

# FOCUS



THE 2005 ANNUAL REPORT



# **About II-VI Incorporated**

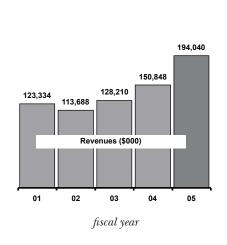
In 1971, II-VI Incorporated began by producing the highest-quality materials available for the manufacture of high-power industrial  $\mathrm{CO}_2$  laser optics. Today, thanks to a commitment to excellence and continued investments in advanced material growth, optical fabrication, precision diamond turning, thin-film coating, and unparalleled quality control, II-VI has helped change the landscape of industrial manufacturing through innovative optical products used in welding, cutting, and marking in the world's factories.

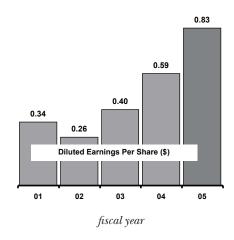
II-VI is a global company with headquarters and manufacturing facilities in Pennsylvania; additional manufacturing facilities in Florida, California, Texas, Singapore, China, and Vietnam; research and development centers in Pennsylvania and New Jersey; and sales and distribution facilities in Japan, Germany, Belgium, Switzerland, and the United Kingdom. A multifaceted optical and opto-electronic manufacturing company as well, II-VI manufactures near-infrared and visible light products for solid-state lasers through its VLOC subsidiary, military infrared optics through its Exotic Electro-Optics subsidiary, thermoelectric coolers through its recently acquired Marlow Industries, Inc., subsidiary, solid-state x-ray and gamma-ray radiation sensor material and devices through its eV PRODUCTS division, single-crystal silicon carbide substrates through its Wide Bandgap Materials Group, and engineered materials, process development, and pilot manufacturing through its Advanced Materials Development Center.

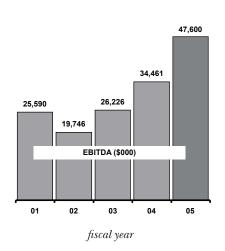
II-VI is a publicly traded company listed on the Nasdaq National Market under the symbol "IIVI."

# On the Cover: Focus

Our cover reflects our focus during the past fiscal year (clockwise from lower right): continued growth and expansion of our Company as reflected by our acquisition of Marlow industries, Inc., our expansion of diamond-turning capabilities, our aggressive marketing of low-power scanning laser system optics, our continued development of x-ray imaging technology, our materials research and development, our contributions to the Joint Strike Fighter program, our progress with silicon carbide, our near-IR development of YAG and other crystals, and — in the magnifying glass — our continued focus on our core high-power CO<sub>2</sub> laser optics products.



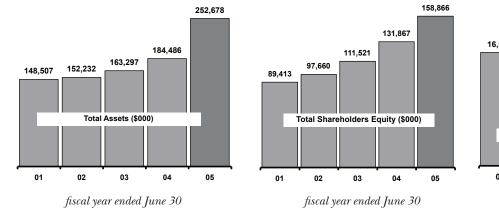


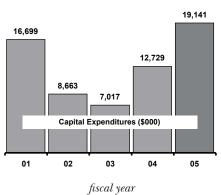


# **Financial Summary**

For the year ended or as of June 30,	2005	2004	
(000 except share and per share data)			
Bookings	\$187,776	\$162,775	
Revenues	\$194,040	\$150,848	
Net earnings	\$24,843	\$17,337	
Total assets	\$252,678	\$184,486	
Total shareholders' equity	\$158,866	\$131,867	
Working capital	\$73,854	\$46,784	
Diluted earnings per share	\$0.83	\$0.59	
Book value per share	\$5.44	\$4.56	
Diluted weighted average shares outstanding	29,909,326	29,436,284	

 $The \ above \ share \ and \ per \ share \ data \ reflects \ the \ two-for-one \ stock \ dividend \ of \ the \ Company's \ common \ stock \ distributed \ on \ March \ 22, \ 2005.$ 









## To Our Fellow Shareholders

Fiscal year 2005 was a very good year at II-VI Incorporated. Net revenues increased 29% to a record \$194.0 million, while earnings per diluted share grew 41% to a record \$0.83 — adjusted to reflect the two-for-one stock dividend distributed to shareholders in March 2005. Forbes Magazine recognized this performance, as well as our past performance, by moving II-VI to its list of 100 Best Small Companies.

During the past year, we not only set financial records but also undertook numerous strategic initiatives to ensure a robust Company future. First, we expanded manufacturing capacity to meet increasing worldwide demand for II-VI products. We invested in a new diamond-turning facility in Singapore, a new lower-cost manufacturing facility for near-infrared optics and thermoelectric coolers in Vietnam, and a 59,000-square-foot addition to our Pennsylvania headquarters, including a major expansion of the thin-film coating area and additional corporate office space. In the business synopses following this letter, we sharpen the focus to show how these capital investments position the Company for future growth. Second, in keeping with our policy of growing via acquisitions, we added Marlow Industries, Inc. (Marlow), to the II-VI family of companies. Marlow is a global leader in thermoelectric solutions for cooling and power generation and a winner of the prestigious Malcolm Baldridge National Quality Award.

With fiscal 2005 bookings up 15% to a record \$187.8 million, we are confident that II-VI will continue to benefit from the anticipated global economic expansion during fiscal 2006. We believe each market we serve will continue to grow and that we have made the appropriate investments and built the solid financial fundamentals necessary to capitalize on these conditions.

The Company's record financial performance was due in large part to the success of our Infrared Optics (IR) business. Demand for IR products remains strong. Record revenues and bookings in fiscal 2005 were led by strong original equipment manufacturers and aftermarket demand. The increasing base of installed laser systems is expected to keep the pace of optics consumption growing during fiscal 2006. To meet this demand, we continue to streamline our worldwide manufacturing base and optimize optics production at our China and Singapore facilities.

Fiscal 2005 also was a strong year in the Near Infrared Optics business. Bookings and revenues increased from the prior year by 11% and 32%, respectively. This increase was driven by the escalating pace of our ultraviolet (UV) filters product line. We expanded production at both the Advanced Materials Development Center (AMDC) in Pennsylvania and VLOC in Florida to meet aggressive customer targets. Additional growth in fiscal 2006 is expected from YAG aftermarket optics, as well as YAG and other crystals shipments for military and medical markets.

Our military IR business, Exotic Electro-Optics (EEO), achieved record revenues of \$27.3 million, an increase of 8% from the prior year. Fiscal 2005 bookings and revenues for the sapphire window product line each increased approximately 20%. During the fourth quarter, EEO received a \$1.0 million order from the Office of Naval Research to continue developing sapphire products. We focused significant effort and investment on improving EEO business systems, manufacturing processes, and quality programs. We expect these initiatives to yield improvements in customer satisfaction and business profitability in fiscal 2006.

During the past year, we also made significant investments to position the Compound Semiconductor Group (CSG) for future growth. With the acquisition of Marlow, whose thermoelectric product line complements II-VI's strong position in optical and opto-electronic components and devices, we now offer one of the broadest product portfolios available to system and equipment designers in the defense, medical, industrial, and telecommunication components industries.

# September 20, 2005

Since joining II-VI in December 2004, Marlow has made significant contributions to the Company's financial results, and we expect that trend to continue in fiscal 2006.

The Wide Bandgap Group (WBG) in CSG increased revenues by 40% from the previous year. During fiscal 2005, this group focused its efforts on silicon carbide (SiC) crystal growth, emphasizing material purity, defect density reduction, and wafer diameter expansion. We continue to develop new products, including 4H polytype conducting SiC wafers. Early in fiscal 2005, WBG was awarded a three-year, \$7.5 million cost-sharing contract to scale up its Advanced Physical Vapor Transport SiC crystal growth technology to produce 100mm diameter substrates. Under this contract, WBG is helping to solve the technical and manufacturing problems posed by next-generation Department of Defense systems and commercial applications. During the past fiscal year, we also announced an alliance with and investment in SemiSouth Laboratories, Inc., which will include the establishment of a SiC semiconductor substrate manufacturing facility in Mississippi.

During fiscal 2005, our eV PRODUCTS (eV) division in CSG completed the third year of a \$1.5 million U.S. Army contract to increase cadmium zinc telluride material purity. In addition, the division entered into a \$0.7 million contract to design and develop a next generation x-ray imaging food inspection system. Although the year was a challenging one due to customer cutbacks, market slowdown, and long customer development cycles, eV moves forward focused on increasing yields, reducing cycle times, and lowering the manufacturing costs of its products. The long-term outlook on demand for radiation sensing products continues to be positive and includes several significant opportunities in the security and monitoring markets.

Throughout its history, II-VI has maintained a conscientious, comprehensive corporate governance program and a solid system of reporting and internal controls to protect and serve the interests of our shareholders. Our commitment to this program was never more evident than in fiscal 2005 when we invested an extraordinary amount of time and money to ensure that our internal processes complied with Section 404 of the Sarbanes-Oxley (SOX) Act. In our opinion, however, the benefits of SOX Section 404 compliance do not justify this level of significant effort and cost, and we urge Congress and the Securities and Exchange Commission to implement regulation relief for smaller companies like II-VI.

As the Company enters fiscal 2006, we believe we are in a strong position to capitalize on investments made during the just completed fiscal year. As the economy continues to expand we will build on our considerable strengths to deliver the technical and operating excellence, growth, and value our shareholders have come to expect from II-VI.

Finally, we would like to thank our 1,500 fellow employees at our 17 locations in 9 countries worldwide whose dedication makes us a stronger company, one exceptionally well positioned for growth and success in the coming fiscal year. We also thank you, members of the communities where we operate, our customers, suppliers, and shareholders for your confidence and continued support.

**Chairman & Chief Executive Officer** 

**President & Chief Operating Officer** 

France of Kramer





# **Optics Products and Services**



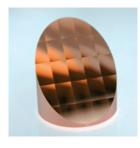
Infrared, near-infrared, and military infrared products and services are provided through our II-VI Infrared, VLOC, and Exotic Electro-Optics groups. Together, they serve the original equipment manufacturers of industrial lasers and end users, as well as the industrial, medical, semiconductor, telecommunication, aerospace, and military markets.

# **II-VI INFRARED (Infrared Optics)**

II-VI Infrared (IR)—the world leader in  $\mathrm{CO}_2$  laser optics—designs, manufactures, and markets a complete line of laser lenses, mirrors, infrared optical materials, and other optical components.



In fiscal year 2005, the IR group sharpened its focus on expanding its worldwide manufacturing capacity. The first step in this process was to increase the size of our campus in Saxonburg, Pennsylvania, by adding 59,000 square feet to the Thin-Film Coating production, engineering, manufacturing, and general and administrative areas. Second, the IR group is adding diamond-turning capabilities to its manufacturing location in Singapore and has increased optics production at its facility in China. The expansion of optics production outside of the Saxonburg facility provides the opportunity to grow our Asian operation's fabrication capabilities beyond the conventional optical fabrication processes used currently. Introducing a diamond-turning facility to Singapore will also reduce production costs and free up capacity in our Saxonburg facility to develop more advanced diamond-turned products.



The growth in the IR group's technical capabilities this past fiscal year was evidenced by the introduction of many new diamond-turned optics. These new optics demonstrated our ability to create products that were not possible a year ago with then-existing technology. The IR group continues pushing the technological envelope, extending the capabilities of our diamond-turning machines and continually improving our ability to make more complex products. The Saxonburg diamond-turning group also played a part in history this past fiscal year when a zinc selenide prism and aluminum mirrors produced by the group were used as part of the Deep Impact space project. This project involved the collision of a probe with a comet in order for NASA to study the comet's makeup and learn more about the origins of the universe.



Images on this page top to bottom: A 2-axis diamond-turning machine creating a copper mirror, a diamond-turned vortex lens, a diamond-turned reflective beam integrator, and the Deep Impact comet collision (image courtesy of NASA).

## **VLOC (Near-Infrared Optics)**

VLOC is a world leader in the growth, manufacture, and supply of a wide range of crystals and optical components used in laser and optical systems.

In fiscal year 2005, a primary focus of this business group was its ultraviolet (UV) filter product line. VLOC increased its monthly delivery rates of UV filter lenses significantly during the fiscal year. This was accomplished through a coordinated effort with the Advanced Materials Development Center (AMDC) to overcome technical UV material growth challenges and add crystal growth and fabrication capacity. These lenses are placed in a housing leading to an optical sensor, which is then installed on military aircraft as a part of a larger missile detection system. The system can detect the wavelength signature caused by a ground-based missile and warn the aircraft, allowing it to take appropriate countermeasures.

As part of its focus for fiscal year 2006, VLOC is starting up production of near-IR optics in a new manufacturing facility near Ho Chi Minh City, Vietnam. Over the next two years, VLOC will transfer the majority of its Asian optics production from our China facility to Vietnam.

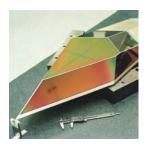


Exotic Electro-Optics, Inc. (EEO), is a leading supplier of state-of-the-art infrared windows, domes, and other optical components, coatings, and assemblies for aerospace, defense, and commercial markets. Our optics and optical subassemblies for military infrared systems include thermal imaging, night vision, and targeting and navigation systems.

A particular focus for EEO is its large-area sapphire fabrication effort, which involves products specifically used for targeting and imaging systems. In fiscal year 2005, we made significant strides in our production rates of large sapphire panels in support of the Advanced Targeting Pod (ATP) program. In addition, we secured initial production sets of large sapphire window assemblies for the System Design and Development (SDD) stage of the Joint Strike Fighter (JSF) Electro-Optic Targeting System (EOTS) program. EEO's focus has been on continued refinement of ATP sapphire production and timely manufacturing for the JSF SDD program. These products act as the window and protective shield, both environmentally and for electromagnetic interference, for advanced targeting and imaging systems. EEO sapphire windows are a critical part of these targeting systems. EEO has delivered numerous ATP units to date and the JSF program is forecasted to last many years, potentially involving more than 2,500 aircraft, all of which would include the EOTS system.









Images on this page top to bottom: Lenses used in the UV filter, a typical threat the UV filter helps to defend against, Joint Strike Fighter large sapphire window assembly for EOTS, the Joint Strike Fighter in flight.





# **Compound Semiconductor Group**



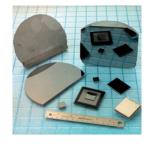
The Compound Semiconductor Group (CSG) is composed of Marlow Industries, Inc.; eV PRODUCTS; the Wide Bandgap Materials Group; and the Advanced Materials Development Center. CSG leverages its expertise in engineered materials and devices in order to provide breakthrough solutions for its customers in niche applications that serve the defense and space, telecommunications, medical, and industrial markets.



# Marlow Industries, Inc.

In fiscal year 2005, Marlow Industries, Inc. (Marlow), a global leader in the design and manufacture of thermoelectric solutions for both cooling and power generation based on compound semiconductor materials, became part of our organization.

Marlow's focus on thermoelectric solutions has resulted in a large number of significant contributions to the development of the CSG markets. For example, Marlow has successfully participated for over 25 years in the U.S. Army's Thermal Weapon Sight (TWS) program. The TWS system was designed to be man-portable, with each component in the system made to be lightweight, small, and operate on low power from internally contained batteries. Marlow established this precise manufacturing capability while ramping up production rates to meet the needs of the special forces who are serving our country in the global war on terrorism. Many different versions of the six-stage thermoelectric cooler (TEC) have evolved during the program to meet ever-increasing demands and performance. This focus on the customer's needs made Marlow the chosen supplier from the start of the program and has allowed it to remain a preferred supplier for TECs.



Like the other business units of II-VI, Marlow has a long history of process and product innovation. As a quality-based company, Marlow was the first and only thermoelectric company to have ever won the coveted Malcolm Baldrige National Quality Award. In order to better meet the needs of its customers and the worldwide market, Marlow's operations will be expanded this year to our new manufacturing facility in Vietnam.



#### **eV PRODUCTS**

eV PRODUCTS (eV) is the world's leading manufacturer of cadmium-zinc-telluride (CZT) radiation detection products, including components and subassemblies optimized for specific industry applications.

eV took its work to a new level this past year with the launch of the NASA Swift Satellite, which included 33,000 CZT radiation detectors produced by the division a few years ago. The detectors were designed to pinpoint the location of gamma ray bursts, which signify events such as the collapse of stars and creation of black holes. The eV detectors were on board when the Swift Satellite was used to photograph the results of the Deep Impact comet project. This

Images on this page top to bottom: A multi-stage thermoelectric cooler, a rifle-mounted Thermal Weapons Sight (TWS), ingots and radiation detectors of CZT, an artist's drawing of the Swift Satellite witnessing a gamma ray burst (image courtesy of NASA).

project is a good example of the long development cycles often required of eV's customers, some of whom are only now completing the final stages of pre-revenue qualification that precede ramp-up of their projects.

During fiscal year 2005, eV focused on a continued effort to make internal investments in order to diversify its product portfolio and improve operational performance. eV experienced an increase in inquiries related to its portable spectrometer sensors, which enable the "fingerprinting" of nuclear materials. We also completed the first phase of our development of new industrial sensor products that are being evaluated for next-generation food and contraband inspection systems.



### **Wide Bandgap Materials Group**

The Wide Bandgap Materials Group (WBG) is a supplier of high-performance, high-quality silicon carbide (SiC) and other wide bandgap materials.

During fiscal year 2005, the group focused its efforts on manufacturing and marketing single-crystal SiC semiconductor wafers. These efforts led to the successful development and volume sales of new, low-defect, semi-insulating, 3-inch SiC wafers. While ramping up volume production on this product, WBG also began making the internal investments necessary to develop a 100-mm (4-inch) diameter wafer capability that is expected to be in demand in the telecommunications market for next-generation wireless networks. In addition, WBG accelerated its product development efforts for items such as 4H polytype conductive wafers. Their use will allow high-temperature, high-power applications such as automotive sensors, power switching devices, and hybrid electric vehicles.

Fiscal year 2005 also saw WBG form an alliance with SemiSouth Laboratories, Inc., and Mississippi State University for the advancement of SiC device technology. In addition, WBG is establishing a SiC semiconductor substrate manufacturing facility in Starkville, Mississippi. The alliance is expected to accelerate development efforts for SiC.



# **Advanced Materials Development Center**

The Advanced Materials Development Center (AMDC) provides expertise in materials development, process development, manufacturing scale up, and more to support the various divisions of II-VI.

In fiscal year 2005, AMDC diversified its focus to include volume manufacturing of engineered materials, including its support of VLOC in the growth of UV filter materials. This activity continues to add new capabilities and materials to our existing product base, providing additional opportunity for growth.



Images on this page top to bottom: Silicon carbide (SiC) wafers, high-power application for SiC (wireless telecommunications tower), AMDC crystal growth facility, a UV detector single crystal.





# **Focus on Growth**

From the expansion of our Pennsylvania headquarters to our new facility in Vietnam, we are focused on increasing our capacity and capabilities to better serve our customers. This includes the addition of diamond-turning capabilities in Singapore (top left) and increased optics production in China (top right).

The addition of Marlow (bottom left) brings with it a strong history of product and process innovation, as well as quality, in the area of thermoelectric solutions. The establishment of new manufacturing facilities in Vietnam (bottom right) opens up further Asian manufacturing opportunities.

Whether it is a new, state-of-the-art boardroom at our Pennsylvania headquarters (center, with Chairman Carl Johnson and President Fran Kramer) or a brand-new facility located halfway around the world, we have focused our efforts and our goals on providing the best product and customer service possible for the benefit of both our customers and shareholders.



# **FORM 10-K**

#### **United States**

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

[X]	<b>Annual Report</b> pursuant to Section 13 or 15(d) of the Sec	curities Exchange Act of 1934
	for the fiscal year ended	June 30, 2005
[]	Transition report pursuant to Section 13 or 15(d) of the Se from to	curities Exchange Act of 1934 for the transition period
	Commission File Num	aber: 0-16195
	II-VI INCORPO (Exact name of registrant as spe	
	PENNSYLVANIA (State or other jurisdiction of incorporation or organization)	25-1214948 (I.R.S. Employer Identification No.)
	375 Saxonburg Boulevard Saxonburg, PA (Address of principal executive offices)	16056 (Zip code)
	Registrant's telephone number, includi	ng area code: <b>724-352-4455</b>
	Securities registered pursuant to Secti	on 12(b) of the Act: None.
	Securities registered pursuant to S	ection 12(g) of the Act:
	Common Stock, no	par value.
Secur	ate by check mark whether the registrant (1) has filed all re- rities Exchange Act of 1934 during the preceding 12 months (exchange), and (2) has been subject to such filing requires	or for such shorter period that the registrant was required
	Yes <u>X</u> No	
will n	ate by check mark if disclosure of delinquent filers pursuant to not be contained, to the best of registrant's knowledge, in def ence in Part III of this Form 10-K or any amendment to this Fo	initive proxy or information statements incorporated by
Indica	ate by check mark whether the registrant is an accelerated file	r (as defined in Rule 12b-2 of the Exchange Act).
	Yes <u>X</u> No	
Indica	ate by check mark whether the registrant is a shell company (a	as defined in Rule 12b-2 of the Exchange Act).
	Yes No2	<u>X</u>
Aggre	egate market value of outstanding Common Stock, no par val	lue, held by non-affiliates of the Registrant at December

purposes of this calculation only, directors and executive officers of the Registrant and their spouses are deemed to be affiliates of the Registrant.

31, 2004, was approximately \$506,279,000 based on the closing sale price reported on the Nasdaq National Market. For

Number of outstanding shares of Common Stock, no par value, at August 31, 2005, was 29,241,688.

#### **DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's definitive proxy statement, which will be issued in connection with the 2005 Annual Meeting of Shareholders of II-VI Incorporated, are incorporated by reference into Part III of this Annual Report on Form 10-K.

#### **Forward-Looking Statements**

This annual report on Form 10-K (including certain information incorporated herein by reference) contains forward-looking statements made pursuant to Section 21E of the Securities Exchange Act of 1934, as amended, and the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements relate to the Company's performance on a going-forward basis. Forward looking statements are also identified by words such as "expects," "anticipates," "intends," "plans," "projects" or similar expressions.

The forward-looking statements in this Form 10-K involve risks and uncertainties, which could cause actual results, performance or trends to differ materially from those expressed in the forward-looking statements herein or in previous disclosures. The Company believes that all forward-looking statements made by it have a reasonable basis, but there can be no assurance that management's expectations, beliefs or projections as expressed in the forward-looking statements will actually occur or prove to be correct. Actual results could materially differ from such statements. In addition to general industry and economic conditions, factors that could cause actual results to differ materially from those discussed in the forward-looking statements include, but are not limited to: (i) the Company's ability to successfully integrate Marlow's operations into the Company's organization and to realize synergies in material growth and utilization of our worldwide manufacturing and distribution networks; (ii) the failure of any one or more of the assumptions stated above to prove to be correct; (iii) the Risk Factors set forth in Item 7; (iv) purchasing patterns from customers and end-users; (v) timely release of new products, and acceptance of such new products by the market; (vi) the introduction of new products by competitors and other competitive responses; and/or (vii) the Company's ability to devise and execute strategies to respond to market conditions.

#### **PART I**

#### ITEM 1. BUSINESS

#### Introduction

II-VI Incorporated ("II-VI" or the "Company") was incorporated in Pennsylvania in 1971. Our executive offices are located at 375 Saxonburg Boulevard, Saxonburg, Pennsylvania 16056. Our telephone number is 724-352-4455. Reference to the "Company" or "II-VI" in this Form 10-K, unless the context requires otherwise, refers to II-VI Incorporated and its wholly-owned subsidiaries and its majority-owned subsidiary. The Company's name is pronounced "Two-Six Incorporated." The majority of our revenues are attributable to the sale of (i) infrared and near-infrared optical components for laser applications, (ii) military infrared products for military applications and (iii) thermoelectric cooling and power generation products.

In December 2004, the Company acquired all the outstanding shares of Marlow Industries, Inc. (Marlow), a global leader in the design and manufacturer of thermoelectric products for both cooling and power generation based on compound semiconductor materials. Marlow's products are sold in a variety of markets, including defense and space, telecommunications, medical, consumer and industrial markets and is an operating unit within the Company's Compound Semiconductor Group segment.

In July 2005, the Company exercised its call option and purchased the remaining 25% interest of II-VI Deutschland GmbH from L.O.T.-Oriel Laser Optik GmbH & Co. KG of Darmstadt, Germany.

Our Internet address is <a href="www.ii-vi.com">www.ii-vi.com</a>. On this web site we post the following filings as soon as reasonably practical after they are electronically filed with or furnished to the Securities and Exchange Commission: our annual report on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K, and any amendments to those reports or statements filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934. In addition, we post our proxy statements on Schedule 14A related to our annual shareholders' meeting as well as reports filed by our directors, officers and ten percent beneficial owners pursuant to Section 16 of the Securities Exchange Act of 1934. All such filings are located on the Investor Relations page of our web site and are available free of charge.

#### **Information Regarding Market Segments and Foreign Operations**

Financial data regarding our revenues, results of operations, industry segments and international sales for the three years ended June 30, 2005 is set forth in the consolidated statements of earnings and in Note M to the Company's consolidated financial statements included in this Form 10-K. We also discuss certain risks related to our foreign operations in Part II of this Annual Report which are incorporated herein by reference (see "Risk Factors – International Sales Account for a Significant Portion of Our Revenues" below).

