

ESSEX CORPORATION  
Form 10-K  
March 30, 2005  
Table of Contents

---

## FORM 10-K

---

### U.S. SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

For the fiscal year ended December 31, 2004

Commission File No. 0-10772

---

## ESSEX CORPORATION

(Exact name of registrant as specified in its charter)

---

Virginia  
(State or other jurisdiction of  
incorporation or organization)

9150 Guilford Road, Columbia, Maryland  
(Address of principal executive offices)

54-0846569  
(I.R.S. Employer  
Identification No.)

21046  
(Zip Code)

Issuer's telephone number: (301) 939-7000

---

Edgar Filing: ESSEX CORPORATION - Form 10-K

**SECURITIES REGISTERED UNDER SECTION 12(b) OF THE EXCHANGE ACT:**

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
None	None

**SECURITIES REGISTERED UNDER SECTION 12(g) OF THE EXCHANGE ACT:**

**Common Stock, no par value per share**

(Title of Each Class)

\_\_\_\_\_

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

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

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). YES  NO

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked prices of such common equity, as of the last business day of the registrant's most recently completed second quarter. \$79,052,932

<u>Class</u>	<u>Outstanding at March 1, 2005</u>
Common Stock, no par value per share	21,010,474

**Documents Incorporated by Reference**

None

A list of the Exhibits and Financial Statement Schedules in this Report on Form 10-K appears on page 60.

**Table of Contents**

Table of Contents

FORM 10-K

Essex Corporation

<u>Item No.</u>		<u>Page</u>
<b><u>PART I</u></b>		
	<b><u>Introductory Statement</u></b>	3
1.	<b><u>Business</u></b>	3
2.	<b><u>Properties</u></b>	26
3.	<b><u>Legal Proceedings</u></b>	26
4.	<b><u>Submission of Matters to a Vote of Security Holders</u></b>	26
<b><u>PART II</u></b>		
5.	<b><u>Market for Registrant's Common Equity and Related Stockholder Matters</u></b>	27
6.	<b><u>Selected Financial Data</u></b>	29
7.	<b><u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u></b>	30
7A.	<b><u>Quantitative and Qualitative Disclosures about Market Risk</u></b>	40
8.	<b><u>Financial Statements and Supplementary Data</u></b>	41
9.	<b><u>Changes In and Disagreements With Accountants on Accounting and Financial Disclosure</u></b>	41
9A.	<b><u>Controls and Procedures</u></b>	41
<b><u>PART III</u></b>		
10.	<b><u>Directors and Executive Officers</u></b>	42
11.	<b><u>Executive Compensation</u></b>	52
12.	<b><u>Security Ownership of Certain Beneficial Owners and Management</u></b>	57
13.	<b><u>Certain Relationships and Related Transactions</u></b>	58
14.	<b><u>Principal Accountant Fees and Services</u></b>	59
<b><u>PART IV</u></b>		
15.	<b><u>Exhibits and Financial Statement Schedules</u></b>	60

**Table of Contents**

**PART I**

**INTRODUCTORY STATEMENT**

The information contained in this report pertains to the registrant, Essex Corporation. References to the Company, Essex or we, our and us refer to Essex Corporation, including its consolidated subsidiary.

We are not an accelerated filer, as we were eligible to use Form 10-KSB at the end of 2004. As such, for 2004, we are not required to provide certain management and outside auditor reports. For 2004, we voluntarily elected to file on Form 10-K and to make only the additional financial statement disclosures, as appropriate.

**FORWARD-LOOKING STATEMENTS**

Some of the statements contained, or incorporated by reference, in this annual report contain forward-looking statements within the meaning of the United States Private Securities Reform Act of 1995. These statements are based on management's current expectations and are subject to risks, uncertainty and changes in circumstances, which may cause actual results, performance or achievements to differ materially from anticipated results, performance or achievements. All statements contained herein that are not clearly historical in nature are forward looking. The forward-looking statements in this report include statements addressing the following subjects: future financial condition and operating results. Economic, business, competitive and/or regulatory factors affecting Essex's business are examples of factors, among others, that could cause actual results to differ materially from those described in the forward-looking statements.

Important factors that could cause our actual results to be materially different from the forward-looking statements are disclosed under the heading BUSINESS Risk Factors. Essex is under no obligation to (and expressly disclaims any such obligation to) update or alter its forward-looking statements whether as a result of new information, future events or otherwise.

**Item 1. BUSINESS**

**GENERAL OVERVIEW**

Essex, which was incorporated in the Commonwealth of Virginia in 1969, provides advanced signal, image, and information processing solutions primarily for U.S. Government intelligence and defense customers. We create our solutions by combining our services and expertise with hardware, software, and proprietary and patented technology to meet our customers' requirements. Within the intelligence and defense communities we have established and maintained long-standing and successful customer relationships. We are also developing next generation signal, image and information processing solutions under classified U.S. Government research and development contracts. We have been able to develop our current proprietary technology using a combination of government funding and our own internal funding and we believe this combination will allow us to continue to enhance and expand our technology and services for future market needs.

## Edgar Filing: ESSEX CORPORATION - Form 10-K

While we have primarily marketed our services and products to the intelligence and defense markets, we believe we are also well positioned to apply our solutions to growth areas within the

## **Table of Contents**

commercial market. Historically, our proprietary technology and products, although critical to our solutions offerings, have not accounted for a significant portion of our revenues on a standalone basis.

Achieving information superiority, or the ability to collect, process and disseminate information while denying our adversaries capabilities to do the same, is a primary objective for the intelligence and defense communities. Our services and products facilitate the technology transformation necessary for our intelligence and defense customers to achieve information superiority. We provide advanced processing solutions using optical, optoelectronic, and software technology within the following three business areas:

### ***Signal Processing.***

**Integrated signal processing solutions.** We offer fully integrated, turn-key systems for processing signals using a variety of commercial-off-the-shelf and customized hardware and software components for our intelligence customers.

**Advanced optical signal processors.** We offer high resolution, ultra-wideband signal processors for electronic warfare and signals intelligence applications. These analog signal processors provide significant improvements over digital devices in processing speed and capacity while substantially reducing the size, weight and power requirements of a system.

**Radar signal processors.** We offer advanced optical processing products which are used as high performance radar signal processing subsystems for advanced ballistic missile defense.

**Communications and networks.** We offer services and products that support analysis and transmission of communications in a variety of formats. We also offer an optical encryption product for secure high speed communications over optical links. We utilize our optoelectronic and signal processing expertise and products to build highly secure, advanced networks that can provide wavelength provisioning and bandwidth on demand.

