding and $4.3 million in standby letters of credit were in effect against this credit facility. No amounts have been drawn against these letters of credit. The credit agreements are collateralized by certain assets of the Company, and contain certain restrictions, including limitations on the amount of distributions that can be made to stockholders, encumbrances of assets, and loans that can be made to officers, and requires the maintenance of certain financial covenants. As of March 31, 2003, the Company was not in compliance with its tangible net worth and earnings covenants, but has obtained a waiver from the bank for these non-compliances for the year-end. Given the significant losses of fiscal 2003, the Company does not expect to be in compliance with the tangible net worth covenant in the coming year. The Company will request waivers of this covenant as required at each quarter end. If the Company is unable to obtain such waivers, HSBC could terminate the Company's domestic revolving credit and export credit facilities. In addition, the current credit agreements expire in July of 2003 and there can be no assurance that HSBC will renew the credit agreements or that alternative financing can be obtained. Management believes the Company's working capital requirements through March 31, 2004 can be met without the line of credit. In addition, if the Company's credit facility were terminated, it would also preclude the Company from obtaining financing through its current secured export credit and security agreement that could negatively impact the Company's ability to support international sales. However, management believes the Company's planned level of 2004 revenues can be achieved without access to export credit.

On May 28, 2002, the Company closed on a private placement offering of common stock and warrants. A total of 1,115,000 shares were sold to accredited investors at a price of $17.64 each. Net proceeds to the Company approximated $18.4 million and were used in part to repay $9.3 million outstanding on the line of credit. In addition, warrants to purchase additional 295,475 shares of common stock at a price of $23.52 were issued. These warrants have a five-year life, expiring in May 2007. In addition, in fiscal 2003, the Company received $1,381,000 in proceeds from the exercise of stock options.

The Company leases various office and manufacturing facilities under noncancelable operating leases. Future minimum rental payments under the Company's operating leases, excluding real estate taxes, insurance and operating costs paid by the Company required over the initial terms of the leases are as follows:

Year Ending March 31,	**(in thousands)**
2004	$ 1,006
2005	872
2006	42
2007	2
	$ 1,922

Historically, the Company has funded it operations and capital expenditures with cash generated by operations, including deposits from customers on long-term projects, or from lines of credit available to the Company. The Company currently has no debt outstanding and believes that its cash flows from operations and cash on hand are sufficient to meet the current and foreseeable operating requirements of the Company's business.

Inflation The Company does not believe that inflation has had a material effect on its results of operation. There can be no assurance, however, that the Company s business will not be affected by inflation in the future.

Purchase Commitments In the normal course of business, the Company enters into purchase orders with its vendors for the purchase of materials or services to meet its production needs. Certain single source vendors or vendors producing custom material require significant lead times from order to delivery of their material. In response to the expected increased demand subsequent to September 11th, the Company entered into certain purchase commitments with key suppliers for this long-lead material. Certain of these purchase orders related to these vendors contained cancellation clauses requiring the Company to pay for a portion or all of the work in process upon cancellation of an order or to purchase a certain minimum quantities of material by a future date. Should the demand for the Company's products decline significantly, or should there be a significant shift in the mix of products being demanded, the Company may incur cancellation charges that could be material to the Company's results of operations. To date, the Company has not experienced any material losses related to cancellation penalties.

Critical Accounting Policies

The Company considers certain accounting policies related to revenue recognition, inventories and the related allowance for obsolete and excess inventory, warrant liability, and income taxes to be critical policies due to the estimation processes involved in each.

Revenue recognition The Company derives a significant portion of its revenue from fixed-price contracts, which require the accurate estimation of the cost, and scope of each contract. The majority of CargoSearch systems are sold under fixed-price arrangements. Revenue is recognized using percentage of completion accounting, generally using a total costs method to measure the percent complete with revisions to estimates reflected in the period in which changes become known. If the Company does not accurately estimate the resources required or the costs to be incurred under the contracts, then future margins may be significantly and negatively affected or losses on existing contracts may need to be recognized. Any such resulting reductions in margins or contract losses could be material to the Company's results of operations.

The Company recognizes certain CargoSearch system sales and other product revenue, primarily ParcelSearch systems and spare parts, in accordance with SEC Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements ("SAB 101"), as amended by SAB 101A and 101B. SAB 101 requires that four basic criteria must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services rendered; (3) the fee is fixed and determinable; and (4) collectibility is reasonably assured. Determination of criteria (3) and (4) are based on management's judgments regarding the fixed nature of the fee charged for services rendered and products delivered and the collectibility of those fees. Should changes in conditions cause management to determine these criteria are not met for certain future transactions, revenue recognized for any reporting period could be adversely affected.

The Company's products are generally covered by a warranty for a one-year period. The Company accrues a warranty reserve for estimated costs to provide warranty services. The Company's estimate of costs to service its warranty obligations is based on historical experience and expectation of future conditions. To the extent the Company experiences increased warranty claim activity or increased costs associated with servicing those claims, its warranty accrual will increase resulting in decreased gross profit.

Inventories and Related Allowance for Obsolete and Excess Inventory Inventories are valued at the lower of cost or net realizable value on an average cost method. The Company regularly reviews inventory quantities on hand and records a provision for excess and obsolete inventory based primarily on the estimated forecast of product demand over the next twelve to eighteen months. As demonstrated during 2002 and 2003, demand for products can fluctuate significantly. A significant increase in the demand for the Company's products could result in a short-term increase in inventory balances while a significant decrease in demand could result in an increase in the amount of excess inventory quantities on hand. Additionally, estimates of future product demand may prove to be inaccurate, in which case the Company may have understated or overstated the provision required for excess and obsolete inventory. In the future, if inventory were determined to be overvalued, the Company would be required to recognize such costs in its cost of goods sold at the time of such determination. Likewise, if inventory is determined to be undervalued, the Company may have over-reported costs of goods sold in previous periods and would be required to recognize such additional operating income at the time of sale. Therefore, although the Company makes every effort to ensure the accuracy of forecasts of future product demand, any significant unanticipated changes in demand or technological developments could have a significant impact on the value of its inventory and reported operating results.

Warrant Liability In fiscal 2003, the Company issued 295,475 warrants in connection with a private placement offering of common stock. These warrants can be exchanged for cash under certain circumstances including a merger, sale or tender offer of the Company and as such the Company recorded the fair value of these warrants as a long-term liability on the balance sheet. The fair value of these warrants is adjusted each period with the resulting gain or loss recorded as other income (expense) in the statement of operations. The Black-Scholes method is used to value the warrants and the calculation requires the use of estimates for stock price volatility and interest rates. The Black-Scholes value of these warrants can fluctuate significantly based on the current fair market value of the Company's common stock, changes in interest rates or changes in the volatility of the Company's stock price.

Income Taxes The Company accounts for income taxes in accordance with SFAS No. 109, "Accounting for Income Taxes." Accordingly, the Company recognizes deferred income taxes based on the expected future tax consequences of differences between the financial statement basis and the tax basis of assets and liabilities, calculated using enacted tax rates in effect for the year in which the differences are expected to be reflected in the tax return. The Company records a valuation allowance against any net deferred tax assets if it is more likely than not that they will not be realized.

New Accounting Pronouncements

In November 2002, the FASB issued FASB Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others," which elaborates on required disclosures by a guarantor in its financial statements about obligations under certain guarantees that it has issued and clarifies the need for a guarantor to recognize, at the inception of certain guarantees, a liability for the fair value of the obligation undertaken in issuing the guarantee. The Company has adopted the disclosure provisions of this interpretation for the fiscal year ended March 31, 2003 and has determined that the recognition principles are not applicable.

In November 2002, the Task Force reached a consensus on Emerging Issues Task Force Issue No. 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables". This issue addresses how to determine whether an arrangement involving multiple deliverables contains more than one unit of accounting and how arrangement consideration should be measured and allocated to the separate units of accounting. This guidance is effective for the Company beginning in fiscal 2005 with early application permitted. The Company is currently evaluating the impact of this guidance on its revenue recognition policies.

In July 2002, the FASB issued Statement of Financial Accounting Standards No. 146, "Accounting for Costs Associated with Exit or Disposal Activities" (FAS 146), which nullifies Emerging Issues Task Force (EITF) Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)." FAS 146 requires a liability for a cost associated with an exit or disposal activity be recognized and measured initially at its fair value in the period in which the liability is incurred. If fair value cannot be reasonably estimated, the liability shall be recognized initially in the period in which fair value can be reasonably estimated. The provisions of FAS 146 will be effective for the Company prospectively for exit or disposal activities initiated after December 31, 2002; however, this standard is not expected to have a significant impact on its financial condition, results of operations, or cash flows.

In December 2002, the FASB issued SFAS No. 148 "Accounting for Stock- Based Compensation-Transition and Disclosure- an amendment of FASB Statement No. 123" (FAS 148). This statement amends SFAS No. 123 "Accounting for Stock Based Compensation" (FAS 123) to provide alternative methods of voluntarily transitioning to the fair value based method of accounting for stock-based employee compensation. FAS 148 also amends the disclosure requirements of FAS 123 to require disclosure of the method used to account for stock-based employee compensation and the effect of the method on reported results in both annual and interim financial statements. The amended disclosure provisions are effective for the fiscal years ending after December 31, 2002 and the Company has adopted the amended disclosure provisions as of March 31, 2003. The Company has not decided whether it will voluntarily change to the fair value based method of accounting for stock-based employee compensation at this time.

In January 2003, the FASB issued FASB Interpretation No. 46, Consolidation of Variable Interest Entities and Interpretation of ARB 51 (FIN 46), which requires the consolidation of certain entities considered to be variable interest entities (VIE's). An entity is considered to be a VIE when it has equity investors which lack the characteristics of a controlling financial interest, or its capital is insufficient to permit it to finance its activities without additional subordinated financial support. Consolidation of a VIE by an investor is required when it is determined that the investor will absorb a majority of the VIE's expected losses or residual returns if they occur. The company adopted FIN 46 as of March 31, 2003 and such adoption did not have an effect on the consolidated financial statements.

Forward-Looking Information and Factors Affecting Future Performance

Some of the statements contained in this report and in the documents incorporated by reference are forward-looking made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. In essence, forward-looking statements are predictions of future events. Although we would not make forward looking statements unless we believe we have a reasonable basis for doing so, we cannot guarantee their accuracy and actual results may differ materially from those we anticipated due to a number of uncertainties, many of which we are not aware. It should also be understood that we have no plans to update our forward-looking statements. Our forward-looking statements are accurate only as of the date of this report, or in the case of forward-looking statements in documents incorporated by reference, as of the date of those documents. Certain risk factors, which might cause actual results to differ materially from those projected or that may otherwise affect future performance, are set forth below.

The Company's reliance on a small number of customers for a large portion of its revenues could harm its business and prospects.

The Company's business is heavily dependent on sales to a small number of customers, which include agencies of the United States government. During fiscal 2003, four customers accounted for 38% of the Company's total revenues. During fiscal 2002, five customers accounted for 62% of the Company's total revenues and during fiscal 2001, three customers accounted for 55% of total revenues. During fiscal 2003, the Company's largest customer, an agency of the U.S. government, accounted for approximately 17% of total revenues. In general, the Company's government contracts may be terminated at the government's discretion. The termination of the Company's relationship with one or more of its significant customers or the reduction or delay of orders of its systems by these customers would substantially reduce the Company's revenues and its business and prospects may be harmed.

The Company conducts its business worldwide, which exposes it to a number of difficulties in coordinating its international activities and dealing with multiple regulatory environments.

The Company's international business, including sales to foreign governments, accounted for approximately 15%, 30% and 53% of its net revenues for the fiscal years ended March 31, 2003, March 31, 2002 and March 31, 2001, respectively. Although fiscal 2003 revenues reflect a focus domestically, the Company anticipates that international sales will account for a significant percentage of its revenues in the future. As a result of the Company's worldwide business operations, it is subject to various risks, including:

- international regulatory requirements and policy changes;
- lengthy sales cycles;
- longer payment cycles of foreign customers;
- difficulties in inventory management, accounts receivable collection and the management of distributors or representatives;
- difficulties in staffing and managing foreign operations;
- geopolitical instability;
- political and economic changes and disruptions;
- favoritism towards local suppliers;
- governmental currency controls;
- currency exchange rate fluctuations; and
- tariff regulations.

Although the Company's international sales have been denominated primarily in U.S. dollars, changes in currency exchange rates that increase the relative value of the U.S. dollar may make it more difficult for the Company to compete with foreign manufacturers on price or otherwise have a material adverse effect on its sales and operating results.

The Homeland Security focus has increased financial expectations that may not materialize.

Following the September 11, 2001 terrorist attacks, the United States government made it a national priority with the creation of the Office of Homeland Security and other initiatives to increase security in airports, high-threat federal facilities, U.S. military bases, and seaports and borders. The efforts of the United States government to revamp security in the United States have resulted in increased interest in the Company's X-ray inspection products. The Company is uncertain whether the level of demand for its products will be as high as anticipated. The Company is uncertain what solutions, if any, ultimately will be adopted and implemented by the United States government and other international entities to combat terrorism and whether the Company's products will be a part of the solution. Even if the Company's products are considered as part of the security solution, it is unclear what level the Company will be involved and how quickly funding to purchase its products may be made available. The Company may incur non-recoverable expenditures in anticipation of future demand for its products that may not materialize. All of these factors may adversely impact the Company's operations and create unpredictability in its revenues and operating results.

The Company's lengthy sales cycle requires it to incur significant expenses with no assurance that it will generate revenue or recover such expenses.

A substantial portion of the Company's sales depends in significant part upon the decision of governmental agencies to upgrade or expand security at border crossing inspection sites, existing airports, seaports and other facilities. Accordingly, a portion of the Company's product sales is subject to delays associated with the lengthy approval processes that often accompany such capital expenditures. During these approval periods, the Company expends significant financial and managerial resources in anticipation of future orders that may not occur. If the Company fails to receive an order after expending these resources, it may be unable to generate sufficient revenue to recover the costs incurred and its business and prospects may be harmed.

The Company's business is dependent upon governmental policies and appropriations.

The Company's largest customers are governmental agencies and demand for its products is dependent upon national priorities and governmental initiatives. These priorities and initiatives are subject to change from time to time in response to the economic and political environment. The Company is also exposed to the United States budget approval and appropriation cycle, which may be subject to significant and unpredictable delays. If demand for the Company's products is reduced because of a change in economic or political conditions or if there are delays in receiving governmental approvals and appropriations, sales of the Company's products may be adversely affected and its business and prospects may be harmed.