#### **General Description of Business**

We develop, manufacture and market high technology materials and derivative precision components and products for precision use in industrial, medical, military, security and aerospace applications. We use advanced engineered material growth technologies coupled with proprietary high precision fabrication, micro-assembly, thin-film coating production processes and electronic integration to enable complex optoelectronic devices and modules. Our products are supplied to manufacturers and users of a wide variety of markets including industrial, defense, space, medical and telecommunication markets and are deployed in applications that improve the cost and performance of laser cutting, welding and marking operations; reduce the cost and improve the reliability of surgical procedures; reduce the cost and improve the reliability of sensors that enhance the safety and effectiveness of our armed forces; and reduce the cost and improve the performance of cooling and power generation solutions. A key strategy is to develop and manufacture complex materials from the periodic table of the elements. We focus on providing critical components to the heart of our customers' assembly lines for products such as high power laser material processing systems, military fire control and missile guidance devices, advanced medical and security scanning systems, fiber optics and wireless communication systems, medical diagnostic systems, and various industrial, commercial and consumer thermal management solutions. We develop, manufacture and market infrared and near-infrared laser optical elements, military infrared optical components, x-ray and gamma ray sensors, single crystal silicon carbide (SiC) substrates and thermoelectric cooling and power generation solutions.

Our United States production operations are located in Pennsylvania, Florida, California, New Jersey and Texas and our non-United States production operations are or will be based in Singapore, China, and Vietnam. In addition to sales offices at each of our manufacturing sites we have sales and marketing subsidiaries in Germany, Japan, Switzerland, Belgium and the United Kingdom. Approximately 40% of our revenues are from product sales to customers outside of the United States.

Our primary products are as follows:

- Laser-related products including laser gain materials for solid-state lasers and high precision optical elements
  used to focus and direct laser beams to target or work surfaces. The majority of our laser products require
  advanced optical materials that are internally produced. Our vertical integration from material growth through
  fabrication and thin-film coating provides us with a significant competitive advantage.
- Military infrared products including targeting and navigation systems that utilize advanced optical materials.
   The vertical integration of our manufacturing processes for these military applications provides us with a significant competitive advantage.
- X-ray and gamma-ray sensors based on the semiconductor material Cadmium Zinc Telluride (CdZnTe). These sensors are attractive to customers due to the promise of increased performance, reduced size, improved ruggedness and lower voltage requirements as compared to traditional technologies.
- SiC substrates, which is a wide bandgap semiconductor material that offers high-temperature, high-power and high-frequency capabilities.
- Thermoelectric coolers based on highly engineered semiconductor materials that provide reliable and low cost temperature control.

#### **Our Markets**

Our market focused businesses are organized by technology and products. Our business is comprised of six primary markets:

- 1) Design, manufacture and marketing of optical and electro-optical components, devices and materials for infrared lasers and instrumentation for industrial, medical and military applications by our II-VI business units.
- 2) Design, manufacture and marketing of near-infrared and visible-light laser products for industrial, military, scientific and medical instruments and laser gain material and products for solid-state Yttrium Aluminum Garnet (YAG) and Yttrium Lithium Fluoride (YLF) lasers by our VLOC subsidiary.
- 3) Design, manufacture and marketing of infrared products for military applications by our Exotic Electro-Optics subsidiary.
- 4) Design, manufacture and marketing of x-ray and gamma-ray solid-state radiation sensors and components for defense, space, medical, and industrial markets serviced by our Compound Semiconductor Group's eV PRODUCTS division.
- 5) Design, manufacture and marketing of single crystal SiC substrates for use in defense and space, telecommunications, and industrial markets by our Compound Semiconductor Group's Wide Bandgap (WBG) group.
- 6) Design, manufacture and marketing of thermoelectric cooling and power generation solutions for use in defense and space, telecommunications, medical, consumer and industrial markets serviced by our Compound Semiconductor Group's Marlow Industries, Inc. subsidiary.

Infrared Optics Market. In recent years, increases in laser component consumption have been driven by continued worldwide proliferation of laser processing applications. Manufacturers are seeking solutions to increasingly complex demands for quality, precision, speed, throughput, flexibility, automation and cost control. CO<sub>2</sub> lasers provide these benefits in a wide variety of cutting, welding, drilling, ablation, balancing, cladding, heat treating, and marking of materials such as steel alloys, non-ferrous metals, plastics, wood, paper, fiberboard, ceramics and composites. For example, automobile

manufacturers use lasers to facilitate rapid prototyping, production simplification, efficient sequencing, and computer control on high throughput production lines. Manufacturers of recreational vehicles, motorcycles, lawn mowers and garden tractors cut, trim and weld metal parts with lasers to achieve flexibility, high consistency, reduced post processing and lower costs. Furniture manufacturers utilize lasers to provide easily reconfigurable, low-distortion, low-cost prototyping and production capabilities that facilitate the manufacturing of customer specified designs. On high-speed processing lines, laser marking provides automated date coding for food packaging and computer driven container identification for pharmaceuticals. In addition to use by original equipment manufacturers (OEMs) building new laser systems, certain of our components are used as replacement parts needed to maintain proper performance in an existing installed base of CO<sub>2</sub> lasers. We believe the current addressable market serviced by our Infrared Optics segment is \$160 million.

Near-Infrared Optics Market. Over recent years, the laser market has required increased power levels and reduced operating costs enabling this technology to address new applications. High power applications include cutting, welding, marking and date coding. YAG lasers are used in high power applications such as cutting, welding, marking and date coding. Additionally, many of these YAG lasers are delivered through optical fibers that provide high flexibility beam delivery systems. A new product line serviced by our Near-Infrared Optics segment is ultra-violet (UV) filters used in early warning missile detection. The near-infrared market is further defined to address opportunities in the areas of YAG, custom crystals, optics and UV filters. We believe the current addressable market serviced by our Near-Infrared Optics segment is approximately \$225 million.

Military Infrared Optics Market. Several key optical components such as windows, domes and related subassemblies are core products offered to the military market for infrared applications in night vision, targeting, navigation and Homeland Security systems. Infrared windows, window assemblies and navigational and targeting systems are employed on fixed and rotary-wing aircraft, such as the F-16 fighter jet, Apache Attack Helicopter and the Joint Strike Fighter, ground vehicles such as the Abrams M-1 Tank and Bradley Fighting Vehicle and Unmanned Air Vehicles (UAV's). Infrared domes are used on missiles with infrared guidance systems ranging from small, man portable designs to larger designs mounted on helicopters, fixed-wing aircraft and ground vehicles. Additionally, multiple fighter jets including the F-16 are being equipped with large area sapphire panels manufactured by our Company providing advanced targeting and imaging capabilities. The development and manufacture of these large area sapphire windows has played a key role in our Company's capability to provide an even larger suite of sapphire panels that are a key component of the Joint Strike Fighter Electro Optics Targeting System. High-precision domes are an integral component of the missile's targeting system providing efficient tactical capability while serving as a protective cover to its internal components. Our military infrared optical products are sold primarily to the U.S. government prime contractors and directly to various U.S. government agencies. We believe the current addressable market serviced by our Military Infrared Optics segment is approximately \$165 million.

X-ray and Gamma-ray Radiation Sensors Market. Solid-state radiation sensors and components are sold primarily to companies engaged in the manufacture of medical diagnostic, medical imaging, industrial gauging/inspection and security and monitoring equipment. The use of x-ray or gamma-ray radiation enables more rapid and accurate measurement of medical conditions, industrial quality and early detection and identification of nuclear materials and explosive materials. Solid-state sensors based on CdZnTe are making inroads against older, more established technologies, such as cryogenically cooled germanium detectors or sodium iodide scintillators coupled to photomultiplier tubes. Opportunities for x-ray and gamma-ray sensors are present in the areas of digital radiography, nuclear medicine, industrial gauging, radiation monitoring, security scanning, and nuclear safeguards/non-proliferation. We believe the current addressable market serviced by our eV PRODUCTS division is approximately \$50 million.

Silicon Carbide Substrate Market. Silicon Carbide is a wide band gap semiconductor material that offers high-temperature, high-power and high-frequency capabilities as a substrate for applications that are emerging at the high-performance end of the defense, telecommunication, and industrial markets. SiC has certain intrinsic physical and electronic advantages over competing semiconductor materials such as silicon and gallium arsenide. For example the high thermal conductivity of silicon carbide enables SiC- and Gallium Nitride- (GaN) based devices to operate at high power levels and still dissipate the excess heat generated. Typically, our customers deposit either SiC or GaN epitaxial layers on a SiC substrate and then fabricate optoelectronic or electronic devices. SiC- and GaN-based structures are being developed and deployed for the manufacture of a wide variety of microwave and power switching devices. High power, high frequency SiC based microwave devices are used in telecommunication base station transmitters and traditional silicon devices in both commercial and military air traffic radar applications. SiC high power, high-speed switching devices improve the performance and reliability of electrical power transmission and distribution systems and for motor controls in a wide variety of applications including aircraft, automotive, industrial, communications and energy exploration applications. We believe the current addressable market serviced by our Wide Bandgap group is approximately \$50 million.

Thermoelectric Coolers Market. Thermoelectric coolers (TECs) are solid-state semiconductor devices that act as small heat pumps to cool, heat, or temperature stabilize a wide range of materials, components and systems. Conversely, the principals underlying thermoelectrics allow them to be used as a source of power when subjected to a temperature difference. TECs are more reliable than alternative cooling solutions that require moving parts, and provide more precise temperature control solutions than competing technologies. TECs also have many other advantages over competing technologies that have spurred their adoption in a variety of industries and applications. TECs provide critical cooling and temperature stabilization solutions in a myriad of defense and space applications, including infrared cooled and uncooled temperature stabilized night vision technologies and thermal reference sources that are deployed by our armed forces. TECs also allow for temperature stabilization for telecommunication lasers that generate and amplify optical signals for fiber optics systems as well as cooling solutions for a variety of medical applications that are used primarily in instrumentation and analytical applications including DNA testing. We believe the current addressable market serviced by our Marlow subsidiary is approximately \$150 million.

#### **Our Strategy**

Our strategy is to build businesses with world-class, high technology materials capabilities at their core. Our significant materials capabilities are as follows:

- Infrared Optics: Zinc Selenide (ZnSe) and Zinc Sulfide (ZnS)
- Near-Infrared Optics: Yttrium Aluminum Garnet (YAG), Yttrium Lithium Fluoride (YLF), Calcium Fluoride (CaF<sub>2</sub>) and Potassium Nickel Sulfate (KNS)
- Military Optic: Germanium (Ge)
- X-ray and gamma-ray sensors: Cadmium Zinc Telluride (CdZnTe)
- Silicon Carbide substrates: Silicon Carbide (SiC)
- Thermoelectric coolers: Bismuth Telluride (Bi, Te<sub>3</sub>)

We subsequently manufacture precision parts and components from these and other materials using expertise in low damage surface and micro fabrication, thin-film coating and exacting metrology. A substantial portion of our business is based on long-term contracts with market leaders, which enables substantial forward planning and production efficiencies. We intend to capitalize on the execution of this proven model and gain market share for the markets we serve.

Our specific strategies are as follows:

- Continue Investment in Manufacturing Operations for our Infrared and Near-Infrared Business Segments. We continually invest in our infrared and near-infrared manufacturing operations worldwide to increase production capacity and capabilities. During the fiscal year ended June 30, 2005, we invested over \$15 million for capital expenditures for the Infrared and Near-Infrared Optics segments. We recently completed a 59,000 square foot addition at our Saxonburg, Pennsylvania facility which was driven by a need to expand the thin-film coating capacity to meet current and projected production requirements.
- Enhance Our Reputation as a Quality and Customer Service Leader. We are committed to understanding our customers' needs and meeting their expectations. We have established ourselves as a consistent high quality supplier of components into our customers' assembly lines. In many cases we deliver on a just in time basis. We believe our on-time delivery record and product return rates enhance our relationships with our customers.
- *Utilize Asian Manufacturing Operations*. Our manufacturing operations in Singapore and China play a critical role in the operational and financial performance of the Company, specifically for the Infrared and Near-Infrared Optics segments. We will continue to invest in these operations and utilize their capabilities. In addition we are establishing a new manufacturing operation in Ho Chi Minh City, Vietnam which will service our Near-Infrared Optics segment and our Marlow subsidiary. Our Asian operations also help to lower our overall effective tax rates as the tax structures in these countries are lower than other countries in which the Company does business.
- Pursue Strategic Acquisitions and Alliances. Some of the markets we participate in remain fragmented and we expect consolidation to occur over the next several years. We will pursue strategic acquisitions and alliances with companies whose products or technologies compliment our current products, expand our market coverage, increase our addressed market or create synergies with our current capabilities. We intend to identify acquisition opportunities that accelerate our access to emerging high growth segments of the markets we serve which further leverages our competencies and economics of scale.

During the fiscal year ended June 30, 2005, we announced an alliance with SemiSouth Laboratories, Inc. (SemiSouth) and Mississippi State University and the establishment of a SiC semiconductor substrate manufacturing facility in Starkville, Mississippi. Our alliance will focus on our production capabilities in SiC substrates along with advanced SiC epitaxial material growth technology at SemiSouth. On April 4, 2005 we entered into a \$2.0 million note purchase agreement with SemiSouth.

- Pursue Military Programs. Our Military Infrared Optics business exclusively serves military and defense applications. In addition, a portion of our other businesses, most notably our Near-Infrared Optics segment and our Marlow subsidiary, is focused on products that are utilized in military and defense applications. Our strategy is to actively work with major defense contractors during the initial product development phase in order to incorporate our products into our customers' systems. Early participation in long-term programs has proven to be a successful strategy and a competitive advantage in addressing the military market.
- Balanced Approach to Research and Development. Our research and development program includes both internally and externally funded research and development targeting an overall investment between 5 and 10 percent of product sales. We are committed to accepting the right mix of internally and externally funded research that ties closely to our long-term strategic objectives.

#### **Our Products**

The main products for each of our businesses is described as follows:

Infrared Optics. We supply a broad line of precision infrared optical components such as lenses, waveplates, and mirrors for use in CO<sub>2</sub> lasers. Our precision optical components are used to regulate the amount of laser energy, enhance the properties of the laser beam, and focus and direct laser beams to a target work surface. The optical components include both reflective and transmissive optics and are made from materials such as ZnSe, copper, silicon and germanium. Transmissive optics used with CO<sub>2</sub> lasers are predominately made from ZnSe. We believe we are the largest manufacturer in the world of ZnSe. Additionally, we supply replacement optics to end users of CO<sub>2</sub> lasers. Over time optics may become contaminated and must be replaced to maintain peak laser operations. This aftermarket portion of our business continues to grow as laser applications proliferate worldwide and the installed base of serviceable laser systems increases each year. We service the aftermarkets via a combination of selling to OEM's who in turn service their customers with our products, and selling directly to end system users through our direct sales and marketing employees.

Near-Infrared Optics. We offer a family of standard and custom laser gain materials and optics for industrial, medical, military, scientific and research and development laser systems. Laser gain materials are produced to stringent industry specifications and precisely fabricated to customer demands. Key materials and precision optical components for YAG and other solid-state laser systems complete our near-infrared optics product offering. We manufacture waveplates, polarizers, lenses, prisms and mirrors for visible and near-infrared applications which are used to control or alter visible or near-infrared energy and its polarization. In addition, we manufacture coated windows used as debris shields in the industrial and medical laser aftermarkets. A new product line serviced by our Near-Infrared Optics segment is UV filters used in early warning missile detection. The end use of the products we make is in systems used to detect shoulder-launched missiles to help improve the survivability of low-flying aircraft if attacked.

Military Infrared Optics. We offer optics and optical subassemblies for military infrared systems including thermal imaging, night vision, targeting and navigation systems. Our product offering is comprised of missile domes, electro-optical windows and subassemblies, imaging lenses and other components. Our precision optical products utilize infrared optical materials such as sapphire, ZnSe, ZnS, germanium, silicon, and ALON. In addition, our products also include visible materials and fused silica as well. Our products are currently utilized on the Abrams M-1 Tank, Apache Attack Helicopter, F-14, F-15, F/A-18 and F-16 military aircraft, UAV's and other platforms, as well as future production programs such as the F-35 Joint Strike Fighter.

Solid-State Radiation Sensors. We design, manufacture and market CdZnTe room temperature, solid-state radiation sensors combined with custom-designed low noise electronics and imbedded control systems. CdZnTe-based imaging arrays are used in nuclear medicine (internally emitted gamma-rays), radiography (x-rays from an external source), security applications and food and beverage inspection.

Silicon Carbide Substrates. Our product offerings are 6H-SiC (semi-insulating and conducting) and 4H-SiC (conducting) poly-types and are available in two-and three-inch diameters. Silicon carbide substrates are used in solid-state lighting, wireless infrastructure, radio frequency (RF) electronics and power switching industries.

Thermoelectric Coolers. We supply a broad array of TECs and related assemblies to various market segments. In the defense and space market, TECs are used in guidance systems, smart weapons and night vision systems. TECs are also used in products providing temperature stabilization for telecommunication lasers that generate and amplify optical signals for fiber optic communication systems. We also produce and sell a variety of solutions from thermoelectric components to complete subsystems used in the medical equipment market and other industrial and commercial applications. We offer single stage TECs, multi-stage TECs, extended life coolers and thermoelectric thermal reference sources.

#### Research, Development and Engineering

Our research and development program includes internally and externally funded research and development targeting an overall investment of between 5 and 10 percent of product sales. From time to time the ratio of contract to internally funded activity varies significantly due to the unevenness and uncertainty associated with government research programs. We are committed to accepting the right mix of internally and externally funded research that ties closely to our long-term strategic objectives.

We devote significant resources to research, development and engineering programs directed at the continuous improvement of existing products and processes and to the timely development of new technologies, materials and products. We believe that our research, development and engineering activities are essential to our ability to establish and maintain a leadership position in each of the markets that we serve. As of June 30, 2005, we employed 201 people in research, development and engineering functions, 160 of which are engineers or scientists. In addition, manufacturing personnel support or participate in research and development on an ongoing basis. Interaction between the development and manufacturing functions enhances the direction of projects, reduces costs and accelerates technology transfers.

During the past fiscal year, we have made focused research and development investments in:

- Silicon Carbide Substrate Technology: Technology development efforts in silicon carbide substrates continue to move forward, with emphasis in the areas of material purity, defect density reduction, surface polishing and diameter expansion. We were recently awarded development funding as a team partner on a multi-year, Defense Advanced Research Projects Agency SiC initiative. This program is focused on materials optimization, device development and Department of Defense (DOD) system module demonstration for high power radar, electronic warfare, missile seeker and communication system. Our research and development efforts in this area have been both internally and externally funded.
- Ultra-violet Filters: Research and development activities for our UV Filter product line include enhancing process
  control and cell-based manufacturing. Our research and development efforts in this area have been both internally
  and externally funded.
- Ceramic Oxide Materials: Our activities in this area are focused on process improvements, benchmarking the quality of commercially available research-grade ceramics and comparing their properties and performance to single crystal YAG. Continued efforts will investigate composite materials for thermally-enhanced laser architectures and could lead to new applications. Our research and development efforts in this area have been both internally and externally funded.
- Cadmium Zinc Telluride: Our activities in this area are focused on process yield improvements, improving the quality and lowering the manufacturing costs of these materials for use in higher speed x-ray sensors. Our research and development efforts in this area have been both internally and externally funded.
- *Micro-Alloyed Material (MAM):* Our research and development activities in this area are focused on the continued development of micro-alloyed Bi<sub>2</sub>Te<sub>3</sub> material for thermoelectric solutions, which is a micro structural material that has higher thermoelectric performance than single crystal and polycrystalline materials grown through standard crystal growth techniques. Our research and development efforts in this area have been internally funded.

The development and manufacturing of our products and processes is largely based on proprietary technical know-how and expertise. We rely on a combination of contract provisions, trade secret laws, invention disclosures and patents to protect our proprietary rights. We have entered into selective intellectual property licensing agreements. When faced with potential infringement, we have in the past asserted and vigorously protected our rights.

Internal and external research, development and engineering expenditures were \$12.6 million, \$12.1 million and \$13.1 million for the fiscal years ended June 30, 2005, 2004 and 2003, respectively. For these same periods, the external customer and government funded portions of these expenditures (i.e. contract research and development revenue) were \$9.4 million, \$8.7 million and \$11.0 million, respectively.

#### **Marketing and Sales**

We market our products through a direct sales force in North America, Japan, Singapore, China, Germany, Belgium, Switzerland and the United Kingdom (U.K.), and through representatives and distributors elsewhere in the world. Our market strategy is focused on understanding customer requirements and building market awareness and acceptance of our products. New products are constantly being produced and sold to our established customers in our market places.

Each of our product lines is responsible for their own worldwide marketing and sales functions, as follows, although certain subsidiaries sell more than one product line:

- 1) The Infrared Optics marketing and sales initiative is handled through a direct sales force in the U.S. and through our wholly-owned subsidiaries in Japan, Singapore, China, Germany, Belgium and the U.K. In Switzerland, during fiscal year 2004, we established a majority-owned subsidiary II-VI LOT Suisse S.a.r.l. to distribute II-VI products in Switzerland. Distributors are utilized throughout the rest of the world.
- 2) The Near-Infrared Optics marketing and sales initiative is handled through a direct sales force in the U.S. and through our wholly-owned and majority-owned international subsidiaries as well as distributors throughout the rest of the world.
- 3) The Military Infrared Optics marketing and sales initiative is handled through a direct sales force in the U.S.
- 4) The x-ray and gamma-ray sensors marketing and sales initiative is handled through a direct sales force in the U.S., through our wholly-owned and majority-owned international subsidiaries, and manufacturers' representatives throughout the rest of the world.
- 5) The silicon carbide marketing and sales initiative is handled through a direct sales force in the U.S. and through our wholly-owned and majority-owned international subsidiaries.
- 6) The thermoelectric coolers marketing and sales initiative is handled through a direct sales force in the U.S., through our wholly-owned subsidiaries in Japan and the U.K. as well as through distributors throughout the world.

Our sales force develops effective communications with our OEM and end-user customers worldwide. Products are actively marketed through targeted mailings, telemarketing, select advertising and attendance at trade shows and customer partnerships. Our sales force includes a highly trained team of application engineers to assist customers in designing, testing and qualifying our parts as key components of our customers' systems. As of June 30, 2005, we employed 114 individuals in sales, marketing and support.

Due to our customers' buying patterns, particularly in Europe, revenues for our first fiscal quarter ending in September are typically below those in the preceding quarter. Our first fiscal quarter results often are dependent upon the sales made in the last month of the quarter.

#### **Manufacturing Technology and Processes**

As noted in the "Our Strategy" section, many of the products we produce depend on our ability to manufacture technically challenging materials and components. The table below shows these key materials and the processes used to produce them.

	Product Line	Materials <u>Produced</u>	Principal Growth Processes Utilized
•	Infrared Optics	ZnSe and ZnS	Chemical Vapor Deposition
•	Near-Infrared Optics	YAG, YLF CaF <sub>2</sub> and KNS	Czochralski
•	Military Optics	Ge	Modified Bridgman
•	X-ray and Gamma-ray Sensors	CdZnTe	High Pressure Bridgman and Conventional Bridgman
•	Silicon Carbide Substrates	SiC	Physical Vapor Transport and Axial Gradient Transport
•	Thermoelectric Coolers	$Bi_2Te_3$	High Pressure Bridgman

The ability to produce these difficult materials and to control the quality and yields is an expertise of the Company. Processing of these materials into finished products is also difficult to accomplish; yet the quality and reproducibility of these products are critical to the performance of our customer's instruments and systems. In the markets we serve there are a limited number of suppliers of many of the components we manufacture, and there are very few industry standard products.

Our network of worldwide manufacturing sites allows products to be produced in regions that provide costeffective advantages and enable proximity to our customers. We employ numerous advanced manufacturing technologies
and systems at our manufacturing facilities. These include automated, Computer Numeric Control optical fabrication,
high throughput thin-film coaters, micro precision metrology and custom-engineered automated furnace controls for the
crystal growth processes. Manufacturing products for use across the electromagnetic spectrum requires the capabilities to
repeatedly produce products with high yields to atomic tolerances. We embody a technology and quality mindset that gives
our customers the confidence to utilize our products in a just in time basis straight into the heart of their production lines.

#### **Sources of Supply**

The major raw materials we use include Zinc, Selenium, Hydrogen Selenide, Hydrogen Sulfide, Cadmium, Tellurium, Yttrium Oxide, Aluminum Oxide, Iridium, Platinum, Bismuth, Silicon, Thorium Fluoride, Antimony and Carbon. We also purchase Gallium Arsenide, Copper, Silicon, Germanium, Molybdenum, Quartz, optical glass and other materials from outside vendors for use as base materials for laser optics. We purchase Thorium Fluoride and other materials for use in optical fabrication and coating processes. Excluding our own production, there are more than two external suppliers for all of the above materials except for Zinc Selenide, Zinc Sulfide, Hydrogen Selenide and Thorium Fluoride, for each of which there is one proven source of supply outside of the Company's capabilities. For many materials, we have entered into annual purchase arrangements whereby suppliers provide discounts for annual volume purchases in excess of specified amounts. The Company also owns a minority ownership interest in 5NPlus, Inc., a supplier of high-purity Cadmium, Zinc, Tellurium, Selenium and Antimony.

The continued high quality and access to these materials is critical to the stability and predictability of our manufacturing yields. We conduct testing of materials at the onset of the production process. Additional research and capital investment may be needed to better define future starting material specifications. We have not experienced significant production delays due to shortages of materials. However, we do occasionally experience problems associated with vendor supplied materials not meeting contract specifications for quality or purity. A significant failure of our suppliers to deliver sufficient quantities of necessary high-quality materials on a timely basis could have a materially adverse effect on the results of our operations.