### ***Image Processing.***

**3-D imaging.** We offer services and products that utilize optoelectronic processing and synthetic aperture radar, or SAR, imagery technology to provide high resolution 3-D images. Applications for these solutions include cloud, foliage and ground penetration, change detection, utility monitoring, and mineral exploration.

**Geographic information solutions.** We offer geographic information systems, or GIS, and plug-in software tools that allow users to integrate, compare, and manipulate datasets and images within third party commercial GIS systems. Our tools can also provide users web-access to these systems.

## Table of Contents

### *Information Processing.*

**Cognitive processing.** We offer software products and services for analyzing and processing information that is in the form of signals, images, and native language to discover new patterns, relationships, and commonalities within large and complex data environments.

**Critical information technology infrastructure services.** We offer information technology, project management, systems integration and engineering services which facilitate the modernization of the intelligence community's critical voice and video systems and associated infrastructure.

Our current customers include the National Security Agency, the National Reconnaissance Office, the National Geospatial-Intelligence Agency, other intelligence agencies, the Missile Defense Agency, the Defense Advanced Research Project Agency, or DARPA, the U.S. Army, Navy, and Air Force and other defense elements. Many of our advanced processing solutions are used in critical national defense programs. Of our 248 employees at December 31, 2004, 177 have government security clearances, with 133 holding Top Secret/Sensitive Compartmented Information clearances, or TS/SCI, which are security clearances at the highest levels.

We have enhanced our technology and solutions with selective acquisitions of complementary technologies and capabilities. We acquired Sensys Development Laboratories, Inc., or SDL, in March 2003; Computer Science Innovations, Inc., or CSI, in April 2004; substantially all of the assets of Performance Group, Inc., or PGI, in June 2004 and The Windermere Group, LLC and its active subsidiaries, or which we collectively refer to as Windermere, in February 2005. Windermere was purchased for an initial purchase price of \$69.4 million in cash, plus legal and other fees of approximately \$2.7 million. SDL's systems and software engineering capabilities, combined with our core capabilities, enabled us to win a \$57.1 million, multi-year award with the National Security Agency in October 2003. In September 2004, 18 months after closing the SDL acquisition, we opened a 50,000-square foot leased secure facility in Annapolis Junction, Maryland related to on-going work on this award. In December 2004, we signed an expansion of this award to a new ceiling of \$227.4 million through December 31, 2007. We believe CSI, PGI and Windermere bring highly complementary capabilities and technology to our core signal, image, and information processing business areas.

For the fiscal year ended December 28, 2003, we generated revenues of \$16.3 million and for the fiscal year ended December 31, 2004 we generated revenues of \$70.5 million. Our total backlog has increased significantly over this past year from \$93.8 million on December 28, 2003 to \$230.8 million on December 31, 2004. The 2004 backlog figure includes \$180.7 million from a \$227.4 million multi-year award in which the ceiling was significantly increased (from its original \$57.1 million October 2003 award) in December 2004 for software and systems engineering and \$19.2 million from a \$30.0 million ten-year contract through 2011 to provide communications systems support to the intelligence community. For fiscal years ended December 31, 2004 and December 28, 2003, revenues derived from the U.S. intelligence and defense communities and other departments and agencies of the Department of Defense were \$68.5 million or 97% and \$15.9 million, or 98%, of our total revenues, respectively.

## Table of Contents

### Industry Overview

We provide services and products to the U.S. Government intelligence and defense communities, and to the communications market. Currently, most of our revenues are from our contracts with intelligence and defense customers, many of which are classified. We believe we have significant opportunities to expand our communications sales.

### *Intelligence and Defense Market*

The U.S. Government is one of the largest purchasers of optoelectronic, signal processing and other information technology services and products. The global threat of terrorism, the demands of homeland security, the needs of the intelligence community and renewed focus on modernizing Department of Defense infrastructures have led to increased government spending. We believe that government spending will continue to increase due to a number of trends including:

**Increasing U.S. Department of Defense Budgets.** Department of Defense spending for procurement and research and development is projected to continue increasing through 2007. The Department of Defense Budget Request for 2003 projected the total defense budget to grow from \$379.0 billion in fiscal year 2003 to \$451.4 billion in fiscal year 2007, continuing to reverse the reduction in defense spending in the early 1990 s.

**Intelligence Spending and the Need for Information Superiority.** While the budget for the intelligence community is classified for national security reasons, several factors suggest increased demand for signal processing and refreshed information technology infrastructure throughout the intelligence community. Joint Vision 2010 , published by the Joint Chiefs of Staff, notes that,

Information superiority is the capability to collect, process, and disseminate an uninterrupted flow of information while exploiting or denying an adversary s ability to do the same. The message from the Director of the National Security Agency is that Our end state is an NSA that in tomorrow s technological environment can create decisive U.S. strategic and tactical advantage by reliably providing otherwise denied information to U.S. decision makers, in a timely manner, in an actionable format while at the same time denying access to U.S. information and information systems by adversaries and competitors. Achieving information superiority requires technological change, infrastructure modernization and continual upgrades to technology, thought process and systems and software.

**Increased Focus on Missile Defense.** The National Missile Defense Act of 1999 states that it is the policy of the United States to deploy as soon as is technologically possible an effective National Missile Defense system capable of defending the United States against limited ballistic missile attacks. In August 2002, the Bush Administration proposed an evolutionary path for the deployment of missile defenses. The capabilities planned for operational use, starting in 2004 and continuing into 2005, will include ground-based interceptors, sea-based interceptors, additional Patriot units, and sensors based on land, at sea and in space. These capabilities will serve as a starting point for fielding improved and expanded missile defense capabilities later. The Missile Defense Agency is developing a layered defense to intercept ballistic missiles of all ranges in all phases of flight—boost, midcourse and terminal. The hit-to-kill technology, also known as the challenge of hitting a bullet with a bullet, requires several enabling



## Table of Contents

technologies, including optoelectronic processors, sensors, radars and communication networks. In order to establish a national missile defense, the Missile Defense Agency was allocated a budget of \$6.7 billion in fiscal year 2003, \$7.2 billion in fiscal year 2004 and a projected \$9.2 billion budget for fiscal year 2005. The 2006 budget continues investment in the advanced research of technologies that are most promising for strengthening U.S. missile defenses.

**Emphasis on Photonics.** Photonics is the use of light to process and transport information. In a recent address to Congress (March 27, 2003), Dr. Anthony Tether, the Director of DARPA, noted that photonics is one of three core technologies for the U.S. military, enabling it to see farther, with greater clarity and better communicate information in a timely manner. Photonics can be applied to a number of intelligence and defense requirements, including signal processing used to analyze high speed communications, transporting information over fiber optic cable or in free space and analyzing radar signals and complex image data sets.