Changes in governmental regulations may reduce demand for the Company's products or increase its expenses.

The Company competes in markets in which the Company or its customers must comply with federal, state, local and foreign regulations, such as health and safety regulations. The Company develops, configures and markets its products to meet its customers' needs created by these regulations. Any significant change in these regulations could reduce demand for the Company's products or increase its costs to comply with new regulations, both of which may adversely affect its operating results.

The Company's reliance on only a limited number of suppliers for some key components for its products could harm its business and prospects.

The Company relies on only a limited number of suppliers for some key components for its products. The Company's reliance on limited supply sources reduces its control over timely delivery, price increases, reliability, and quality of critical components. Obtaining alternative sources of supply of these key components could involve significant delays and other costs, and may not be available to the Company on reasonable terms, if at all. If the Company changes any of its suppliers, the potential new supplier would be required to go through a qualification process, creating potential delays or reductions in product shipments. The failure of any supplier to provide quality and timely components at an acceptable price, or an interruption of supplies from such a supplier could result in lost or deferred sales, which would harm the Company's business and prospects.

Fluctuations in the Company's quarterly operating results may cause its stock price to decline.

Given the nature of the markets in which the Company participates, it cannot reliably predict future revenue and profitability. A high proportion of the Company's costs are fixed, due in part to its significant sales, research and development, and manufacturing costs. As a result of its fixed costs, small declines in revenue could disproportionately affect the Company's operating results in a quarter. Factors that may affect the Company's quarterly operating results and the market price of its Common Stock include:

- demand for and market acceptance of its X-ray inspection systems;
- lengthy sales cycles and the effect of large orders;
- changes in political agendas or national priorities;
- adverse changes in the level of economic activity in regions in which the Company does business;
- political unrest in the regions where the Company transacts business;
- adverse changes in industries on which the Company is particularly dependent;
- competitive pressures resulting in lower selling prices for its products;
- changes in the portions of its revenue represented by its various products and customers;
- delays or problems in the introduction of new products;
- the Company's competitors' announcement or introduction of new products, services or technological innovations;
- variations in the Company's product mix;
- the timing and amount of the Company's expenditures in anticipation of future sales;
- increased costs of raw materials or supplies; and
- changes in the volume or timing of product orders.

The Company could incur substantial costs as a result of product liability claims and adverse publicity if its X-ray inspection systems fail to detect bombs, explosives, weapons, contraband or other threats to personal safety.

If the Company's X-ray inspection systems fail to detect the presence of bombs, explosives, weapons, contraband or other threats to personal safety, the Company could be subject to product liability claims and negative publicity, which could result in increased costs, reduced sales, and a decline in the market price of the Company's Common Stock. There are many factors beyond the Company's control that could result in the failure of its products to detect the presence of bombs, explosives, weapons, contraband or other threats to personal safety. Examples of these factors include operator error or misuse of or malfunction of its equipment. The failure of the Company's systems to detect the presence of these dangerous materials may lead to personal injury, loss of life, and extensive property damage and resulting claims against the Company.

The Company's insurance may be insufficient to protect it from product liability claims.

The Company's product liability and umbrella liability insurance may be insufficient to protect it from product liability claims. Moreover, there is a risk that product liability insurance will not continue to be available to the Company at a reasonable cost, if at all. If liability claims exceed the Company's current or available insurance coverage, its business and prospects may be harmed. Regardless of the adequacy of the Company's product liability insurance protection, any significant claim may have an adverse affect on its industry and market reputation, leading to a substantial decrease in demand for its products and reduced revenues.

The Company may not be able to fund its research and development activities.

The Company generates funds for its research and development activities from operations, private sources and the government. The Company may be unable to generate the funds necessary to support its research and development activities if it does not generate sufficient funds from operations, other potential private sources, or the government. The Company may not successfully compete with other companies and research institutions for government funding and funding from other private sources. Additionally, government-funding priorities are subject to frequent changes. For example, in fiscal 2003 and 2002, the Company earned $747,000 and $635,000, respectively, for government-sponsored research and development. In fiscal 2001 the Company did not receive any funds to conduct government-sponsored research and development. There is no guarantee that the Company will receive funds for government-sponsored research in the future. If the Company is unable to fund its research and development activities through its operations or from outside sources, the Company may be unable to continue to innovate or bring its innovations to market on a timely or cost effective basis, or its innovations may be surpassed by other competitors or new technologies.

The Company's success depends on new product development.

The Company's continuing research and development program is designed to develop new products and to enhance and improve its current products. The Company plans to expend significant resources on the development of its new products. The successful development of its products and product enhancements is subject to numerous risks, both known and unknown, including:

- unanticipated delays;
- access to capital;
- budget overruns;
- technical problems; and
- other difficulties that could result in the abandonment or substantial change in the design, development and commercialization of new products and product enhancements, including, for example, changes requested or required by governmental and regulatory agencies.

Given the uncertainties inherent with product development and introduction of X-ray inspection systems, the Company cannot assure that its product development efforts will be successful on a timely basis or within budget, if at all. The Company's failure to develop new products and product enhancements on a timely basis or within budget would harm its business and prospects.

The Company's success depends upon its ability to adapt to rapid changes in technology and customer requirements.

The market for the Company's products has been characterized by rapid technological changes, frequent product introductions and evolving industry standards and customer requirements. The Company believes that these trends will continue into the foreseeable future. The Company's success will depend, in part, upon its ability to enhance its existing products, successfully develop new products that meet changing customer and regulatory requirements and gain market acceptance. If the Company fails to do so, its products may be rendered obsolete or uncompetitive by new industry standards or changing technology, in which case its revenue and operating results would suffer. In developing any new product, the Company may be required to make a substantial investment before it can determine the commercial viability of the new product. If the Company fails to accurately foresee its customers' needs and future activities, it may invest heavily in research and development of products that do not lead to significant revenue.

The Company may not be able to compete successfully.

A number of companies have developed products that compete with the Company's X-ray inspection products. Many of the Company's competitors are larger and have greater financial resources than it does. Some of its competitors have more extensive research, marketing and manufacturing capabilities and greater technical and personnel resources than the Company does, and may be better positioned to continue to improve their technology in order to compete in an evolving industry. The Company's failure to compete successfully could decrease demand for its products or make its products obsolete.

In the inspection systems market, competition is based primarily on the following factors:

- product performance, functionality and quality;
- price;
- the overall costs of the system;
- prior customer relationships;
- technological capabilities of the product;
- certification by government authorities;
- local market presence; and
- breadth of sales and service organization.

To remain competitive, the Company must develop new products and periodically enhance its existing products in a timely manner. The Company anticipates that it may have to adjust the prices of some of its products to stay competitive. In addition, new competitors may emerge, and entire product lines may be threatened by new technologies or market trends that reduce the value of these product lines.

The Company's business could be harmed if it is unable to protect its intellectual property.

The Company relies primarily on a combination of trade secrets, patents, copyrights, trademarks, licensing arrangements and confidentiality procedures to protect its technology. Despite its precautions, the steps the Company has taken to protect its technology may be inadequate. Existing trade secret, patent, trademark and copyright laws offer only limited protection. The Company's patents could be invalidated or circumvented. The laws of some foreign countries in which the Company's products are or may be developed, manufactured or sold may not protect its products or intellectual property rights to the same extent as do the laws of the United States. This may make the possibility of piracy of the Company's technology and products more likely. The Company cannot assure that the steps it has taken to protect its intellectual property will be adequate to prevent misappropriation of its technology. The Company's business could be harmed if it is unable to protect its intellectual property.

The Company's business may be materially and adversely affected by infringement claims initiated by the Company or its competitors.

Initiating or defending against the enforcement of the Company's intellectual property rights may result in significant, protracted, and costly litigation. The Company was previously involved in civil litigation filed by a competitor seeking a declaratory judgment that the competitor's product did not infringe upon certain of the Company's patents. The Company was successful in that action. The Company is currently involved in a civil action filed by the Company against a competitor alleging patent infringement and misappropriation of trade secrets. The Company expects intellectual property disputes to be an ordinary part of its business for the foreseeable future. The Company may initiate claims or litigation against third parties for infringement of its intellectual property rights, or to establish the validity of its property rights. There can be no assurance that the Company will prevail in any such action. Litigation by or against the Company could result in significant expense to it and divert the efforts of technical and management personnel, whether or not such litigation results in a favorable outcome for the Company. In the event of an adverse result in any such litigation, the Company could be required to pay substantial damages, cease the manufacture, use and sale of infringing products, expend significant resources to develop non-infringing technology, discontinue the use of certain processes, or obtain licenses for the infringing technology. If a license were required, the Company cannot assure that it would be able to obtain one on commercially reasonable terms, if at all. The Company cannot assure that it will be successful in developing non-infringing technology or that the cost or time required to develop such technology will be reasonable.

The Company's success depends on its ability to attract and retain qualified management professionals.

Due to the recent departures of our CEO and other members of our senior management team, future operating results will be largely dependent upon our ability to recruit and retain the services of professionals to fill these roles from a limited pool of qualified candidates. Our future success will continue to depend in large measure upon the continued contributions of our senior management team and other key personnel. If we lose professionals or are unable to attract new talent, we will not be able to maintain our position in the market or grow our business.

Future sales of the Company's common stock by existing stockholders could depress the market price of the Company's common stock.

Substantially all of the Company's outstanding shares of common stock are freely tradable without restriction or further registration. Affiliates must sell all shares they own in compliance with the volume and other requirements of Rule 144, except for the holding period requirements. Nevertheless, sales of substantial amounts of common stock by the Company's stockholders, or even the potential for such sales, may cause the market price of the Company's common stock to decline and could impair the Company's ability to raise capital through the sale of the Company's equity securities.

Existing external financing may not be available in the future.

The Company may require additional capital to finance continuing operations. The Company cannot assure that operations will continue to be profitable, that it will generate levels of revenues and cash flows sufficient to fund operations, or, if necessary, that the Company will be able to obtain additional financing on satisfactory terms, if at all. Any existing financing arrangements may not be available or sufficient to meet the Company's cash needs or may not be available in the future, or, if available, at a cost that the Company believes is reasonable.

Given the significant losses of fiscal 2003, the Company does not expect to be in compliance with the tangible net worth covenant contained in its credit agreements with HSBC Bank USA ("HSBC") in the coming year. The Company will request waivers of this covenant as required at each quarter end. To the extent the Company is unable to obtain such waivers, HSBC could terminate the Company's domestic revolving credit and export credit facilities. In addition, the current credit agreements expire in July of 2003 and there can be no assurance that HSBC will renew the credit agreements or that alternative financing can be obtained. Management believes the Company's working capital requirements through March 31, 2004 can be met without the line of credit. In addition, to the extent the Company's credit facility is terminated, it would preclude the Company from obtaining financing through its current secured export credit and security agreement which could negatively impact the Company's ability to support international sales. However, management believes the Company's planned level of sales in 2004 can be achieved without access to export credit.

The volatility of the Company's stock price could adversely affect an investment in the Company's common stock.

The market price of the Company's common stock has been, and may continue to be, highly volatile. The Company believes that a variety of factors could cause the price of the Company's common stock to fluctuate, perhaps substantially, including:

- announcements of developments related to the Company's business;
- quarterly fluctuations in the Company's actual or anticipated operating results and order levels;
- general conditions in the worldwide economy;
- announcements of technological innovations;
- new products or product enhancements by the Company or its competitors;
- developments in patents or other intellectual property rights and litigation; and
- developments in the Company's relationships with its customers and suppliers.

In addition, in recent years the stock market in general and the markets for shares of small capitalization and "high-tech" companies in particular, have experienced extreme price fluctuations which have often been unrelated to the operating performance of affected companies. Any such fluctuations in the future could adversely affect the market price of the Company's common stock.

Provisions in the Company's articles of organization and the Company's shareholder rights plan may have the effect of discouraging advantageous offers for the Company's business or common stock and limit the price that investors might be willing to pay in the future for shares of the Company's common stock.

Provisions in the Company's articles of organization and the Company's shareholder rights plan may have the effect of discouraging or preventing a change in control. These provisions could limit the price that certain investors might be willing to pay in the future for shares of the Company's common stock. Specifically, the Company's articles of organization authorize its Board of Directors to issue up to 100,000 shares of preferred stock in one or more series, to fix certain rights, preferences, privileges and restrictions granted to or imposed upon any wholly unissued shares of preferred stock, to fix the number of shares constituting any such series, and to fix the designation of any such series, without further vote or action by its shareholders. The terms of any series of preferred stock, which may include priority claims to assets and dividends and special voting rights, could adversely affect the rights of the holders of common stock and thereby reduce the value of the Company's common stock. The Company has no present plans to issue shares of preferred stock. The Company has in place a shareholder rights plan, adopted in 1998, under which its stockholders are entitled to purchase shares of its preferred stock under certain circumstances. These circumstances include the purchase of 15% or more of the outstanding shares of common stock by a person or group, or the announcement of a tender or exchange offer to acquire 15% or more of the outstanding common stock. The shareholder rights plan may have the effect of impeding or preventing certain types of transactions involving a change in control of the Company that could be beneficial to the stockholders.

Inability to obtain former auditor's, Arthur Andersen LLP, consent may limit stockholder's right of recovery under Section 11(a)(4) of the Securities Act of 1933.

Prior to July 18, 2002, Arthur Andersen LLP served as the Company's independent auditors. On March 14, 2002 Arthur Andersen was indicted on federal obstruction of justice charges arising from the government's investigation of Enron Corporation and on June 15, 2002 Arthur Andersen was found guilty. Arthur Andersen informed the SEC that it would cease practicing before the SEC by August 31, 2002, unless the SEC determined that another date was appropriate. On July 18, 2002, the Company dismissed Arthur Andersen and retained PricewaterhouseCoopers as its independent auditors for its current fiscal year ended March 31, 2003. SEC rules require the Company to present historical audited financial statements in various SEC filings, such as registration statements, along with Arthur Andersen's consent to the Company's inclusion of Arthur Andersen's audit report in those filings. Since the Company's former engagement partner and audit manager have left Arthur Andersen and in light of the announced cessation of Arthur Andersen's SEC practice, the Company has not be able to obtain the consent of Arthur Andersen to the inclusion of Arthur Andersen's audit report in the Company's relevant current and future filings. The SEC recently has provided regulatory relief designed to allow companies that file reports with the SEC to dispense with the requirement to file a consent of Arthur Andersen in certain circumstances, but purchasers of securities sold under the Company's registration statements, which were not filed with the consent of Arthur Andersen to the inclusion of Arthur Andersen's audit report will not be able to sue Arthur Andersen pursuant to Section 11(a)(4) of the Securities Act of 1933 and therefore the purchasers' right of recovery under that section may be limited as a result of the lack of the Company's ability to obtain Arthur Andersen's consent.