#### **Customers**

Our customer base for infrared optics for our laser component products consists of over 5,000 customers worldwide. The three main groups of customers for these products are as follows:

- Leading original equipment manufactures and system integrators of high power industrial, medical and military laser systems. Representative customers are Rofin-Sinar Technologies, Inc., Trumpf, Inc., Bystronic and Amada.
- Laser end users who require replacement optics for their existing laser systems. Representative customers are Ford Motor Company, John Deere and Caterpillar, Inc.
- Military and aerospace customers for use in advanced targeting, navigation and infrared imaging systems. Representative customers are Northrop Grumman Corporation, Raytheon Corporation and BAE Systems.

For our near infrared optics products, our customers are original equipment manufacturers and system integrators of high power lasers used in industrial, scientific, military and medical markets. Representative customers include Volkswagen, Candella Corporation and Alliant Technologies.

For our military infrared optics products, our customers are manufacturers of equipment and devices for aerospace, defense and commercial markets. Representative customers include Lockheed-Martin, Raytheon Corporation, Boeing and various U.S. government agencies.

For our solid-state radiation sensor products, our customers are manufacturers of equipment and devices for medical imaging, defense applications, nuclear safeguards, space and industrial applications. We are currently dependent on a limited number of key customers for this product line and face strong competition from suppliers of products based on incumbent and legacy technology.

For our silicon carbide products, our customers are manufacturers and developers of equipment and devices for high power RF electronics and high power and high voltage switching and power conversion systems for both DoD and commercial applications. We are currently dependent on a limited number of key customers for this product line and we face strong competition from the industry leader and other market participants.

For our thermoelectric cooler products, our customers are manufacturers and developers of equipment and devices for defense and space, telecommunications, medical and industrial and commercial markets. Example customers include Raytheon, Beckman Coulter and American Biophysics Corp.

#### Competition

We believe that we are a significant producer of products and services in our addressed markets. In the area of commercial infrared laser optics and materials, we believe we are an industry leader. We are a significant supplier of YAG rods and YAG laser optics to the worldwide markets of scientific, research, military, medical and industrial laser manufacturers. We are a leading supplier of infrared optics used in complex military assemblies for targeting, navigation and thermal imaging systems to every major military prime contractor. We believe we are the leading supplier of CdZnTe substrates and devices for x-ray and gamma-ray sensors and components. We believe we are a preferred alternative to the leading supplier of single crystal SiC substrates for use in the defense telecommunication and industrial markets. We believe we are a global leader in the design and manufacturer of thermoelectric coolers and thermal control subsystems.

We compete on the basis of product technical specifications, quality, delivery time, technical support and pricing. Management believes that we compete favorably with respect to these factors and that our vertical integration, manufacturing facilities and equipment, experienced technical and manufacturing employees, and worldwide marketing and distribution provide competitive advantages.

We have a number of present and potential competitors which have greater financial, selling, marketing or technical resources. A competitor of our production of ZnSe is a division of Rohm and Haas Company. Competitors producing infrared and CO<sub>2</sub> laser optics include Sumitomo Electric in Japan and Ophir Optronics in Israel as well as several companies producing limited quantities of infrared and CO<sub>2</sub> laser optics. Competing producers of YAG materials and optics include a division of Northrop Grumman Corporation and a division of Saint-Gobain. Competing producers of infrared optics for

military applications are in-house fabrication and thin film coating capabilities of major military prime contractors, such as Raytheon Corporation. Competing producers of CdZnTe and CdZnTe sensors include Acrorad in Japan and Orbotech in Israel. Competing producers of thermoelectric coolers include Melcor in the United States and ITI Ferrotec in Asia.

In addition to competitors who manufacture products similar to those we produce, there are other technologies or materials that can compete with our products.

#### **Bookings and Backlog**

We define our bookings as customer orders received that are expected to be converted to revenues over the next twelve months. For long-term customer orders, the Company takes the view of not including in bookings the portion of the customer order that is beyond twelve months due to the inherent uncertainty of an order that far in the future. For the year ended June 30, 2005, our bookings were \$187.8 million compared to bookings of \$162.8 million for the year ended June 30, 2004. Approximately 10% of the increase in bookings or \$17.3 million were from Marlow, the Company's recently acquired subsidiary. The remaining 5% increase was primarily attributable to stronger market demands in the Company's Infrared and Near-Infrared Optics segments.

We define our backlog as bookings that have not been converted to revenues by the end of the reporting period. Bookings are adjusted if changes in customer demands or production schedules move a delivery out past twelve months. As of June 30, 2005, our backlog was \$75.5 million including \$9.2 million from Marlow, the Company's recently acquired subsidiary.

#### **Employees**

As of June 30, 2005, we employed 1,548 persons worldwide. Of these employees, 201 were engaged in research, development and engineering, 1,056 in direct production and the balance in sales and marketing, administration, finance and support services. Our production staff includes highly skilled optical craftsmen. During the year ended June 30, 2005, the employee group which initially voted to be covered under a collective bargaining agreement withdrew their request for union representation. We have a long-standing policy of encouraging active employee participation in areas of operations management. We believe our relations with our employees to be good. We reward our employees with incentive compensation based on achievement of performance goals.

#### **Trade Secrets, Patents and Trademarks**

We rely on our trade secrets, proprietary know-how, invention disclosures and patents to develop and maintain our competitive position. We have begun to aggressively pursue process and product patents in certain areas of our businesses. We have confidentiality and noncompetition agreements with our executive officers and certain other personnel. We require all United States employees sign a confidentiality and noncompetition agreement upon commencement of employment.

The processes and specialized equipment utilized in crystal growth, infrared materials fabrication and infrared optical coatings as developed by us are complex and difficult to duplicate. However, there can be no assurance that others will not develop or patent similar technology or that all aspects of our proprietary technology will be protected. Others have obtained patents covering a variety of infrared optical configurations and processes, and others could obtain patents covering technology similar to our technology. We may be required to obtain licenses under such patents, and there can be no assurance that we would be able to obtain such licenses, if required, on commercially reasonable terms, or that claims regarding rights to technology will not be asserted which may adversely affect our results of operations. In addition, our research and development contracts with agencies of the U.S. Government present a risk that project-specific technology could be disclosed to competitors as contract reporting requirements are fulfilled.

We currently hold eight registered trademarks: the II-VI INCORPORATED<sup>(TM)</sup> name; INFRAREADY OPTICS<sup>(TM)</sup> for replacement optics for industrial CO<sub>2</sub> lasers; EPIREADY<sup>(TM)</sup> for low surface damage substrates for Mercury Cadmium Telluride epitaxy; eV PRODUCTS<sup>(TM)</sup> for products manufactured by our eV PRODUCTS division; LASER POWER CORPORATION<sup>(TM)</sup> name; MP-5<sup>(TM)</sup> for low absorption coating technology; the MARLOW INDUSTRIES, INC.<sup>(TM)</sup> name; the MARLOW INDUSTRIES, INC. mark. The trademarks are registered with the U.S. Patent and Trademark Office but not with any states. We are not aware of any interference or opposition to these trademarks in any jurisdiction.

#### **ITEM 2. PROPERTIES**

Information regarding our principal properties at June 30, 2005 is set forth below:

	Location	Primary Uses	Primary Business Segment(s)	Square Footage	Ownership
United States:	Saxonburg, PA	Manufacturing, Corporate Headquarters and Research and Development	Infrared Optics and Compound Semiconductor Group	235,000	Owned
	New Port Richey and Port Richey, FL	Manufacturing	Near-Infrared Optics	65,000	Owned
	Temecula, CA	Manufacturing	Military Infrared Optics	66,000	Leased
	Pine Brook, NJ	Manufacturing and Research and Development	Compound Semiconductor Group	13,000	Leased
	Dallas, TX	Manufacturing	Compound Semiconductor Group	116,000	Owned and Leased
Foreign Locations:	Singapore China	Manufacturing Manufacturing	Infrared Optics Infrared Optics and Near-Infrared Optics	30,000 33,000	Leased Leased
	Vietnam	Manufacturing	Near-Infrared Optics and Compound Semiconductor Group	35,000	Leased
	Germany	Distribution	Infrared Optics and Near-Infrared Optics	2,000	Leased
	Japan	Distribution	Infrared Optics, Near-Infrared Optics and Compound Semiconductor Group	3,000	Leased
	United Kingdom	Distribution	Infrared Optics and Compound Semiconductor Group	2,000	Leased
	Belgium Switzerland	Distribution Distribution	Infrared Optics Infrared Optics	3,000 3,000	Leased Leased
	Switzerianu	Distribution	minared Optics	3,000	Leaseu

#### ITEM 3. LEGAL PROCEEDINGS

During the quarter ended September 30, 2003, the Company was awarded a jury verdict in the amount of \$0.8 million in a trade secret lawsuit which it had initiated. In addition, the Company was initially entitled to punitive damages and reimbursement of its attorneys' fees and costs at the discretion of the court. On April 27, 2004, the court denied the award relating to punitive damages and reimbursement of its attorneys' fees and costs. The Company and the Defendant have appealed the decision by the lower court. As such, the Company has not made any adjustments to its financial position or results of operations for this contingent gain.

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

No matters were submitted to a vote of security holders during the fourth quarter of the fiscal year covered by this Form 10-K.

#### **EXECUTIVE OFFICERS OF THE REGISTRANT**

The executive officers<sup>(1)</sup> of the Company and their respective ages and positions are as follows:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Carl J. Johnson	63	Chairman, Chief Executive Officer and Director
Francis J. Kramer	56	President, Chief Operating Officer and Director
Herman E. Reedy	62	Executive Vice President – Infrared Optics
James Martinelli	47	Vice President – Government and Military Businesses
Craig A. Creaturo	35	Chief Financial Officer and Treasurer

<sup>(1)</sup> Each executive officer listed has been appointed by the Board of Directors to serve until removed or until a successor is elected and qualified.

**Carl J. Johnson**, a co-founder of the Company in 1971, serves as Chairman, Chief Executive Officer, and Director of the Company. He served as President of the Company from 1971 until 1985, has served as a Director since 1971 and Chairman and Chief Executive Officer since 1985. From 1966 to 1971, Dr. Johnson was Director of Research & Development for Essex International, Inc., an automotive electrical and power distribution products manufacturer. From 1964 to 1966, Dr. Johnson worked at Bell Telephone Laboratories as a member of the technical staff. Dr. Johnson completed his Ph.D. in Electrical Engineering at the University of Illinois. He holds B.S. and M.S. degrees in Electrical Engineering from Purdue University and Massachusetts Institute of Technology (MIT), respectively.

Francis J. Kramer has been employed by the Company since 1983 and has been its President and Chief Operating Officer since 1985. Mr. Kramer has served as a Director of the Company since 1989. Mr. Kramer joined the Company as Vice President and General Manager of Manufacturing and was named Executive Vice President and General Manager of Manufacturing in 1984. Prior to his employment by the Company, Mr. Kramer was the Director of Operations for the Utility Communications Systems Group of Rockwell International Corp. Mr. Kramer graduated from the University of Pittsburgh with a B.S. degree in Industrial Engineering and from Purdue University with an M.S. degree in Industrial Administration.

**Herman E. Reedy** has been employed by the Company since 1977 and has been Executive Vice President – Infrared Optics since February 2003. Previously, Mr. Reedy held positions at the Company as Vice President and General Manager of Quality and Engineering, Manager of Quality and Manager of Components. Prior to his employment by the Company, Mr. Reedy was employed by Essex International, Inc., serving last as Manager, MOS Wafer Process Engineering. Prior to 1973, he was employed by Carnegie Mellon University and previously held positions with SemiElements, Inc. and Westinghouse Electric Corporation. Mr. Reedy is a graduate of the University of Pittsburgh with a B.S. degree in Electrical Engineering.

James Martinelli has been employed by the Company since 1986 and has been Vice President – Government and Military Businesses since February 2003. Previously, Mr. Martinelli served as General Manager of Laser Power Corporation since 2000 and Chief Financial Officer of II-VI Incorporated since 1994. Mr. Martinelli joined the Company as Accounting Manager, was named Corporate Controller in 1990 and named Chief Financial Officer and Treasurer in 1994. Prior to his employment by the Company, Mr. Martinelli was Accounting Manager at Tippins Incorporated and Pennsylvania Engineering Corporation from 1980 to 1985. Mr. Martinelli graduated from Indiana University of Pennsylvania with a B.S. degree in Accounting.

Craig A. Creaturo has been employed by the Company since 1998 and has been Chief Financial Officer since November 2004. Previously, Mr. Creaturo served as Chief Accounting Officer since 2003 and as Treasurer since 2000. Previously, Mr. Creaturo served as Director of Finance, Accounting and Information Systems since 2000 and initially joined the Company as Corporate Controller. Prior to his employment by the Company, Mr. Creaturo was employed by the Pittsburgh, Pennsylvania office of Arthur Andersen LLP from 1992 to 1998 and served in the audit and attestation division with a final position as Audit Manager. Mr. Creaturo graduated from Grove City College with a B.S. degree in Accounting. Mr. Creaturo is a Certified Public Accountant in the Commonwealth of Pennsylvania and is a member of the American Institute of Certified Public Accountants and the Pennsylvania Institute of Certified Public Accountants.

#### **PART II**

# ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

The Company's Common Stock is traded on the Nasdaq National Market under the symbol "IIVI." The following table sets forth the range of high and low closing sale prices per share of the Company's Common Stock for the fiscal periods indicated, as reported by Nasdaq.

	<u>High</u>	Low
Fiscal 2005		
First Quarter	\$19.36	\$13.46
Second Quarter	\$22.00	\$15.62
Third Quarter	\$21.18	\$16.39
Fourth Quarter	\$18.62	\$13.93
Fiscal 2004		
First Quarter	\$12.50	\$ 9.57
Second Quarter	\$12.98	\$10.00
Third Quarter	\$14.90	\$10.76
Fourth Quarter	\$15.33	\$11.21

On August 31, 2005, the last reported sale price for the Common Stock was \$17.78 per share. As of such date, there were approximately 829 holders of record of the Common Stock. The Company historically has not paid cash dividends and does not anticipate paying cash dividends in the foreseeable future.

The following table provides information with respect to purchases of the Company's equity securities during the fiscal year ended June 30, 2005.

#### ISSUER PURCHASES OF EQUITY SECURITIES

Period	(a) Total Number of Shares Purchased	(b) Average Price Paid per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs <sup>(1)</sup>
April 1, 2005 to April 30, 2005 May 1, 2005 to May 31, 2005 June 1, 2005	-	-	-	<u>500,000</u>
to June 30, 2005	<u>11,000</u>	<u>\$16.49</u>	<u>11,000</u>	<u>489,000</u>

<sup>&</sup>lt;sup>(1)</sup> A share repurchase program for up to 500,000 shares was approved by the Board of Directors and announced on May 18, 2005. The repurchase program has no expiration date.

Additional repurchases of stock may occur from time to time depending upon factors such as the Company's cash flows and general market conditions. While the Company expects to continue to repurchase shares of the Common Stock for the foreseeable future, there can be no assurance as to the timing or amount of such repurchases.

ITEM 6. SELECTED FINANCIAL DATA

# FIVE-YEAR FINANCIAL SUMMARY

Year Ended June 30,	2005	2004	2003	2002	2001
(000 except per share data)					
Statement of Earnings					
Net revenues	\$194,040	\$150,848	\$128,210	\$113,688	\$123,334
Net earnings	\$ 24,843	\$ 17,337	\$ 11,620	\$ 7,264	\$ 9,491
Basic earnings per share	\$ 0.85	\$ 0.61	\$ 0.41	\$ 0.26	\$ 0.35
Diluted earnings per share	\$ 0.83	\$ 0.59	\$ 0.40	\$ 0.26	\$ 0.34
Diluted weighted average shares outstanding	29,909	29,436	28,780	28,628	28,320

Share and per share data for all periods presented were adjusted to reflect the two-for-one stock split in fiscal 2005.

June 30,	2005	2004	2003	2002	2001
(\$000)					
Balance Sheet					
Working capital	\$73,854	\$ 46,784	\$ 40,200	\$ 35,746	\$ 33,976
Total assets	252,678	184,486	163,297	152,232	148,507
Long-term debt	41,180	7,986	16,782	29,435	33,172
Total debt	44,981	15,536	23,705	34,503	37,006
Retained earnings	115,110	90,267	73,071	61,451	54,187
Shareholders' equity	158,866	131,867	111,521	97,660	89,413

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

#### FORWARD-LOOKING STATEMENTS

Certain statements contained in this Management's Discussion and Analysis of Financial Condition and Results of Operations are forward-looking statements. Forward-looking statements are also identified by words such as "expects," "anticipates," "believes," "intends," "plans, "projects," or similar expressions. Actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including risk factors described in the Risk Factors set forth in this Item 7.

#### INTRODUCTION

The Company generates revenues, earnings and cash flows from developing, manufacturing and marketing high technology materials and derivative products for precision use in industrial, medical, military, security and aerospace applications. We also generate revenue, earnings and cash flows from external customer and government funded research and development contracts relating to the development and manufacture of new technologies, materials and products.

Our customer base includes original equipment manufacturers (OEM), laser end users, system integrators of high-power lasers, manufacturers of equipment and devices for industrial, security and monitoring, x-ray imaging, U.S. government prime contractors, various U.S. government agencies and thermoelectric solutions. Approximately 40% of our revenues during the fiscal year ended June 30, 2005 were from product sales to customers outside the United States.

The following discussion and analysis includes the seven months financial results for the year ended June 30, 2005 of the Company's recently acquired Marlow Industries, Inc. subsidiary included in the Compound Semiconductor Group since the date of acquisition.

All per share data for this year and former periods cited in this discussion and analysis have been adjusted to reflect the two-for-one split of the Company's common shares paid as a stock dividend to shareholders of record on March 2, 2005 and distributed on March 22, 2005.

#### CRITICAL ACCOUNTING POLICIES

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America and the Company's discussion and analysis of its financial condition and results of operations requires the Company's management to make judgments, assumptions, and estimates that affect the amounts reported in its consolidated financial statements and accompanying notes. Note A of the Notes to Consolidated Financial Statements describes the significant accounting policies and methods used in the preparation of the Company's consolidated financial statements. Management bases its estimates on historical experience and on various other assumptions that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ from these estimates.

Management believes the Company's critical accounting policies are those related to revenue recognition, allowance for doubtful accounts, warranty reserves, inventory valuation, valuation of long-lived assets including acquired intangibles and goodwill, accrual of bonus and profit sharing estimates, accrual of income tax liability estimates, accounting for stock-based compensation and self-insurance for workers' compensation. Management believes these policies to be critical because they are both important to the portrayal of the Company's financial condition and results of operations, and they require management to make judgments and estimates about matters that are inherently uncertain.

The Company recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred, the price is established or determinable and collectibility is probable.

Revenue for all business segments, other than for contract research and development, is recognized from the sale of products at the point of passage of title, which is generally at the time of shipment.

The Company performs research and development under contract agreements with customers based on cost plus fixed fee, cost reimbursable or fixed fee terms. These contracts generally require the Company to produce and provide developmental materials and/or products to those customers. Revenues from cost plus fixed fee and cost reimbursable contracts are recognized as costs are incurred.

The Company follows the guidelines of Statement of Position 81-1 "Accounting for Performance of Construction—Type and Certain Production—Type Contracts" for our fixed fee contracts. Revenue and profits on each fixed fee contract are accounted for using the percentage-of-completion method of accounting, whereby revenue and profits are recognized throughout the performance period of the contract. Percentage-of-completion is determined by relating the actual cost of work performed to date to the estimated total cost for each contract. The estimated total cost for each contract is periodically reevaluated and revised, when necessary, throughout the life of the contract. Losses on contracts are recorded in full when identified.

The Company establishes an allowance for doubtful accounts and a warranty reserve based on historical experience and believes the collection of revenues, net of these reserves, is reasonably assured. The allowance for doubtful accounts is an estimate for potential non-collection of accounts receivable based on historical experience. The Company has not experienced a non-collection of accounts receivable materially affecting its financial position or results of operations as of and for the fiscal years ended June 30, 2005, 2004 and 2003. If the financial condition of the Company's customers were to deteriorate causing an impairment of their ability to make payments, additional provisions for bad debts may be required in future periods.

The Company records a warranty reserve as a charge against earnings based on a percentage of revenues utilizing actual returns over the last twelve months. If actual returns in the future are not consistent with the historical data used to calculate these estimates, additional warranty reserves could be required.

The Company records a slow moving inventory reserve as a charge against earnings for all products on hand more than twelve months to eighteen months depending on the products that have not been sold to customers or cannot be further manufactured for sale to alternative customers. An additional reserve is recorded for product on hand that is in excess of product sold to customers over the same periods noted above. If actual market conditions are less favorable than projected, additional inventory reserves may be required.

The Company tests goodwill and indefinite-lived intangible assets on at least an annual basis for impairment. Other intangible assets are amortized over their estimated useful lives. The determination of related estimated useful lives of other intangible assets and whether goodwill or indefinite-lived intangibles are impaired involves judgments based upon long-term projections of future performance. A discounted cash flow model is used to determine the fair value of the reporting units for purposes of testing goodwill and indefinite-lived intangibles for impairment. Based on the results of the most recently completed analysis, the Company's goodwill was not impaired as of June 30, 2005. No event has occurred as of or for the period ended June 30, 2005 that would give management an indication that an impairment charge was necessary that would adversely affect the Company's financial position or results of operations.

The Company records bonus and profit sharing estimates as a charge against earnings based on a formula percentage of the Company's operating income. These estimates are adjusted to actual based on final results of operations achieved during the fiscal year. Partial bonus amounts are paid quarterly based on interim Company performance, and the remainder is paid after fiscal year end and final determination of the applicable percentage. Other discretionary bonuses are paid annually.

The Company records an estimated income tax liability to recognize the amount of income taxes payable or refundable for the current year and deferred income tax liabilities and assets for the future tax consequences of events that have been recognized in the Company's financial statements or income tax returns. Judgment is required in estimating the future income tax consequences of events that have been recognized in the Company's financial statements or the income tax returns.

The Company uses the intrinsic value approach specified in Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," for stock options granted to officers and key employees, and therefore does not record compensation costs based upon the fair value of options at the date of grant. See Notes A and L to the Company's consolidated financial statements.

In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123 (Revised 2004), "Share-Based Payment" (SFAS 123(R)), which amends SFAS No. 123 "Accounting for Stock-Based Compensation." SFAS 123(R) requires all companies to measure compensation cost for all share-based payments (including employee stock options) at fair value, and will be effective for public companies for annual periods beginning after June 15, 2005. The Company will adopt this accounting change effective July 1, 2005 using the Black-Scholes option pricing model.

The Company is self-insured for certain losses related to workers' compensation. Additionally, third-party insurance is obtained to limit our exposure to these claims in excess of \$0.3 million per occurrence and \$0.8 million in the aggregate per policy year. When estimating the self-insurance liability, the Company considers a number of factors, including historical claims experience, demographic and severity factors and valuations provided by independent third party consultants. Periodically, management reviews its assumptions and the valuations provided by independent third-party consultants to determine the adequacy of the self-insurance liability.

From time to time, estimated accruals are recorded as a charge against earnings based on known circumstances where it is probable that a liability has been incurred or is expected to be incurred and the amount can reasonably be estimated.

#### Fiscal 2005 Compared to Fiscal 2004

Overview (millions except per share data)

#### **RESULTS OF OPERATIONS**

	Year E <u>June</u>	%	
	<u>2005</u>	<u>2004</u>	<u>Increase</u>
Bookings	\$187.8	\$162.8	15%
Revenues	194.0	150.8	29%
Net earnings	24.8	17.3	43%
Diluted earnings per share	0.83	0.59	41%

**NET EARNINGS** Net earnings increased 43% in fiscal 2005 to \$24.8 million (\$0.83 per share-diluted) from \$17.3 million (\$0.59 per share-diluted) in fiscal 2004. Net earnings increase was primarily attributed to revenue growth in all the Company's operating segments. In particular the Infrared Optics and Near-Infrared Optics segments achieved increases in revenues of 16% and 31% respectively from the prior year. In addition to the above, the Company's newly acquired subsidiary, Marlow contributed to the net earnings growth. Earnings increases also resulted from operating improvements from the prior year due to production efficiencies and cost savings realized through increased manufacturing performed at the Company's Singapore and China facilities and the lowering of the effective tax rate to 27% in fiscal 2005 from 29% in fiscal 2004.

**BOOKINGS** Bookings increased 15% to \$187.8 million in fiscal 2005 compared to \$162.8 million in fiscal 2004. Order backlog increased 9% to \$75.5 million at June 30, 2005. Included in the fiscal 2005 bookings and order backlog are \$17.3 million of bookings and \$9.2 million of backlog at June 30, 2005 from Marlow. The Company's Infrared Optics and Near-Infrared Optics bookings increased 13% and 11%, respectively, over the prior year. Growth in the United States CO<sub>2</sub> laser market fueled the increase in the Infrared Optics segment. Laser system builders continue to develop higher power cutting systems, the combination of the increasing powers and the growing installed laser base should increase optics consumptions at a solid pace for fiscal year 2006. The Near-Infrared Optics segment increase was driven by the Company's ramp up of their UV Filter product line for which bookings of \$6.4 million were recorded during fiscal 2005. The Company's Military Optics segment bookings decreased 14% due to delays in the defense procurement cycle and increased competition in the military optics market. The Company's Compound Semiconductor Group, exclusive of Marlow, experienced a decrease in bookings of approximately 23%. The majority of this decrease was due to the Company's eV PRODUCTS division receipt of approximately \$1.9 million in order cancellations from two OEM customers.