### *Communications Market*

The market for next generation optoelectronic and signal processing services and products is driven by the strong continued demand for bandwidth and the economic pressure on service providers to increase revenues and to reduce the cost of their existing network infrastructure. Although current spending levels have dropped below the peak levels experienced in 2000, spending on next generation technologies that address these issues continues. Technologies that offer improved cost performance, scalability based on demand and improved distribution of high bandwidth levels to customers are expected to receive strong interest in the market.

**Expected Increased Communications Industry Spending and Expected Growth in Bandwidth Demand.** In June 2003, the Telecommunications Industry Association forecast that U.S. spending on communications equipment will increase by 8% in 2003 and stated, Sectors that will fare particularly well include enterprise services, wireless services and broadband. Service provider spending will also increase as strong demand for bandwidth and new services means carriers will be forced to upgrade existing networks. IDC forecasted in a recent report that internet traffic will nearly double each year for the next five years. The survey data forecast that internet traffic will grow from 180,000 terabits per day in 2003, to 5,175,000 terabits per day in 2007.

**Cost Performance of Wavelength Solutions.** Yankee Group, in an April 2003 analysis, concludes that, wavelengths in their most basic form, as an unprotected transport service, can be 30 to 60 percent cheaper than comparable lit bandwidth services. For example, the application of wavelength division multiplexing, or WDM, systems in existing optical networks enables service providers to greatly increase capacity of the existing networks in a cost-effective manner. WDM systems separate or combine light of different wavelengths or colors, which increases capacity by enabling simultaneous transmission of data along numerous wavelengths on the same fiber optic cable. By transmitting more wavelengths per fiber and using them to distribute bandwidth to customers, service providers can reduce costs and increase revenue.

## Table of Contents

### Competitive Strengths

We possess the following competitive strengths that will allow us to take advantage of trends in our industry and we are well-positioned to meet our customers' demands.

**Optoelectronic and Signal Processing Expertise.** We have provided signal intelligence and information security services and products to the intelligence community for over 25 years. Given our expertise and track record with these customers, we believe we are well-positioned to take advantage of the heightened awareness and expected increase in spending for intelligence activities. Led by our Chief Scientist, Terry Turpin, we have a strong photonics team delivering leading edge products in communications and 3-D, image and radar processing.

**Skilled Employees with High Level Security Clearances.** The strict security clearance requirements for companies and the personnel who work on classified programs for the intelligence community and Department of Defense severely limit the number of suppliers that are allowed to work on such programs. In order for a company to work on these programs, it must have a sufficient number of employees who have completed the lengthy process to obtain security clearance. As of December 31, 2004, 177 of our 248 employees had government security clearances, with a substantial majority holding Top Secret/Sensitive Compartmented Information clearances, or TS/SCI, which are security clearances at the highest levels.

**Established Sole Source Contract Relationships.** In some cases we do not have to compete for U.S. Government contracts. Sole source contracts are awarded when an agency's need for the services is of such an unusual and compelling urgency that the U.S. would be seriously injured unless the agency is permitted to limit the number of sources from which it solicits bids or proposals. A contract can also be awarded to a contractor on a sole source basis when the services needed by the agency are available from only one responsible source or only from a limited number of responsible sources and no other type of services will satisfy the needs of the agency. We received a substantial amount of our intelligence and defense communities revenues for 2004 from such contracts. These relationships provide us with the ability to prepare proactively for follow-on program opportunities through upgrades, continuing work and new products.

**Experienced Management Team.** Our executives have an average of more than 20 years of leadership experience in supporting the U.S. intelligence community and the Department of Defense. Our long-term relationships in these communities are the result of successful performance and commitment as directed by our senior executives.

**Intellectual Property.** Through innovative use of optical processing, we have produced a number of technologies including our *hyperfine WDM*, optical devices for noise reduction in cellular and wireless communications systems through our Optical Processing Enhanced Receiver Architecture, or OPERA technology, and 3-D image synthesis technologies. We have a strong patent portfolio that includes 14 issued patents covering our core intellectual property. In 2003 we were awarded a patent for our *hyperfine WDM* technology and we have 18 additional patent applications in process related to these technologies. With our team of veteran innovators, we are focused and experienced in creating and protecting our intellectual property.

**Table of Contents**

**Established Innovative Research and Development Team.** We have participated for many years in the Small Business Innovation Research, or SBIR, program administered by various agencies within the Department of Defense and we have received a number of Phase I, Phase II and Phase III contracts to advance our core optoelectronic and signal processing technologies. The SBIR program allows us to leverage government investment in research and development to create intellectual property while retaining the ownership and the value of innovations developed under the program, subject to rights retained by the U.S. Government. We continue to use SBIR contracts to create value for our customers, employees, and shareholders by combining corporate and government research and development funds to create a portfolio of products.

**Expert Technical and National Programs Advisory Boards.** Our advisory boards provide us with strategic guidance concerning the application of our optoelectronic and signal processing technology. Key members of our advisory boards include:

*U.S. Army Lieutenant General Claudia Kennedy (retired).* General Kennedy served for 32 years in the Army culminating in her appointment as Deputy Chief of Staff of Intelligence.

*U.S. Air Force Lieutenant General Kenneth Minihan (retired).* General Minihan served 33 years in the Air Force in various capacities including Director of the National Security Agency/Central Security Service.

*U.S. Navy Rear Admiral Don McDowell (retired).* Admiral McDowell commanded the worldwide 10,000-person Naval Security Group.

*Dr. Fred Leonberger.* Dr. Leonberger is a recognized leader and strategic technologist in the optical communications industry, active in the field for over 25 years, and author of numerous patents.

*Dr. Paul Green.* Dr. Green is a co-inventor and co-developer of key communications technologies in use in optical and cellular communications.

*Sam Greenholtz.* Mr. Greenholtz is a retired senior optical networking architecture engineer for Verizon where he was responsible for technical evaluation of optical networking products. Mr. Greenholtz is currently a senior communications consultant and founder of Telecom Pragmatics, LLC, an advisory company to communication and financial services businesses.

*Joe Houston.* Mr. Houston is the former President of the International Society of Optical Engineering and has 39 years of engineering expertise and technical management experience.

## **Table of Contents**

### **Strategy**

Our objective is to continue to grow our business as a provider of signal, image, and information processing services and products to U. S. Government customers and to leverage our intellectual property and capabilities in this field to both government and commercial customers. Key elements of our strategy include:

**Leverage technology to expand U.S. Government business.** We intend to leverage our high technology services and products to further penetrate the intelligence and defense communities and to expand our participation in other growth areas of the U.S. Government such as homeland security.