The Company does not plan to pay dividends on its common stock.

The Company has not declared or paid a cash dividend on its common stock in recent years and it does not expect to declare or pay any cash dividends in the foreseeable future. The Company intends to retain all earnings, if any, in order to expand its operations. Investors should not rely on dividends from the common stock as a possible source of income.

ITEM 7(A). QUANTITIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company is subject to interest rate risk on its credit facilities which have variable interest rates tied to the Prime Rate or LIBOR. As of March 31, 2003, the Company had no variable interest rate debt outstanding. See Note 3 of Notes to Consolidated Financial Statements for a discussion of our long-term indebtedness.

The cash accounts for the Company's operations in Singapore, Hong Kong, England, and Abu Dhabi are maintained in Singapore dollars, Hong Kong dollars, pounds sterling and dirhams, respectively. Foreign currency accounts are marked to market at current rates that resulted in immaterial translation adjustments to stockholders equity. The gains and losses from foreign currency transactions are included in the statement of operations for the period and were also immaterial. A hypothetical 10% change in foreign currency rates would not have a material impact on the Company's results of operations or financial position.

As of March 31, 2003, the Company holds short-term investments consisting of money market funds and U.S. government and government agency bonds. The Company s primary objective with its investment portfolio is to invest available cash while preserving principal and meeting liquidity needs. These investments have an average interest rate of approximately 1.7% and are subject to interest rate risk. As a result of the average maturity and conservative nature of the investment portfolio, a sudden change in interest rates would not have a material effect on the value of these investments.

In Fiscal 2003, the Company issued 295,475 warrants in connection with a private placement offering of common stock. These warrants can be exchanged for cash under certain circumstances including a merger, sale or tender offer of the Company and as such a liability equal to Black-Scholes value of the warrants is recorded on the balance sheet. Changes in the fair value of the warrants are recorded as other income (expense). The Black-Scholes value of these warrants can fluctuate significantly based on the current fair market value of the Company's common stock. A 10% change in the fair market value of the Company's common stock, holding other assumptions constant, would have approximately a $135,000 impact on earnings.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements and supplementary financial information listed in the Index to Consolidated Financial Statements and Schedule on page 30 are filed as part of this Annual Report on Form 10-K and are incorporated into this Item by reference.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Information regarding the change in the Company's principal accountants was provided in the Company's Current Report on Form 8-K filed July 18, 2002.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE COMPANY

Directors and Executive Officers of the Company as of July 15, 2003.

Name	Age	Positions and Offices of Company Held	Date Assumed Each Position
DIRECTORS			
William E. Odom	71	Director Chairman	September 1996 September 1998
Roger P. Heinisch	65	Director Interim President and Chief Executive Officer	August 1999 May 2003
Hamilton W. Helmer	56	Director	February 1993
Donald J. McCarren	63	Director	February 1993
Ernest J. Moniz	58	Director	October 2002
Ralph S. Sheridan	53	Director Former President & CEO	January 1994 September 1993— May 2003
Carl W. Vogt	67	Director	June 1997
EXECUTIVE OFFICERS (Who are not also Directors)			
Ralph G. Foose	59	Vice President, Operations	September 1999
Roger P. Heinisch	65	Director Interim President and Chief Executive Officer	August 1999 May 2003
Paul Theodore Owens	50	Vice President, Treasurer and Chief Financial Officer	October 2002

All Directors hold office until the next annual meeting of Stockholders and until their successors are duly elected and qualified. No family relationship exists between any of the listed Directors and Executive Officers.

General William E. Odom is the Director of National Security Studies for the Hudson Institute in Washington, D.C. and an adjunct Professor in the Department of Political Science at Yale University. Prior to joining the Hudson Institute in 1988, General Odom spent 34 years as an officer in the United States Army, retiring with the rank of Lieutenant General. While on active duty, General Odom served as Director of the National Security Agency for three years, Assistant Chief of Staff for Intelligence for the Department of the Army for four years and Military Assistant to the President's National Security Advisor for four years. General Odom received his B.S. degree from West Point and Masters and Ph.D. degrees from Columbia University. General Odom is on the Board of Directors of V-ONE Corporation of Rockville, Maryland and the Institute for the Study of Diplomacy at Georgetown University. General Odom is the author of five books and numerous articles.

Dr. Roger P. Heinisch is currently serving as Interim President and CEO of AS&E and has served on the Company's Board of Directors since August 1999. In 1968 Dr. Heinisch joined the Honeywell Corporation where he served in various scientific and engineering positions before becoming Director of Research in 1978. In 1980, Dr. Heinisch became the Director of the Systems and Research Center and was named Vice President of the Center in 1982. He became Vice President of Honeywell's Flight Systems Operations in 1985. In 1988, Dr. Heinisch was appointed Corporate Vice President of

Advanced Technology. In 1990, he became Vice President of Materials and Manufacturing for the Defense Systems group. When Alliant Techsystems was spun off from Honeywell in 1991, he assumed the position of Vice President, Engineering with the new company. From 1995 until April of 1997 he also assumed responsibility for Information Systems and Technology at Alliant. Dr. Heinisch is a former member of the Army Science Board and has been a member of various Department of Defense review panels and technical boards. Currently, Dr. Heinisch serves on the boards of Theseus Logic Inc., Third Wave Systems and Point Cloud. Dr. Heinisch holds a B.S. in Nuclear Engineering from Marquette University, a M.S. in Nuclear Engineering from Marquette University and a Ph.D. in Engineering Science from Purdue University. In addition, Dr. Heinisch has been recognized as an Outstanding Engineering Alumnus of Marquette and a Distinguished Engineering Alumnus of Purdue.

Dr. Hamilton W. Helmer is a Managing Director of Strategy Capital, an investment firm utilizing Strategic Arbitrage™. Previously Dr. Helmer was a business strategist first with Bain & Company and then with his own firm, Helmer & Associates. Dr. Helmer received his Ph.D. in Economics from Yale University in 1978 and his BA from Williams College in 1969.

Dr. Donald J. McCarren is President of D&A Consulting, Inc., a consulting organization, focused on the healthcare industry. Previously he was President and CEO of an early stage; privately held, functional genomic research organization, AlphaGene, Inc. Dr. McCarren has also served as President of the National Center for Genome Resources, a non-profit corporation located in Santa Fe, New Mexico, which supports genome projects with expertise in bioinformatics. Prior to assuming that position in 1997, Dr. McCarren was the founder of Tacora Corporation, a medical technology company located in Seattle, Washington. From July 1992 to June 1994, he was President and Chief Operating Officer of ImmunoGen, Inc., a company focused on the delivery of small molecules using monoclonal antibodies to target cancer. Prior to that, Dr. McCarren spent almost nine years at Erbamont N.V. serving as President (1990 to 1992) of the Adria Laboratories Division of Erbamont N.V. in Columbus, Ohio, and Corporate Vice President of Worldwide Marketing and Business Development (1989 to 1990) and Vice President of Far East and Austral-Asian Operations (1986 to 1989). Dr. McCarren spent his earlier career with Abbott International, Pfizer International, Merck International and Warner Lambert. Dr. McCarren has earned an MBA and holds a Ph.D. in Developmental Economics.

Dr. Moniz is a Professor of Physics at the Massachusetts Institute of Technology where he has served on the faculty since 1973. At MIT, he served as Head of the Department of Physics and Director of the Bates Linear Accelerator Center. From October 1997 to January 2001, he was Undersecretary of the Department of Energy, responsible for the Offices of Science; Fossil Energy; Energy Efficiency and Renewable Energy; Nuclear Energy, Science and Technology; Environmental Management; and Civilian Radioactive Waste Management. He was the Department's lead negotiator for cooperative programs with Russia dealing with nuclear weapons material control and disposition. Dr. Moniz also served from 1995 to 1997 as Associate Director for Science in the Office of Science and Technology Policy in the Executive Office of the President. He previously served as a Director of AS&E from 1990 to 1995. Dr. Moniz holds a Bachelor of Science degree in physics from Boston College, a doctorate in theoretical physics from Stanford University, and honorary doctorates from the University of Athens and the University of Erlangen-Nurenburg. Dr. Moniz is a fellow of the American Association for the Advancement of Science, the Humboldt Foundation, and the American Physical Society and is also a member of the Council on Foreign Relations. He is a senior associate of the Washington Advisory Group and serves on the Boards of the Gas Technology Institute, Nexant, Inc., and the Center for the Advancement of Energy Markets.

Mr. Ralph S. Sheridan was President and Chief Executive Officer of the Company from September 1993 through May 2003, and in January of 1994, he was elected a Director. Prior to joining the Company, Mr. Sheridan ran his own consulting and investment firm, Value Management Corporation, in Waltham, Massachusetts. Prior to that, Mr. Sheridan was President and CEO (1988-1989) and Vice President of Marketing and Operations (1987-1988) of HEC Energy Corp., in

Boston, Massachusetts. Before joining HEC, Mr. Sheridan held the position of Vice President of Operations for the Engineered Systems and Controls Group (1984-1986) and Vice President of Corporate Business Development (1981-1984) at Combustion Engineering, Inc. in Stamford, Connecticut. Before this, Mr. Sheridan spent three years with W. R. Grace and five years with Continental Group in a number of jobs of increasing responsibility and scope including business development and international operations. Mr. Sheridan holds a B.S. in Chemistry and an M.B.A., both from Ohio State University. He has been an active member on the American Electronics Association Board of Directors. In addition, Mr. Sheridan serves as Chairman of the Public Safety and Justice Board of Advisors for RAND, a nonprofit institution that helps improve policy and decision-making through research and analysis.

Mr. Carl W. Vogt was elected to the Board in June 1997. He is of counsel (formerly a senior partner) in the Washington, D.C. office of the international law firm of Fulbright & Jaworski. Mr. Vogt has been with that firm since 1966, with various periods away from the firm to perform government service. In 1992, he was appointed by President Bush as the Chairman of the National Transportation Safety Board, where he served until 1994. Mr. Vogt earned his bachelor's degree from Williams College and his law degree from the University of Texas Law School.

Mr. Foose joined AS&E as Vice President of Operations after three years as President and Chief Financial Officer of Sight in Systems, a software manufacturing company. Prior to his work at Sight in Systems, Mr. Foose was President of IRD Mechanalysis where he led a company turnaround. In 1986 Mr. Foose joined Combustion Engineering as President of Taylor Instrument Systems. During his six-year tenure, the Company grew its Distributed Control Systems business from $20 million in annual sales to $150 million, while spinning the Company's Instrument business (about $80 million) into a separate division. After the purchase of its parent company, Combusion Engineering, by ABB, Mr. Foose became a member of the management team that led to the merging of the Taylor businesses into ABB's existing instrument and controls company. Early on in his career, Mr. Foose held various technical consulting and managerial positions with Booz-Allen Hamilton, AccuRay Corporation and NASA. Mr. Foose holds a B.S. in Electrical Engineering from Florida Institute of Technology and an M.S. in Computer Science from Ohio State University.

Mr. Paul Theodore Owens joined the Company in October 2002 as Vice President, Treasurer and Chief Financial Officer. Before joining AS&E, Mr. Owens served as the Chief Financial Officer of Circe Biomedical, Inc. in 2002, as Chief Financial Officer of Surgency, Inc. from 2000 to 2001, and as Chief Financial Officer of Marathon Biopharmaceuticals, LLC from 1997 to 1999. In 1993, Mr. Owens founded Brown, Thompson & Company, a consulting firm that provided a broad range of financial and administrative support services to emerging high-technology companies, and acted as principal of the firm until he joined Marathon in 1997. From 1986 to 1993, Mr. Owens was employed by Groundwater Technology, Inc., an environmental industry leader in the assessment and remediation of contaminated soil and groundwater, where he first served as the Senior Vice President, Treasurer and Chief Financial Officer and then as Senior Vice President of International Operations. Mr. Owens holds a B.A. degree from Georgetown University and a M.B.A. degree from Boston University.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires certain persons, including the Company's directors, executive officers and beneficial holders of more than 10% of the Company's Common Stock to file initial reports of beneficial ownership of the Company's securities and reports of changes in beneficial ownership with the Securities and Exchange Commission. For fiscal year 2003, to the Company's knowledge, all Section 16(a) filing requirements applicable to its officers, directors and greater than 10% beneficial owners were complied with, except as follows: (i) an initial report of ownership for Paul Theodore Owens was filed late.

ITEM 11. EXECUTIVE COMPENSATION

The following chart provides information concerning compensation paid by the Company during the year ended March 31, 2003 to the Chief Executive Officer and each of the four most highly compensated executive officers of the Company whose aggregate compensation exceeded $100,000 ("Named Executive Officers").

SUMMARY COMPENSATION

		Annual Compensation		Long-Term Compensation	
Name and Principal Position	**Fiscal Year**	**Salary($)**	**Bonus($)**	**Option Awards(#)**	**All other Compensation ($)(1)**
Ralph S. Sheridan(3) Former President and CEO	2003	362,000(7)	—	225,000	56,000
	2002	270,000	—	—	1,162,000
	2001	275,000	—	—	5,000
Joseph Callerame(4) Former Vice President, CTO	2003	210,000	—	—	2,000
	2002	210,000	—	20,000	30,000
	2001	212,000	—	—	3,000
Reed Clark(5) Former Vice President, International Marketing	2003	200,000	—	8,000	—
	2002	138,000(2)	—	—	
Ralph G. Foose Vice President, Operations	2003	222,000	—	—	10,000
	2002	200,000	—	40,000	8,000
	2001	207,000	—	—	10,000
Edwin L. Lewis(6) Former Vice President, General Counsel	2003	180,000	—	—	63,000
	2002	180,000	10,000	—	3,000
	2001	182,000	10,000	10,000	3,000

(1) All Other Compensation includes the gain earned on the exercise of non-qualified or incentive stock options, taxable life insurance premiums paid by the Company, and, for Mr. Sheridan, a leased automobile.

(2) The indicated year was a year of partial employment with the Company for the named executive.

(3) Mr. Sheridan ceased to serve as President and CEO in May 2003.

(4) Mr. Callerame began a leave of absence in April 2003.

(5) Mr. Clark ceased to serve as Vice President, International Marketing in June 2003.

(6) Mr. Lewis resigned in April 2003.