**REVENUES** Revenues increased 29% to \$194.0 million in fiscal 2005 compared to \$150.8 million in fiscal 2004. Included in the fiscal year 2005 revenues were \$19.8 million of revenue contributions from Marlow. Excluding Marlow, leading this growth was the Company's Near-Infrared Optics segment which recorded an increase in revenues of 31%. The majority of this increase was attributable to the segment's UV Filter product line which recorded revenues of \$7.1 million during fiscal 2005. The Company's Infrared Optics and Military Optics segments increased revenues of 16% and 8%, respectively. The revenue growth in the Infrared Optics segment is due to the strong demand of our optics particularly in the aftermarket as more laser systems are being deployed. The increase in revenues in the Military Optics segment was driven by strong demand for the Company's core military and sapphire products due to the need to repair and replace hardware expended or damaged in the war against terror.

**OUTLOOK** The Company anticipates continued strengthening of its addressable markets in fiscal 2006, and is currently projecting for fiscal 2006 revenues to range from \$216 million to \$222 million and diluted earnings per share to range from \$0.84 to \$0.88. Earnings per share outlook for the fiscal year ending June 30, 2006 reflects implementation of Statement of Financial Accounting Standards No. 123 (Revised 2004) "Share-Based Payment" (FAS 123(R)). FAS 123(R) requires expensing the calculated fair value of our incentive stock options. This non-cash stock option charge currently is expected to reduce earnings per share by approximately \$0.06 to \$0.08 in the fiscal year ending June 30, 2006.

Bookings, revenues and segment earnings (loss) for the Company's reportable segments are discussed below. Segment earnings is a non-GAAP financial measure and differs from income from operations in that segment earnings excludes certain operational expenses included in other expense – net as reported. Management believes segment earnings to be a useful measure as it reflects the results of segment performance over which management has direct control and is used by management in its evaluation of segment performance. See also Note M to the Company's consolidated financial statements for further information on the Company's reportable segments.

Infrared Optics (millions)

	Year E <u>June</u>	%	
	<u>2005</u>	<u>2004</u>	<u>Increase</u>
Bookings	\$102.0	\$90.4	13%
Revenues	101.3	87.6	16%
Segment earnings	32.7	23.5	39%

Bookings for fiscal 2005 for Infrared Optics increased 13% to \$102.0 million from \$90.4 million in fiscal 2004. Strong buying patterns by CO<sub>2</sub> laser OEM's worldwide were experienced during the year. During fiscal 2005, our OEM customers deployed high-powered laser systems at the highest level in several years. If the industrialized economies continue to grow, high power laser machine utilization and, therefore, optics consumption, are expected to increase in fiscal 2006. In addition to high-powered laser system growth, the Company has experienced growth in the low-power optics markets.

Revenues for fiscal 2005 for Infrared Optics increased 16% to \$101.3 million from \$87.6 million in fiscal 2004. The increase was primarily attributed to increased shipment volume to both OEM and aftermarket customers as stronger order intake has translated into stronger revenues for fiscal 2005 compared to the prior year.

Segment earnings for fiscal 2005 increased 39% to \$32.7 million compared to \$23.5 million in fiscal 2004. The improvement was the result of a combination of increased sales volume, an increased level of manufacturing at the Company's Asian facilities in Singapore and China and productivity improvements occurring at our various manufacturing facilities.

Near-Infrared Optics (millions)

	Year Ended <u>June 30,</u>		% Increase
	<u>2005</u>	<u>2004</u>	(Decrease)
Bookings	\$33.5	\$30.2	11%
Revenues	33.9	25.8	31%
Segment earnings	2.3	2.4	(4)%

Bookings for fiscal 2005 for Near-Infrared Optics increased 11% to \$33.5 million from \$30.2 million in fiscal 2004. The increase in bookings was primarily driven by an increase in demand for the Company's UV Filter product line which recorded \$2.4 million more bookings in fiscal 2005 as compared to the prior year. In addition, YAG and other crystal product bookings increased approximately 7% from the prior year.

Revenues for fiscal 2005 for Near-Infrared Optics increased 31% to \$33.9 million compared to \$25.8 million in fiscal 2004. The increase in revenues was primarily due to increased shipments of the Company's UV Filter product line which ramped up production during fiscal 2005. The Company recorded \$7.1 million of UV Filter revenue compared to \$1.8 million in fiscal 2004. In addition to the increased UV Filter revenue, the Company recorded approximately 15% more optic shipments during fiscal 2005.

Segment earnings for fiscal 2005 decreased 4% to \$2.3 million from \$2.4 million in fiscal 2004. The decrease in segment earnings reflects higher operating costs driven by a higher proportion of lower margin shipments during the current fiscal year and the ramp up of costs associated with the UV Filter product line.

Military Infrared Optics (millions)

	Year Ended <u>June 30,</u>		% Increase
	<u>2005</u>	<u>2004</u>	(Decrease)
Bookings	\$25.0	\$29.2	(14)%
Revenues	27.3	25.3	8%
Segment earnings	1.0	0.9	11%

Bookings for fiscal 2005 for Military Infrared Optics decreased 14% to \$25.0 million from \$29.2 million in fiscal 2004. The reduction in bookings was primarily driven by delays in the defense procurement cycle and increased competition in the military optics market.

Revenues for fiscal 2005 for Military Infrared Optics increased 8% to \$27.3 million compared to \$25.3 million in fiscal 2004. The increase in revenues was due primarily from strong demand for core military products due to the need to repair and replace hardware expended or damaged in the war against terror. In addition, the Company's sapphire product line revenues increased approximately \$1.1 million from the prior year as the Company continues to develop this part of its business.

Segment earnings for fiscal 2005 increased to \$1.0 million from \$0.9 million in fiscal 2004. The increase in segment earnings was due to overall increase in revenues and favorable product mix with higher revenues from core military products with higher gross margins.

Compound Semiconductor Group (millions)

	Year Ended <u>June 30,</u>		% Increase
	<u>2005</u>	<u>2004</u>	(Decrease)
Bookings	\$27.3	\$13.0	110%
Revenues	31.5	12.1	160%
Segment earnings	(1.5)	(2.0)	(25)%

The Company's Compound Semiconductor Group includes the combined operations of Marlow for the seven months in fiscal year 2005 since the date of acquisition, the Company's eV PRODUCTS division, the Company's WBG group, and the Company's Advanced Materials Development Center (AMDC).

Combined bookings for fiscal 2005 from these operations increased 110% to \$27.3 million as compared to \$13.0 million in fiscal 2004. Included in the current fiscal year bookings were \$17.3 million from Marlow. Excluding the bookings from Marlow for the current year, bookings for the Compound Semiconductor Group decreased \$3.0 million or 23%. The decrease in bookings primarily resulted from the Company's eV PRODUCTS division receiving order cancellations of approximately \$1.9 million from two OEM customers.

Revenues for fiscal 2005 from these operations increased 160% to \$31.5 million compared to \$12.1 million in 2004. Included in the current fiscal year revenues were \$19.8 million from Marlow. Excluding revenues from Marlow for the current year end, revenues for the Compound Semiconductor Group were consistent with the prior fiscal year.

The segment loss for fiscal 2005 of \$1.5 million decreased 25% from the segment loss of \$2.0 million in fiscal 2004. The improvement in the segment loss was attributed to the inclusion of Marlow's operations during the current year which offset slightly higher segment losses at eV PRODUCTS and WBG.

#### Costs and Expenses

Manufacturing gross margin, which is defined as net sales less cost of goods sold, for fiscal 2005 was \$79.8 million or 43% of revenues compared to \$62.6 million or 44% of revenues in fiscal 2004. The increased gross margin in relative dollars was due to higher sales levels than the prior year while the decrease in the gross margin as a percentage of sales was primarily due to the addition of Marlow which historically has a lower gross margin than the core II-VI operating segments. Other factors impacting the gross margin of specific business segments were noted in the previous discussion of segment results.

Contract research and development gross margin, which is calculated as contract research and development revenues less expenses, for fiscal 2005 was \$2.6 million (28% of research and development revenues), compared to a gross margin of \$1.6 million (18% of research and development revenues), for fiscal 2004. The contract research and development revenues and costs are a result of development efforts in the Near-Infrared Optics and the Military Infrared Optics segments as well as activities in Marlow, the eV PRODUCTS division and the WBG group for fiscal 2005. The improvement in the contract research and development gross margin was due to increased contract activity in the current year. In addition, our Military Optics segment recognized approximately \$0.7 million of gross margin during the current fiscal year related to its Large Optics Coating contract. Contract research and development gross margin is a result of a blend of cost plus fixed fee, cost reimbursement and fixed fee contract activities.

Company-funded internal research and development expenses for fiscal 2005 were \$5.8 million or 3% of revenues compared to \$5.0 million or 3% of revenues, for fiscal 2004. The higher dollar amount is primarily the result of the addition of internal research and development at our Marlow subsidiary combined with more corporate research and development activities.

Selling, general and administrative expenses for fiscal 2005 were \$41.9 million or 22% of revenues compared to \$34.4 million or 23% of revenues for fiscal 2004. The dollar increase reflects the addition of Marlow during the year and higher salary expense for the Company's worldwide profit driven bonus program. In addition, outside professional services, including services relating to Section 404 of Sarbanes-Oxley, contributed to the increase from the prior year. From a percentage of revenue standpoint, the addition of Marlow and this business's selling, general and administration cost structure has lowered this metric for the Company.

Interest expense for fiscal 2005 was \$0.9 million compared to \$0.4 million for fiscal 2004. The increase in interest expense reflects an increase in the company's debt levels from the prior year due to the financing of the acquisition of Marlow. As of June 30, 2005, the Company's had outstanding debt of \$45.0 million compared to \$15.5 million outstanding at June 30, 2004. During fiscal 2005 the Company capitalized approximately \$0.1 million of interest associated with its coating and administrative office expansion in Saxonburg, Pennsylvania.

The Company's effective income tax rate for fiscal 2005 was 27% and was lower than the income tax rate for fiscal 2004 of 29%. The Company's effective income tax rate reflects the Company's continued benefit from lower tax rates on its Singapore and China operations and a favorable mix of U.S. and foreign income. The Company entered into a Development and Expansion Initiative with the Singapore government whereby II-VI Singapore lowered its effective tax rate to approximately 16%. It is expected that this favorable tax structure will exist for another two to three years.

The American Jobs Creation Act of 2004, signed into law in October 2004, provides for a variety of changes in the tax law including incentives to repatriate undistributed earnings of foreign subsidiaries, phased elimination of the Extraterritorial Income benefit and a domestic manufacturing benefit. Management currently estimates that the repeal of the Extraterritorial Income Exclusion will result in an increase in income tax expense but expects a portion of this increase to be offset by the deduction on manufacturing income. The Company is evaluating the implications of the new law on repatriation of foreign earnings including assessing the details of the Act, analyzing the funds available for repatriation and the economic cost of doing so, assessing the qualified uses of repatriated funds and assessing the domestic manufacturing benefit. However, given the stage of our evaluation, at this time it is not possible to determine what impact this legislation may have on our effective tax rate for the fiscal year ending June 30, 2006.

#### Fiscal 2004 Compared to Fiscal 2003

Overview (millions except per share data)

#### **RESULTS OF OPERATIONS**

	Year Ended <u>June 30,</u>			
			%	
	<u>2004</u>	<u>2003</u>	<u>Increase</u>	
Bookings	\$162.8	\$136.3	19%	
Revenues	150.8	128.2	18%	
Segment earnings	17.3	11.6	49%	
Diluted earnings per share	0.59	0.40	48%	

**NET EARNINGS** Net earnings increased 49% in fiscal 2004 to \$17.3 million (\$0.59 per share-diluted) from \$11.6 million (\$0.40 per share-diluted) in fiscal 2003. Net earnings increase was primarily attributed to the overall strong demand for all of the Company's products as evidenced by an 18% increase in revenues from the prior year. Earnings increases also resulted from operating improvements in all segments from the prior year due to production efficiencies, yield improvements and cost control programs. Approximately one-half of the earnings improvement was attributable to stronger revenues and gross margins from the Infrared Optics segment and approximately one-third of the earnings improvement was attributable to operational performance improvements of our eV PRODUCTS division.

**BOOKINGS** Bookings increased 19% to \$162.8 million in fiscal 2004 compared to \$136.3 million in fiscal 2003. Order backlog increased 20% to \$69.0 million at June 30, 2004 from \$57.5 million at June 30, 2003 as a result of bookings outpacing shipments in fiscal 2004. Manufacturing orders comprised approximately 94% of the backlog at June 30, 2004. Manufacturing bookings increased by approximately \$25.7 million while contract research and development bookings increased by approximately \$0.7 million. The 19% growth in bookings attests to the strong worldwide demand for all of the Company's products. All operating segments experienced double-digit percentage increases in bookings during fiscal 2004.

**REVENUES** Revenues increased 18% to \$150.8 million in fiscal 2004 compared to \$128.2 million in fiscal 2003. The revenue growth reflects the general strength of our product offering and, more specifically, strong demand in our infrared optics business. The increase in revenues for fiscal 2004 compared to fiscal 2003 was primarily due to stronger shipments of commercial infrared optics to both OEM and aftermarket customers and to a lesser extent the integration of the Company's sales and marketing distribution activity in Switzerland through a consolidated subsidiary, II-VI LOT Suisse S.a.r.l..

Bookings, revenues and segment earnings (loss) for the Company's reportable segments are discussed below. See also Note M to the Company's consolidated financial statements.

Infrared Optics (millions)

	Year Ended <u>June 30,</u>		%
	<u>2004</u>	<u>2003</u>	<u>Increase</u>
Bookings	\$90.4	\$79.2	14%
Revenues	87.6	73.7	19%
Segment earnings	23.5	20.0	18%

Bookings for fiscal 2004 for Infrared Optics increased 14% to \$90.4 million from \$79.2 million in fiscal 2003. Strong buying patterns by CO<sub>2</sub> laser OEM's worldwide as well as an increase in industrial material processing requiring lasers operating more hours per week, thus replacement demands has allowed us to increase our infrared optics bookings. During fiscal 2004, bookings from United States OEM and aftermarket customers increased 32% and 16% respectively from fiscal 2003. Additionally, bookings in U.S. dollars from our II-VI Japan subsidiary increased 36% evidencing the strengthening of the Far Eastern markets.

Revenues for fiscal 2004 for Infrared Optics increased 19% to \$87.6 million from \$73.7 million in fiscal 2003. This increase was primarily attributable to increased shipments to both OEM and aftermarket customers worldwide. OEM laser builders continue to introduce higher-powered lasers. A significant portion of laser optics shipments during the year were from  $\mathrm{CO}_2$  lasers with output power greater than 5 kilowatts. These innovative laser designs incorporate higher priced complex optical configurations and optical parts.

Segment earnings for fiscal 2004 increased 18% to \$23.5 million compared to \$20.0 million in fiscal 2003. The improvement in segment earnings was due to a combination of increased sales volume particularly in our II-VI Japan subsidiary, where the strong Yen has helped gross margins, increased manufacturing at the Company's Asian facilities in Singapore and China, and yield improvement and cost control programs occurring at our various facilities.

Near-Infrared Optics (millions)

	Year Ended <u>June 30,</u>		%
	<u>2004</u>	2003	<u>Increase</u>
Bookings	\$30.2	\$24.8	22%
Revenues	25.8	22.8	13%
Segment earnings	2.4	1.7	41%

Bookings for fiscal 2004 for Near-Infrared Optics increased 22% to \$30.2 million from \$24.8 million in fiscal 2003. The increase in bookings was primarily due to approximately \$4.0 million of bookings for a new product line in 2004 UV filters used in early warning missile detection. The remaining increase was driven by broad based demand for near-infrared optics in medical, military and instrumentation market segments.

Revenues for fiscal 2004 for Near-Infrared Optics increased 13% to \$25.8 million compared to \$22.8 million in fiscal 2003. The increase in revenues was primarily due to increased shipments of Near-Infrared Optics products such as waveplates, standard optics and crystal products used in medical, military, instrumentation and industrial markets. During fiscal 2004, the Company recognized approximately \$0.9 million on sales of the UV filters product line.

Segment earnings for fiscal 2004 increased 41% to \$2.4 million from \$1.7 million in fiscal 2003. This improvement reflected overall stronger gross margin dollars resulting from the increased sales volume as well as the improved product yields. Cost reductions, resulting from yield improvements in crystal growth and fabrication and the higher revenue levels were sufficient to increase segment earnings for fiscal 2004.

Military Infrared Optics (millions)

	Year Ended <u>June 30,</u>		%
	<u>2004</u>	<u>2003</u>	<u>Increase</u>
Bookings	\$29.2	\$23.1	26%
Revenues	25.3	23.0	10%
Segment earnings (loss)	0.9	(0.1)	N/A

Bookings for fiscal 2004 for Military Infrared Optics increased 26% to \$29.2 million from \$23.1 million in fiscal 2003. The increase in bookings was primarily due to increases in the core military and sapphire window product lines. Core military bookings increased 28% from 2003 due to the need to repair and replace hardware expended or damaged in the war against terror. The sapphire product bookings increased to approximately \$5.4 million from \$1.4 million in the prior fiscal year as the Company continues to meet customer product demands.

Revenues for fiscal 2004 for Military Infrared Optics increased 10% to \$25.3 million compared to \$23.0 million in fiscal 2003. The increase in revenues was due to increases in our core military products of approximately 15% due to the need to repair and replace hardware expended or damaged during the war on terror. The Company also increased its sapphire product revenues by approximately 75% to \$4.6 million during fiscal 2004. During fiscal 2004 revenues of the Military Infrared Optics Large Optics Coating Facility decreased 69% as compared to the prior fiscal year as the Company announced the shutdown of this facility in the second quarter of this fiscal year.

Segment earnings for fiscal 2004 increased to \$0.9 million from a loss of \$0.1 million in fiscal 2003. The improvement in segment earnings was primarily due to the recognition of \$0.3 million of contract expenses as compared to approximately \$1.2 million of contract expenses recognized in the prior fiscal year from activities performed on a specific fixed price percentage of completion contract. During fiscal 2004, the Company received a "stop-work order" relating to this contract as the U.S. Government cancelled the entire program relating to the Comanche Helicopter Defense initiatives. Additionally, improvements in gross margin from increased sales volume also contributed to the increased segment earnings as compared to the prior year.

Compound Semiconductor Group (millions)

	Year Ended <u>June 30.</u>		%
	<u>2004</u>	2003	<u>Increase</u>
Bookings	\$13.0	\$9.2	41%
Revenues	12.1	8.7	39%
Segment loss	(2.0)	(4.4)	(55)%

Combined bookings for fiscal 2004 from these operations increased 41% to \$13.0 million as compared to \$9.2 million in fiscal 2003. The eV PRODUCTS division recorded bookings in excess of \$8.0 million during fiscal 2004 a 38% increase over the prior fiscal year. This booking growth was driven by stronger demand from the medical and security segments as well as emerging industrial applications. The WBG group's bookings increased 34% to \$4.4 million due to a \$1.9 million contract bookings to further the group's effort in silicon carbide.

Revenues for fiscal 2004 from these operations increased 39% to \$12.1 million compared to \$8.7 million in 2003. The higher revenues were a direct result of higher shipments of hand-held spectrometers for Homeland Security applications, increased shipment of medical imaging detectors, higher levels of research and development revenues by the Company's eV PRODUCTS division and increased commercial shipments of SiC substrates from the WBG group.

The segment loss for fiscal 2004 of \$2.0 million decreased 55% from the segment loss of \$4.4 million in fiscal 2003. The decrease in the loss was primarily attributable to increased shipment volume improving incremental gross margins, maintaining controlled cost ramp-up and improved operational efficiencies.

#### Costs and Expenses

Manufacturing gross margin for fiscal 2004 was \$62.6 million or 44% of revenues compared to \$47.8 million or 41% of revenues in fiscal 2003. The increased gross margin was caused primarily by the increase in the amount of manufacturing performed at the Company's Singapore and China facilities, the increase in sales at our II-VI Japan subsidiary, due to the strengthening of the Yen, and the added incremental gross margin from our majority-owned subsidiary II-VI LOT Suisse S.a.r.l. acquired during 2004.

Contract research and development gross margin, for fiscal 2004 was \$1.6 million (18% of research and development revenues), compared to a gross margin of \$0.6 million (5% of research and development revenues), for fiscal 2003. The contract research and development revenues and costs are a result of development efforts in the Near-Infrared Optics and the Military Infrared Optics segments as well as activities in the eV PRODUCTS division and the WBG group for the fiscal year ended June 30, 2004. The improvement in the contract research and development gross margin was due to the recognition of approximately \$1.2 million of additional expenses in the prior fiscal year from activities performed on a specific fixed price percentage of completion contract in the Military Optics segment. During fiscal 2004, the Company received a "stop-work order" relating to this contract as the entire Comanche Helicopter Defense Initiatives was cancelled by the U.S. Government. The decrease in contract revenues is primarily due to lower contract activity in the Near-Infrared Optics segment and the WBG Group during fiscal 2004. Contract research and development gross margin is a result of a blend of cost plus fixed fee, cost reimbursement and fixed fee contract activities.

Company-funded internal research and development expenses for fiscal 2004 were \$5.0 million or 3% of revenues compared to \$2.7 million or 2% of revenues, for fiscal 2003. The higher expense is a direct result of less external contract support of the Company's WBG group's efforts in SiC crystal growth technology and processing development. Company-funded internal research and development expenses also include corporate research and development activities in addition to the research and development activities of the eV PRODUCTS division.

Selling, general and administrative expenses for fiscal 2004 were \$34.4 million or 23% of revenues compared to \$28.5 million or 22% of revenues for fiscal 2003. The dollar and percentage increases reflect higher salary expenses for the Company's worldwide profit driven bonus program. The increase in selling, general and administration expense from fiscal 2003 was also attributed to costs associated with the acquisition of a majority interest in II-VI LOT Suisse S.a.r.l. during the second quarter of fiscal year 2004. While this acquisition increased the Company's direct selling expense by approximately 1% of sales as compared to the prior year, this expense increase has been offset by the additional gross margin on sales to end customers in Switzerland.

Interest expense for fiscal 2004 was \$0.4 million compared to \$0.8 million for fiscal 2003. The decrease in interest expense reflects lower LIBOR based interest rates, as well as a reduction in debt levels throughout fiscal 2004. At June 30, 2004, total debt was 34% lower as compared to June 30, 2003.

Other expense for fiscal 2004 almost completely offset our other income items. Other expense in 2004 was primarily due to the minority interest in II-VI LOT GmbH and II-VI LOT Suisse S.a.r.l., foreign currency losses as a result of the U.S. dollar's performance relative to other currencies and losses recognized on disposal property, plant and equipment offset by interest and other income. Other expense in fiscal 2003 was primarily due to the minority interest in II-VI LO.T, the \$0.1 million write-off of an investment and foreign currency losses as a result of the U.S. dollar's performance relative to other currencies offset by royalty income and interest income.

The Company's effective income tax rate for fiscal 2004 was 29% compared to an effective income tax rate of 28% for fiscal 2003. The Company's effective income tax rate reflects the Company's continued benefit from lower tax rates on its Singapore and China operations and a favorable mix of U.S. and foreign income.

#### LIQUIDITY AND CAPITAL RESOURCES

Historically, our primary source of cash has been provided through operations and long-term borrowings. Other sources of cash include proceeds received from the exercise of stock options and long-term borrowings. Our historical uses of cash have been for capital expenditures, purchases of businesses and payment of principal and interest on outstanding debt obligations. Supplemental information pertaining to our sources and uses of cash is presented as follows:

Sources (uses) of Cash:

	Year Ended <u>June 30.</u>	
	<u>2005</u>	2004
Net Cash provided by operating activities	\$18.6	\$30.4
Proceeds from exercise of stock options	1.3	1.3
Additions to property, plant and equipment	(17.7)	(12.7)
Purchases of businesses	(29.7)	(3.8)
Note purchase agreement and additional		
investment in unconsolidated business	(2.2)	-
Net borrowings (payments) on long-term borrowings	29.5	(8.4)

In fiscal 2005, cash provided by operations was \$18.6 million. The increase in cash was driven by the Company's net earnings of \$24.8 million along with depreciation and amortization expense of \$12.7 million. The increase in cash was offset by working capital requirements of \$18.8 million.

Net cash used in investing activities during the fiscal year of \$49.5 million was primarily for the Company's acquisition of Marlow of \$29.7 million, property plant and equipment expenditures of \$17.7 million and note purchase agreement and an additional investment in unconsolidated business of approximately \$2.2 million. Net cash provided by financing activities during the fiscal year 2005 of \$30.6 million included short-term and long-term borrowings totaling \$48.9 million, payments made on borrowings of \$19.4 million and \$1.3 million of proceeds from the exercise of stock options.

On December 10, 2004, the Company replaced its \$45.0 million secured credit facility with a \$60.0 million secured credit agreement in connection with the Company's acquisition of Marlow. This facility has a five-year term and contains a term loan in the original amount of \$30.0 million and a \$30.0 million line of credit. The facility is collateralized by a pledge of

65% of the stock of certain of the Company's foreign subsidiaries. Additionally, the facility is subject to certain restrictive covenants, including those relating to minimum net worth, leverage and consolidated debt service coverage. The facility has an interest rate range of LIBOR plus 0.75% to LIBOR plus 1.50%. Principal payments of \$1.9 million under the term loan are payable quarterly beginning January 1, 2006. The weighted average interest rate of borrowings under the credit agreements was 3.42% for the fiscal year ended June 30, 2005. The Company had available \$17.6 million under its line of credit as of June 30, 2005.