**Build on research and development efforts.** We intend to continue to utilize company and customer funded research and development to develop technologies and products that have significant potential in both the government and commercial markets.

**Accelerate business development efforts.** We intend to capitalize on the investments we have made in our business development function, together with our capabilities, relationships and facilities, to effectively compete for additional large procurements.

**Pursue strategic acquisitions.** We intend to continue to pursue strategic acquisitions that cost-effectively add new customers, specific federal agency knowledge, complementary technology, or technological expertise to accelerate our access to existing or new markets.

**Build product channel partnerships.** In commercializing our technologies, we intend to pursue strategic relationships with market leaders in related areas of signal, image, and information processing, as well as communications.

### **Services and Products**

We support our customers' goal of achieving information superiority through our combination of the skills and knowledge of a services company with the technology and innovation of a product oriented company. Based on the core competencies that we have developed both internally and through acquisitions, we provide advanced processing solutions using optical, optoelectronic and software technology within the following three business areas:

#### ***Signal Processing.***

***Integrated signal processing solutions.*** We provide software and systems engineering services to the intelligence community. We significantly expanded our systems engineering capabilities by acquiring Sensys Development Laboratories, Inc., or SDL, in March 2003. SDL's skill and experience were highly complementary to our core competencies in image and signal processing technology. In October 2003, we were awarded a defense related award for \$57.1 million over a three-month base period plus four option years for software and systems engineering and delivery of custom systems to national priority programs. In December 2004, we signed an expansion of this award to a new ceiling of \$227.4 million through December 31, 2007. We believe that the knowledge and capability of the SDL team, combined with our core capabilities, enabled us to win this large award. We are the prime contractor and



## **Table of Contents**

there are numerous team members and subcontractors who work on this program. In the second quarter of 2004, in support of this award, we leased over 50,000 square feet of space that currently houses a Sensitive Compartmented Information Facility, or SCIF, with both office and production space. Our SCIF has been certified by our intelligence customer to allow us to perform highly classified work within our leased facility.

*Advanced optical signal processors.* In addition to radar analysis, our customers use our advanced optical processors, or AOPs, for cellular phone signal analysis, wideband electronic intelligence analysis, and encryption system exploitation.

*Radar signal processors.* We design and develop AOPs, which are high performance radar signal processors that can be applied to radar signal analysis to provide advanced ballistic missile defense in a cost-effective, low-size, low-weight and low-power package. In missile defense, the missile target must be identified, along with other items that make it harder to identify the missile, so that the missile target can be isolated and destroyed.

In May 2002, we received a five-year \$25.0 million indefinite delivery, indefinite quantity, or IDIQ, award from the Naval Air Warfare Center to use our signal processing technology to enhance Department of Defense radar programs. Working for the Missile Defense Agency under this award, we have designed and fabricated a prototype AOP. We are awaiting the opportunity to test the device at the Massachusetts Institute of Technology's Lincoln Laboratory facility and subsequently a field demonstration. These tests were originally scheduled to occur in 2004 but have been deferred until 2005 due to operational priorities by the Government that forced scheduling changes. The laboratory and field tests are among the final steps prior to production of the AOP for Department of Defense applications.

*Communications and networks.* Our patented *hyperfine WDM* technology is the core technology behind our solutions for the defense and intelligence communication markets and opportunities in the commercial markets. Originally developed for military applications and now being applied to commercial communications applications to create wavelength rich solutions, our *hyperfine WDM* technology is characterized by simple and small packaging, high channel density, low insertion loss, superior filter shape, low sensitivity to temperature changes, and the fact that it is a passive optical technology and therefore does not require power to operate. To date, our sales of *hyperfine WDM* technology have been limited to prototype and early production units for military applications. In July 2003, we commenced a project with a key government agency to apply *hyperfine WDM* to achieve privacy in an all-optical network and an award to create a technology roadmap for optical components. In connection with DARPA, we also have been applying our communications technology to improve processor performance and security in next generation supercomputer performance.

### ***Image Processing.***

*3-D imaging.* We design, develop, manufacture and support products that feature optoelectronic processing and synthetic aperture radar, or SAR, imagery technology to provide 3-D images. These technologies are primarily used today for military imaging that penetrates clouds, foliage and the ground, as well as for change detection and facility inspection. They can also be used in commercial applications, such as utility monitoring, mineral exploration and other special purpose inspections. We believe we are positioned to apply these technologies to major government programs for customers that are increasingly focusing on military imaging.

---

**Table of Contents**

*Geographic information systems.* Our GIS and Environmental Services Group, which was created from our June 2004 acquisition of Performance Group, Inc., provides extensive software tools that allow users to integrate, compare and manipulate datasets and images within third party commercial GIS systems. Once this information is collected, there are many potential user applications in the areas of asset management, planning, security, emergency operations, and environmental assessment. We are exploring combining our GIS solutions with our proprietary 3-D imaging technology, to address new defense, intelligence and commercial applications.

***Information Processing.***

*Cognitive processing.* With our acquisition of Computer Science Innovations, Inc., or CSI, in April 2004, we now have proprietary techniques, algorithms and tools that are used to build custom cognitive engines for a broad range of intelligence, defense and commercial customers and applications. Cognitive engines are software that includes predictive models and classifiers, and they have applications in the areas of fraud and anomaly detection, image and signal recognition, information fusion, knowledge management, network information assurance, semantic processing and waveform analysis. CSI has been developing cognitive engines for government and commercial customers since 1983.

*Critical information technology infrastructure services.* We provide information technology services that facilitate the modernization, project management, integration and engineering analysis of the intelligence community's critical voice and video systems and associated infrastructure. In 2003, we received a telecommunication services task order award with a total value of \$30.0 million over ten years. We believe our technology infrastructure group has the potential for significant growth as the intelligence and defense communities focus on upgrading their communications infrastructure.

**Customers**

Our intelligence and defense customers typically exercise independent contracting authority. We serve our customers in either a prime contractor or subcontractor capacity.

Our intelligence customers include most of the 13 federal agencies that comprise the intelligence community listed below. Most of our intelligence customers require that they not be specifically disclosed.

Central Intelligence Agency	Defense Intelligence Agency
National Security Agency	Army Intelligence
Naval Intelligence	Air Force Intelligence
Marine Corps Intelligence	Department of State
Department of Energy	Department of Treasury
Federal Bureau of Investigation	National Reconnaissance Office
National Geospatial Intelligence Agency	

Long-term relationships between intelligence customers and related contractors develop because of the high level of security clearances required to work on projects and unique technical requirement of intelligence customers. For example, we have been working closely with the NSA for over 20 years during which we have completed numerous projects and have several currently ongoing.