(7) Includes $77,000 of accumulated vacation benefits paid in cash.

Mr. Sheridan had an employment contract with the Company that provided for his employment as President and Chief Executive Officer, and as a Director, through September 2005, at an annual salary of $300,000, subject to annual review, plus performance bonuses tied to specific accomplishments. This contract replaced Mr. Sheridan's prior contract with the Company that expired in September 2002.

Under the contract, Mr. Sheridan was eligible to receive an annual bonus of up to $300,000 in each contract year, based on his accomplishment of goals established by the Compensation Committee. In addition, the Company granted Mr. Sheridan options to purchase 225,000 shares of the Company's

Common Stock at an exercise price of $10.30 per share, the fair market value of the Company's Common Stock on the date of grant. The options became exercisable at the rate of 75,000 options per year on the first three anniversaries of the grant. Mr. Sheridan recognized no income upon the issuance of the options. When exercised, ordinary income in an amount equal to the difference between the fair market value of the Common Stock received upon the exercise of the option and the amount paid for the Common Stock is recognized by Mr. Sheridan. At that time, the Company will be allowed a deduction equal to the amount recognized as ordinary income by Mr. Sheridan. The options provided that to the extent that exercise of an option would give rise to compensation expense that the Company reasonably expects will not be deductible for tax purposes in any given taxable year pursuant to Section 162(m) of the Internal Revenue Code of 1986, as amended, the number of shares as to which the options may be exercised during that taxable year shall be limited.

In addition Mr. Sheridan was entitled to receive the same benefits as other senior executives of the Company, as well as the use of a car.

Mr. Sheridan's contract stipulated that in the event that Mr. Sheridan's employment with the Company were terminated without "Cause", or by him for "Good Reason" (as defined in the employment contract), he would receive twelve months' pay and any previously earned bonuses. In the event that Mr. Sheridan's employment with the Company were terminated for "Cause", or by him other than for "Good Reason" (as defined in the employment contract), or by his death or disability, he would not be entitled to receive any salary beyond the date of termination, and he would only be entitled to receive previously earned bonuses if the termination were caused by death or disability.

Mr. Sheridan's employment was terminated without "Cause" and he ceased to be an employee in May of 2003. The Company has appointed Roger Heinisch as interim President and Chief Executive Officer pending appointment of a permanent successor to Mr. Sheridan.

Each of the Named Executive Officers had an agreement with the Company granting severance payments equal to one year's salary if he was terminated in connection with a change of control of the Company as defined in the agreement. The agreements also provided that if he was terminated for any reason other than "Cause" as defined in the agreement, he would be entitled to receive an amount equal to at least six months salary.

OPTION GRANTS IN THE LAST FISCAL YEAR

The following table provides information on option grants in the fiscal year ended March 31, 2003 to the Named Executive Officers.

	Individual Grants				Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term	
	Options Granted	% of Total Options Granted to All Employees	Exercise Price	Expiration Date	5%/year	10%/year
Ralph S. Sheridan	225,000	31.96%	$ 10.30	9/19/12	$ 1,457,000	$ 3,693,000
Edwin L. Lewis	20,000	2.8%	$ 11.90	2/13/13	150,000	379,000

Mr. Callerame, Mr. Clark, and Mr. Foose received no option grants in fiscal 2003.

AGGREGATED OPTION EXERCISES IN LAST FISCAL YEAR AND FISCAL YEAR END OPTION VALUES

The following table sets for the information for the Named Executive Officers with respect to options exercised during the fiscal year ended March 31, 2003 and the value of options held as of March 31, 2003 by such persons.

	Shares Acquired on Exercise (#)	Value Realized ($)	Number of Unexercised Options at Fiscal Year End—March 31, 2003		Value of Unexercised In-The-Money Options at Fiscal Year End—March 31, 2003(1)	
			Exercisable (#)	Unexercisable (#)	Exercisable ($)	Unexercisable ($)
Ralph S. Sheridan	8,000	$ 48,080	500,000	225,000	$ 326,000	—
Joseph Callerame	—	—	53,667	13,333	—	—
Ralph G. Foose	—	—	40,000	40,000	$ 20,000	—
Edwin L. Lewis	5,000	$ 59,921	45,000	20,000	$ 54,375	—
Reed O. Clark	—	—	16,667	33,333	$ 26,667	$ 53,333

(1)

The value of in-the-money options for the Company represents the positive spread between the exercise price of the stock options and the closing price of the Common Stock as of March 31, 2003 which was $8.00 per share.

See Item 5 for additional Equity Compensation Plan information.

Compensation of Directors

Directors who are also employees of the Company do not receive additional compensation as Directors. Non-Employee Directors receive annual compensation of 2,000 shares (the Chairman receives 3,000 shares) of Company Common Stock issuable on January 10th in each year, and options to purchase 7,000 shares of Common Stock at the closing price on the date of the Annual Meeting in each year. No meeting fees or other fees are payable to any Director.

Compensation Committee Interlocks and Insider Participation

During the fiscal year ended March 31, 2003, the Company's Compensation Committee consisted of General William Odom and Mr. Carl Vogt. No reportable relationship existed with respect to any member of the Compensation Committee.

Board Compensation Committee Report on Executive Compensation

The Compensation Committee of the Board of Directors (consisting of two independent Directors) has sole responsibility for compensation issues relating to the Chief Executive Officer. Compensation practices and policies for the other executive officers are set by the Chief Executive Officer with the advice of the Compensation Committee.

The Board of Directors signed a new employment contract with Mr. Sheridan in July 2002 that provided for his employment as President and Chief Executive Officer, through September 2005, at an annual salary of $300,000, subject to annual review, plus performance bonuses tied to specific accomplishments. This contract replaced Mr. Sheridan's prior contract with the Company that expired in September 2002.

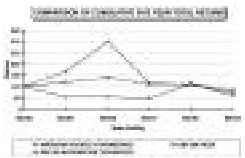
The Compensation Committee has formulated an approach to all executive compensation that emphasizes the establishment of goals and objectives for each executive and for the Company as a whole and ties a substantial portion of executive compensation to the performance of the executive and the Company with respect to these goals and objectives. Base compensation for executive officers (and many other Company employees) is established on the basis of an analysis of salaries received by comparable employees of high-tech and manufacturing companies in the Greater Boston area, company financial results and prospects, and individual contributions relative to the job description and past performance of each officer.

Also in keeping with its performance-based compensation philosophy, the Company has an incentive compensation program for all executives who report directly to the Office of the President. Under this new policy, these executives receive a specified portion of their total compensation (ranging from 10% to 50%) based upon two factors: their completion of agreed upon goals and objectives, and the performance of the entire Company.

Report Submitted By: William Odom and Carl Vogt

Stock Performance Chart

The following chart graphs the performance of the cumulative total return to shareholders (stock price appreciation plus dividends) during the previous five years in comparison to the returns of the Standard & Poor's 500 Composite Stock Price Index and the Standard & Poor's 500 Information Technology Composite Stock Price Index.



Note:

Assumes $100 invested at the close of trading on the last trading day preceding the first day of the fifth preceding fiscal year (and reinvestment of dividends) in the Company's Common Stock, Standard & Poor's 500 Composite Stock Price Index and the Standard & Poor's 500 Information Technology Composite Stock Price Index.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth the number of shares of the Company's voting stock beneficially owned (as determined under the rules of the SEC) directly or indirectly as of July 15, 2003 by (i) each current director of the Company; (ii) each executive officer and former executive officer of the Company named in the Summary Compensation Table above; (iii) all current directors and executive officers of the Company as a group; and (iv) each person who is known to the Company to beneficially own more than five percent (5%) of the outstanding shares of any class of the Company's voting stock, as well as the percentage of the outstanding voting stock represented by each such amount. The information in the table is based on information available to the Company. The total number of shares of Common stock outstanding as of July 15, 2003 was 6,936,323. Consistent with the rules of the Securities and Exchange Commission, the table below lists the ownership of the executive officers of the Company named in the Summary Compensation Table, although Messrs. Sheridan, Callerame, Clark and Lewis are no longer serving as executive officers of the Company. The information regarding beneficial ownership of directors and executive officers as a group represents beneficial ownership of the Company's current directors and executive officers.

Name of Beneficial Owner(1)	Amount and Nature of Beneficial Ownership(2)	Percent of Class
Joseph Callerame	59,600	(3)
Reed O. Clark	585	(3)
Ralph G. Foose	81,435	1.2%
Roger P. Heinisch	20,000	(3)
Hamilton W. Helmer	46,000	(3)
Edwin L. Lewis	1,453	(3)
Donald J. McCarren	69,581	1.0%
Ernest J. Moniz	2,614	(3)
William E. Odom	51,000	(3)
Paul Theodore Owens	—	—
Ralph S. Sheridan(4)	762,959	10.2%
Carl W. Vogt	45,166	(3)
Current Directors and Officers as a Group (9 persons)	1,078,755	14.0%
Essex Management Co., Inc.(5)	612,935	8.8%
FMR Corp.(6)	535,000	7.7%

(1) Unless otherwise indicated, the address of all persons listed above is c/o American Science and Engineering, Inc., 829 Middlesex Turnpike, Billerica, MA 01821.

(2) Includes shares that may be acquired under stock options and warrants exercisable within sixty days after the date of this table, as follows: Dr. Callerame—53,667; Mr. Foose—60,000; Dr. Heinisch—14,000; Dr. Helmer—42,000; Dr. McCarren—47,000; Lt. Gen. (Ret.) Odom—28,000; Mr. Sheridan—548,699; Mr. Vogt—21,000; and all Current Directors and Officers as a group—760,699. All ownership reported herein includes sole voting and investment power.

(3) Amount owned constitutes less than one percent.

(4) Mr. Sheridan's address is 79 Byron Road, Weston, MA 02193

(5) Essex Management Co. Inc.'s address is 125 High Street, Boston, MA 02110.

(6) FMR Corp.'s address is 82 Devonshire Street, Boston, MA 02109.

Equity Compensation Plan information and table can be found in Item 5 of this report.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

No items noted.

ITEM 14. CONTROLS AND PROCEDURES

a) Evaluation of disclosure controls and procedures.

The principal executive officer and principal financial officer have evaluated the disclosure controls and procedures as of a date within 90 days before the filing date of this annual report. Based on this evaluation they conclude that the disclosure controls and procedures effectively ensure that information required to be disclosed in our filings and submissions under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.

b) Changes in internal controls

There have been no significant changes in our internal controls or in other factors that could significantly affect these controls subsequent to the evaluation of the internal controls, including any corrective actions with regard to significant deficiencies and material weaknesses.

PART IV

ITEM 15. FINANCIAL STATEMENT SCHEDULES AND EXHIBITS, AND REPORTS ON FORM 8-K

Financial Statement Schedules and Exhibits

The financial statements and schedules listed in the Index to Consolidated Financial Statements and Schedule on page 38 are filed as part of this report, and such Index is incorporated in this Item by reference.

The exhibits listed in the Exhibit Index on page 66 are filed as part of this report, and such Index is incorporated in this Item by reference.

Reports on Form 8-K

Reports on Form 8-K. There were no reports on Form 8-K filed during the fourth quarter of the fiscal year covered by this report.

AMERICAN SCIENCE AND ENGINEERING, INC., AND SUBSIDIARIES
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS AND SCHEDULE

(Submitted in answer to Item 8 and Item 15 of Form 10-K, Securities and Exchange Commission)

Other schedules have been omitted because of the absence of conditions under which they are required or because the required information is given in the financial statements or notes thereto.

Report of Independent Auditors

To the Board of Directors and
Stockholders of American Science and Engineering, Inc.:

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of operations, stockholders' investment and cash flows present fairly, in all material respects, the financial position of American Science and Engineering, Inc. and its subsidiaries at March 31, 2003, and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion. The financial statements of the Company as of March 31, 2002, and for each of the two years in the period ended March 31, 2002, were audited by other independent accountants who have ceased operations. Those independent accountants expressed an unqualified opinion on those financial statements in their report dated May 31, 2002.

/s/PricewaterhouseCoopers LLP

Boston, MA
May 21, 2003

THIS REPORT IS A CONFORMED COPY OF THE REPORT PREVIOUSLY ISSUED BY ARTHUR ANDERSEN LLP IN CONNECTION WITH THE COMPANY'S ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED MARCH 31, 2002 AND HAS NOT BEEN REISSUED BY THAT FIRM.

Report of Independent Public Accountants

To American Science and Engineering, Inc.:

We have audited the accompanying consolidated balance sheets of American Science and Engineering, Inc. (a Massachusetts corporation) and subsidiaries as of March 31, 2002 and March 31, 2001 and the related consolidated statements of operations, stockholders' investment and cash flows for each of the three years in the period ended March 31, 2002. These consolidated financial statements and the schedule referred to below are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and schedule based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of American Science and Engineering, Inc. and subsidiaries as of March 31, 2002 and March 31, 2001 and the results of their operations and their cash flows for each of the three years in the period ended March 31, 2002 in conformity with accounting principles generally accepted in the United States.

Our audits were made for the purpose of forming an opinion on the basic consolidated financial statements taken as a whole. The schedule listed in the index to consolidated financial statements and schedule is presented for purposes of complying with the Securities and Exchange Commission's rules and is not part of the basic consolidated financial statements. This schedule has been subjected to the auditing procedures applied in the audit of the basic consolidated financial statements and, in our opinion, fairly states in all material respects the financial data required to be set forth therein in relation to the basic consolidated financial statements taken as a whole.