On May 18, 2005, the Board of Directors authorized the Company to purchase up to 500,000 shares of its Common Stock. The repurchase program calls for shares to be purchased in the open market or in private transactions from time to time. The Company may suspend or discontinue this purchase program at any time. Shares purchased by the Company will be retained as treasury stock and will be available for general corporate purposes. The Company repurchased 11,000 shares totaling \$0.2 million of common stock under the share repurchase program during the fiscal year ended June 30, 2005. The Company expects the repurchase of shares to at least partially offset the dilutive effect of the issuance of shares from the Company's stock option plan.

Our cash position, borrowing capacity and debt obligations are as follows:

(millions)	Year Ended <u>June 30,</u>		
	<u>2005</u>	<u>2004</u>	
Cash and cash equivalents	\$21.7	\$21.7	
Additional borrowing capacity under existing credit facility	17.6	16.6	
Total debt obligations	45.0	15.5	

The Company believes cash flow from operations, existing cash reserves and available borrowing capacity will be sufficient to fund its working capital needs, capital expenditures, scheduled debt payments, treasury stock repurchases and internal growth for fiscal 2006.

# **OFF-BALANCE SHEET ARRANGEMENTS**

The Company's off-balance sheet arrangements include the operating leases and unconditional purchase obligations disclosed in the "Liquidity and Capital Resources" section in the contractual obligations table as well as letters of credit as discussed in Note H, "Debt," under Item 8 of this Form 10-K.

## TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

	Payments Due By Period						
Contractual Obligations	Total	Less Than	1-3	3-5	More Than		
		1 Year	Years	Years	5 Years		
(\$000's)							
Long-Term Debt Obligations	\$44,981	\$3,801	\$17,835	\$23,264	\$81		
Interest Payments <sup>(1)</sup>	5,575	1,748	2,664	1,161	2		
Capital Lease Obligations	_	_			_		
Operating Lease Obligations	5,905	1,939	1,997	1,579	390		
Purchase Obligations	14,738	9,156	5,582				
Other Long-Term Liabilities Reflected on the							
Registrant's Balance Sheet							
Total	\$71,199	\$16,644	\$28,078	\$26,004	\$473		

<sup>(1)</sup> Variable rate interest obligations are based on the interest rate in place at June 30, 2005.

#### **RISK FACTORS**

# We Depend on Highly Complex Manufacturing Processes Which Require Products from Limited Sources of Supply

We utilize high quality, optical grade ZnSe in the production of many of our infrared optical products. We are a leading producer of ZnSe for our internal use and for external sale. The production of ZnSe is a complex process requiring production in a highly controlled environment. A number of factors, including defective or contaminated materials, could adversely affect our ability to achieve acceptable manufacturing yields of high quality ZnSe. ZnSe is available from only one outside source where quantity and qualities may be limited. The unavailability of necessary amounts of high quality ZnSe would have a material adverse effect upon us. There can be no assurance that we will not experience manufacturing yield inefficiencies which could have a material adverse effect on our business, results of operations or financial condition.

We produce Hydrogen Selenide gas which is used in our production of ZnSe. There are risks inherent in the production and handling of such material. Our inability to effectively handle Hydrogen Selenide could require us to curtail our production of Hydrogen Selenide. Hydrogen Selenide is available from only one outside source where quantities and qualities may be limited. The cost of purchasing such material is greater than the cost of internal production. As a result, purchasing a substantial portion of such material from the outside source would increase our production costs of ZnSe. Therefore, our inability to internally produce Hydrogen Selenide could have a material adverse effect on our business, results of operations or financial condition.

During fiscal 2005, our Infrared Optics segment has experienced higher raw material costs, specifically for selenium which is used in our growth process for ZnSe. We have experienced an increase in selenium prices from approximately \$4 per pound two to three years ago to around \$50 per pound currently.

In addition, we produce and utilize other high purity, relatively uncommon materials and compounds to manufacture our products. Failure of our internal production processes or our suppliers to deliver sufficient quantities of these necessary materials on a timely basis could have a material adverse effect on our business, results of operations or financial condition.

# International Sales Account for a Significant Portion of Our Revenues

Sales to customers in countries other than the United States accounted for approximately 40%, 41% and 41% of revenues during the years ended June 30, 2005, 2004 and 2003, respectively. We anticipate that international sales will continue to account for a significant portion of our revenues for the foreseeable future. In addition, we manufacture products in Singapore, China and Vietnam and maintain direct sales offices in Germany, Japan, Switzerland, the UK and Belgium. Sales and operations outside of the United States are subject to certain inherent risks, including fluctuations in the value of the U.S. dollar relative to foreign currencies, tariffs, quotas, taxes and other market barriers, political and economic instability, restrictions on the export or import of technology, potentially limited intellectual property protection, difficulties in staffing and managing international operations and potentially adverse tax consequences. There can be no assurance that any of these factors will not have a material adverse effect on our business, results of operations or financial condition. In particular, currency exchange fluctuations in countries where we do business in the local currency could have a material adverse affect on our business, results of operations, or financial condition by rendering us less price-competitive than foreign manufacturers. Our sales in Japan are denominated in Yen and, accordingly, are affected by fluctuations in the dollar/ yen currency exchange rates. We generally reduce our exposure to such fluctuations of the Yen through forward exchange agreements which target to hedge approximately 75% of our sales in Japan. We do not engage in the speculative trading of financial derivatives. There can be no assurance, however, that our practices will reduce or eliminate the risk of fluctuation of the Yen in the U.S. dollar/Japanese Yen currency exchange rate.

# We May Encounter Substantial Competition

We may encounter substantial competition from other companies in the same market, including established companies with significant resources. Some of our competitors may have financial, technical, marketing or other capabilities more extensive than ours and may be able to respond more quickly than we can to new or emerging technologies and other competitive pressures. We may not be able to compete successfully against our present or future competitors, and competition may adversely affect our business, results of operations or financial condition.

## There Are Limitations on the Protection of Our Intellectual Property

We rely on a combination of trade secrets, patents, copyright and trademark laws combined with employee non-competition and nondisclosure agreements to protect our intellectual property rights. There can be no assurance that the steps taken by us will be adequate to prevent misappropriation of our technology. Furthermore, there can be no assurance that, in the future, third parties will not assert infringement claims against us. Asserting our rights or defending against third-party claims could involve substantial expense, thus materially and adversely affecting our business, results of operations or financial condition. In the event a third party were successful in a claim that one of our processes infringed its proprietary rights, we may have to pay substantial damages or royalties, or expend substantial amounts in order to obtain a license or modify processes so that it no longer infringes such proprietary rights, any of which could have an adverse effect on our business, results of operations or financial condition.

## Our Success Depends on the Ability to Retain Key Personnel

We are highly dependent upon the experience and continuing services of certain scientists, engineers, production and management personnel. Competition for the services of these personnel is intense, and there can be no assurance that we will be able to retain or attract the personnel necessary for our success. The loss of the services of our key personnel could have a material adverse effect on our business, results of operations or financial condition.

# Failure to Keep Pace with Industry Developments May Adversely Affect Our Operations

We are engaged in industries which will be affected by future developments. The introduction of products or processes utilizing new developments could render existing products or processes obsolete or unmarketable. Our continued success will depend upon our ability to develop and introduce on a timely and cost-effective basis new products, processes and applications that keep pace with developments and address increasingly sophisticated customer requirements. There can be no assurance that we will be successful in identifying, developing and marketing new products, applications and processes that we will not experience difficulties that could delay or prevent the successful development, introduction and marketing of product or process enhancements or new products, applications or processes, or that our products, applications or processes will adequately meet the requirements of the marketplace and achieve market acceptance. Our business, results of operations and financial condition could be materially and adversely affected if we were to incur delays in developing new products, applications or processes or if we did not gain market acceptance for the same.

## **Our Success Depends on New Products and Processes**

In order to meet our strategic objectives, we must continue to develop, manufacture and market new products, develop new processes and improve existing processes. As a result, we expect to continue to make significant investments in research and development and to continue to consider from time to time the strategic acquisition of businesses, products, or technologies complementary to our business. Our success in developing, introducing and selling new and enhanced products depends upon a variety of factors including product selection, timely and efficient completion of product design and development, timely and efficient implementation of manufacturing and assembly processes, effective sales and marketing, and product performance in the field. There can be no assurance that we will be able to develop and introduce new products or enhancements to our existing products and processes in a manner which satisfies customer needs or achieves market acceptance. The failure to do so could have a material adverse effect on our ability to grow our business.

## We May Expand Product Lines and Markets by Acquiring Other Businesses

Our business strategy includes expanding our product lines and markets through internal product development and acquisitions. Any acquisition may result in potentially dilutive issuances of equity securities, the incurrence of debt and contingent liabilities, and amortization expense related to intangible assets acquired, any of which could have a material adverse effect on our business, results of operations or financial condition. In addition, acquired businesses may be experiencing operating losses. Any acquisition will involve numerous risks, including difficulties in the assimilation of the acquired company's operations and products, uncertainties associated with operating in new markets and working with new customers, and the potential loss of the acquired company's key employees.

The following information relates to significant acquisitions made since fiscal year ended June 30, 1995.

Acquired Party	Year Acquired Business Segment		Percentage Ownership as of June 30, 2005	
Virgo Optics Division of				
Sandoz Chemicals Corporation	Fiscal 1995	Near-Infrared Optics	100%	
Lightning Optical Corporation	Fiscal 1996	Near-Infrared Optics	100%	
Laser Power Corporation	Fiscal 2001	Military Infrared Optics and Infrared Optics	100%	
Silicon Carbide Group				
of Litton Systems, Inc.	Fiscal 2002	Compound Semiconductor Group	100%	
5NPlus, Inc.	Fiscal 2002	Compound Semiconductor Group	36%	
II-VI Deutschland GmbH (1)	Fiscal 2003	Infrared Optics and Near-Infrared Optics	75%	
II-VI LOT Suisse S.a.r.l.	Fiscal 2004	Infrared Optics	75%	
Ultra-Violet Filter Product Line of				
Coherent, Inc.	Fiscal 2004	Near-Infrared Optics	100%	
Marlow Industries, Inc.	Fiscal 2005	Compound Semiconductor Group	100%	
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<sup>(1)</sup> In July 2005, the Company exercised its call option and purchased the remaining 25% interest of II-VI Deutschland GmbH from L.O.T.-Oriel Laser Optik GmbH & Co. KG of Darmstadt, Germany.

# Our Revenues May Suffer if General Economic Conditions Worsen

Our revenues and earnings may be affected by general economic factors, such as inflation, currency fluctuations and employment levels, resulting in a temporary or longer-term overall decline in demand for our products. Therefore, any significant downturn or recession in the United States or other countries could have a material adverse effect on our business, results of operations or financial condition.

## A Significant Portion of Our Business is Dependent on Other Cyclical Industries

Our business is significantly dependent on the demand for products produced by end-users of industrial lasers. Many of these end-users are in industries that historically have experienced a highly cyclical demand for their products. As a result, demand for our products are subject to cyclical fluctuations. This cyclical demand could have a material adverse effect on our business, results of operations or financial condition.

# Our Revenues are Subject to Potential Seasonal Fluctuations

Due to our customers' buying patterns, particularly in Europe, revenues for our first fiscal quarter ending in September could be below those in the preceding quarter. Our first fiscal quarter results often are dependent upon the sales made in the last month of the quarter.

# **Exposure to Government Markets**

With the acquisition of Marlow and the operations of Exotic Electro-Optics, sales to customers in the defense industry have increased. These customers in turn generally contract with a governmental entity, typically the U.S. government. Most governmental programs are subject to funding approval and can be modified or terminated with no warning upon the determination of a legislative or administrative body. The loss or failure to obtain certain contracts or a loss of a major government customer could have a material adverse effect on our business, and results of operations or financial condition.

## **Our Stock Price May Fluctuate**

Future announcements concerning us, our competitors or customers, quarterly variations in operating results, announcements of technological innovations, the introduction of new products or changes in product pricing policies by us or our competitors, seasonal or other variations in anticipated or actual results of operations, changes in earnings estimates by analysts or reports regarding our industries in the financial press or investment advisory publications, among other factors, could cause the market price of our stock to fluctuate substantially. In addition, stock prices may fluctuate widely for reasons which may be unrelated to operating results. These fluctuations, as well as general economic, political and market conditions

such as recessions, military conflicts or market or market-sector declines, may materially and adversely affect the market price of our common stock. In addition, any information concerning us, including projections of future operating results, appearing in investment advisory publications or on-line bulletin boards or otherwise emanating from a source other than us could in the future contribute to volatility in the market price of our common stock.

# Provisions in our Articles of Incorporation and By-Laws May Limit the Price that Investors May be Willing to Pay in the Future for Shares of Our Common Stock

Our articles of incorporation and by-laws contain provisions which could make us a less attractive target for a hostile takeover or make it more difficult or discourage a merger proposal, a tender offer or a proxy contest. The provisions include: classification of the board of directors into three classes; a procedure which requires shareholders or the board of directors to nominate directors in advance of a meeting to elect such directors; the ability of the board of directors to issue additional shares of common stock or preferred stock without shareholder approval; and certain provisions requiring supermajority approval (at least two-thirds of the votes cast by all shareholders entitled to vote thereon, voting together as a single class).

In addition, the Pennsylvania Business Corporation Law contains provisions which may have the effect of delaying or preventing a change in our control. All of these functions may limit the price that investors may be willing to pay in the future for shares of our common stock.

# We Are Subject to Stringent Environmental Regulation

We use or generate certain hazardous substances in our research and manufacturing facilities. We believe that our handling of such substances is in material compliance with applicable local, state and federal environmental, safety and health regulations at each operating location. We invest substantially in proper protective equipment, process controls and specialized training to minimize risks to employees, surrounding communities and the environment due to the presence and handling of such hazardous substances. We regularly conduct employee physical examinations and workplace monitoring regarding such substances. When exposure problems or potential exposure problems have been indicated, corrective actions have been implemented and re-occurrence has been minimal or non-existent. We do not carry environmental impairment insurance.

Relative to its generation and use of the extremely hazardous substance Hydrogen Selenide, we have in place an emergency response plan. Special attention has been given to all procedures pertaining to this gaseous material to minimize the chances of its accidental release to the atmosphere.

With respect to the use, storage and disposal of the low-level radioactive material Thorium Fluoride, our facilities and procedures have been inspected and licensed by the Nuclear Regulatory Commission. Thorium bearing by-products are collected and shipped as solid waste to a government-approved low-level radioactive waste disposal site in Clive, Utah.

The generation, use, collection, storage and disposal of all other hazardous by-products, such as suspended solids containing heavy metals or airborne particulates, are believed by us to be in material compliance with regulations. We believe that all of the permits and licenses required for operation of our business are in place. Although we do not know of any material environmental, safety or health problems in our properties or processes, there can be no assurance that problems will not develop in the future which could have a material adverse effect on our business, results of operations or financial condition.

# Some Laser Systems Are Complex in Design and May Contain Defects that Are Not Detected Until Deployed Which Could Increase Our Costs and/or Reduce Our Revenues

Laser systems are inherently complex in design and require ongoing regular maintenance. The manufacture of lasers, laser products and systems involves a highly complex and precise process. As a result of the technical complexity of our products, changes in our or our suppliers' manufacturing processes or in the use of defective or contaminated materials by us or our suppliers could result in a material adverse effect on our ability to achieve acceptable manufacturing yields and product reliability. To the extent that we do not achieve such yields or product reliability, our business, operating results, financial condition and customer relationships could be adversely affected. Our customers may discover defects in our products after the products have been fully deployed and operated under peak stress conditions. In addition, some of our products are combined with products from other vendors, which may contain defects. Should problems occur, it may be

difficult to identify the source of the problem. If we are unable to fix defects or other problems, we could experience, among other things: loss of customers; increased costs of product returns and warranty expenses; damage to our brand reputation; failure to attract new customers or achieve market acceptance; diversion of development and engineering resources; and legal action by our customers.

The occurrence of any one or more of the foregoing factors could have an adverse effect on our business, results of operations or financial condition.

# **Recently Issued Financial Accounting Standards**

In November 2004, the FASB issued SFAS No. 151, "Inventory Costs," an amendment of Accounting Research Bulletin No. 43, "Inventory Pricing." SFAS No. 151 requires all companies to recognize a current-period charge for abnormal amounts of idle facility expense, freight, handling costs and wasted materials. The statement also requires that the allocation of fixed production overhead to the costs of conversion be based on the normal capacity of the production facilities. This new standard will be effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The Company does not expect that the adoption of this statement will have a material impact on its financial position, results of operations or cash flows.

In December 2004, the FASB issued Staff Position ("FSP") No. 109-1, "Application of FASB Statement No. 109, Accounting for Income Taxes, for the Tax Deduction on Qualified Production Activities Provided by the American Jobs Creation Act of 2004". The FASB also issued FSP 109-2, "Accounting and Disclosure Guidance for the Foreign Earnings Repatriation Provision within the American Jobs Creation Act of 2004." However, given the stage of our evaluation, at this time it is not possible to determine what impact this legislation may have on our effective tax rate for the fiscal year ending June 30, 2006.

In December 2004, the FASB issued SFAS No. 153, "Exchanges of Nonmonetary Assets." SFAS 153 addresses the measurement of exchanges of nonmonetary assets and redefines the scope of transactions that should be measured based on the fair value of the assets exchanged. SFAS 153 is effective for fiscal periods beginning after June 15, 2005. The Company does not expect that the adoption of this statement will have a material impact on its financial position, results of operations or cash flows.

In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123 (Revised 2004), "Share-Based Payment" (SFAS 123(R)), which amends SFAS No. 123 "Accounting for Stock-Based Compensation," and SFAS 95, "Statement of Cash Flows." SFAS 123(R) requires all companies to measure compensation cost for all share-based payments (including employee stock options) at fair value, and will be effective for public companies for annual periods beginning after June 15, 2005. The Company will adopt this accounting change effective July 1, 2005 using the Black-Scholes option pricing model. This non-cash stock option charge currently is expected to reduce earnings per share by approximately \$0.06 to \$0.08 in the fiscal year ending June 30, 2006.

#### ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

## **MARKET RISKS**

The Company is exposed to market risks arising from adverse changes in foreign currency exchange rates and interest rates. In the normal course of business, the Company uses a variety of techniques and derivative financial instruments as part of its overall risk management strategy primarily focused on its exposure to the Japanese Yen. No significant changes have occurred in the techniques and instruments used other than those described below.

In addition, the Company has transactions denominated in Euros and Pounds Sterling. As a result of the Company's hedging activities discussed below, changes in the foreign currency exchange rates of these currencies did not have a material impact on the results of operations for fiscal year 2005.

## Foreign Exchange Risks

In the normal course of business, the Company enters into foreign currency forward exchange contracts with its financial institutions. The purpose of these contracts is to hedge ordinary business risks regarding foreign currencies on product sales. Foreign currency exchange contracts are used to limit transactional exposure to changes in currency rates. The Company enters into foreign currency forward contracts that permit it to sell specified amounts of foreign currencies expected to be received from its export sales for pre-established U.S. dollar amounts at specified dates. The forward contracts are denominated in the same foreign currencies in which export sales are denominated. These contracts provide the Company with an economic hedge in which settlement will occur in future periods and which otherwise would expose the Company to foreign currency risk. The Company monitors its positions and the credit ratings of the parties to these contracts. While the Company may be exposed to potential losses due to risk in the event of non-performance by the counterparties to these financial instruments, it does not anticipate such losses. The Company entered into a low interest rate, 300 million Yen loan with PNC Bank in September 2002 in an effort to minimize the foreign currency exposure in Japan. A change in the interest rate of 1% for this Yen loan would have changed the interest expense by approximately \$27,000 and a 10% change in the Yen to U.S. dollar exchange rate would have changed revenues in the range from a decrease of \$1,647,000 to an increase of \$2,025,000 for the year ended June 30, 2005.

For II-VI Singapore Pte., Ltd. and its subsidiaries, and the Company's majority-owned subsidiary II-VI LOT Suisse S.a.r.l., the functional currency is the U.S. dollar. Gains and losses on the remeasurement of the local currency financial statements are included in net earnings. Foreign currency remeasurement gains (losses) were \$0.2 million, \$0.5 million and (\$0.2) million for the years ended June 30, 2005, 2004 and 2003, respectively.

For all other foreign subsidiaries, the functional currency is the local currency. Assets and liabilities of those operations are translated into U.S. dollars using the period-end exchange rate while income and expenses are translated using the average exchange rates for the reporting period. Translation adjustments are recorded as accumulated other comprehensive income within shareholders' equity.

# Interest Rate Risks

To satisfy certain provisions of its credit facility (see Note H), on March 8, 2005 the Company entered into one-year interest rate caps with a total notional amount of \$15.0 million. These agreements were entered into to limit interest rate exposure on one-half of the remaining outstanding balance of the Company's term loan under the credit agreement. The floating rate option for the interest rate caps is the one-month LIBOR rate. \$10.0 million of the notional amount has a cap strike rate of 4.00% while \$5.0 million of the notional amount has a cap strike rate of 3.50%. At June 30, 2005 the one-month LIBOR rate was 3.34%. The Company has elected not to account for these agreements as hedges as defined by SFAS No. 133 but instead recorded the unrealized change in the fair value of these agreements as an increase or decrease to interest expense in the results of operations. The effect of these interest rate caps on net earnings for the years ended June 30, 2005 and 2004 was insignificant. As of June 30, 2005, the total borrowings of \$45.0 million included a \$30.0 million term loan, \$11.9 million under a line of credit, \$2.7 million loan denominated in Japanese Yen and a \$0.4 million Pennsylvania Industrial Development Authority (PIDA) term note. As such, the Company is exposed to changes in interest rates. A change in the interest rate of 1% would have changed the interest expense by approximately \$0.3 million for the fiscal year ended June 30, 2005.

#### ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

#### REPORT OF MANAGEMENT

# Responsibility for Preparation of the Financial Statements and Establishing and Maintaining Adequate Internal Control Over Financial Reporting

Management is responsible for the preparation of the financial statements included in this Annual Report. The financial statements were prepared in accordance with accounting principles generally accepted in the United States of America and include amounts that are based on the best estimates and judgments of management. The other financial information contained in this Annual Report is consistent with the financial statements.

Management is also responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control system is designed to provide reasonable assurance concerning the reliability of the financial data used in the preparation of the Company's financial statements, as well as reasonable assurance with respect to safeguarding the Company's assets from unauthorized use or disposition.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement presentation and other results of such systems.

Management conducted an evaluation of the effectiveness of the Company's internal control over financial reporting as of June 30, 2005. In making this evaluation, management used the criteria set forth by the *Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework.* As permitted by Securities Exchange Act Rule 13a-15, management has excluded an assessment of the internal controls over financial reporting of Marlow Industries, Inc. (the "Subsidiary") which was acquired in December 2004. The subsidiary's total assets and total revenue represented 16% and 10%, respectively, of the Company's total assets and total revenue as of and for the year ended June 30, 2005. There have been no material changes to the Company's internal controls related to the Subsidiary as of June 30, 2005. Management's evaluation included reviewing the documentation of its controls, evaluating the design effectiveness of controls and testing their operating effectiveness. Based on the evaluation, management believes that, as of June 30, 2005, the Company's internal controls over financial reporting were effective and provide reasonable assurance that the accompanying financial statements do not contain any material misstatement.

Deloitte & Touche LLP, an independent registered public accounting firm, has issued their report on our evaluation of internal control over financial reporting.

September 8, 2005

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

#### To the Board of Directors and Shareholders of II-VI Incorporated and Subsidiaries:

We have audited management's assessment, included in the accompanying *Report of Management*, that II-VI Incorporated and subsidiaries (the "Company") maintained effective internal control over financial reporting as of June 30, 2005, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organization of the Treadway Commission. As described in the *Report of Management*, management excluded from their assessment the internal control over financial reporting at Marlow Industries, Inc., which was acquired in December 2004 and whose financial statements reflect total assets and revenues constituting 16% and 10%, respectively, of the related consolidated financial statement amounts as of and for the year ended June 30, 2005. Accordingly, our audit did not include the internal control over financial reporting at Marlow Industries, Inc. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that the Company maintained effective internal control over financial reporting as of June 30, 2005, is fairly stated, in all material respects, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of June 30, 2005, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements and financial statement schedule as of and for the year ended June 30, 2005 of the Company and our report dated September 9, 2005 expressed an unqualified opinion on those financial statements and financial statement schedule.