## **Table of Contents**

We provide services and products to other customers within the U.S. defense community including DARPA and the Missile Defense Agency. Our U.S. Government awards can be terminated by the U.S. Government either at its convenience or if we default. If the U.S. Government terminates any of our awards, we are entitled to payment of compensation only for work done and commitments made at the time of termination. If any of our U.S. Government awards are terminated for default, we would be obligated to pay the excess costs incurred by the U.S. Government in procuring undelivered items from another source.

The potential communications market for *hyperfine WDM* products includes a wide range of customers such as communications service providers, supercomputer vendors and optical networking vendors. In the communications market, we are positioning ourselves as a provider of *hyperfine WDM* optical components and subsystems to system vendors. This positioning will allow *hyperfine WDM* to be integrated into overall system architectures being sold to the communications service providers, and will leverage rather than attempt to compete with the established relationships between communications service providers and their system vendor of choice.

## **Employees**

As of February 28, 2005, prior to the Windermere acquisition, we had 254 employees. Of our 254 employees, 180 had government security clearances, with 139 employees holding TS/SCI, which are security clearances at the highest levels. We believe we are successful in recruiting and retaining our employees by offering a competitive salary, benefits, growth prospects and the opportunity to perform mission critical services in a classified environment.

## **Intellectual Property**

We have 14 issued patents and 18 patents pending covering the core intellectual property for our products. Our patent portfolio is divided into four technology groups: *hyperfine WDM*, OPERA, ImSyn and Virtual Lens Imaging.

## ***Hyperfine WDM***

The first *hyperfine WDM* patent, entitled Optical Tapped Delay Line, was awarded to Essex on August 19, 2003 as U.S. Patent No. 6,608,721 and will expire on June 20, 2020. It includes 46 claims covering use of the device as a receiver and demultiplexer for wavelength division multiplexing fiber optic networks. Related international patents are still pending. On January 22, 2002, we filed U.S. and international patents for use of *hyperfine WDM* technology as an add drop multiplexer and as an optical-code division multiple access, or OCDMA, system. On July 21, 2002, we filed U.S. and international patents for several other *hyperfine WDM* optical signal processing architectures. On November 19, 2003, we filed U.S. and international patents for use of *hyperfine WDM* as an encryptor for fiber optic and free-space communications. On January 3, 2005 we filed a U.S. provisional patent for a high resolution enhancement of *hyperfine WDM*.

## **Table of Contents**

### ***OPERA***

We filed a patent application for our OPERA technology in the U.S. and in certain other countries on January 19, 2001, U.S. Patent Pending No. 09/766,151. OPERA is an optoelectronic system for wireless communications that eliminates interfering signals using optical correlation combined with multi-user detection algorithms.

### ***ImSyn***

We hold four U.S. patents on our ImSyn technology. Three of these patents cover the optoelectronic architecture and applications including accelerating image reconstructions for SAR and Magnetic Resonance Imaging, or MRI. The fourth patent covers the sensing and reconstruction techniques of the Virtual Lens Microscope, or VLM, technology which is part of our VLI technology family. This technology family can be applied to semiconductor inspection, foliage and ground penetration imaging, biomedical imaging, and non-destructive testing.

The first issued ImSyn patent (U.S. Patent No. 5,079,555), *Sequential Image Synthesizer*, includes 20 claims and expires January 7, 2009. The corresponding Canadian patent (No. 2,058,209), expires November 25, 2011. The corresponding European patent for a subset of the claims (No. 0543064) is in force in the United Kingdom and Germany, and will expire on November 21, 2011. Our patent in Japan (Patent No. 3113338) for the same claims as the U.S. patent will expire on October 29, 2011.

The second issued ImSyn patent (U.S. Patent No. 5,384,573), *Image Synthesis Using Time Sequential Holography*, includes 157 claims and expires on January 24, 2012. In France, the United Kingdom, Germany and Italy, Patent EP0617797B1 has been awarded for a subset of the claims in the U.S. patent and this patent expires December 17, 2012.

The third ImSyn U.S. Patent No. 5,736,958, *Image Synthesis Using Time Sequential Holography*, with 8 claims expires April 7, 2015. The fourth issued ImSyn patent (U.S. Patent No. 5,751,243), *Image Synthesis Using Time Sequential Holography*, with 21 claims expires May 11, 2015.

### ***Virtual Lens Imaging***

The ImSyn U.S. Patent No. 5,751,243 discloses the Virtual Lens Microscope, a 2-D and 3-D sensing and reconstruction technique called the Synthetic Aperture Microscope. On May 11, 2004, we were awarded the second VLI patent, U.S. patent 6,735,346 entitled *Efficient Fourier Transform Algorithm For Non-Uniform Data*, that discloses algorithms and methods for faster 2-D and 3-D image reconstruction of synthetic aperture data. On April 28, 2004, we filed U.S. and international patent applications entitled *Sub-aperture Sidelobe and Alias Mitigation Techniques* that discloses algorithms and methods for improving the reconstruction of synthetic aperture 2-D and 3-D image data.

## **Table of Contents**

### **Competition**

We have sold our services and products primarily to the intelligence and defense communities. The level of security clearances required for this work limits the range of competitors against whom we compete for both services and products. In addition, the number of competitors is limited even further by the level of technical expertise required for both product and service deliveries to our government customers. We compete either as prime contractor or as a subcontractor, depending on the requirement and scope of the project.

Our larger competitors for U.S. Government business include Lockheed Martin Corporation and divisions of large defense contractors such as Boeing Support Services. These competitors may be able to compete more effectively for very large scale government awards. These competitors also may be able to provide customers with different or greater capabilities or benefits than we can provide in areas such as technical qualification, past performance on larger scale contracts, geographic presence, price, and the availability of key professional personnel. Our competitors also have established or may establish relationships among themselves or with third parties, including through mergers and acquisitions, to increase their ability to address customers' needs. Accordingly, it is possible that new competitors or alliances among competitors may emerge against whom it will be difficult for us to compete.

Competition in the communications market for network communications equipment is intense and has historically been dominated by such large companies as Alcatel, Ciena, Cisco Systems, JDS Uniphase, Lucent Technologies, NEC and Nortel Networks. Competitors for high speed encryption technology include General Dynamics, L3 Communications, Viasat and Safenet. Because of our proprietary optical encryption solution, these companies are also potential channel partners. Some of these companies, as well as emerging companies, are currently developing products that may compete in the areas that our technology is designed to address. We also may face competition from other large communications companies who may enter our markets. Many of these possible competitors have longer operating histories, greater name recognition, larger customer bases and greater financial, technical and business development resources than we do and may be able to undertake more extensive marketing efforts and adopt more aggressive pricing policies than we can. In addition, additional competitors with significant market presence and financial resources may enter our markets, which are rapidly evolving, further intensifying competition.