/s/ Arthur Andersen LLP

Boston, Massachusetts
May 31, 2002

American Science and Engineering, Inc. and Subsidiaries

Consolidated Balance Sheets

March 31, 2003 and 2002

(Amounts in thousands, except share and per share amounts)

	2003	2002
Assets		
Current assets:		
Cash and cash equivalents	$ 5,585	$ 7,591
Restricted cash	1,895	—
Short-term investments	4,538	—
Accounts receivable, net of allowances of $246 in 2003 and $111 in 2002	10,499	7,216
Unbilled costs and fees, net of allowances of $437 in 2003 and $437 in 2002	4,343	5,456
Inventories	15,748	21,013
Deferred income taxes	—	2,475
Prepaid expenses and other current assets	822	685
Total current assets	43,430	44,436
Non-current deferred income taxes	—	823
Deposits	38	104
Equipment and leasehold improvements, net	3,714	4,663
Other assets	100	100
Patents and other intangibles, net of accumulated amortization of $405 in 2003 and $351 in 2002	34	115
Total assets	$ 47,316	$ 50,241

	2003	2002
Liabilities & Stockholders' Investment		
Current liabilities:		
Line of credit	$ —	$ 9,319
Accounts payable	5,327	6,557
Accrued salaries and benefits	1,476	1,577
Accrued warranty costs	535	196
Accrued income taxes	—	763
Deferred revenue	1,928	1,030
Customer deposits	2,747	4,875
Other current liabilities	1,221	1,783
Total current liabilities	13,234	26,100
Non-current liabilities:		
Warrant liability	820	—
Deferred revenue	751	691
Deferred compensation	85	109
Deferred rent	68	212
Total non-current liabilities	1,724	1,012
Commitments and contingencies (Notes 2 and 9)		
Stockholders' investment:		
Preferred stock, no par value		
Authorized — 100,000 shares		
Issued—None	—	—
Common stock, $0.66 2/3 par value		
Authorized—20,000,000 shares		
Issued 6,871,729 shares in 2003 and 5,549,478 shares in 2002	4,581	3,699
Capital in excess of par value	38,780	22,482
Accumulated deficit	(11,003)	(3,052)
Total stockholders' investment	32,358	23,129
Total liabilities and stockholders' investment	$ 47,316	$ 50,241

The accompanying notes are an integral part of these consolidated financial statements.

American Science and Engineering, Inc. and Subsidiaries

Consolidated Statements of Operations

For the Years Ended March 31, 2003, 2002 and 2001

(Amounts in thousands, except per share amounts)

	2003	2002	2001
Net sales and contract revenues:			
Net product sales and contract revenues	$ 52,894		
Net service revenues	9,064		
Total net sales and contract revenues	61,958	$ 65,396	$ 67,374
Cost of sales and contracts:			
Cost of product sales and contracts	42,610		
Cost of service revenues	8,399		
Total cost of sales and contracts	51,009	49,357	51,155
Gross profit	10,949	16,039	16,219
Expenses:			
Selling, general and administrative	12,409	12,753	9,688
Research and development	6,419	7,136	5,060
Total expenses	18,828	19,889	14,748
Operating income (loss)	(7,879)	(3,850)	1,471
Other income (expense):			
Interest income	95	39	69
Interest expense	(86)	(476)	(552)
Other, net	2,375	(225)	(183)
Total other income (expense)	2,384	(662)	(666)
Income (loss) before provision for income taxes	(5,495)	(4,512)	805
Provision for income taxes	2,456	—	145
Net income (loss)	$ (7,951)	$ (4,512)	$ 660
Income/(loss) per share—Basic	$ (1.20)	$ (0.87)	$ 0.13
—Diluted	$ (1.20)	$ (0.87)	$ 0.13
Weighted average shares—Basic	6,627	5,191	4,978
—Diluted	6,627	5,191	5,006

The accompanying notes are an integral part of these consolidated financial statements.

American Science and Engineering, Inc. and Subsidiaries

Consolidated Statements of Stockholders' Investment

For the Years Ended March 31, 2003, 2002 and 2001

(Amounts in thousands, except share amounts)

	Common Stock		Capital in Excess of Par Value	Retained Earnings (Accumulated Deficit)	Note Receivable Officer	Total
	Shares	Amount				
Balance, March 31, 2000	4,961,874	$ 3,308	$ 17,907	$ 800	$ (640)	$ 21,375
Net income	—	—	—	660	—	660
Exercise of stock options and related tax benefit	8,158	5	352	—	—	357
Issuance of stock	42,720	29	213	—	—	242
Balance, March 31, 2001	5,012,752	3,342	18,472	1,460	(640)	22,634
Net loss	—	—	—	(4,512)	—	(4,512)
Exercise of stock options	484,116	323	3,491	—	—	3,814
Repayment of officer note	—	—	—	—	640	640
Issuance of stock	52,610	34	519	—	—	553
Balance, March 31, 2002	5,549,478	3,699	22,482	(3,052)	—	23,129
Net loss	—	—	—	(7,951)	—	(7,951)
Private placement issuance of stock	1,115,000	743	14,553	—	—	15,296
Exercise of stock options	175,347	117	1,355	—	—	1,472
Issuance of stock	31,904	22	390	—	—	412
Balance, March 31, 2003	6,871,729	$ 4,581	$ 38,780	$ (11,003)	$ —	$ 32,358

The accompanying notes are an integral part of these consolidated financial statements

American Science and Engineering, Inc. and Subsidiaries

Consolidated Statements of Cash Flows

For the Years Ended March 31, 2003, 2002 and 2001

(Amounts in thousands)

	2003	2002	2001
Cash flows from operating activities:			
Net income (loss)	$ (7,951)	$ (4,512)	$ 660
Adjustments to reconcile net income (loss) to net cash provided by (used for) operating activities:			
Depreciation and amortization	2,185	2,379	2,171
Provisions for contract, inventory, accounts receivable and warranty reserves	4,501	607	664
Change in value of warrants issued	(2,298)	—	—
Deferred (prepaid) income tax	3,298	—	(40)
Change in assets and liabilities:			
Accounts receivable	(3,421)	2,510	(3,560)
Unbilled costs and fees	1,113	3,451	210
Inventories	1,650	(7,421)	(3,753)
Prepaid expenses, other assets, and deposits	(71)	229	168
Accounts payable	(1,230)	(870)	1,713
Accrued income taxes	(763)	325	355
Deferred revenue	958	218	(366)
Customer deposits	(2,128)	2,983	(317)
Accrued expenses and other current liabilities	(570)	(98)	1,473
Noncurrent liabilities	(168)	(61)	(127)
Total adjustments	3,056	4,252	(1,409)
Net cash used for operating activities	(4,895)	(260)	(749)
Cash flows from investing activities:			
Increase in restricted cash	(1,895)	—	—
Investment in short-term instruments	(4,538)	—	—
Purchase of property and equipment	(1,155)	(1,109)	(1,342)
Cash used in investing activities	(7,588)	(1,109)	(1,342)
Cash flows from financing activities:			
Proceeds from (repayment of) line of credit	(9,319)	3,300	2,019
Proceeds from issuance of common stock and warrants, net	18,415	—	—
Repayment of officer loan	—	640	—
Proceeds from exercise of stock options	1,381	3,814	48
Principal payments of capital lease obligations	—	—	(16)
Cash provided by financing activities	10,477	7,754	2,051
Net increase (decrease) in cash and cash equivalents	(2,006)	6,385	(40)
Cash and cash equivalents at beginning of year	7,591	1,206	1,246
Cash and cash equivalents at end of year	$ 5,585	$ 7,591	$ 1,206
Supplemental disclosures of cash flow information:			
Interest paid	$ 124	$ 481	$ 437
Income taxes paid	—	15	95
Non-cash transactions:			
Issuance of stock and warrants in lieu of fees	$ 412	$ 553	$ 242

The accompanying notes are an integral part of these consolidated financial statements.

1. Nature of Operations and Summary of Significant Accounting Policies

American Science and Engineering, Inc. (the "Company") is engaged in the development and manufacture of sophisticated X-ray inspection systems for critical detection and security screening solutions for sale primarily to U.S. and foreign government agencies.

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

Principles of Consolidation: The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

Reclassifications: Certain amounts in the prior period financial statements have been reclassified to conform to the current period presentation.

Cash and Cash Equivalents: The Company considers all investments with original maturities of 90 days or less to be cash equivalents. Cash and cash equivalents are carried at cost, which approximates fair market value at year-end 2003 and 2002. The Company has repurchase agreements with its banks. The repurchase agreements are collateralized by investments principally consisting of U.S. Government Agency securities in the amount of at least 100% of such obligation.

Restricted Cash: The Company's Export and Security Agreement with HSBC Bank USA requires certain cash balances to be restricted as collateral against outstanding standby letters of credit.

Short-term Investments: Short-term investments consist of investments in money market funds and U.S government and government agency bonds. These investments are classified as available-for-sale and are recorded at their fair market values. The unrealized holding gains or losses on these securities were immaterial for the year ended March 31, 2003.

Inventories: Inventories consist of material, labor and manufacturing overhead and are recorded at the lower of cost or net realizable value. Cost is determined on an average cost method.

The components of inventories at March 31, 2003 and 2002 were as follows (dollars in thousands):

	2003	2002
Raw materials, completed subassemblies and spare parts	$ 8,119	$ 10,483
Work-in-process	3,783	7,981
Finished goods	3,846	2,549
	$ 15,748	$ 21,013

The Company periodically reviews quantities of inventory on hand and compares these amounts to expected usage of each particular product or product line. The Company records as a charge to cost of sales any amounts required to reduce the carrying value to net realizable value.

Equipment and Leasehold Improvements: The Company provides for depreciation and amortization of its fixed assets on a straight-line basis over estimated useful lives of 2-10 years. Expenditures for normal maintenance and repairs are charged to expense as incurred. Significant additions, renewals or betterments that extend the useful lives of the assets are capitalized at cost. The cost and accumulated depreciation applicable to equipment and leasehold improvements sold or otherwise disposed of are removed from the accounts, and any resulting gain or loss is included in the consolidated statements of operations.

Equipment and leasehold improvements consisted of the following at March 31 (in thousands):

	Estimated Useful Lives	2003	2002
Equipment	3-10 years	$ 1,948	$ 6,486
Computer equipment and software	2-5 years	5,580	5,850
Tooling	3-7 years	366	951
Leasehold improvements	Lesser of 10 years or remaining lease term	1,999	1,995
Furniture and fixtures	5-7 years	1,682	2,255
Demo and test equipment	3-7 years	2,647	2,416
Motor vehicles	3 years	41	76
Total		14,263	20,029
Less accumulated depreciation and amortization		(10,549)	(15,366)
Equipment and leasehold improvements, net		$ 3,714	$ 4,663

Patents and Other Intangibles: Patents and other intangible assets are being amortized using the straight-line method over the legal lives of the patents, not to exceed 17 years. The Company's inability to protect its intellectual property could have a significant impact on its results of operations. Claims against others for patent infringement are not recorded until realized.

Revenue Recognition: Revenues on cost reimbursable and long-term fixed price contracts are generally recorded as costs are incurred using the percentage of completion method. These contracts are for custom-built systems or contract engineering projects and the length of these contracts typically range from 9 to 24 months from order to delivery and acceptance. Percentages-of-completion are determined by relating the actual costs of work performed to date for each contract to its estimated final costs. Revisions in costs and profit estimates are reflected in the period in which the facts causing the revision become known.

Certain contracts require payments from the customer upon execution of the agreement that are included in customer deposits. Individual customer deposits are reduced by the amount of revenue recognized on the contract until a zero balance is reached. Revenue recognized in excess of billings or customer deposits under the contracts is included in unbilled costs and fees in the accompanying balance sheet.

For all fixed price contracts, if a loss is anticipated on the contract, provision is made in the period in which such losses are determined.

Under the terms of certain of its cost reimbursement contracts, the Company is not permitted to bill customers a specified portion of the contract value until completion. Such retainages (approximately $214,000 in 2003 and $85,000 in 2002) result from both commercial contract retentions and government contract withholdings generally for up to 15% of fees, as well as the difference between the actual and provisional indirect cost billing rates. Retainages are included in the accompanying consolidated balance sheets as components of unbilled costs and fees.

During the fourth quarter of 2001, effective as of April 1, 2000, the Company adopted Securities and Exchange Commission Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements." The Company recognizes sales for its systems that are produced in a standard manufacturing operation and have shorter order to deliver cycles at the time of shipment of the system to the customer and when other revenue recognition criteria is met. The costs of installation at the customer's site are accrued at the time of shipment. Management believes the customer's post-delivery acceptance provisions and installation are perfunctory and inconsequential. The Company has never failed to successfully complete a system installation. Installation is non-complex and does not require specialized skills and the related costs are predictable and insignificant to the total purchase price. The Company has demonstrated a history of customer acceptance subsequent to shipment and installation of these systems.

Service revenues are accrued on time and materials engagements as the services are provided. Service contract revenues are recognized on a straight-line basis over the length of the contract. Service revenues for fiscal 2003 exceeded 10% of total revenues and as such have been separately presented for the current year.

The Company records billed shipping and handling fees and billed out-of-pocket expenses as revenue and the associated costs as cost of goods sold in the accompanying consolidated income statement.

Included in accounts receivable and unbilled costs and fees at March 31, 2003 and 2002 are $9,957,000 and $5,878,000, respectively, attributable to both prime and subcontracts with the U.S. Government.

Warranty Costs: The Company generally provides a one-year parts and labor warranty with the purchase of equipment. The anticipated cost for this one-year warranty is accrued for at the time of the sale and is recorded as accrued warranty costs and as an expense within cost of goods sold, or is included in contract costs for contracts accounted for using the percentage of completion method.

Deferred Revenue: The Company offers to its customers extended warranty and service contracts. The coverage period of these contracts will typically range from one to five years, and typically with advance payments that are recorded as Deferred Revenue. Revenue is recognized on a straight-line basis over the life of the contract.

Impairment of Long-Lived Assets: Long-lived assets are reviewed for possible impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable in accordance with SFAS No. 144, Accounting for the Impairment and Disposal of Long-Lived Assets. Impairment is assessed by comparing the estimated undiscounted cash flows over the asset's remaining life to the carrying amount of the asset. If the estimated cash flows are insufficient to recover the investment an impairment loss is recognized based on the fair value of the asset less any costs of disposal.

Customer Deposits: For most international orders, the Company generally includes, as part of its terms and conditions, an advance deposit with order acceptance. For long-term international contracts, the Company will generally include milestone payments tied to a specific event and/or passage of time. These deposit amounts are recorded as a liability under "Customer Deposits" until reduced by revenue recognized against the specific contract.

Deferred Rent: The Company has a lease for its office and manufacturing facilities, which includes escalation clauses. Accounting principles generally accepted in the United States of America require the rental expense to be recorded on a straight-line basis over the life of the lease, resulting in deferred rent being reflected in the accompanying consolidated balance sheets.

Research and Development: Research and development costs are expensed as incurred.

Fair Value of Financial Instruments: The Company's financial instruments consist primarily of cash and cash equivalents, short-term investments, accounts receivable, accounts payable, debt and letters of credit. The carrying amounts of these instruments approximate fair value.

Comprehensive Income: Statement of Financial Accounting Standards ("SFAS") No. 130, "Reporting Comprehensive Income," establishes standards for the reporting and display of comprehensive income (loss) and its components in a full set of general-purpose financial statements. The Company's comprehensive income (loss) is equal to the Company's net income (loss) for each of the periods presented.