/s/ Deloitte & Touche LLP Pittsburgh, Pennsylvania September 9, 2005

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

# To the Board of Directors and Shareholders of II-VI Incorporated and Subsidiaries:

We have audited the accompanying consolidated balance sheets of II-VI Incorporated and subsidiaries (the "Company") as of June 30, 2005 and 2004, and the related consolidated statements of earnings and comprehensive income, cash flow and stockholders' equity for each of the three years in the period ended June 30, 2005. Our audits also included the financial statement schedule listed in Item 15. These financial statements and the financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (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, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of June 30, 2005 and 2004, and the results of its operations and its cash flows for each of the three years in the period ended June 30, 2005, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of the Company's internal control over financial reporting as of June 30, 2005, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated September 9, 2005 expressed an unqualified opinion on management's assessment of the effectiveness of the Company's internal control over financial reporting and an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ Deloitte & Touche LLP Pittsburgh, Pennsylvania September 9, 2005

# **CONSOLIDATED BALANCE SHEETS**

June 30,	2005	2004
(\$000)		
Current Assets		
Cash and cash equivalents	\$21,675	\$21,683
Accounts receivable – less allowance for doubtful accounts of \$816 at June 30, 2005		
and \$791 at June 30, 2004	35,985	26,092
Inventories	44,916	29,201
Deferred income taxes	6,960	4,561
Prepaid and other current assets	2,202	1,595
Total Current Assets	111,738	83,132
Property, Plant & Equipment, net	77,900	62,339
Goodwill	39,537	28,987
Investment	2,249	1,888
Intangible Assets, net	16,332	5,852
Other Assets	4,922	2,288
	\$252,678	\$184,486
Current Liabilities	¢10.072	¢0 227
Accounts payable	\$10,073	\$8,337
Accrued salaries and wages	4,870	3,291
Accrued bonuses	7,095	7,386
Income taxes payable	4,718	4,295
Accrued profit sharing contribution	2,143	2,122
Other accrued liabilities	5,184	3,367
Current portion of long-term debt	3,801	7,550
Total Current Liabilities	37,884	36,348
Long-Term Debt	41,180	7,986
Deferred Income Taxes	12,349	6,177
Other Liabilities	2,399	2,108
Total Liabilities	93,812	52,619
Commitments and Contingencies Shareholders' Equity		
Preferred stock, no par value;		
authorized — 5,000,000 shares; none issued		
Common stock, no par value; authorized — 100,000,000 shares at June 30, 2005 and	_	_
30,000,000 shares at June 30, 2004; issued — 31,350,118 shares at June 30, 2005; 31,041,426 shares at June 30, 2004	45 217	42 420
Accumulated other comprehensive income	45,217 631	42,429 1,081
Retained earnings	115,110	90,267
Retained carnings		
Loca tracerum, etc. ch. et. co. et. 2, 140, 760 ehemes et Loca 20, 2005, 2, 127, 760 et	160,958	133,777
Less treasury stock at cost, 2,148,760 shares at June 30, 2005; 2,137,760 shares at	2.002	1.010
June 30, 2004	2,092	1,910
Total Shareholders' Equity	158,866	131,867
	\$252,678	\$184,486

# **CONSOLIDATED STATEMENTS OF EARNINGS**

Year Ended June 30,	2005	2004	2003
(\$000 except per share data)			
Revenues			
Net sales:			
Domestic	\$106,902	\$ 80,143	\$ 64,740
International	77,732	62,019	52,470
Contract research and development	9,406	8,686	11,000
	194,040	150,848	128,210
Costs, Expenses and Other Expense (Income)			
Cost of goods sold	104,877	79,558	69,408
Contract research and development	6,787	7,135	10,436
Internal research and development	5,847	4,965	2,660
Selling, general and administrative	41,895	34,359	28,510
Interest expense	945	412	849
Other (income) expense - net	(261)	2	297
	160,090	126,431	112,160
Earnings Before Income Taxes	33,950	24,417	16,050
Income Taxes	9,107	7,080	4,430
Net Earnings	\$ 24,843	\$ 17,337	\$ 11,620
Basic Earnings Per Share	\$ 0.85	\$ 0.61	\$ 0.41
Diluted Earnings Per Share	\$ 0.83	\$ 0.59	\$ 0.40

# **CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY**

# Accumulated Other

	_						
	Common Stock		Comprehensive R	Retained	Treasury Stock		
	Shares	Amount	Income	Earnings	Shares	Shares Amount	
(000)							
BALANCE – JULY 1, 2002	30,202	\$37,840	\$ 279	\$61,451	(2,138)	\$ (1,910)	\$ 97,660
Shares issued under							
stock option plans	334	542	_	_	_	_	542
Shares issued to acquire							
Laser Power Corporation	2	6	_	_	_	_	6
Net earnings	_	_	_	11,620	_	_	11,620
Other comprehensive income, net of tax	_	_	651	_	_	_	651
Income tax benefit for							
options exercised		1,042					1,042
BALANCE - JUNE 30, 2003	30,538	\$39,430	\$ 930	\$73,071	(2,138)	\$(1,910)	\$111,521
Shares issued under							
stock option plans	502	1,302	_	_	_	_	1,302
Shares issued to acquire							
Laser Power Corporation	2	11	_	_	_	_	11
Net earnings	_	_	_	17,337	_	_	17,337
Payment for redemption of Shareholder							
Rights Plan	_	_	_	(141)	_	_	(141)
Other comprehensive income, net of tax	_	_	151	_	_	_	151
Income tax benefit for							
options exercised	_	1,686	_	_	_	_	1,686
BALANCE – JUNE 30, 2004	31,042	\$42,429	\$1,081	\$90,267	(2,138)	\$(1,910)	\$131,867
Shares issued under							
stock option plans	308	1,291	_	_	_	_	1,291
Net earnings	_	_	_	24,843	_	_	24,843
Purchase of treasury stock	_	_	_	_	(11)	(182)	(182)
Other comprehensive loss, net of tax	_	_	(450)	_	_	_	(450)
Income tax benefit for							
options exercised	_	1,497	_	_	_	_	1,497
		\$45,217	\$631	\$115,110	(2,149)	\$(2,092)	\$158,866

See Notes to Consolidated Financial Statements.

# CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Year Ended June 30,	2005	2004	2003
(\$000)			
Net earnings	\$24,843	\$17,337	\$ 11,620
Other comprehensive income:			
Foreign currency translation adjustments, net of income taxes of			
\$(165), \$62 and \$248, respectively	(450)	151	651
COMPREHENSIVE INCOME	\$24,393	\$17,488	\$ 12,271

# **CONSOLIDATED STATEMENTS OF CASH FLOWS**

		Year Ended Jun			
(\$000)		2005	2004	2003	
Cash Flows from O	perating Activities				
Net earnings		\$24,843	\$17,337	\$ 11,620	
Adjustments to reconci	le net earnings to net cash				
provided by operating a					
Depreciation		11,501	8,987	8,817	
Amortization		1,204	646	510	
(Gain) loss on foreig	n currency remeasurements and transactions	(106)	105	159	
	or writedown of assets	92	159	323	
Deferred income tax	es	20	(169)	1,361	
Other		(157)	(100)	50	
Increase (decrease) i	n cash from changes in:				
Accounts receivab		(5,762)	(3,388)	(796)	
Inventories		(11,329)	(3,373)	(3,549)	
Accounts payable		(1,825)	2,258	2,124	
Income taxes paya	ible	1,886	4,004	2,075	
Other operating ne		(1,755)	3,933	2,947	
Net cash provided by o	perating activities	18,612	30,399	25,641	
1 ,					
Cash Flows from In	•	4	(10 -00)	(= 0.1 =)	
Additions to property, p		(17,656)	(12,729)	(7,017)	
Purchases of businesses		(29,743)	(3,754)	(2,755)	
Investment in unconsol		(217)	_	_	
Dividends from uncons		10	8	9	
Note purchase agreeme		(2,000)			
Disposals of property, p	plant and equipment	142	_	476	
Net cash used in invest	ing activities	(49,464)	(16,475)	(9,287)	
Cash Flows from Fi	nancing Activities				
Proceeds from short-ter		18,900	4,000	3,414	
Payments on short-tern		(9,425)	(5,500)	(9,233)	
Proceeds from long-ter		30,000	—		
Payments on long-term	•	(10,000)	(6,923)	(5,066)	
Proceeds from exercise		1,291	1,313	548	
Purchases of treasury s		(182)		_	
-	n of Shareholder Rights Plan	_	(141)	_	
Net cash provided by (	used in) financing activities	30,584	(7,251)	(10,337)	
Effect of exchange rate	changes on cash and cash equivalents	260	(573)	(44)	
	in cash and cash equivalents	(8)	6,100	5,973	
Cook and Cook Farr	iivalanta				
Cash and Cash Equal Beginning of year	iivalents	21,683	15,583	9,610	
End of year		\$ 21,675	\$ 21,683	\$ 15,583	
	Additional to manager when the state of the form	. ,	. ,	. ,	
Non-cash transactions:	1 1 2/1 1 1	¢ 1 405	¢	¢	
	included in accounts payable	\$ 1,485	\$ —	\$ —	
	Increase to investments from loan conversion	_		412	

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## Note A NATURE OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

**NATURE OF BUSINESS** The Company develops, manufactures and markets infrared and near-infrared laser optical elements, military infrared optical components, x-ray and gamma-ray sensors, single crystal silicon carbide (SiC) substrates and thermoelectric cooling and power generation solutions. The Company markets its products in the United States through its direct sales force and worldwide through its wholly- or majority-owned subsidiaries, distributors and agents.

The Company uses certain uncommon materials and compounds to manufacture its products. Some of these materials are available from only one proven outside source. The continued high quality of these materials is critical to the stability of the Company's manufacturing yields. The Company has not experienced significant production delays due to a shortage of materials. However, the Company does occasionally experience problems associated with vendor supplied materials not meeting specifications for quality or purity. A significant failure of the Company's suppliers to deliver sufficient quantities of necessary high-quality materials on a timely basis could have a material adverse effect on the Company's results of operations.

**PRINCIPLES OF CONSOLIDATION** The consolidated financial statements include the accounts of II-VI Incorporated and its controlled subsidiaries. All intercompany transactions and balances have been eliminated.

**FOREIGN CURRENCY TRANSLATION** For II-VI Singapore Pte., Ltd. and its subsidiaries, and the Company's majority-owned subsidiary II-VI LOT Suisse S.a.r.l., the functional currency is the U.S. dollar. Gains and losses on the remeasurement of the local currency financial statements are included in net earnings. Foreign currency remeasurement gains (losses) were \$0.2 million, \$0.5 million and (\$0.2) million for the years ended June 30, 2005, 2004 and 2003, respectively.

For all other foreign subsidiaries, the functional currency is the local currency. Assets and liabilities of those operations are translated into U.S. dollars using period-end exchange rates while income and expenses are translated using the average exchange rates for the reporting period. Translation adjustments are recorded as accumulated other comprehensive income within shareholders' equity in the accompanying consolidated balance sheets.

**CASH AND CASH EQUIVALENTS** The Company considers highly liquid debt instruments with an original maturity of three months or less to be cash equivalents. The majority of cash and cash equivalents is invested in investment grade money market type instruments. Cash of foreign subsidiaries is on deposit at banks in Singapore, China, Germany, Japan, Belgium, the Netherlands, Switzerland, the United Kingdom and Vietnam.

**ACCOUNTS RECEIVABLE AND WARRANTY RESERVE** The Company establishes an allowance for doubtful accounts based on historical experience. The Company records a warranty reserve as a charge against earnings based on a percentage of sales utilizing actual returns over the last twelve months. The following table summarizes the change in the carrying value of the Company's warranty reserve as of and for the years ended June 30, 2005, 2004 and 2003.

Year Ended June 30,	2005	2004	2003
(\$000)			
Balance – Beginning of Year	\$552	\$504	\$419
Expense and writeoffs, net	194	48	85
Other <sup>(1)</sup>	216	_	_
Balance – End of Year	\$962	\$552	\$504

<sup>(1)</sup> The component of "Other" relates to the warranty reserve from the acquisition of Marlow Industries, Inc. in December 2004 (see Note C).

Concentrations of credit risk with respect to accounts receivable are limited due to the Company's large number of customers. However, a significant portion of the accounts receivable is from a single European distributor. At June 30, 2005 and 2004, the accounts receivable balance from this distributor was \$1.4 million and \$1.3 million, respectively, or 4% and 5%, respectively, of the net accounts receivable balance. Although the Company does not currently foresee a risk associated with these receivables, repayment is dependent upon the financial stability of this distributor.

The Company factored a portion of the accounts receivable due to its Japan subsidiary during each of the years ended June 30, 2005 and 2004. Factoring is done with large banks in Japan. During the years ended June 30, 2005 and 2004, \$6.6 million and \$7.0 million of accounts receivable had been factored. As of June 30, 2005 and 2004, \$0.6 million and \$0.5 million, respectively, was included in Other Accrued Liabilities representing the Company's obligation to the bank for these receivables factored with recourse.

**INVENTORIES** Inventories are valued at the lower of cost or market, with cost determined on the first-in, first-out basis. Inventory costs include material, labor and manufacturing overhead. The Company records a slow moving inventory reserve as a charge against earnings for all products on hand more than twelve months to eighteen months depending on the products that have not been sold to customers or cannot be further manufactured for sale to alternative customers. An additional reserve is recorded for product on hand that is in excess of product sold to customers over the same periods noted above. Inventories are net of reserves totaling \$1.4 million and \$1.7 million at June 30, 2005 and 2004, respectively.

**PROPERTY, PLANT AND EQUIPMENT** Property, plant and equipment are carried at cost or fair market value upon acquisition. Major improvements are capitalized, while maintenance and repairs are generally expensed as incurred. The Company reviews its property, plant and equipment and other long-lived assets for impairment whenever events or circumstances indicate that the carrying amounts may not be recoverable. Depreciation for financial reporting purposes is computed primarily by the straight-line method over the estimated useful lives of the assets. Depreciable useful lives range from 2 to 20 years.

**GOODWILL** The excess purchase price over the net assets of businesses acquired is reported as goodwill in the accompanying consolidated balance sheets. Statement of Financial Accounting Standards (SFAS) No. 142 "Goodwill and Other Intangible Assets", was adopted by the Company as of July 1, 2001. The Company no longer amortizes goodwill but tests goodwill for impairment at least annually or when events or changes in circumstances indicate that goodwill might be impaired.

**INVESTMENT** During the year ended June 30, 2002, the Company acquired for \$1.7 million a 25% ownership interest in 5NPlus, Inc., a supplier to the Company. In July 2002, the Company increased its ownership interest to 33% as a result of a loan conversion to equity in accordance with the original purchase agreement in the amount of \$0.4 million. In April 2005, the Company increased its ownership to approximately 36% as a result of acquiring a pro-rata ownership percentage of an exiting shareholder for \$0.2 million. This investment is accounted for under the equity method of accounting.

At June 30, 2005 and 2004, the Company had outstanding notes receivable of approximately \$0.5 million and \$0.4 million, respectively, from equipment and supply agreements with this supplier. Payments on these notes are made quarterly with interest calculated at the Canadian Prime Rate plus 1.50% on the unpaid balance. For the years ended June 30, 2005, 2004 and 2003, the Company purchased \$1.0 million, \$0.3 million and \$0.3 million, respectively, of raw materials each year from this supplier. The Company's pro rata share of the earnings from this investment and the interest received from these agreements were approximately \$0.2 million, \$0.1 million and \$0.1 million for the years ended June 30, 2005, 2004 and 2003, respectively.

**INTANGIBLES** Intangible assets are carried at cost or fair market value upon acquisition. Finite-lived intangible assets are amortized for financial reporting purposes using the straight-line method over the estimated useful lives of the assets ranging from 1.5 years to 20 years. Indefinite-lived intangible assets are not amortized but tested annually for impairment.

**OTHER ASSETS** In April 2005, the Company entered into a \$2.0 million note purchase agreement with SemiSouth Laboratories, Inc. (SemiSouth), a customer and supplier of the Company. Under the terms of the agreement, the note receivable accrues interest at Prime plus 1.00% per annum paid quarterly. The note receivable matures April 4, 2010. The note purchase agreement contains a conversion feature that permits the Company to convert the note receivable into common shares of SemiSouth at certain times upon certain situations through the maturity date.

**ACCRUED BONUSES AND PROFIT SHARING CONTRIBUTION** The Company records bonus and profit sharing estimates as a charge against earnings based on a formula percentage of the Company's operating income. These estimates are adjusted to actual based on final results of operations achieved during the fiscal year. Partial bonus amounts may be paid on an interim basis, and the remainder is paid after the fiscal year end after the final determination of the applicable percentage or amounts.

**INCOME TAXES** Deferred income tax assets and liabilities are determined based on the differences between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. Valuation allowances are established when necessary to reduce deferred income tax assets to the amount more likely than not to be realized. Annual tax provisions include amounts considered sufficient to pay assessments that may result from examinations of prior year tax returns; however, the amount ultimately paid upon resolution of issues raised may differ from the amounts accrued.

**REVENUE RECOGNITION** Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the price is established or determinable and collectibility is probable.

Revenue, for all business segments, other than for contract research and development, is recognized from the sale of products at the point of passage of title, which is generally at the time of shipment.

The Company performs research and development under contract agreements with customers based on cost plus fixed fee, cost reimbursable or fixed fee terms. These contracts generally require the Company to produce and provide developmental materials and/or products to those customers. Revenues from cost plus fixed fee and cost reimbursable contracts are recognized as costs are incurred.

The Company follows the guidelines of Statement of Position 81-1 "Accounting for Performance of Construction-Type and Certain Production-Type Contracts" for its fixed fee contracts. Revenue and profits on each fixed fee contract are accounted for using the percentage-of-completion method of accounting, whereby revenue and profits are recognized throughout the performance period of the contract. Percentage-of-completion is determined by relating the actual cost of work performed to date to the estimated total cost for each contract. The estimated total cost for each contract is periodically reevaluated and revised, when necessary, throughout the life of the contract. Losses on contracts are recorded in full when identified.

**SHIPPING AND HANDLING COSTS** Shipping and handling costs billed to customers are included in revenues. Shipping and handling costs incurred by the Company are included in selling, general and administrative expenses in the accompanying consolidated statements of earnings. Total shipping and handling costs included in revenues and in selling, general and administrative expenses were \$0.2 million for each of the years ended June 30, 2005, 2004 and 2003.

**RESEARCH AND DEVELOPMENT** Internal research and development costs and costs not related to customer and government funded research and development contracts are expensed as incurred.

**STOCK-BASED COMPENSATION** Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123") defines a fair value based method of accounting for an employee stock option whereby compensation cost is measured at the grant date based on the fair value of the award and is recognized over the service period. A company may elect to adopt SFAS 123 or elect to continue accounting for its stock option or similar equity awards using the method of accounting prescribed by Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB25"), where compensation cost is measured at the date of grant based on the excess of the market value of the underlying stock over the exercise price. We have elected to continue to account for our stock-based compensation plans under the provisions of APB 25. No compensation expense has been recognized in the accompanying financial statements relative to our stock option plans.

In accordance with the disclosure requirements of SFAS No. 148, the following pro forma information adjusts previously reported net earnings, basic earnings per common share and diluted earnings per common share to reflect the fair value recognition provisions of SFAS No. 123.

		2005		2004			2003			
Year Ended June 30, (\$000 except per share data)	Net Earnings	Basic Earnings Per Common Share	Diluted Earnings Per Common Share	Net Earnings	Basic Earnings Per Common Share	Diluted Earnings Per Common Share	Net Earnings	Basic Earnings Per Common Share	Diluted Earnings Per Common Share	
Net earnings and earnings per common share, as reported	\$24,843	\$0.85	\$0.83	\$17,337	\$0.61	\$0.59	\$11,620	\$0.41	\$0.40	
Deduct: Stock-based employee compensation cost, net of related income tax effects, that would have been included in the determination of net earnings if the fair value method had been applied to all awards	(1,588)	(0.05)	(0.05)	(815)	(0.03)	(0.03)	(698)	(0.02)	(0.02)	
Pro forma net earnings and earnings per common share	\$23,255	\$0.80	\$0.78	\$16,522	\$0.58	\$0.56	\$10,922	\$0.39	\$0.38	

The pro forma adjustments were calculated using the Black-Scholes option pricing model under the following weighted-average assumptions in each fiscal year:

Year Ended June 30,	2005	2004	2003
Risk free interest rate	3.84%	3.53%	3.45%
Expected volatility	64%	64%	61%
Expected life of options	6.36 years	7.11 years	7.04 years
Expected dividends	none	none	none

Based on the option pricing model, options granted during the years ended June 30, 2005, 2004 and 2003 had fair values at the date of the grant of \$11.21, \$7.84 and \$4.43 per share, respectively.

In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123 (Revised 2004), "Share-Based Payment" (SFAS 123(R)), which amends SFAS No. 123 "Accounting for Stock-Based Compensation.," SFAS 123(R) requires all companies to measure compensation cost for all share-based payments (including employee stock options) at fair value, and will be effective for public companies for annual periods beginning after June 15, 2005. The Company will adopt this accounting change effective July 1, 2005 using the Black-Scholes option pricing model. Based exclusively on the options outstanding as of June 30, 2005, the Company expects the impact of adopting this accounting change to reduce earnings per share by approximately \$0.06 in the fiscal year ending June 30, 2006.

**DERIVATIVE INSTRUMENTS** SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities", as amended establishes accounting and reporting standards for derivative instruments and hedging activities. It requires that an entity recognize all derivatives as either assets or liabilities in the statement of financial position and measure those instruments at fair value.

The Company, from time to time, purchases foreign currency forward exchange contracts, primarily in Japanese Yen, that permit it to sell specified amounts of these foreign currencies expected to be received from its export sales for pre-established U.S. dollar amounts at specified dates. These contracts are entered into to limit transactional exposure to changes in currency exchange rates of export sales transactions in which settlement will occur in future periods and which otherwise would expose the Company, on the basis of its aggregate net cash flows in respective currencies, to foreign currency risk.

The Company recorded these contracts with a notional amount of approximately \$3.0 million and \$3.3 million as of June 30, 2005 and 2004, respectively, on the statement of financial position. The Company does not account for these contracts as hedges as defined by SFAS No. 133 and records the change in the fair value of these contracts in the results of operations as they occur. The change in the fair value of these contracts increased (decreased) net earnings by \$94,000, \$(29,000) and \$69,000 for the years ended June 30, 2005, 2004 and 2003, respectively.

To satisfy certain provisions of its credit facility (see Note H) on March 8, 2005 the Company entered into one-year interest rate cap agreements with a total notional amount of \$15.0 million. These agreements were entered into to limit interest rate exposure on one-half of the remaining outstanding balance of the Company's term loan under the credit agreement. The floating rate option for the interest rate cap agreements is the one-month LIBOR rate. \$10.0 million of the notional amount has a cap strike rate of 4.00% while \$5.0 million of the notional amount has a cap strike rate at 3.50%. At June 30, 2005 the one-month LIBOR rate was 3.34%. The Company has elected not to account for these agreements as hedges as defined by SFAS No. 133 but instead recorded the unrealized change in the fair value of these agreements as an increase or decrease to interest expense in the results of operations. The effect of these interest rate cap agreements on net earnings for the years ended June 30, 2005, 2004 and 2003 was insignificant.

**WORKERS' COMPENSATION** The Company is self-insured for certain losses related to workers' compensation. Additionally, third-party insurance is obtained to limit our exposure to these claims. When estimating the self-insurance liability, the Company considers a number of factors, including historical claims experience, demographic and severity factors and valuations provided by independent third party consultants. Periodically, management reviews its assumptions and the valuations provided by independent third-party consultants to determine the adequacy of the self-insurance liability.

**COMPREHENSIVE INCOME** Comprehensive income is a measure of all changes in shareholders' equity that result from transactions and other economic events of the period other than transactions with owners. Accumulated other comprehensive income is a component of shareholders' equity and consists of accumulated foreign currency translation adjustments of \$0.6 million and \$1.1 million, net of income taxes, as of June 30, 2005 and 2004, respectively.

**FAIR VALUE OF FINANCIAL INSTRUMENTS** The following methods and assumptions were used to estimate the fair value of financial instruments:

**Cash and Cash Equivalents** The carrying amount approximates fair value because of their short maturities.

**Debt Obligations** The fair values of debt obligations are estimated based upon market values of similar issues. The fair values and carrying amounts of the Company's debt obligations are approximately equivalent.

**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.

**RECENTLY ISSUED FINANCIAL ACCOUNTING STANDARDS** In November 2004, the FASB issued SFAS No. 151, "Inventory Costs," an amendment of Accounting Research Bulletin No. 43, "Inventory Pricing." SFAS No. 151 requires all companies to recognize a current-period charge for abnormal amounts of idle facility expense, freight, handling costs and wasted materials. The statement also requires that the allocation of fixed production overhead to the costs of conversion be based on the normal capacity of the production facilities. This new standard will be effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The Company does not expect that the adoption of this statement will have a material impact on its financial position, results of operations or cash flows.

In December 2004, the FASB issued Staff Position ("FSP") No. 109-1, "Application of FASB Statement No. 109, Accounting for Income Taxes, for the Tax Deduction on Qualified Production Activities Provided by the American Jobs Creation Act of 2004." The FASB also issued FSP 109-2, "Accounting and Disclosure Guidance for the Foreign Earnings Repatriation Provision within the American Jobs Creation Act of 2004." However, given the stage of our evaluation, at this time it is not possible to determine what impact this legislation may have on our effective tax rate for the fiscal year ending June 30, 2006.

In December 2004, the FASB issued SFAS No. 153, "Exchanges of Nonmonetary Assets." SFAS 153 addresses the measurement of exchanges of nonmonetary assets and redefines the scope of transactions that should be measured based on the fair value of the assets exchanged. SFAS 153 is effective for fiscal periods beginning after June 15, 2005. The Company does not expect that the adoption of this statement will have a material impact on its financial position, results of operations or cash flows.

**RECLASSIFICATIONS** Certain amounts from prior years have been reclassified to conform to the 2005 presentation.

# Note B STOCK SPLIT

On February 17, 2005, the Company's Board of Directors declared a two-for-one stock split, in the form of a stock dividend, of the Company's common stock for shareholders of record on March 2, 2005. The stock split was distributed on March 22, 2005 issuing one additional share of common stock for every share of common stock held. The applicable share and per share data for all periods included herein have been restated to give effect to this stock split.