In the commercial market, we are still positioning our optical products and technology. Our commercial products will be sold as part of an integrated solution. We intend to sell our products through well established channels within the commercial industry in order to successfully introduce our technology and products into the market. Our products are based on patented technology, available only through us, which we believe have significant performance advantages over alternative products in the same market space, including simple and small packaging, high channel density, low insertion loss, superior filter shape, low sensitivity to temperature changes, and the fact that it is a passive optical technology and therefore does not require power to operate.

**Table of Contents**

**Backlog**

As discussed more fully in Management's Discussion and Analysis of Financial Condition and Results of Operations, our backlog as of fiscal year end 2004, funded and unfunded, was \$230.8 million as compared to \$93.8 million as of fiscal year end 2003. Of these amounts, funded backlog was \$29.7 million and unfunded backlog was \$201.1 million at fiscal year end 2004 compared to \$15.0 million and \$78.8 million, respectively, at fiscal year end 2003.

## **Table of Contents**

### **RISK FACTORS**

*Our business, results of operations and financial condition may be materially and adversely affected due to any of the following risks. The risks described below are not the only ones we face. Additional risks that we are not presently aware of or that we currently believe are immaterial may also impair our business operations.*

#### **Risks Related to our Business and Financial Results**

**We currently rely on sales to U.S. Government entities, particularly in the intelligence and defense areas, and the loss of certain of our awards with the U.S. Government could have an adverse impact on our operating results.**

We depend on sales to the U.S. Government. For fiscal years 2004 and 2003, awards from the U.S. intelligence and defense communities and other departments and agencies of the Department of Defense accounted for approximately \$68.5 million, or 97% of our revenues, and \$15.9 million, or 98% of our revenues, respectively.

For fiscal 2004 and 2003, our top three customer programs accounted for approximately \$52.6 million, or 75% of our revenues, and \$8.5 million, or 52% of our revenues, respectively. For fiscal years 2004 and 2003, our largest award with the National Security Agency accounted for approximately \$45.2 million, or 64% of our revenues, and \$1.5 million, or 9% of our revenues, respectively. For fiscal years 2004 and 2003, our award with the Missile Defense Agency accounted for approximately \$1.3 million, or 2% of our revenues, and \$3.3 million, or 21% of our revenues, respectively. The loss or significant reduction in government funding of a program for which we are the contractor or in which we participate could reduce our revenue and cash flows and have an adverse effect on our operating results.

**We depend on U.S. Government awards which are only partially funded; the U.S. Government has no obligation to fully fund our awards.**

Budget decisions made by the U.S. Government are outside of our control and have significant consequences for our business. Funding for U.S. Government awards is subject to Congressional appropriations. Although multi-year awards may be planned or authorized in connection with major procurements, Congress generally appropriates funds on a fiscal year basis even though a program may be expected to continue for several years. Consequently, awards often initially receive only partial funding, and additional funds are committed only as Congress makes further appropriations. The termination of funding for one of our U.S. Government awards would result in a loss of anticipated future revenues attributable to that program which could have an adverse impact on our operations.

Our backlog was \$230.8 million as of December 31, 2004, of which \$29.7 million was funded. In addition, the award to us in October 2003 of a \$57.1 million contract, for which the ceiling was significantly increased to \$227.4 million in December 2004, for software and systems engineering increased our backlog, of which there remains \$10.7 million in funded and \$170 million in unfunded backlog. Our backlog includes orders under awards that in some cases extend for several years, with the latest expiring in 2011. The U.S. Government's ability to select multiple winners under multiple award schedule contracts, government-wide acquisition contracts, blanket purchase agreements and other indefinite delivery, indefinite quantity, or



## **Table of Contents**

IDIQ, contracts, as well as its right to award subsequent task orders among such multiple winners, means that there is no assurance that unfunded contract backlog will result in actual orders. The actual receipt of revenues on awards included in backlog may never occur or may change because a program schedule could change or the program could be canceled, or a contract could be reduced, modified, or terminated early. Moreover, under IDIQ contracts, the U.S. Government is not obligated to order more than a minimum quantity of goods or services.

### **U.S. Government awards are subject to immediate termination and are heavily regulated.**

Our U.S. Government awards can be terminated by the U.S. Government either at its convenience or if we default. If the U.S. Government terminates any of our awards, we are entitled to payment of compensation only for work done and commitments made at the time of termination. If any of our U.S. Government awards are terminated for default, we would be obligated to pay the excess costs incurred by the U.S. Government in procuring undelivered items from another source. If any or all of our U.S. Government awards are terminated under either of these circumstances, we may be unable to procure new awards to offset the lost revenues.

In addition, supplying defense-related services and equipment to U.S. Government agencies subjects us to risks specific to the defense industry, including the ability of the U.S. Government to unilaterally:

suspend us from receiving new awards pending resolution of alleged violations of procurement laws or regulations;

terminate our existing awards;

reduce the value of our existing awards;

audit our award-related costs and fees, including allocated indirect costs; and

control and prohibit the export of our products.

Because a significant portion of our revenues are dependent on our procurement, performance and payment under our U.S. Government awards, the loss of one or more large awards would have an adverse impact on our financial condition.

### **If we are unable to manage our growth, our business could be adversely affected.**

Achieving our plans for growth will place significant demands on our management, as well as on our administrative, operational and financial resources. For us to successfully manage our growth, we must continue to improve our operational, financial and management information systems and expand, motivate and manage our workforce. If we are unable to successfully manage our growth without compromising the quality of our services and products, our business, prospects, financial condition or operating results could be adversely affected.





## **Table of Contents**

**A key part of our strategy involves acquisitions, however, such acquisitions may not achieve all intended benefits.**

A key part of our strategy has been to obtain technologies, customers, and personnel through acquisitions. We acquired Sensys Development Laboratories, Inc., or SDL, in March 2003; Computer Science Innovations, Inc., or CSI, in April 2004; and substantially all of the assets of Performance Group, Inc., or PGI, in June 2004. We intend to continue to pursue selective acquisition opportunities in the future. On February 28, 2005, we acquired Windermere for an initial purchase price of \$69.4 million in cash, plus legal and other fees of approximately \$2.7 million, substantially reducing the December 31, 2004 reported cash balance. In connection with an acquisition, we may incur significant amortization expenses related to intangible assets. We also may incur significant write-offs of goodwill associated with companies, businesses or technologies that we acquire.