Income Per Common and Potential Common Shares: Basic earnings per common share is computed by dividing net income available to common stockholders by the weighted average number of shares of common stock outstanding during the year. Diluted earnings per share include the dilutive impact of options and warrants using the average share price of the Company's common stock for the period. For the years ended March 31, 2003, March 31, 2002 and March 31, 2001, respectively, 403,000, 516,000 and 1,857,000 shares attributable to the exercise of outstanding options are excluded from diluted earnings per share, as their effect is anti-dilutive.

	Year Ended		
	March 31, 2003	March 31,2002	March 31,2001
		(in thousands)	
Weighted average number of common shares outstanding—basic	6,627	5,191	4,978
Assumed exercise of stock options, using the treasury stock method	—	—	28
Weighted average number of common and potential common shares outstanding—diluted	6,627	5,191	5,006

Income Taxes: The Company accounts for income taxes in accordance with SFAS No. 109, "Accounting for Income Taxes." Accordingly, the Company recognizes deferred income taxes based on the expected future tax consequences of differences between the financial statement basis and the tax basis of assets and liabilities, calculated using enacted tax rates in effect for the year in which the differences are expected to be reflected in the tax return. The Company records a valuation allowance against any net deferred tax assets if it is more likely than not that they will not be realized.

Pro Forma Stock-Based Compensation Expense: As permitted by SFAS No. 123, "Accounting for Stock-Based Compensation", the Company has elected to continue to apply Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," to account for its stock-based compensation plans. Had compensation cost for awards in 2003, 2002 and 2001 under the Company's stock-based compensation plans been determined based on the fair value at the grant dates consistent with the method set forth under SFAS No. 123, the effect on the Company's net income (loss) and income (loss) per share would have been as follows:

	2003	2002	2001
	In thousands except per share amounts		
Net income (loss):			
As reported	$ (7,951)	$ (4,512)	$ 660
Less: Stock based compensation using fair value method for all awards	(3,689)	(3,351)	(1,031)
Pro forma	$ (11,640)	$ (7,863)	$ (371)
Income (loss) per share—Basic:			
As reported	$ (1.20)	$ (0.87)	$ 0.13
Pro forma	$ (1.76)	$ (1.52)	$ (0.07)
Income (loss) per share—Diluted:			
As reported	$ (1.20)	$ (0.87)	$ 0.13
Pro forma	$ (1.76)	$ (1.52)	$ (0.07)

The fair value of each option granted was estimated on the grant date using the Black-Scholes option pricing model with the following weighted average assumptions: risk-free interest rates of 5.0%, 4.53% to 5.13%, and 5.5% to 6.75% for 2003, 2002, and 2001, respectively, expected volatility of 73%, 68%, and 56% for 2003, 2002, and 2001, respectively, an expected dividend yield of 0% and an expected life of 7 years for all three fiscal years.

New Accounting Pronouncements: In November 2002, the FASB issued FASB Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others," which elaborates on required disclosures by a guarantor in its financial statements about obligations under certain guarantees that it has issued and clarifies the need for a guarantor to recognize, at the inception of certain guarantees, a liability for the fair value of the obligation undertaken in issuing the guarantee. The Company has adopted the disclosure provisions of this interpretation for the fiscal year ended March 31, 2003 and has determined that the recognition principles are not applicable.

In November 2002, the Task Force reached a consensus on Emerging Issues Task Force Issue No. 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables". This issue addresses how to determine whether an arrangement involving multiple deliverables contains more than one unit of accounting and how arrangement consideration should be measured and allocated to the separate units of accounting. This guidance is effective for the Company beginning in fiscal 2005 with early application permitted. The Company is currently evaluating the impact of this guidance on its revenue recognition policies.

In July 2002, the FASB issued Statement of Financial Accounting Standards No. 146, "Accounting for Costs Associated with Exit or Disposal Activities" (FAS 146), which nullifies Emerging Issues Task

Force (EITF) Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)." FAS 146 requires a liability for a cost associated with an exit or disposal activity be recognized and measured initially at its fair value in the period in which the liability is incurred. If fair value cannot be reasonably estimated, the liability shall be recognized initially in the period in which fair value can be reasonably estimated. The provisions of FAS 146 will be effective for the Company prospectively for exit or disposal activities initiated after December 31, 2002; however, this standard is not expected to have a significant impact on its financial condition, results of operations, or cash flows.

In December 2002, the FASB issued SFAS No. 148 "Accounting for Stock- Based Compensation-Transition and Disclosure- an amendment of FASB Statement No. 123" (FAS 148). This statement amends SFAS No. 123 "Accounting for Stock Based Compensation" (FAS 123) to provide alternative methods of voluntarily transitioning to the fair value based method of accounting for stock-based employee compensation. FAS 148 also amends the disclosure requirements of FAS 123 to require disclosure of the method used to account for stock-based employee compensation and the effect of the method on reported results in both annual and interim financial statements. The amended disclosure provisions are effective for the fiscal years ending after December 31, 2002 and the Company has adopted the amended disclosure provisions as of March 31, 2003. The Company has not decided whether it will voluntarily change to the fair value based method of accounting for stock-based employee compensation at this time.

In January 2003, the FASB issued FASB Interpretation No. 46, Consolidation of Variable Interest Entities and Interpretation of ARB 51 (FIN 46), which requires the consolidation of certain entities considered to be variable interest entities (VIE's). An entity is considered to be a VIE when it has equity investors which lack the characteristics of a controlling financial interest, or its capital is insufficient to permit it to finance its activities without additional subordinated financial support. Consolidation of a VIE by an investor is required when it is determined that the investor will absorb a majority of the VIE's expected losses or residual returns if they occur. The company adopted FIN 46 as of March 31, 2003 and such adoption did not have an effect on the consolidated financial statements.

2. Lease Agreements

The Company leases various office and manufacturing facilities under noncancelable operating leases. Additionally, the Company entered into a sublease agreement (as lessor) as of May 2000 in regards to certain manufacturing and office space, which was cancelled during fiscal 2002. The Company incurred $1,116,000, $1,062,000, and $1,053,000 of rent expense in 2003, 2002, and 2001 respectively. The security deposits on these leases amount to $127,000.

Future minimum rental payments under the Company's operating leases, excluding real estate taxes, insurance and operating costs paid by the Company required over the initial terms of the leases are as follows:

Year Ending March 31,	(in thousands)
2004	$ 1,006
2005	872
2006	42
2007	2
	$ 1,922

3. Line of Credit

On November 30, 2000, the Company signed two credit agreements with HSBC Bank USA ("HSBC"). The first agreement was for a $10.0 million domestic revolving credit facility to support the Company's routine working capital and standby letter of credit needs. The second was a $30.0 million export credit and security agreement, guaranteed by the Export-Import Bank of the United States to support the Company's overseas contract, trade finance and working capital needs.

On February 14, 2002, these credit agreements were amended to increase the domestic revolving credit facility to $20.0 million and to reduce the export credit facility to $20.0 million in anticipation of higher domestic demand. This agreement was due to expire on November 30, 2002. These agreements were further amended on November 28, 2002 to reduce the domestic revolving credit facility to $5 million, with maximum borrowings set at the lower of: (a) the sum of 85% of eligible domestic accounts receivable plus the lower of: (i) 40% of eligible raw materials and work-in-process inventory; or; (ii) $2 million, or; (b) $5 million. In addition, the interest rate and certain financial covenants were amended and the expiration date of the facility was extended to February 28, 2003. In February 2003 and May 2003, these agreements were further amended to extend expiration to July 31, 2003. The credit facility, as amended, bears an interest rate at the HSBC Bank USA prime rate plus $^1/_4$% or LIBOR plus 2.0% at the Company's option (4.5% at March 31, 2003). At the end of fiscal 2003, there were no borrowings outstanding and $4.3 million in standby letters of credit, guaranteeing performance on certain large international cargo projects, were in effect against this credit facility. No amounts have been drawn against these letters of credit.

The credit agreements are collateralized by certain assets of the Company, and contain certain restrictions, including limitations on the amount of distributions that can be made to stockholders, encumbrances of assets, and loans that can be made to officers, and requires the maintenance of certain financial covenants. As of March 31, 2003, the Company was not in compliance with its tangible net worth and earnings covenants, but has obtained a waiver from the bank for these non-compliances for the year-end.

Given the significant losses of fiscal 2003, the Company does not expect to be in compliance with the tangible net worth covenant in the coming year. The Company will request waivers of this covenant as required at each quarter end. If the Company is unable to obtain such waivers, HSBC could terminate the Company's domestic revolving credit and export credit facilities. In addition, the current credit agreements expire in July of 2003 and there can be no assurance that HSBC will renew the credit agreements or that alternative financing can be obtained. If the Company's credit facility were terminated, it would preclude the Company from obtaining financing through its current secured export credit and security agreement that could negatively impact the Company's ability to support international sales.

4. Income Taxes

The provision (benefit) for income taxes for the years ended March 31, 2003, 2002 and 2001 consisted of the following:

	2003	2002	2001
		(in thousands)	
Current:			
Federal	$ (840)	$ —	$ 165
State	(2)	—	20
	(842)	—	185
Deferred/(Prepaid):			
Federal	3,066	—	(37)
State	232	—	(3)
	3,298	—	(40)
Total	$ 2,456	$ —	$ 145

The difference between the total expected provision (benefit) for income taxes computed by applying the statutory federal income tax rate to income before provision (benefit) for income taxes and the recorded provision (benefit) for income taxes for the three years in the period ended March 31, 2003 follows:

	2003	2002	2001
		(in thousands)	
Provision (benefit) for income taxes at statutory rate	$ (2,703)	$ (1,534)	$ 274
State tax provision net of federal effect	154	13	13
Permanent tax differences for non-deductible expenses/non-taxable income	(759)	31	30
Expiration of tax credits	—	8	6
Change in valuation allowance	5,764	1,282	—
Effect of FSC and EIE exclusion	—	(86)	(206)
Other	—	286	28
	$ 2,456	$ —	$ 145

The significant components of the net deferred tax asset at March 31, 2003 and 2002 follow:

	2003		2002	
	Current	Non-current	Current	Non-current
	(in thousands)			
Assets:				
Net operating loss carry forwards	$ —	$ 7,086	$ 3,124	$ —
Accounts receivable and unbilled costs and fees	266	—	213	—
Inventory	693	—	361	486
Deferred revenue	—	584	—	—
Accrued vacation	291	—	320	—
Accrued warranty costs	208	—	106	—
Research & development and other tax credits	—	1,813	701	—
Depreciation	—	604	—	—
Other	82	70	311	415
Deferred income tax assets	1,540	10,157	5,136	901
Valuation Allowance	(1,540)	(10,157)	(2,661)	(78)
Net deferred income taxes	$ —	$ —	$ 2,475	$ 823

The Company has available general business and other credits of approximately $1.8 million expiring at various times through 2018. As of March 31, 2003, the Company had federal and state net operating loss carryforwards of approximately $18,656,000 and $12,228,000, respectively expiring at various times from 2015 through 2023.

The Company has established a full valuation reserve in accordance with the provisions of SFAS No. 109. The Company continually reviews the adequacy of valuation allowances and releases these allowances when it is determined that is more likely than not that the benefits will be realized. During fiscal 2003 and 2002, the valuation allowance was increased by $8,958,000 and $2,739,000, respectively due to the Company's continued historical losses and the lack of persuasive evidence that these benefits would more likely than not be realized. In fiscal 2003 $6.2 million was charged to income tax expense, $0.5 million was attributable to net operating losses generated by deductions for stock options and the remainder was attributable to adjustments and reclassifications of deferred tax balances resulting in an increase of $8,958,000.

5. Warranty Obligations

The Company's parcel product line carries a one-year warranty, the costs of which are accrued for at time of shipment. Accrual rates are based upon historical experience over the preceding twelve months and the adequacy of the warranty reserve is evaluated monthly. Warranty experience for the year ended March 31, 2003 is as follows:

		(in thousands)
Warranty accrual beginning of period	$	196
Accruals for warranties issued during the period		519
Accruals related to pre-existing warranties		153
Warranty costs incurred during period		(333)
Balance at end of period	$	535

6. Stockholders' Investment

Preferred Stock: The Company's articles of organization authorize its Board of Directors to issue up to 100,000 shares of preferred stock in one or more series, to determine and fix certain relative rights and preferences of the shares of any series, to fix the number of shares constituting any such series, and to fix the designation of any such series, without further vote or action by its shareholders. The Company has no present plans to issue shares of preferred stock. In 1998, the Company designated a series of Preferred Stock as Series A Junior Participating Cumulative Preferred Stock (the "Series A Preferred Stock") to be issued upon the exercise of Rights issued under the Company's Shareholders Rights Plan. Under the Shareholder Rights Plan, adopted in 1998, under which its stockholders are entitled to purchase shares of its Series A Preferred Stock under certain circumstances. These circumstances include the purchase of 15% or more of the outstanding shares of common stock by a person or group, or the announcement of a tender or exchange offer to acquire 15% or more of the outstanding common stock.

Common Stock and Warrant Offering: On May 28, 2002, the Company closed on a private placement offering of common stock and warrants. A total of 1,115,000 shares were sold to accredited investors at a price of $17.64 each. In addition, warrants to purchase an additional 295,475 shares of common stock at a price of $23.52 were issued. Proceeds to the Company approximated $18.4 million, net of approximately $1.3 million of issuance costs of which $3.1 million was assigned to the warrants issued. The warrants were immediately vested and have a five-year life expiring in May of 2007. Due to certain conversion features of these warrants, that provide that the holder may opt for a cash settlement in certain instances, including a merger, a sale of all or substantially all of the Company's assets, or a tender offer or exchange offer of shares of the Company's stock, a liability equal to the Black-Scholes valuation of the warrants at the deal closing date was recorded on the Company's balance sheet. The "mark to market" change in the warrants value at March 31, 2003 of $2,299,000 was recorded as other income for the year ended March 31, 2003. The liability of $820,000 associated with the warrants is recorded as a non-current liability on the March 31, 2003 balance sheet. The fair market value of the warrants was determined using the Black Scholes pricing model and an assumed volatility of 68% to 72%, an interest rate of 5% and the remaining life of the warrants.