#### Note C ACQUISITIONS

In December 2004, the Company acquired all the outstanding shares of Marlow Industries, Inc. (Marlow) for approximately \$29.7 million net of cash acquired of \$2.9 million and including transaction costs of approximately \$0.3 million. Marlow is a global leader in the design and manufacture of thermoelectric solutions for both cooling and power generation based on compound semiconductor materials. Marlow's products are sold in a variety of markets, including defense and space, telecommunications, medical and industrial markets. As a result of the acquisition, the Company is expected to recognize synergies in material growth technology and utilization of its worldwide manufacturing and distribution networks to increase the operational and financial results of the combined companies. The financial results of Marlow are included for the seven months, since the date of acquisition, in the Consolidated Statements of Earnings for the fiscal year ended June 30, 2005.

This acquisition was accounted for using the purchase method in accordance with SFAS No. 141, "Business Combinations." Accordingly, the Company recorded the net assets at their estimated fair values, and included operating results in the consolidated financial statements since December 2004. The Company plans on finalizing its purchase price allocation of Marlow no later than the second quarter of fiscal 2006, and does not anticipate significant changes. The following table presents allocation of the purchase price to the assets acquired and liabilities assumed at the date of acquisition (\$000's).

Assets	
Accounts receivable, net	\$ 4,664
Inventories	4,350
Deferred income taxes	1,889
Prepaid and other current assets	23
Property, plant, and equipment	8,149
Intangible assets	11,650
Goodwill	10,322
Other assets	93
Total assets acquired	\$ 41,140
Liabilities	
Accounts payable	\$ 2,036
Other accrued liabilities	3,923
Deferred income taxes	5,431
Other liabilities	7
Total liabilities assumed	<u>\$ 11,397</u>
Net assets acquired	\$ 29,743

Of the \$11.7 million of acquired intangible assets, \$6.0 million was assigned to a registered tradename that is not subject to amortization. Acquired patents totaled \$2.9 million and are amortized over a period ranging from 1.5 years to 8.5 years. Customer list acquired totaled \$2.3 million and is amortized over 9.5 years and the remaining noncompete agreement of \$0.5 million is amortized over 3 years.

The following unaudited pro-forma consolidated results of operations have been prepared as if the acquisition of Marlow had occurred at July 1, 2002, the beginning of the Company's fiscal year 2003 (\$000 except per share).

	J	Year Ended June 30, 200	Year Ended June 30, 2004	Year Ended June 30, 2003
Net Revenues	\$	205,288	\$ 173,046	\$ 149,256
Net Earnings	\$	24,247	\$ 15,135	\$ 9,537
Basic earnings per share	\$	0.83	\$ 0.53	\$ 0.34
Dilutive earnings per share	\$	0.81	\$ 0.51	\$ 0.33

The pro-forma results are not necessarily indicative of what actually would have occurred if the transaction had taken place at the beginning of the period, are not intended to be a projection of future results and do not reflect any cost savings that might be achieved from the combined operations.

# Note D CONTRACT RECEIVABLES

The components of contract receivables, which are a component of accounts receivable, net, were as follows:

June 30,	2005	2004	
(\$000)			
Billed			
Completed Contracts	\$ 883	\$ -	
Contracts in Progress	953	721	
	1,836	721	
Unbilled	2,323	1,755	
	\$4,159	\$2,476	

## Note E INVENTORIES

The components of inventories were as follows:

June 30,	2005	2004
(\$000)		
Raw materials	\$ 16,396	\$ 9,852
Work in process	16,409	10,455
Finished goods	12,111	8,894
	\$44,916	\$29,201

# Note F PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment at cost or valuation consist of the following:

June 30,	2005	2004
(\$000)		
Land and land improvements	\$ 1,842	\$ 1,453
Buildings and improvements	35,614	32,068
Machinery and equipment	87,943	74,397
Construction in progress	13,412	9,852
	138,811	117,770
Less accumulated depreciation	(60,911)	(55,431)
	\$ 77,900	\$ 62,339

Depreciation expense was \$11.5 million, \$9.0 million and \$8.8 million for the years ended June 30, 2005, 2004 and 2003, respectively.

Capitalized interest expense associated with the construction of buildings and improvements was \$0.1 million for the year ended June 30, 2005 and was insignificant for the years ended June 30, 2004 and 2003.

## Note G GOODWILL AND INTANGIBLE ASSETS

In June 2001, the FASB issued SFAS No. 142, "Goodwill and Other Intangible Assets." This standard requires that goodwill and intangible assets with indefinite useful lives not be amortized but should be tested for impairment at least annually. As required by SFAS No. 142, management has allocated goodwill to the Company's reporting units.

The Company completed a discounted cash flow and comparable market capitalization analysis by identified reporting units of the Company which have recorded goodwill as of June 30, 2005 and 2004. Based on the results of these analyses, the Company's goodwill of \$39.5 million as of June 30, 2005 and \$29.0 million as of June 30, 2004 was not impaired.

Changes in the carrying amount of goodwill are as follows:

Year Ended June 30, (\$000)	_	2005	_	2004
Balance – Beginning of Year	\$	28,987	\$	28,987
Goodwill acquired - Marlow Industries, Inc.		10,322		-
Goodwill acquired – II-VI LOT Suisse S.a.r.l.		228	_	-
Balance – End of Year	\$	39,537	\$	28,987

In connection with the acquisition of Marlow in December 2004, the Company recorded the excess purchase price over the net assets of the business acquired as goodwill in the accompanying Consolidated Balance Sheet based on the purchase price allocation.

During the year ended June 30, 2005, the Company finalized its accounting for the acquisition of II-VI LOT Suisse S.a.r.l. (II-VI LOT Suisse) in accordance with SFAS No. 141, "Business Combinations."

The gross carrying amount and accumulated amortization of the Company's intangible assets other than goodwill as of June 30, 2005 and 2004 were as follows:

	June 30, 2005			June 30, 2004			
(\$000)	Gross Carrying Amount	Accumulated Amortization	Net Book Value	Gross Carrying Amount	Accumulated Amortization	Net Book Value	
Patents	\$5,506	\$ (1,151)	\$4,355	\$2,681	\$ (693)	\$1,988	
Trademark	7,491	(367)	7,124	1,491	(292)	1,199	
Customer Lists	5,742	(1,356)	4,386	3,400	(854)	2,546	
Other	1,275	(808)	467	750	(631)	119	
Total	\$20,014	\$(3,682)	\$16,332	\$8,322	\$(2,470)	\$5,852	

Amortization expense recorded on the intangible assets for the years ended June 30, 2005, 2004 and 2003 was \$1.2 million, \$0.6 million and \$0.5 million, respectively. In connection with the acquisition of Marlow, the Company completed its valuation of certain identifiable intangible assets in accordance with "SFAS" 141, during the recently completed year end June 30, 2005. The Company recognized approximately \$11.7 million of identifiable intangibles as a result of the valuation. The carrying amount of the acquired trade name with an indefinite life not amortized but tested annually for impairment totaled \$6.0 million. Included in the gross carrying amount and accumulated amortization of the Company's customer list component of intangible assets is the effect of the foreign currency translation of the portion relating to the Company's German distributor. The estimated amortization expense for existing intangible assets for each of the five succeeding years is as follows:

(\$000)	
2006	\$1,484
2007	1,306
2008	1,195
2009	1,122
2010	1,122

#### Note H DEBT

The components of debt were as follows:

June 30,	2005	2004
(\$000)		
Line of credit, interest at the LIBOR rate, as defined plus 0.75%	\$11,900	\$ -
Term loan, interest at the LIBOR rate, as defined plus 0.75%		
payable in installments beginning in January 2006	30,000	-
Line of credit, interest at the LIBOR Rate, as defined,		
plus 1.00%	-	3,000
Term loan, interest at the LIBOR Rate, as defined,		
plus 1.00%	-	9,375
Pennsylvania Industrial Development Authority		
(PIDA) term note, interest at 3.00%, payable in		
monthly installments through October 2011	354	404
Yen denominated term note, interest at the Japanese Yen Base Rate, as defined,		
plus 1.49%, principal payable in full in September 2007	2,727	2,757
Total debt	44,981	15,536
Current portion of long-term debt	(3,801)	(7,550)
Long-term debt	\$41,180	\$7,986

On December 10, 2004, the Company replaced its \$45.0 million secured credit facility with a \$60.0 million secured credit facility in connection with the Company's acquisition of Marlow. This facility has a five-year term and contains a term loan in the original amount of \$30.0 million and a \$30.0 million line of credit. The facility is collateralized by a pledge of 65% of the stock of certain of the Company's foreign subsidiaries. Additionally, the facility is subject to certain restrictive covenants, including those relating to minimum net worth, leverage and consolidated debt service coverage. The facility has an interest rate range of LIBOR plus 0.75% to LIBOR plus 1.50%. Principal payments of \$1.9 million under the term loan are payable in quarterly installments beginning January 1, 2006. The weighted average interest rate of borrowings under the credit agreements was 3.42% for the fiscal year ended June 30, 2005. The Company had available \$17.6 million under its line of credit as of June 30, 2005.

At June 30, 2005 and 2004, total outstanding letters of credit supported by the credit facility were \$0.5 million and \$0.4 million, respectively.

The Company has a 300 million Yen loan. This loan matures on September 25, 2007. Interest is at a rate equal to the Japanese Yen Base Rate, as defined in the loan agreement, plus 1.49%. The Japanese Yen Base Rate was 0.07% at June 30, 2005.

The Company has a line of credit facility with a Singapore bank which permits maximum borrowings in the local currency of approximately \$0.4 million for the fiscal years ended June 30, 2005 and 2004. Borrowings are payable upon demand with interest being charged at the rate of 1.00% above the bank's prevailing prime lending rate. The interest rate was 5.25% at June 30, 2005 and 2004. At June 30, 2005 and 2004 there were no outstanding borrowings under this facility.

The aggregate annual amounts of principal payments required on the long-term debt are as follows:

(\$000)	
2006	\$ 3,801
2007	7,553
2008	10,282
2009	7,556
2010	15,708
Thereafter	81

Interest and commitment fees paid during the years ended June 30, 2005, 2004 and 2003 totaled approximately \$1.0 million, \$0.5 million and \$1.0 million, respectively.

# Note I INCOME TAXES

The components of income tax expense were as follows:

Year Ended June 30,	2005	2004	2003
(\$000)			
Current:			
Federal	\$5,514	\$3,217	\$1,272
State	661	787	531
Foreign	2,912	3,245	1,266
Total Current	\$9,087	\$7,249	\$3,069
Deferred:			
Federal	\$ 70	\$ 676	\$1,070
State	(7)	(206)	(37)
Foreign	(43)	(639)	328
Total Deferred	\$ 20	\$(169)	\$1,361
Total Income Tax Expense	\$9,107	\$7,080	\$4,430

Principal items comprising deferred income taxes were as follows:

June 30,	2005	2004
(\$000)		
Deferred income tax assets and (liabilities) – current		
Inventory capitalization	\$4,005	\$2,882
Non-deductible accruals	925	469
Accrued employee benefits	1,524	1,249
Net-operating loss carryforward – current portion	500	_
Other	6	(39)
Deferred income taxes – current	\$ 6,960	\$ 4,561
Deferred income tax assets and (liabilities) – long-term Prepaid taxes Net-operating loss and credit carryforwards Valuation allowance	\$ 392 1,365 (1,147)	\$ 392 787 (1,167)
Deferred income tax asset – long-term	\$ 610	\$ 12
Tax over book accumulated depreciation	\$ (8,083)	\$(5,292)
Intangible assets	(4,876)	(897)
Deferred income tax liability – long-term	\$(12,959)	\$(6,189)
Net deferred income taxes – long-term	\$(12,349)	\$(6,177)

The reconciliation of income tax expense at the statutory federal rate to the reported income tax expense is as follows:

Year Ended June 30,	2005	%	2004	%	2003	%
(\$000) Taxes at statutory rate	\$11,882	35	\$8,302	34	\$5,457	34
Increase (decrease) in taxes resulting from: State income taxes – net of federal benefit Extraterritorial Income Exclusion Taxes on non U.S. earnings	442 (885) (2,505)	1 (3) (7)	467 (763) (422)	2 (3) (2)	343 (1,112) (472)	2 (7) (3)
Reduction of provision recorded in prior years Other	173	1	(761) 257	(3)	214	2
	\$9,107	27	\$7,080	29	\$4,430	28

During the years ended June 30, 2005, 2004, and 2003, cash paid by the Company for income taxes was \$6.9 million, \$3.3 million, and \$1.2 million, respectively.

Earnings before income taxes of our non-U.S. operations for June 30, 2005, 2004 and 2003 was \$15.0 million, \$12.8 million and \$7.9 million, respectively. The Company has not recorded deferred income taxes applicable to undistributed earnings of foreign subsidiaries that are indefinitely reinvested outside the United States. If the earnings of such foreign subsidiaries were not indefinitely reinvested, an additional deferred tax liability of approximately \$15.3 million and \$11.0 million would have been required as of June 30, 2005 and 2004, respectively.

The sources of differences resulting in deferred income tax expense (benefit) and the related tax effect of each were as follows:

Year Ended June 30,	2005	2004	2003
(\$000)			
Depreciation and amortization	\$ 11	\$ 540	\$ 337
Inventory capitalization	(350)	(1,779)	(99)
Net operating loss and credit carryforwards net of valuation allowances	550	1,342	931
Other	(191)	(272)	192
	\$ 20	\$ (169)	\$1,361

As of June 30, 2005, the Company had federal and state net operating loss carryforwards of \$2.9 million and \$2.1 million, respectively. The net operating loss carryforwards will begin to expire in 2024 and 2010, respectively. For the years ended June 30, 2005, 2004 and 2003, the Company utilized \$1.6 million, \$1.9 million and \$2.0 million of net operating losses, respectively, to reduce current taxable income.

Under the guidance in FASB Staff Position No. FAS 109-1, Application of FASB Statement No. 109, "Accounting for Income Taxes," to the Tax Deduction on Qualified Production Activities Provided by the American Jobs Creation Act of 2004 (the Act), the deduction will be treated as a "special deduction" as described in FASB Statement No. 109. As such, the special deduction has no effect on deferred tax assets and liabilities existing at the enactment date. Rather, the impact of this deduction will be reported in the period in which the deduction is claimed on our tax return. The Company does not expect that the adoption of this statement will have a material impact on its financial position, results of operations or cash flows.

The Act creates a temporary incentive for U.S. corporations to repatriate accumulated income earned abroad by providing an 85% dividends received deduction for certain dividends from controlled foreign corporations. The deduction is subject to a number of limitations and uncertainty remains as to how to interpret numerous provisions in the Act. We are not yet in a position to decide on whether, and to what extent, we might repatriate foreign earnings that have not yet been remitted to the U.S. We have not provided for federal income taxes on the undistributed earnings of our foreign operations as it has been our intention to permanently reinvest undistributed earnings.

## Note J EARNINGS PER SHARE

The following table sets forth the computation of earnings per share for the periods indicated. Weighted average shares issuable upon the exercise of stock options that were not included in the calculation because they were antidilutive were immaterial for all periods presented.

Year Ended June 30,	2005	2004	2003
(000 except per share data)			
Net earnings	\$24,843	\$17,337	\$11,620
Divided by:			
Weighted average common shares outstanding	29,103	28,634	28,160
Basic earnings per share	\$ 0.85	\$ 0.61	\$ 0.41
Net earnings	\$24,843	\$17,337	\$11,620
Divided by:			
Weighted average common shares outstanding	29,103	28,634	28,160
Dilutive effect of stock options	806	802	620
Dilutive weighted average common shares outstanding	29,909	29,436	28,780
Diluted earnings per share	\$ 0.83	\$ 0.59	\$ 0.40

#### Note K OPERATING LEASES

The Company leases certain property under operating leases that expire at various dates through the year ending June 30, 2014. Future rental commitments applicable to the operating leases at June 30, 2005 are as follows:

Year E	nding J	lune	30,
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(\$000)	
2006	\$1,939
2007	1,105
2008	892
2009	810
2010	769
Thereafter	390

Rent expense was approximately \$1.7 million, \$1.3 million and \$1.2 million for the years ended June 30, 2005, 2004 and 2003, respectively.

# Note L STOCK OPTION PLANS

The Company has a stock option plan under which stock options have been granted by the Board of Directors to directors, certain officers and key employees, with 7,740,000 shares of common stock reserved for use under this plan. All options to purchase shares of common stock granted to date have been at market price at the date of grant. Generally, twenty percent of the options may be exercised one year from the date of grant with comparable annual increases on a cumulative basis each year thereafter. The stock option plan also has vesting provisions predicated upon the death, retirement or disability of the optionee. The amount available for future grants under the stock option plan was 974,184 as of June 30, 2005.

The Company has a nonemployee directors stock option plan with 480,000 shares of common stock reserved for use under this plan. The plan provides for the automatic grant of options to purchase 60,000 shares to each nonemployee director at the fair value on the date of shareholder approval of the plan and a similar grant for each nonemployee director that joined the Board prior to October 1999. Twenty percent of the options granted may be exercised one year from the date of grant with comparable annual increases on a cumulative basis each year thereafter. The amount available for future grants under the nonemployee directors stock option plan was 240,000 as of June 30, 2005.

All stock options expire 10 years after the grant date.

Stock option activity relating to the plans during the years ended June 30, 2005, 2004 and 2003 were as follows:

	Number of	
	Shares Subject	Weighted Average
Options	to Option	Exercise Price
Outstanding – July 1, 2002	2,122,562	\$ 4.04
Granted	544,600	\$ 7.02
Exercised	(334,200)	\$ 1.62
Forfeited	(112,400)	\$ 8.49
Outstanding – June 30, 2003	2,220,562	\$ 4.91
Granted	209,500	\$11.95
Exercised	(502,402)	\$ 2.58
Forfeited	(50,460)	\$ 7.69
Outstanding – June 30, 2004	1,877,200	\$ 6.24
Granted	709,250	\$17.87
Exercised	(308,692)	\$ 4.19
Forfeited	(29,920)	\$11.06
Outstanding – June 30, 2005	2,247,838	\$10.12
Exercisable – June 30, 2005	1,007,738	\$ 5.47
Exercisable – June 30, 2004	1,105,614	\$ 4.65
Exercisable – June 30, 2003	1,350,568	\$ 3.55

	Options Outstanding		Options	Exercisable	
Range of Exercise Prices	Number of Shares	Weighted Average Remaining Contractual Life in Years	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
\$1.89-\$4.38	424,368	2.25	\$ 3.08	424,368	\$ 3.08
\$5.00-\$7.87	570,910	5.57	\$ 6.36	340,330	\$ 6.12
\$8.00-\$11.20	436,610	6.68	\$ 8.87	212,440	\$ 8.23
\$11.21-\$16.88	535,050	8.92	\$15.89	30,600	\$12.24
\$16.99-\$21.88	280,900	9.58	\$19.39	-	-
	2,247,838	6.46	\$10.12	1,007,738	\$ 5.47

## Note M SEGMENT AND GEOGRAPHIC REPORTING

The Company reports its segments using the "management approach" model for segment reporting. The management approach model is based on the way a company's management organizes segments within the company for making operating decisions and assessing performance. Reportable segments are based on products and services, geography, legal structure, management structure or any other manner in which management segregates a company.

The Company's reportable segments offer similar products to different target markets. The segments are managed separately due to the production requirements and facilities that are unique to each segment. The Company has the following reportable segments: Infrared Optics, which is the Company's infrared optics and material products businesses and remaining corporate activities, primarily corporate assets and capital expenditures; Near-Infrared Optics, which is the Company's VLOC subsidiary, the Suzhou, China and Vietnam near-infrared operations and Military Infrared Optics, which is the Company's Exotic Electro-Optics subsidiary. The Compound Semiconductor Group, is primarily the aggregation of Marlow, the eV PRODUCTS division, the Wide Bandgap Materials (WBG) group and the Advanced Material Development Center (AMDC) group, (which is responsible for the corporate research and development activities). The seven months of financial results of Marlow, since the date of acquisition, are included in segment information for the year ended June 30, 2005.

The Infrared Optics segment is divided into the geographic locations in the United States, Singapore, China, Germany, Switzerland, Japan, Belgium and the United Kingdom. An Executive Vice-President of the Company directs the segment, while each geographic location is directed by a general manager, and is further divided into production and administrative units that are directed by managers. The Infrared Optics segment designs, manufactures and markets optical and electro-optical components and materials sold under the II-VI brand name and used primarily in high-power CO<sub>2</sub> lasers.

The Near-Infrared Optics segment is located in the United States, China and Vietnam. The Near-Infrared Optics segment is directed by a general manager. The Near-Infrared Optics segment is further divided into production and administrative units that are directed by managers. The Near-Infrared Optics segment designs, manufactures and markets near-infrared and visible-light products for industrial, scientific, military and medical instruments and laser gain material and products for solid-state YAG and YLF lasers.

The Military Infrared Optics segment is located in the United States. The Military Infrared Optics segment is directed by a general manager with oversight by a Corporate Vice-President. The Military Infrared Optics segment is further divided into production and administrative units that are directed by managers. The Military Infrared Optics segment designs, manufactures and markets infrared products for military applications under the Exotic Electro-Optics brand name.

The Compound Semiconductor Group is located in the United States, the United Kingdom, Japan and Vietnam. The Compound Semiconductor Group segment is directed by a Group Vice-President. Marlow designs and manufacturers thermoelectric cooling and power generation solutions for use in defense and space, telecommunications, medical, consumer and industrial markets. eV PRODUCTS division manufactures and markets solid-state x-ray and gamma-ray sensor materials and products for use in medical, security monitoring, industrial, environmental and scientific applications. WBG group manufactures and markets single crystal silicon carbide substrates for use in solid-state lighting, wireless infrastructure, radio frequency (RF) electronics and power switching industries. AMDC group directs the corporate research and development initiatives.

The accounting policies of the segments are the same as those of the Company. Substantially all of the Company's corporate expenses are allocated to the segments. The Company evaluates segment performance based upon reported segment earnings or loss, which is defined as earnings before income taxes, interest and other income or expense. Inter-segment sales and transfers have been eliminated.

The following table summarizes selected financial information of the Company's operations by segment:

	Infrared Optics	Near-Infrared Optics	Military Infrared Optics	Compound Semiconductor Group	Eliminations	Total
(\$000)						
2005						
Revenues	\$101,295	\$33,917	\$27,310	\$31,518		\$194,040
Inter-segment revenues	532	3,990	413	2,918	(7,853)	_
Segment earnings (loss)	32,748	2,317	1,046	(1,477)		34,634
Interest expense		_				(945)
Other income, net				_	_	261
Earnings before income taxes	_	_	_	_	_	33,950
Depreciation and amortization	4,774	2,602	1,682	3,647	_	12,705
Segment assets	117,611	30,332	42,943	61,792		252,678
Expenditures for property,						
plant and equipment	12,364	3,277	821	2,679		19,141
Equity investment	_	_		2,249	_	2,249
Goodwill	5,744	1,927	21,544	10,322		39,537
2004						
Revenues	\$87,652	\$25,786	\$25,322	\$12,088	_	\$150,848
Inter-segment revenues	1,432	2,453	167	37	(4,089)	
Segment earnings (loss)	23,564	2,350	886	(1,969)	_	24,831
Interest expense	, <u> </u>	, <u> </u>		_		(412)
Other expense, net		_				(2)
Earnings before income taxes	_	_	_	_	_	24,417
Depreciation and amortization	4,175	2,296	1,450	1,712	_	9,633
Segment assets	98,777	27,934	40,852	16,923		184,486
Expenditures for property,						
plant and equipment	7,152	1,806	1,599	2,172		12,729
Equity investment		_		1,888		1,888
Goodwill	5,516	1,927	21,544			28,987
2003						
Revenues	\$73,638	\$22,844	\$23,003	\$8,725	_	\$128,210
Inter-segment revenues	1,856	1,723		6	(3,585)	
Segment earnings (loss)	19,965	1,698	(65)	(4,402)		17,196
Interest expense	<del></del>		<del>-</del>			(849)
Other expense, net				_		(297)
Earnings before income taxes	_	_	_	_	_	16,050
Depreciation and amortization	4,406	2,053	1,662	1,206	_	9,327

Geographic information for revenues, based on country of origin, and long-lived assets which include property, plant and equipment, goodwill and other intangibles, net of related depreciation and amortization, follows:

		Revenues			
Year Ended June 30,	2005	2004	2003		
(\$000)					
United States	\$131,690	\$100,001	\$83,915		
Non-United States:					
Germany	19,947	16,310	15,180		
Japan	19,069	17,677	11,866		
Switzerland	7,948	3,946			
United Kingdom	7,543	3,031	2,573		
Singapore	4,494	7,339	12,382		
Belgium	3,336	2,524	2,280		
China	13	20	14		
Total Non - United States	62,350	50,847	44,295		
	\$194,040	\$150,848	\$128,210		

	Long-Lived	Assets
June 30,	2005	2004
(\$000)		
United States	\$124,898	\$89,828
Non-United States:		
China	2,711	2,415
Singapore	2,327	1,926
Germany	1,372	1,576
Switzerland	1,060	892
Vietnam	947	_
Belgium	277	507
Japan	163	23
United Kingdom	14	11
Total Non - United States	8,871	7,350
	\$133,769	\$97,178

# Note N EMPLOYEE BENEFIT PLANS

Eligible employees of the Company participate in a profit sharing retirement plan. Contributions to the plan are made at the discretion of the Company's board of directors and were \$2.1 million, \$2.1 million and \$1.3 million for the years ended June 30, 2005, 2004 and 2003, respectively.