Acquisitions and strategic investments may involve a number of other risks, including:

difficulties in integrating the operations, technologies, and products of the acquired companies;

diversion of management's attention from our existing business;

potential difficulties in completing the acquired company's projects; and

the potential loss of the acquired company's key employees.

**Our success largely depends on our ability to hire and retain key personnel.**

Our success has historically depended in large part on our ability to attract and retain highly skilled technical, managerial and operational personnel, particularly those knowledgeable about the U.S. Government intelligence and defense agencies, those with security clearances and those skilled in optoelectronics and optical communications equipment. In addition, the relationships and reputation that many members of our senior management team have established and maintain with government personnel contribute to our ability to maintain good customer relationships and to identify new business opportunities. The loss of key personnel may impair our ability to obtain new U.S. Government awards or adequately perform under our current U.S. Government awards. We also rely on the skills and expertise of our senior technical development personnel, the loss of any of whom could prevent us from completing current development projects and restrict new development projects. We currently do not maintain key man insurance on any of our executives or key employees.

**Our quarterly operating results may vary widely.**

Our quarterly revenues and operating results have fluctuated significantly in the past, and may fluctuate in the future. A number of factors can cause our revenue, cash flow and operating results to vary from quarter to quarter, including:

acquisitions of other businesses;



**Table of Contents**

commencement, completion or termination of projects during any particular quarter;

variable purchasing patterns under government awards, blanket purchase agreements and IDIQ awards;

seasonal work patterns due to vacation, holiday, and weather incidences resulting in reduced work days on our time and materials awards;

changes in senior U.S. Government officials that affect the timing of technology procurement; and

changes in policy or budgetary measures that adversely affect appropriations for government awards in general.

Changes in the number of projects commenced, completed or terminated during any quarter may cause significant variations in our cash flow from operations because a relatively large amount of our expenses are fixed. We may incur significant operating expenses during the start-up and early stages of an award and typically do not receive corresponding payments until subsequent quarters. We also may incur significant or unanticipated expenses when awards expire or are terminated. In addition, payments due to us from U.S. Government agencies may be delayed due to customer payment cycles or as a result of the failure of Congress and the President to approve budgets in a timely manner.

**Because we currently are developing our optoelectronic products for the commercial market, it is difficult to evaluate our future business and prospects in this market.**

We traditionally have derived our revenues from awards from the U.S. Government. While we intend to enhance and expand our government business, we are continuing our work to develop new optoelectronic commercial products, including products based on our *hyperfine WDM* fiber optic communications technology, such as our optical encryptor. Because we have not begun significant commercial sales of these products, our commercial revenue and profit potential is unproven and our limited history in the commercial market makes it difficult to evaluate our business and prospects. We cannot accurately forecast our commercial revenue and we have limited historical financial data upon which to base production budgets. You should consider our business and prospects in light of the heightened risks and unexpected expenses and problems we may face as a company developing new commercial products for a rapidly changing industry.

**We face intense competition from many competitors that have greater resources than we do, which could result in price reductions, reduced profitability and loss of market share.**

We operate in highly competitive markets and may encounter intense competition to win U.S. Government awards. If we are unable to successfully compete for new business, our revenue growth may decline. Many of our competitors are larger and have greater financial, technical, marketing and public relations resources than we do. Larger competitors include Lockheed Martin Corporation and divisions of large defense contractors such as Boeing Support Services. These competitors may be able to compete more effectively for very large scale government awards. These competitors also may be able to provide customers with different or

## **Table of Contents**

greater capabilities or benefits than we can provide in areas such as technical qualification, past performance on larger scale contracts, geographic presence, price, and the availability of key professional personnel. Our competitors also have established or may establish relationships among themselves or with third parties, including through mergers and acquisitions, to increase their ability to address customers needs. Accordingly, it is possible that new competitors or alliances among competitors may emerge against whom it will be difficult for us to compete.

In addition, competition in the commercial market for network communications equipment is intense. This market has historically been dominated by such large companies as Alcatel, Ciena, Cisco Systems, JDS Uniphase, Lucent Technologies, NEC and Nortel Networks. Some of these companies, as well as emerging companies, are currently developing products that may compete in the areas that our technology is designed to address. We also may face competition from other large communications companies who may enter our markets. Many of these possible competitors have longer operating histories, greater name recognition, larger customer bases and greater financial, technical and business development resources than we do and may be able to undertake more extensive marketing efforts and adopt more aggressive pricing policies than we can. In addition, additional competitors with significant market presence and financial resources may enter our markets, which are rapidly evolving, further intensifying competition.

**If we are unable to protect our intellectual property effectively, we may be unable to prevent third parties from using our technologies, which would impair our competitive advantage.**

We rely on a combination of patent, copyright, trademark and trade secret laws and restrictions on disclosure to protect our intellectual property rights. We also enter into confidentiality or license agreements with our key employees and consultants and control access to and distribution of our software, documentation and other proprietary information. We believe that our patents and patent applications provide us with a competitive advantage and, therefore, patent protection is important to our business. However, our patent and other intellectual property protection may not adequately protect our rights or permit us to gain or keep any competitive advantage. For instance, unauthorized parties may attempt to copy, reverse engineer or otherwise obtain and use our patented products or technology without our permission, eroding or eliminating the competitive advantage we hope to gain through the exclusive rights provided by patent protection. Moreover, our existing patents and pending patent applications, if granted, may not protect us against competitors that independently develop proprietary technologies that are substantially equivalent or superior to our technologies, or design around our patents. The competitive advantage provided by patenting our technology may erode if we do not upgrade, enhance and improve our technology on an ongoing basis to meet competitive challenges.

In addition, we conduct research and development under projects with the U.S. Government. In general, our rights to technologies we develop under those projects are subject to the U.S. Government's non-exclusive, non-royalty bearing, world-wide license to use those technologies. In the case of SBIR awards, the U.S. Government has limited rights to the delivered data for five years after project completion, and unlimited rights after five years. Our rights to license and protect our technology are unaffected by the U.S. Government's rights to SBIR technical data.

Monitoring unauthorized use of our technology is difficult, and we cannot be certain that the steps we have taken will prevent unauthorized use of our technology, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States. A description of our patents and patent applications is contained in this Form 10-K under "Business - Intellectual Property."

## **Table of Contents**

### **There is a risk that some of our patent applications will not be granted.**

Although we have received our first *hyperfine WDM* and VLI patents, we have filed several other applications for U.S. and International patents relating to our *hyperfine WDM*, VLI and OPERA technologies, and there is a risk that some or all of the pending applications will not be granted. Although we believe our patent applications are valid, the failure of our pending applications to be granted would affect the competitive advantage we hope to gain by obtaining patent protection and could have a material adverse effect upon our business and results of operations.