Stock Option and Other Compensation Plans: The Company has various stock option and other compensation plans for directors, officers, and employees. The Company has the following stock option plans outstanding as of March 31, 2003: the 1984 Stock Option Plan, the 1993, 1994-1995 and 1996 Stock Option Plans for Non-employee Directors; three CEO Employment Agreement Plans; 1995 Combination Plan; 1997 and 1998 Non-Qualified Option Plan; 1994-95 Stock Option Plan for New Employees, a 1999 Combination Plan, a 2000 Combination Plan and a 2002 Combination Plan. There were 3,293,000 shares authorized under these plans. Vesting periods on these plans range from immediate vesting to four years. Options under these plans are granted at fair market value and generally become exercisable within one to two years of the grant date and terminate ten years from the date of grant. In addition, the Company has a common stock installment purchase plan under which the Board of Directors may grant key personnel the right to purchase shares of the Company's common stock at fair market value and to pay the purchase price in twelve equal monthly installments. As of March 31, 2003, no shares have been reserved or granted under this plan.

The Company has instituted two common stock purchase plans. The Executive Equity Incentive Plan allows an executive officer of the Company to buy original issue Company common stock in any dollar amount up to the gross amount of the annual bonus granted to the Officer and to receive half the number of shares purchased in restricted stock which vests after 3 years. If the employee leaves the Company prior to 3 years, then the shares revert back to the Company. As of both March 31, 2003 and 2002, 2,251 shares have been reserved and restricted under this plan. The Reload Option Plan allows any eligible employee designated by the Board of Directors to receive new stock options (at an exercise price equal to the fair market value of the common stock on the date of sale of the stock) for every share of Company common stock sold or used to exercise stock options. There have been no issuances of stock options under the Reload Option Plan.

Stock Option Activity

A summary of the Company's stock option activity is as follows:

	2003		2002		2001	
	Number of Shares	**Weighted Average Exercise Price**	**Number of Shares**	**Weighted Average Exercise Price**	**Number of Shares**	**Weighted Average Exercise Price**
Options outstanding, beginning of year	1,739,657	$ 9.50	2,025,133	$ 8.78	1,784,399	$ 9.45
Options granted	704,100	11.13	484,400	10.04	409,350	6.30
Options exercised	(175,347)	8.39	(484,367)	7.78	(8,158)	6.62
Options expired	(108,550)	9.14	(285,509)	7.92	(160,458)	10.01
Options outstanding, end of year	2,159,860	$ 10.03	1,739,657	$ 9.50	2,025,133	$ 8.78
Options exercisable	1,350,246	$ 9.78	1,112,392	$ 9.62	1,363,251	$ 9.60
Options available for grant	344,615		327,615		469,890	
Weighted average fair value per share of options granted during the year		$ 7.84		$ 8.17		$ 3.96

The following summarizes certain data for options outstanding and exercisable at March 31, 2003:

	Number of Shares	Range of Exercise Prices	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life
Options outstanding,				
End of year:	353,970	$3.25—$7.00	$ 5.93	5.8
	436,100	7.01—10.25	7.71	5.9
	1,314,090	10.26—14.00	11.62	7.4
	50,200	14.01—17.50	16.26	7.1
	5,500	17.51—22.00	18.86	7.2
	2,159,860		$ 10.03	6.8
Options Exercisable:	272,971	$3.25—$7.00	$ 5.88	
	417,100	7.01—10.25	7.64	
	631,308	10.26—14.00	12.61	
	25,867	14.01—17.50	15.32	
	3,000	17.51—22.00	19.10	
	1,350,246		$ 9.78	

On April 15, 1998, the Company announced that its Board of Directors adopted a Shareholders' Rights Plan (the Plan) and declared a dividend of one preferred stock purchase right for each outstanding share of common stock. The dividend was payable to all holders of record of shares of common stock as of the close of business on April 17, 1998. The rights become exercisable ten days after a person or group acquires 15% or more of the Company's common stock, and in certain other situations described in the Plan. As of March 31, 2003, no options have been granted or exercised under this plan.

The Company realizes a tax deduction upon the exercise of non-qualified stock options and disqualifying dispositions of incentive stock options due to the recognition of compensation expense in the calculation of its taxable income. The amount of the compensation recognized for tax purposes is based on the difference between the market value of the common stock and the option price at the date the options are exercised. These tax benefits are credited to additional paid-in capital if it is considered more likely than not that they will be realized. No tax benefits were recorded in fiscal 2003 or 2002.

7. Note Receivable from Officer

In January 1994, the Company's former Chief Executive Officer ("CEO") purchased 160,000 shares of common stock at a price of $4.00 per share (the fair market value) financed under a note agreement for $640,000 from the Company. This note was secured by the stock and the personal assets of the CEO and accrued interest at a rate of 6.26%. In December 2001 this note was repaid in full.

8. Business Segment Information

In accordance with the provisions of SFAS No. 131 "Disclosures about Segments of an Enterprise and Related Information", the Company has determined that it has only one operating segment, the

X-ray product segment. This includes X-ray detection and imaging products used primarily for the detection of illegal drugs, terrorist explosives, and smuggled goods. The equipment is purchased by sophisticated government and commercial clients who place a premium on the detection of organic material in complex backgrounds and the ability to see the contents of containers with precision.

Geographical Data: All of the Company's export sales originate from the U.S. Less than 1% of the Company's assets are in any foreign country. The following table shows the breakdown of Net sales and contract revenues to foreign and domestic customers and the major regions of export activity based upon customer country of domicile.

	2002		2001		2000	
	(dollars in thousands):					
Domestic	$ 52,834	85%	$ 45,932	70%	$ 31,958	47%
Export	$ 9,124	15%	$ 19,464	30%	$ 35,416	53%
Net sales and contract revenues	$ 61,958	100%	$ 65,396	100%	$ 67,374	100%
Percent of Export Revenue by Major Region:						
Middle East & Africa	70.6%		59.0%		66.5%	
Europe	16.8		28.1		13.8	
Mexico	—		7.7		6.9	
Pacific Rim	11.7		4.4		12.7	
All Other	0.9		0.8		0.1	

Major Customers: Sales to major customers (representing in excess of 10% of consolidated revenues) consisted of X-ray product sales of the following:

Fiscal 2003: $10,768,000 to one customer.

Fiscal 2002: $18,199,000 to one customer.

Fiscal 2001: $16,768,000, $12,155,000 and $7,850,000 to three customers.

One customer, an agency of the U.S. Government, at March 31, 2003 had an accounts receivable balance (representing in excess of 10% of consolidated accounts receivable) of $2,730,000.

9. Commitments and Contingencies

Deferred Compensation: The Company has an unfunded deferred compensation plan, originally adopted in 1976 and amended at various times, for certain retired directors. This plan provides for periodic payments beginning at age 65, the amount of which depends on length of service. The Company paid $24,000 in 2003, $16,000 in 2002, and $50,000 in 2001 under this deferred compensation plan.

Litigation: In a decision issued December 29, 1999, the United States Court of Appeals for the Federal Circuit in Washington, D.C. ruled that the Company may pursue a patent infringement claim against Vivid Technologies ("Vivid"), which produces X-ray detection devices used in baggage scanning equipment. The Appeals Court overturned a 1998 decision in Vivid's favor by the Massachusetts Federal District Court. The lawsuit, filed by Vivid Technologies in May 1996, concerned whether Vivid's X-ray detection devices infringed on AS&E's patent. The District Court had ruled that AS&E could not assert a claim that Vivid's devices infringed on AS&E's patent. The Appeals Court also reversed the district court's finding on summary judgment that Vivid did not infringe on AS&E's patent, as well as the district court's denial of AS&E's request for discovery to oppose Vivid's summary judgment motion. Vivid was acquired by PerkinElmer in 2000.

In September 1998, the Company filed suit against EG&G Astrophysics Research Corp. ("EG&G") in U.S. District Court in Boston, Massachusetts alleging that EG&G infringed upon at least two patents owned by the Company and that EG&G had misappropriated certain trade secrets of the Company. In February 1999, the Company filed a related action in the same court against the U.S. Customs Service ("Customs") alleging that Customs had either misappropriated the Company's trade secrets or facilitated their misappropriation by EG&G and that Customs had improperly entered into a contract with EG&G for the acquisition of a product functionally equivalent to the Company's MobileSearch™ X-ray inspection system. In May 1999, the Court held a hearing on the Company's motion for a preliminary injunction against both Customs and EG&G prohibiting further performance of the contested contract and preventing EG&G from utilizing the Company's trade secrets. In August 1999, the Court issued a ruling denying the request for the preliminary injunction. In December 1999, EG&G filed a Motion for Summary Judgment that EG&G did not misappropriate the Company's trade secrets and in March 2000 EG&G filed a Motion for Summary Judgment that EG&G did not infringe the Company's patents. In February 2001 the Court denied EG&G's and the Company's motions for Summary Judgment. The suit against U.S. Customs Service was subsequently dismissed.

In a related matter, EG&G filed a request with the U.S. Patent and Trademark Office ("USPTO") for reexamination of the two patents that were at issue in the patent infringement action described above. The Company filed oppositions to the re-examination requests and the Company was advised by the USPTO that both its MobileSearch X-ray inspection and its Z® Backscatter X-ray inspection technology patent were upheld in all material respects on January 30, 2001.

In June 2002, the assets of EG&G were sold by PerkinElmer to L-3 Communications.

In March 2003 the Company entered into a Partial Settlement Agreement and Release with PerkinElmer, the parent of EG&G, with respect to the above-referenced litigation. The Partial Settlement Agreement and Release covers claims and counter-claims in the EG&G and Vivid actions up to June 14, 2002, the date of closing on the sale of EG&G by PerkinElmer to L-3.

The Company is also subject to various legal proceedings and claims that arise in the ordinary course of business. The Company currently believes that resolving these matters will not have a material adverse impact on its financial condition or results of operations.

Purchase Commitments: In the normal course of business, the Company enters into purchase orders with its vendors for the purchase of materials or services to meet its production needs. Certain single source vendors or vendors producing custom material require significant lead times from order to delivery of their material. In response to the expected increased demand subsequent to September 11th, the Company entered into certain purchase commitments with key suppliers for this long-lead material. Certain of these purchase orders related to these vendors contain cancellation clauses requiring the Company to pay for a portion or all of the work in process upon cancellation of an order or to purchase a certain minimum quantity of material by a future date. Should the demand for the Company's products decline significantly, or should there be a significant shift in the mix of products being demanded, the Company may incur cancellation charges that could be material to the

Company's results of operations. To date, the Company has not experienced any material losses related to cancellation penalties.

Employment Agreements: The Company has employment agreements with certain executives that provide for severance payments of up to one years base salary and the continuation of certain benefits for a period not to exceed one year if terminated pursuant to a change in control of the Company.

Retirement Savings Plan: The Company maintains a 401(k) Retirement Savings Plan for all employees with more than 500 hours and 6 months of credited service annually. The Plan is funded by elective employee contributions of up to 15% of their compensation. Under the Plan the Company matches 3% of employee contributions for each participant in the form of Company common stock. Expense under the Plan, consisting of Company contributions and Plan administrative expenses paid by the Company, totaled $420,711, $393,512, and $189,930 in 2003, 2002 and 2001, respectively.

American Science and Engineering, Inc. and Subsidiaries
Unaudited Quarterly Consolidated Financial Data
For the years ended March 31, 2003 and March 31, 2002

	2003 by quarter				2002 by quarter			
	1st	2nd	3rd	4th(1)(2)	1st	2nd	3rd	4th(1)
	Dollars in thousands, except per share amounts							
Net sales and contract revenues	$ 14,918	$ 16,935	$ 17,220	$ 12,885	$ 19,105	$ 15,501	$ 14,248	$ 16,542
Gross profit	3,490	3,362	3,878	219	4,614	3,384	3,170	4,871
Operating income (loss)	(1,548)	(2,071)	(519)	(3,741)	349	(1,118)	(2,732)	(349)
Net income (loss)	(909)	(697)	(1,058)	(5,287)	99	(797)	(1,792)	(2,022)
Net income per share								
—Basic	$ (0.15)	$ (0.10)	$ (0.15)	$ (0.77)	$ 0.02	$ (0.16)	$ (0.35)	$ (0.37)
—Diluted	$ (0.15)	$ (0.10)	$ (0.15)	$ (0.77)	$ 0.02	$ (0.16)	$ (0.35)	$ (0.37)

(1)
The fourth quarter of 2003 and 2002 net losses includes valuation reserves of approximately $2.5 million and $1.5 million, respectively, recorded against deferred tax assets previously recorded in connection with net operating losses incurred.

(2)
The fourth quarter of 2003 net losses include $3.2 million in provisions for inventory obsolescence based on the Company's forecast of future sales and the recoverability analysis.

Report of Independent Auditors on
Financial Statement Schedule

To the Board of Directors
of American Science and Engineering, Inc.:

Our audit of the March 31, 2003 consolidated financial statements referred to in our report dated May 21, 2003 appearing in this Annual Report on Form 10-K of American Science and Engineering, Inc. also included an audit of the March 31, 2003 financial statement schedule listed in the index to consolidated financial statements and schedule of this Form 10-K. In our opinion, this 2003 financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

/s/ PricewaterhouseCoopers LLP

Boston, MA
May 21, 2003

SCHEDULE II

AMERICAN SCIENCE AND ENGINEERING, INC. AND SUBSIDIARIES
VALUATION AND QUALIFYING ACCOUNTS AND RESERVES
For the years ended March 31, 2003, March 31, 2002, and March 31, 2001

Description—Allowance for Doubtful Accounts

	Balance at Beginning of Year	Charged to Costs and Expenses	Deductions from Reserves	Balance At End of Year
	Dollars in thousands			
2003	$ 111	$ 138	$ 3	$ 246
2002	$ 134	$ —	$ 23	$ 111
2001	$ 250	$ 110	$ 226	$ 134

Description—Allowances for Unbilled Cost and Fees

	Balance at Beginning of Year	Charged to Costs and Expenses	Deductions from Reserves	Balance At End of Year
	Dollars in thousands			
2003	$ 437	$ —	$ —	$ 437
2002	$ 437	$ —	$ —	$ 437
2001	$ 447	$ —	$ 10	$ 437

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AMERICAN SCIENCE AND ENGINEERING, INC.