The Company has an employee stock purchase plan available for employees who have completed six months of continuous employment with the Company. The employee may purchase the common stock at 5% below the prevailing market price. The amount of shares which may be bought by an employee during each fiscal year is limited to 10% of the employee's base pay. This plan, as amended, limits the number of shares of common stock available for purchase to 800,000 shares. There were 370,896 and 381,108 shares of common stock available for purchase under the plan at June 30, 2005 and 2004, respectively.

The Company has no program for postretirement health and welfare and post employment benefits.

The II-VI Incorporated Deferred Compensation Plan (the "Plan") is designed to allow officers and key employees of the Company to defer receipt of compensation into a trust fund for retirement purposes. The Plan is a nonqualified, defined contribution employees' retirement plan. At the Company's discretion, the Plan may be funded by the Company making

contributions based on compensation deferrals, matching contributions and discretionary contributions. Compensation deferrals will be based on an election by the participant to defer a percentage of compensation under the Plan. All assets in the Plan are subject to claims of the Company's creditors until such amounts are paid to the Plan participants. Employees of the Company made contributions to the Plan in the amount of approximately \$0.4 million, \$0.5 million and \$0.4 million for the years ended June 30, 2005, 2004, and 2003, respectively. Other Liabilities and Other Assets in the accompanying consolidated balance sheets included \$2.1 million and \$1.8 million related to the Plan at June 30, 2005 and 2004, respectively.

## Note O COMMITMENTS AND CONTINGENCIES

The Company has purchase commitments for materials and supplies as part of the ordinary conduct of business. A few of the commitments are long-term and are based on minimum purchase requirements. Due to the proprietary nature of some of the Company's materials and processes, certain contracts may contain penalty provisions for early termination. The Company does not believe that a material amount of penalties is reasonably likely to be incurred under these commitments based upon historical experience and current expectation. Future purchases under these commitments are as follows:

Voor	Endi	na lu	ne 30.
rear	Enai	na Ju	ine su.

(\$000)	
(\$000) 2006	\$9,156
2007	\$9,156 4,809
2008	773

#### Note P LEGAL PROCEEDINGS

The Company and its subsidiaries are involved in various claims and lawsuits incidental to the business. In addition, during the quarter ended September 30, 2003, the Company was awarded a jury verdict in the amount of \$0.8 million in a trade secret lawsuit which it had initiated. In addition, the Company was initially entitled to punitive damages and reimbursement of its attorneys' fees and costs at the discretion of the court. On April 27, 2004, the court denied the award relating to punitive damages and reimbursement of its attorneys' fees and costs. The Company and the Defendant have appealed the decision by the lower court. As such, the Company has not made any adjustments to its financial position or results of operations for this contingent gain.

## Note Q TERMINATION OF SHAREHOLDER RIGHTS PLAN

During the quarter ended March 31, 2004, the Board of Directors of the Company terminated the Company's Shareholder Rights Plan. In accordance with the Plan, the Company redeemed the rights at a redemption price of \$0.01 per right. The Company paid approximately \$141,000 to shareholders of record as of February 27, 2004 for the redemption of the rights and recorded this payment as a dividend during the year ended June 30, 2004.

# Note R STOCK REPURCHASE PROGRAM

On May 18, 2005, the Board of Directors authorized the Company to purchase up to 500,000 shares of its Common Stock. The repurchase program calls for shares to be purchased in the open market or in private transactions from time to time. The Company may suspend or discontinue this purchase program at any time. Shares purchased by the Company will be retained as treasury stock and will be available for general corporate purposes. The Company repurchased 11,000 shares totaling \$0.2 million of common stock under the share repurchase program as of June 30, 2005. The Company expects the repurchase of shares to at least partially offset the dilutive effect of the issuance of shares from the Company's stock option plan.

# Note S SUBSEQUENT EVENT

In July 2005, the Company exercised its call option and purchased the remaining 25% interest of II-VI Deutschland GmbH from L.O.T.-Oriel Laser Optik GmbH & Co. KG of Darmstadt, Germany (collectively L.O.T.) for approximately \$1.3 million. In connection with the purchase of the remaining 25% interest, the Company entered into a non-compete agreement with L.O.T.

# **SCHEDULE II**

# II-VI INCORPORATED AND SUBSIDIARIES

# VALUATION AND QUALIFYING ACCOUNTS YEARS ENDED JUNE 30, 2003, 2004, AND 2005 (IN THOUSANDS OF DOLLARS)

			Additions						
	Begi	nce at nning Year		harged to xpense	to	harged Other ecounts	 duction from eserves	at	ance End Year
YEAR ENDED JUNE 30, 2003:									
Allowance for doubtful accounts	\$	516	\$	401	\$	(9)	\$ $146^{1}$	\$	762
Warranty reserves	\$	419	\$	85	\$	_	\$ 	\$	504
Other <sup>2</sup>	\$	692	\$	182	\$	(59)	\$ 605	\$	210
YEAR ENDED JUNE 30, 2004:									
Allowance for doubtful accounts	\$	762	\$	107	\$		\$ $78^{1}$	\$	791
Warranty reserves	\$	504	\$	48	\$		\$ 	\$	552
Other <sup>2</sup>	\$	210	\$		\$		\$ 200	\$	10
YEAR ENDED JUNE 30, 2005:									
Allowance for doubtful accounts	\$	791	\$	162	\$	$113^{3}$	\$ $250^{1}$	\$	816
Warranty reserves	\$	552	\$	218	\$	$217^{3}$	\$ 25	\$	962
Other <sup>2</sup>	\$	10	\$		\$	_	\$ 	\$	10

<sup>&</sup>lt;sup>1</sup> Uncollectible accounts written off, net of recovery

<sup>&</sup>lt;sup>2</sup> Primarily relates to the closing of manufacturing operations in Mexico and the costs related to consolidating several of the Company's European distribution arrangements.

<sup>&</sup>lt;sup>3</sup> Primarily relates to the allowance for doubtful accounts and warranty return reserves from the acquisition of Marlow Industries, Inc. and foreign currency translations from the Company's foreign subsidiaries.

# QUARTERLY FINANCIAL DATA (unaudited) FISCAL 2005

QUARTER ENDED	September 30, 2004	December 31, 2004	March 31, 2005	June 30, 2005
(\$000 except per share data)				
Net revenues	\$40,507	\$43,213	\$53,313	\$57,007
Cost of goods sold	22,722	24,096	32,248	32,598
Internal research and development	1,048	1,584	1,410	1,805
Selling, general and administrative	9,001	9,713	10,674	12,507
Interest expense	63	88	421	373
Other expense (income) – net	(491)	(203)	(16)	449
Earnings before income taxes	8,164	7,935	8,576	9,275
Income taxes	2,205	2,142	2,315	2,445
Net earnings	\$ 5,959	\$ 5,793	\$ 6,261	\$ 6,830
Basic earnings per share	\$ 0.21	\$ 0.20	\$ 0.21	\$ 0.23
Diluted earnings per share	\$ 0.20	\$ 0.19	\$ 0.21	\$ 0.23

## FISCAL 2004

QUARTER ENDED	September 30, 2003	December 31, 2003	March 31, 2004	June 30, 2004
(\$000 except per share data)				
Net revenues	\$34,094	\$34,635	\$39,129	\$42,990
Cost of goods sold	20,057	20,367	21,333	24,936
Internal research and development	1,087	1,367	1,259	1,252
Selling, general and administrative	8,226	7,782	9,152	9,199
Interest expense	134	117	101	60
Other expense (income) – net	(91)	(149)	105	137
Earnings before income taxes	4,681	5,151	7,179	7,406
Income taxes	1,567	1,727	2,404	1,382
Net earnings	\$ 3,114	\$ 3,424	\$ 4,775	\$ 6,024
Basic earnings per share	\$ 0.11	\$ 0.12	\$ 0.17	\$ 0.21
Diluted earnings per share	\$ 0.11	\$ 0.12	\$ 0.16	\$ 0.20

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

None.

#### ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The Company's management evaluated, with the participation of Carl J. Johnson, the Company's Chairman and Chief Executive Officer, and Craig A. Creaturo, the Company's Chief Financial Officer and Treasurer the effectiveness of the Company's disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of the end of the period covered by this annual report on Form 10-K. The Company's disclosure controls were designed to provide reasonable assurance that information required to be disclosed in reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission. It should be noted that the design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, regardless of how remote. However, the controls have been designed to provide reasonable assurance of achieving the controls' stated goals. Based on that evaluation, Messrs. Johnson and Creaturo concluded that the Company's disclosure controls and procedures are effective at the reasonable assurance level.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in "Internal Control-Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission. See the "Report of Management" which is set forth under Item 8 above and is incorporated herein by reference.

Attestation Report of the Registered Public Accounting Firm

Our management's assessment of the effectiveness of our internal control over financial reporting as of June 30, 2005 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is included in Item 8.

Changes in Internal Control over Financial Reporting

There have been no changes in the Company's internal controls over financial reporting that occurred during our most recent quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

#### ITEM 9B. OTHER INFORMATION

None.

#### **PART III**

## ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information set forth above in Part I under the caption "Executive Officers of the Registrant" is incorporated herein by reference. The other information required by this item is incorporated herein by reference to the information set forth under the captions "Election of Directors," "Corporate Governance Matters-Code of Business Conduct and Ethics," "Meetings and Committees of the Board of Directors" and "Other Matters - Section 16(a) Beneficial Ownership Reporting Compliance" in the Company's definitive proxy statement for the 2005 Annual Meeting of Shareholders filed pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended.

## ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated herein by reference to the information set forth in the second paragraph under the caption "Meetings and Committees of the Board of Directors" and the information set forth under the caption "Executive Compensation and Other Information" in the Company's definitive proxy statement for the 2005 Annual Meeting of Shareholders filed pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended.

# ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item related to the Company's Equity Compensation Plan is incorporated herein by reference set forth under Proposal 2 "Approval of the II-VI Incorporated 2005 Omnibus Incentive Plan – Equity Compensation Plan Information" in the Company's definitive proxy statement for the 2005 Annual Meeting of Shareholders filed pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended.

The other information required by this item is incorporated herein by reference to the information set forth under the caption "Principal Shareholders" in the Company's definitive proxy statement for the 2005 Annual Meeting of Shareholders filed pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended.

## ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by this item is incorporated herein by reference to the information set forth under the caption "Meetings and Committees of the Board of Directors" in the Company's definitive proxy statement for the 2005 Annual Meeting of Shareholders filed pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended.

## ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated herein by reference to the information set forth under the caption "Ratification of Independent Registered Public Accounting Firm of Auditors" in the Company's definitive proxy statement for the 2005 Annual Meeting of Shareholders filed pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended.

# **PART IV**

# ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

# (a)(1) Financial Statements

The financial statements are set forth under Item 8 of this annual report on Form 10-K.

# (2) Schedules

Schedule II - Valuation and Qualifying Accounts for each of the three years in the period ended June 30, 2005 is set forth under Item 8 of this annual report on Form 10-K.

Financial statements, financial statement schedules and exhibits not listed have been omitted where the required information is included in the consolidated financial statements or notes thereto, or is not applicable or required.

# (3) Exhibits.

Exhibit <u>Number</u>	Description of Exhibit	
3.01	Amended and Restated Articles of Incorporation of II-VI Incorporated	Incorporated herein by reference is Exhibit 3.01 to II-VI's Current Report on Form 8-K filed on November 12, 2004.
3.02	Amended and Restated By-Laws of II-VI Incorporated	Incorporated herein by reference is Exhibit 3.02 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 2002.
10.01	II-VI Incorporated Amended and Restated Employees' Stock Purchase Plan	Incorporated herein by reference is Exhibit 10.04 to II-VI's Registration Statement No. 33-16389 on Form S-1.
10.02	First Amendment to the II-VI Incorporated Amended and Restated Employees' Stock Purchase Plan	Incorporated herein by reference Exhibit 10.01 to II-VI's Quarterly Report on Form 10-Q for the Quarter Ended March 31, 1996.
10.03	II-VI Incorporated Amended and Restated Employees' Profit-Sharing Plan and Trust Agreement, as amended	Incorporated herein by reference is Exhibit 10.05 to II-VI's Registration Statement No. 33-16389 on Form S-1.
10.04	Form of Representative Agreement between II-VI and its foreign representatives	Incorporated herein by reference is Exhibit 10.15 to II-VI's Registration Statement No. 33-16389 on Form S-1.
10.05	Form of Employment Agreement*	Incorporated herein by reference is Exhibit 10.16 to II-VI's Registration Statement No. 33-16389 on Form S-1.

10.06	Description of Management-By- Objective Plan*	Incorporated herein by reference is Exhibit 10.09 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 1993.
10.07	II-VI Incorporated 1994 Nonemployee Directors Stock Option Plan*	Incorporated herein by reference is Exhibit A to II-VI's Proxy Statement dated September 30, 1994.
10.08	II-VI Incorporated Deferred Compensation Plan*	Incorporated herein by reference is Exhibit 10.12 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 1996.
10.09	Trust Under the II-VI Incorporated Deferred Compensation Plan*	Incorporated herein by reference is Exhibit 10.13 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 1996.
10.10	Description of Bonus Incentive Plan*	Incorporated herein by reference is Exhibit 10.14 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 1996.
10.11	Amended and Restated II-VI Incorporated Deferred Compensation Plan*	Incorporated herein by reference is Exhibit 10.01 to II-VI's Quarterly Report on Form 10-Q for the Quarter Ended December 31, 1996.
10.12	Agreement by and between PNC Bank, National Association and II-VI Incorporated for Amended and Restated Letter Agreement for Committed Line of Credit and Japanese Yen Term Loan	Incorporated herein by reference is Exhibit 10.01 to II-VI's Quarterly Report on Form 10-Q for the Quarter Ended March 31, 1999.
10.13	Credit Agreement by and among II-VI Incorporated, its subsidiary guarantors, various lenders and PNC Bank, National Association dated as of August 14, 2000	Incorporated herein by reference is Exhibit (b)(1) to Amendment No. 3 to the Company's Tender Offer Statement on Schedule TO filed on August 24, 2000.
10.14	II-VI Incorporated Stock Option Plan of 2001*	Incorporated herein by reference is Exhibit 4.1 to II-VI's Registration Statement No. 333-74682 on Form S-8.
10.15	First Amendment to Credit Agreement by and among II-VI Incorporated, its subsidiary guarantors, various lenders and PNC Bank, National Association dated as of June 28, 2002	Incorporated herein by reference is Exhibit 10.17 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 2002.

10.16	Second Amendment to Credit Agreement by and among II-VI Incorporated, its subsidiary guarantors, various lenders and PNC Bank, National Association dated as of March 19, 2004.	Incorporated herein by reference is Exhibit 10.01 to II-VI's Quarterly Report on Form 10-Q for the Quarter ended March 31, 2004.
10.17	Example Form of Stock Option Agreement*	Incorporated herein by reference is Exhibit 10.17 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 2004.
10.18	II-VI Incorporated Arrangement for Director Compensation*	Incorporated herein by reference is Exhibit 10.1 to II-VI's Current Report on Form 8-K filed on March 2, 2005.
21.01	List of Subsidiaries of II-VI Incorporated	Filed herewith.
23.01	Consent of Deloitte & Touche LLP	Filed herewith.
31.01	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
31.02	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
32.01	Certification of the Chief Executive Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith.
32.02	Certification of the Chief Financial Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith.

<sup>\*</sup> Denotes management contract or compensatory plan, contract or arrangement.

The Registrant will furnish to the Commission upon request copies of any instruments not filed herewith which authorize the issuance of long-term obligations of the Registrant not in excess of 10% of the Registrant's total assets on a consolidated basis.

#### **SIGNATURES**

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

#### II-VI INCORPORATED

Date: September 9, 2005	By:/s/ Carl J. Johnson
	Chairman and Chief Executive Officer
Pursuant to the requirements of the Se following persons on behalf of the registrant and	ecurities Exchange Act of 1934, this report has been signed below by the d in the capacities and on the dates indicated.
	Principal Executive Officer:
Date: September 9, 2005	By: /s/ Carl J. Johnson Carl J. Johnson Chairman, Chief Executive Officer and Director
	Principal Financial and Accounting Officer:
Date: September 9, 2005	By: /s/ Craig A. Creaturo Craig A. Creaturo Chief Financial Officer and Treasurer
Date: September 9, 2005	By: /s/ Francis J. Kramer Francis J. Kramer President, Chief Operating Officer and Director
Date: September 9, 2005	By:/s/ Joseph J. Corasanti Joseph J. Corasanti Director
Date: September 9, 2005	By: /s/ Thomas E. Mistler Thomas E. Mistler Director
Date: September 9, 2005	By: /s/ Duncan A.J. Morrison Duncan A. J. Morrison Director
Date: September 9, 2005	By: /s/ RADM Marc Y.E. Pelaez (retired)  RADM Marc Y. E. Pelaez (retired)  Director
Date: September 9, 2005	By:/s/ Peter W. Sognefest Peter W. Sognefest Director

#### EXHIBIT INDEX

3.01	Amended and Restated Articles of Incorporation of II-VI Incorporated	Incorporated herein by reference is Exhibit 3.01 to II-VI's Current Report on Form 8-K filed on November 12, 2004.
3.02	Amended and Restated By-Laws of II-VI Incorporated	Incorporated herein by reference is Exhibit 3.02 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 2002.
10.01	II-VI Incorporated Amended and Restated Employees' Stock Purchase Plan	Incorporated herein by reference is Exhibit 10.04 to II-VI's Registration Statement No. 33-16389 on Form S-1.
10.02	First Amendment to the II-VI Incorporated Amended and Restated Employees' Stock Purchase Plan	Incorporated herein by reference Exhibit 10.01 to II-VI's Quarterly Report on Form 10-Q for the Quarter Ended March 31, 1996.
10.03	II-VI Incorporated Amended and Restated Employees' Profit-Sharing Plan and Trust Agreement, as amended	Incorporated herein by reference is Exhibit 10.05 to II-VI's Registration Statement No. 33-16389 on Form S-1.
10.04	Form of Representative Agreement between II-VI and its foreign representatives	Incorporated herein by reference is Exhibit 10.15 to II-VI's Registration Statement No. 33-16389 on Form S-1.
10.05	Form of Employment Agreement*	Incorporated herein by reference is Exhibit 10.16 to II-VI's Registration Statement No. 33-16389 on Form S-1.
10.06	Description of Management-By- Objective Plan*	Incorporated herein by reference is Exhibit 10.09 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 1993.
10.07	II-VI Incorporated 1994 Nonemployee Directors Stock Option Plan*	Incorporated herein by reference is Exhibit A to II-VI's Proxy Statement dated September 30, 1994.
10.08	II-VI Incorporated Deferred Compensation Plan*	Incorporated herein by reference is Exhibit 10.12 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 1996.
10.09	Trust Under the II-VI Incorporated Deferred Compensation Plan*	Incorporated herein by reference is Exhibit 10.13 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 1996.

10.10	Description of Bonus Incentive Plan*	Incorporated herein by reference is Exhibit 10.14 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 1996.
10.11	Amended and Restated II-VI Incorporated Deferred Compensation Plan*	Incorporated herein by reference is Exhibit 10.01 to II-VI's Quarterly Report on Form 10-Q for the Quarter Ended December 31, 1996.
10.12	Agreement by and between PNC Bank, National Association and II-VI Incorporated for Amended and Restated Letter Agreement for Committed Line of Credit and Japanese Yen Term Loan	Incorporated herein by reference is Exhibit 10.01 to II-VI's Quarterly Report on Form 10-Q for the Quarter Ended March 31, 1999.
10.13	Credit Agreement by and among II-VI Incorporated, its subsidiary guarantors, various lenders and PNC Bank, National Association dated as of August 14, 2000	Incorporated herein by reference is Exhibit (b)(1) to Amendment No. 3 to the Company's Tender Offer Statement on Schedule TO filed on August 24, 2000.
10.14	II-VI Incorporated Stock Option Plan of 2001*	Incorporated herein by reference is Exhibit 4.1 to II-VI's Registration Statement No. 333-74682 on Form S-8.
10.15	First Amendment to Credit Agreement by and among II-VI Incorporated, its subsidiary guarantors, various lenders and PNC Bank, National Association dated as of June 28, 2002	Incorporated herein by reference is Exhibit 10.17 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 2002.
10.16	Second Amendment to Credit Agreement by and among II-VI Incorporated, its subsidiary guarantors, various lenders and PNC Bank, National Association dated as of March 19, 2004.	Incorporated herein by reference is Exhibit 10.01 to II-VI's Quarterly Report on Form 10-Q for the Quarter ended March 31, 2004.
10.17	Example Form of Stock Option Agreement*	Incorporated herein by reference is Exhibit 10.17 to II-VI's Annual Report on Form 10-K for the fiscal year ended June 30, 2004.
10.18	II-VI Incorporated Arrangement for Director Compensation*	Incorporated herein by reference is Exhibit 10.1 to II-VI's Current Report on Form 8-K filed on March 2, 2005.
21.01	List of Subsidiaries of II-VI Incorporated	Filed herewith.
23.01	Consent of Deloitte & Touche LLP	Filed herewith.

31.01	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
31.02	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
32.01	Certification of the Chief Executive Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith.
32.02	Certification of the Chief Financial Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith.

<sup>\*</sup> Denotes management contract or compensatory plan, contract or arrangement.

#### CERTIFICATIONS

#### I, Carl J. Johnson, certify that:

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

September 9, 2005	By:	/s/ Carl J. Johnson	
,	<u> </u>	Carl J. Johnson	
	Cha	airman and Chief Executive Officer	

#### CERTIFICATIONS

#### I, Craig A. Creaturo, certify that:

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

September 9, 2005	By: /s/ Craig A. Creaturo
•	Craig A. Creaturo
	Chief Financial Officer and Treasurer

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

In connection with the Annual Report of II-VI Incorporated (the "Corporation") on Form 10-K for the period ending June 30, 2005 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Corporation certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

- (1) The Report 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 Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Date:	September 9, 2005	/s/ Carl J. Johnson	
		Carl J. Johnson Chairman and Chief Executive Officer	

<sup>\*</sup>This certification is made solely for purposes of 18 U.S.C. Section 1350, subject to the knowledge standard contained therein, and not for any other purpose.

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

In connection with the Annual Report of II-VI Incorporated (the "Corporation") on Form 10-K for the period ending June 30, 2005 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Corporation certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

- (1) The Report 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 Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Date: September 9, 2005

/s/ Craig A. Creaturo

Craig A. Creaturo

Chief Financial Officer and Treasurer

<sup>\*</sup>This certification is made solely for purposes of 18 U.S.C. Section 1350, subject to the knowledge standard contained therein, and not for any other purpose.

#### **Board of Directors**

Joseph J. Corasanti President and Chief Operating Officer CONMED Corporation

Carl J. Johnson Chairman and Chief Executive Officer II-VI Incorporated

Francis J. Kramer President and Chief Operating Officer II-VI Incorporated

Thomas E. Mistler Operating Partner Buckingham Capital Partners

Duncan A.J. Morrison Retired Chairman ARRI Canada Ltd.

Marc Y.E. Pelaez
Rear Admiral, United States Navy (retired)

Peter W. Sognefest President, Chief Executive Officer and Chairman South East Asia Manufacturing Operations Consultancy (Seamoc, Inc.)

#### **Executive Officers**

Carl J. Johnson
Chairman and Chief Executive Officer

Francis J. Kramer President and Chief Operating Officer

Herman E. Reedy
Executive Vice President – Infrared Optics

James Martinelli Vice President – Government and Military Businesses

Craig A. Creaturo Chief Financial Officer and Treasurer

#### **Annual Meeting**

Friday, November 4, 2005 Offices of the Company 375 Saxonburg Blvd Saxonburg, PA 16056 Shareholder Reception at 12:45 PM EST Shareholder Meeting at 1:30 PM EST

For maps and directions, log onto: http://www.ii-vi.com/lodging.html

#### **Stock Listing**

The common stock of II-VI Incorporated is traded on the Nasdaq National Market under the trading symbol "IIVI".

#### **Transfer Agent**

American Stock Transfer & Trust Company 6201 15<sup>th</sup> Avenue, 3<sup>rd</sup> Floor Brooklyn, NY 11219 1-800-937-5449

### Independent Registered Public Accountants

Deloitte & Touche LLP 2500 One PPG Place Pittsburgh, PA 15222

#### **Corporate Counsel**

Sherrard, German & Kelly PC 28th Floor, Two PNC Plaza 620 Liberty Avenue Pittsburgh, PA 15222

#### **Securities Counsel**

Buchanan Ingersoll PC One Oxford Centre 301 Grant Street, 20<sup>th</sup> Floor Pittsburgh, PA 15219

II-VI Incorporated is an Equal Opportunity Employer. As such, it is the Company's policy to promote equal employment opportunities and to prohibit discrimination on the basis of race, color, religion, sex, age, national origin, disability or status as a veteran in all aspects of employment, including recruiting, hiring, training or promoting personnel. In fulfilling this commitment, the Company shall comply with the letter and spirit of the laws, regulations and Executive Orders governing equal opportunity in employment, including the Civil Rights Act of 1964, Executive Order 11246, Revised Order Number 4, and amendments thereto.



# INCORPORATED

II-VI Incorporated

375 Saxonburg Blvd Saxonburg, PA 16056

888-558-1504 (toll-free) 724-352-4455 (phone)

www.ii-vi.com