DATED: July 29, 2003

By: /s/ ROGER P. HEINISCH

Roger P. Heinisch
Interim President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Company and in the capacities and on the dates indicated:

Signature	Title	Date
/s/ ROGER P. HEINISCH Roger P. Heinisch	Director and Interim President and Chief Executive Officer (Principal Executive Officer)	July 29, 2003
/s/ PAUL THEODORE OWENS Paul Theodore Owens	Vice President, Treasurer and Chief Financial Officer (Principal Financial Officer)	July 29, 2003
/s/ HAMILTON W. HELMER Hamilton W. Helmer	Director	July 29, 2003
/s/ DONALD J. MCCARREN Donald J. McCarren	Director	July 29, 2003
/s/ ERNEST J. MONIZ Ernest J. Moniz	Director	July 29, 2003
/s/ WILLIAM E. ODOM William E. Odom	Chairman of the Board, Director	July 29, 2003
/s/ RALPH S. SHERIDAN Ralph S. Sheridan	Director	July 29, 2003
/s/ CARL W. VOGT Carl W. Vogt	Director	July 29, 2003

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
Section 302 Certification

I, Roger P. Heinisch, certify that:*1*.
I have reviewed this amended annual report on Form 10-K/A of American Science and Engineering, Inc.;

2.
Based on my knowledge, this annual 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 annual report;

3.
Based on my knowledge, the financial statements, and other financial information included in this annual 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 annual report;

4.
The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:

a)
Designed such disclosure controls and procedures 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 annual report is being prepared;

b)
Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

c)
Presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5.
The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

a)
All significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

b)
Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6.
The registrant's other certifying officer and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: July 29, 2003 /s/ ROGER P. HEINISCH

Roger P. Heinisch
Interim President and Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
Section 302 Certification

I, Paul Theodore Owens, certify that:*1.*
I have reviewed this amended annual report on Form 10-K/A of American Science and Engineering, Inc.;

2.
Based on my knowledge, this annual 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 annual report;

3.
Based on my knowledge, the financial statements, and other financial information included in this annual 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 annual report;

4.
The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:

a)
Designed such disclosure controls and procedures 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 annual report is being prepared;

b)
Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

c)
Presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5.
The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

a)
All significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

b)
Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6.
The registrant's other certifying officer and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: July 29, 2003 /s/ PAUL THEODORE OWENS

Paul Theodore Owens
Vice-President, Treasurer and Chief Financial Officer

EXHIBIT INDEX

Exhibit Number	Description of Exhibit (and Statement of Incorporation by Reference, If Applicable)	Page Number (If Filed)
(3)(a)	Restated Articles of Organization of the Company (filed as an Exhibit to Company's Annual Report on Form 10-K for the year ended September 30, 1967, and incorporated herein by reference)	
(3)(b)	Articles of Amendment to Restated Articles of Organization of Company (filed as Exhibit 2(a)(ii)(B) to the Company's Registration Statement on Form S-7, No. 2-56452, filed May 25, 1976, and incorporated herein by reference)	
(3)(c)	Articles of Amendment to Restated Articles of Organization of Company (filed as Exhibit 12 to the Company's Annual Report on Form 10-K for the year ended March 31, 1976, and incorporated herein by reference)	
(3)(d)	By-laws of Company, as amended (filed as Exhibit 2(a)(iii) to Company's Registration Statement on Form S-7, No. 2-56452, filed May 25, 1976, and incorporated herein by reference)	
(4)	Shareholders Rights Plan (filed as Exhibit to the Company's filing on Form dated , 1992 and incorporated herein by references)	
(10)(a)(iv)	Amendment to Deferred Compensation Plans for Ismael Escobar and Herman Feshbach (filed as Exhibit 7 to the Company's Annual Report on Form 10-K for the fiscal year ended March 31, 1980, and incorporated herein by reference)	
(10)(a)(v)	Deferred Compensation Plan for Marie Spaulding (filed as Exhibit (10)(a)(v) to the Company's Annual Report on Form 10-K for the year ended March 31, 1988, and incorporated herein by reference)	
(10)(b)(ix)	1996 Stock Plan For Non-Employee Directors (filed as Exhibit 99 to the Company's Registration Statement on Form S-8, File No. 333-09257, filed on July 31, 1996, and incorporated herein by reference)	
(10)(b)(x)	Executive Equity Incentive Plan (filed as Exhibit 99 to the Company's Registration Statement on Form S-8, File No. 333-27929, filed on May 28, 1997 and incorporated herein by reference)	
(10)(b)(xi)	Reload Option Plan (filed as Exhibit (10)(b)(xi) to the Company's Annual Report on Form 10-K for the year ended March 28, 1997 and incorporated herein by reference)	
(10)(b)(xii)	1997 Non-Qualified Stock Option Plan (filed as Exhibit 99 to the Company's Registration Statement on Form S-8, File No. 333-27927, filed on May 28, 1997 and incorporated herein by reference)	
(10)(b)(xiii)	1998 Non-Qualified Stock Option Plan (filed as Exhibit (10) (b) (xiii) to the Annual Report on Form 10-K for the year ended March 31, 1998, and incorporated herein by reference)	
(10)(b)(xv)*	Employment Agreement between the Company and Dr. Joseph Callerame dated May 6, 1998, (filed as Exhibit (10) (b) (xv) to the Annual Report on Form 10-K for the year ended March 31, 1998, and incorporated herein by reference)	

(10)(c)(i)	Lease of Billerica property (filed as Exhibit 10(c) to the Company's Annual Report on Form 10-K for the year ended March 31, 1995 and incorporated herein by reference)
(10)(c)(ii)	Amendment to Lease of Billerica property (filed as to the Company's Annual Report on Form 10-K for the year ended March 28, 1997 and incorporated herein by reference)
(10)(c)(iii)	Lease of 33 Manning Road, Billerica, MA
(10)(c)(iv)	1999 Combination Stock Option Plan (filed as Exhibit 99 to the Company's Registration Statement on Form S-8, File No. 333-91801, filed on November 30, 1999 and incorporated herein by reference).
(10)(c)(v)	2000 Combination Stock Option Plan (filed as Exhibit 99 to the Company's Registration Statement, filed as Exhibit A to the Definitive Proxy Statement on Schedule 14A filed on August 18, 2000 and incorporated herein by reference)
(10)(c)(vi)	2002 Combination Stock Option Plan (filed as Exhibit 99.1 to the Company's Registration Statement on Form S-8, No. 333-102338, filed on January 3, 2003 and incorporated herein by reference)
(10)(c)(vii)*	Employment Agreement between the Company and Edwin L. Lewis dated February 3, 2000.
(10)(c)(viii)	Sub-lease from the Company of 30 Manning Road, Billerica, Massachusetts (filed as Exhibit (10)(c)(viii) to the Annual Report on Form 10-K for the year ended March 31, 2000, and incorporated herein by reference).
(10)(c)(ix)*	Employment Agreement between the Company and Richard Mastronardi dated August, 2000
(10)(c)(x)*	Employment Agreement between the Company and Andrew R. Morrison dated May 30, 2001
(10)(c)(xi)*	Employment Agreement between the Company and Reed Clark dated July 23, 2001
(10)(c)(xii)*	Employment Agreement between the Company and Ralph Foose dated February 11, 2002
(10)(c)(xiii)*	Employment Agreement between the Company and Ralph Sheridan dated July 11, 2002
(10)(c)(xiv)*	Employment Agreement between the Company and Paul Theodore Owens dated December 12, 2002
(10)(d)(i)	Export Credit and Security Agreement between American Science & Engineering and HSBC Bank USA
(10)(d)(ii)	Revolving Loan and Security Agreement between American Science & Engineering, Inc. and HSBC Bank USA
(10)(d)(iii)	Amendment No. 1 to the Export Credit and Security Agreement between American Science and Engineering and HSBC Bank USA dated February 14, 2002

(10)(d)(iv)	Amendment No. 1 to the Revolving Loan and Security Agreement between American Science and Engineering and HSBC Bank USA dated February 14, 2002
10(d)(v)	Amendment No. 2 to the Revolving Loan and Security Agreement between American Science and Engineering, Inc. and HSBC bank dated November 28, 2002
10(d)(vi)	Amendment No. 2 to the Export Credit and Security Agreement between American Science and Engineering, Inc. and HSBC bank dated November 28, 2002
10(d)(vii)	Amendment No. 3 to the Export Credit and Security Agreement between American Science and Engineering, Inc. and HSBC bank dated February 28, 2003
10(d)(viii)	Amendment No. 3 to the Revolving Loan and Security Agreement between American Science and Engineering, Inc. and HSBC bank dated February 28, 2003
(22)	Identification of Company's subsidiary, AS&E Radiography, Inc., incorporated in Massachusetts (filed as Exhibit (22) to Company's Annual Report on Form 10-K for the year ended March 31, 1988, and incorporated herein by reference)
(22.1)	Identification of Company's subsidiary, AS&E Global, Inc., incorporated in Massachusetts
(23.1)	Consent of Independent Accountants
(23.2)	Notice Regarding Arthur Andersen LLP
(99-1)	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(99-2)	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

*

Contract with Management

The Company's principal executive offices are located at 829 Middlesex Turnpike, Billerica, MA 01821; telephone number 978-262-8700; corporate web site www.as-e.com. We make available, free of charge through our website, our annual Form 10-K, current reports on Form 10-Q and Form 8-K, and amendments to these reports filed or furnished pursuant to Section 13(a) of the Securities Exchange Act of 1934 as soon as practicable after we electronically file such material with, or furnish it to the Securities and Exchange Commission.

EXHIBIT 23.1

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-102338, 333-13259, 333-05795, 333-05797, 333-53842, 333-69717, 333-27927, 333-27929, 333-09257, and 333-91801) and Form S-3 (Nos. 033-61903 and 333-89836) of American Science and Engineering, Inc. of our report dated May 21, 2003 relating to the consolidated financial statements and financial statement schedule, which appears in this Form 10-K/A.

/s/ PricewaterhouseCoopers LLP
Boston, Massachusetts
July 29, 2003

EXHIBIT 99.1

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

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), the undersigned officer of American Science & Engineering, Inc., a Massachusetts corporation (the "Company"), does hereby certify, to such officer's knowledge and belief, that: (1) the Annual Report on Form 10-K/A for the year ended March 31, 2003 (the "Form 10-K") of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and (2) the information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Roger P. Heinisch

ROGER P. HEINISCH
INTERIM PRESIDENT AND CHIEF EXECUTIVE OFFICER

JULY 29, 2003

EXHIBIT 99.2

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

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), the undersigned officer of American Science & Engineering, Inc., a Massachusetts corporation (the "Company"), does hereby certify, to such officer's knowledge and belief, that: (1) the Annual Report on Form 10-K/A for the year ended March 31, 2003 (the "Form 10-K") of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and (2) the information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Paul Theodore Owens

PAUL THEODORE OWENS

VICE PRESIDENT, TREASURER, AND CHIEF FINANCIAL OFFICER

JULY 29, 2003

BOARD OF DIRECTORS

Lt. Gen. (Ret.) William E. Odom
Chairman of the Board
Director, National Security Studies, Hudson Institute

Roger P. Heinisch, Ph.D.
Interim President and Chief Executive Officer, American Science and Engineering, Inc.

Hamilton W. Helmer, Ph.D.
Managing Director, Strategy Capital

Donald J. McCarren, Ph.D.
President, D&A Consulting, Inc.

Ernest J. Moniz, Ph.D.
Professor of Physics, Massachusetts Institute of Technology

Ralph S. Sheridan
Former Chief Executive Officer and President, American Science and Engineering, Inc.

Carl W. Vogt
Of Counsel, Fulbright and Jaworski

EXECUTIVE OFFICERS AND MANAGEMENT

Joseph Callerame, Ph.D.
Senior Technical Advisor

Ralph G. Foose
Vice President, Operations

Lee Grodzins, Ph.D.
Vice President, Advanced Development

Roger P. Heinisch, Ph.D.
Interim President and Chief Executive Officer

Andrey Mishin, Ph.D.
Vice President and General Manager, High Energy Systems Division

Ted Owens
Vice President, Treasurer and Chief Financial Officer

AS&E CORPORATE HEADQUARTERS

829 Middlesex Turnpike
Billerica, MA 01821
Tel. (978) 262-8700
Fax. (978) 262-8804
http://www.as-e.com

CONTACT INFORMATION

Investor Relations: ir@as-e.com
President's Office: ceo@as-e.com
Sales: sales@as-e.com

ANNUAL MEETING

The Special Meeting in Lieu of Annual Meeting of Stockholders of American Science and Engineering, Inc. will be held September 25, 2003, at 10:30 a.m., at the Renaissance Bedford Hotel, 44 Middlesex Turnpike, Bedford, Massachusetts.

AUDITORS

PricewaterhouseCoopers LLP
Boston, Massachusetts

OUTSIDE LEGAL COUNSEL

Ropes and Gray LLP
Boston, Massachusetts

BANKING

Silicon Valley Bank
Santa Clara, California

TRANSFER AGENT AND REGISTRAR

American Stock Transfer and Trust Company
New York, New York

STOCK LISTING

American Stock Exchange
Symbol: ASE

SEC FILINGS

Copies of American Science and Engineering, Inc.'s filings with the Securities and Exchange Commission (SEC) may be obtained online at:
http://www.as-e.com/investor/investor.html

AS&E is an Equal Opportunity Employer. It is our policy to recruit, hire, train, and promote personnel in all job classifications without regard to race, religion, color, national origin, sex, or age. Above and beyond nondiscrimination, we are committed to an Affirmative Action Program dedicated to the hiring, training, and advancement within the Company of minorities, women, people with disabilities, and Vietnam Veterans.

AS&E® and Z® Backscatter are registered trademarks, and BodySearch™, CargoSearch™, MobileSearch™, ISOSearch™, PalletSearch™, Shaped Energy™, Z® Backscatter Van™, 66Z™, 66Z*PLUS*™, 101GT™, 101Z™, 101ZZ™, 101ZZ*PLUS*™, 101XL™, 101ZVan™ and Radioactive Threat Detection™, are trademarks of American Science and Engineering, Inc.

AS&E is ISO 9001 Registered

FRONT COVER IMAGES

1	2	3
4	5	6

1. Z® Backscatter Van™
2. MobileSearch™ Z® Backscatter X-ray image
3. MobileSearch™ scanning a sea container
4. Radioactive Threat Detection™ alert
5. 3.5 MeV Shaped Energy™ gantry
6. Heroin revealed in Z® Backscatter X-ray image

BACK COVER IMAGES

7	8	9
10	11	12

7. Z® Backscatter X-ray image of mixed cargo
8. Truck approaching border crossing checkpoint
9. Shaped Energy™ image of a car in a container
10. AS&E's Model 66Z*PLUS*™
11. Weapons and explosives revealed in Z® Backscatter image
12. Vehicles awaiting clearance at military security checkpoint *(photo courtesy U.S. Department of Defense)*

AS&E®

AMERICAN SCIENCE AND ENGINEERING, INC.
829 MIDDLESEX TURNPIKE BILLERICA, MA 01821 USA
TEL: 978-262-8700 FAX: 978-262-8804 www.as-e.com