### **We may become involved in intellectual property disputes, which could subject us to significant liability, divert the time and attention of our management and prevent us from selling our products.**

We or our customers may be a party to litigation in the future to protect our intellectual property or to respond to allegations that we infringe on others' intellectual property. We have not performed any patent infringement clearance searches and are not in a position to assess the likelihood that any claims would be asserted. If any parties assert that our products infringe upon their proprietary rights, we would be forced to defend ourselves and possibly our customers against the alleged infringement. If we are unsuccessful in any intellectual property litigation, we could be subject to significant liability for damages and loss of our proprietary rights. Intellectual property litigation, regardless of its success, would likely be time consuming and expensive to resolve and would divert management's time and attention. In addition, we could be forced to do one or more of the following:

stop selling, incorporating or using our products that include the challenged intellectual property;

obtain from the owner of any infringed intellectual property right a license to sell or use the relevant technology, which license may not be available on reasonable terms, or at all; or

re-design those products that use the technology.

If we are forced to take any of these actions, our business could be seriously harmed.

## **Risks Related to the Optical Networking Industry**

### **Our ability to expand into the commercial optical networking market may be adversely affected by unfavorable and uncertain conditions in the commercial industry and the economy in general.**

One element of our strategy is to develop products targeted at the commercial optical networking market. The market for communications equipment, including optical components, has suffered a severe and prolonged downturn. Many of our potential customers in this market have experienced significant financial distress, and some have gone out of business. This has



## Table of Contents

resulted in a significant consolidation in the commercial communications equipment industry, combined with a substantial reduction in overall demand. In addition, most of the potential customers we would like to reach have become more conservative about their future purchases, which has made our commercial business slow to materialize.

We expect the following factors to affect our ability to expand our commercial market business for an indeterminate period:

capital expenditures by many of our potential customers may be flat or reduced;

increased competition may enable commercial customers to insist on more favorable terms and conditions for sales, including extended payment terms or other financing assistance as a condition of procuring their business; and

the bankruptcies or weakened financial condition of several communications companies may adversely affect the commercial market for the optical networking products we are developing.

The result of any one or a combination of these factors could eliminate or reduce our ability to successfully enter and compete in this market.

**Our optoelectronic products are complex, operate in demanding environments and have not yet been widely deployed. If our products contain defects that are undiscovered until full deployment we may incur significant and unexpected expenses, losses of sales and harm to our reputation.**

Optoelectronic products are complex and are designed to be deployed across complex networks. Because of the nature of the products, they can only be fully tested when completely deployed in large networks with high amounts of traffic. Our products have not yet been deployed and tested in a commercial environment, and when they are, customers may discover errors or defects in the hardware or the software, or products we develop may not operate as expected. If we are unable to fix defects or other problems that may be identified in full deployment, we would likely experience:

a loss of, or delay in, revenue and loss of market share;

a loss of existing customers;

difficulties in attracting new customers or achieving market acceptance;

diversion of development resources;

increased service and warranty costs;

legal actions by our customers; and

increased insurance costs.



## **Table of Contents**

Defects, integration issues or other performance problems could result in financial or other damages to our customers or could negatively affect market acceptance for the products we develop. Our customers could also seek damages for losses from us, which, if they were successful, could adversely affect our cash flow from operations. A product liability claim brought against us, even if unsuccessful, would likely be time consuming and costly and would put a strain on our management and resources.

### **Risks Related to Our Company**

#### **A limited number of shareholders are able to exert significant influence over matters requiring shareholder approval.**

As of February 28, 2005, a few private investors collectively hold approximately 3.8 million shares, or 18.1%, of our total outstanding shares of common stock. Accordingly, these investors could seek to exercise significant control and influence of certain actions requiring the approval of the holders of shares of our common stock. This concentration of ownership may also delay or prevent a change in control of us or reduce the price other investors might be willing to pay for our common stock. In addition, the interests of this limited number of investors may conflict with the interests of other holders of our common stock.

#### **The market price of our common stock is subject to significant price fluctuations.**

The trading price of our common stock has historically been volatile and will likely continue to fluctuate significantly in the future. We believe this volatility has often been unrelated to our operating performance. Volatility in the market price of our common stock may prevent investors from being able to sell their common stock at or above the price such investors paid for their shares or at any price at all. In addition, in the event our operating results fall below the expectations of public market analysts and investors, the market price of our common stock would likely decline.

#### **Sales of a significant number of shares of our common stock by existing shareholders could cause the market price of our common stock to decline.**

If our shareholders sell substantial amounts of our common stock, including shares issued upon the exercise of outstanding options, the market price of our common stock may decline. These sales also might make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate. We are unable to predict the effect that sales may have on the then prevailing market price of our common stock.

As of February 28, 2005, there remain registered for resale under the Securities Act approximately 1.0 million shares of our common stock on behalf of certain of our shareholders. In addition, 1.7 million common shares issued in December 2003 upon the conversion of warrants are subject to registration rights upon demand, and there are approximately 192,307 shares of our common stock issued in December 2003 upon conversion of a note payable, the holder of which is entitled to piggy-back registration rights. Sales of substantial amounts of common stock under Rule 144 or pursuant to the holder's registration rights, or the perception that such sales may occur, could depress the market price of our common stock. All of these shares will become eligible for public resale at various times within two years subject to volume limitations and certain restrictions on sales by affiliates.



**Table of Contents**

**Changes in stock option accounting rules may adversely impact our operating results prepared in accordance with generally accepted accounting principles.**

Technology companies like ours have a history of using broad based employee stock option programs to hire, incentivize and retain our workforce in a competitive marketplace. Statement of Financial Accounting Standards No. 123, Accounting for Stock-Based Compensation, allows companies the choice of either using a fair value method of accounting for options which would result in expense recognition for all options granted, or using an intrinsic value method, as prescribed by Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees, or APB 25, with a pro forma disclosure of the impact on net income (loss) of using the fair value option expense recognition method. We have elected to apply APB 25 and accordingly we generally do not recognize any expense with respect to employee stock options as long as such options are granted at exercise prices equal to the fair value of our common stock on the date of grant.

In December 2004, the Financial Accounting Standards Board, or FASB, issued statement 123R, Share-Based Payment, which requires all companies to measure compensation cost for all share-based payments, including employee stock options, at fair value, and is effective for public companies for interim or annual periods beginning after June 15, 2005. We are currently evaluating the effect that the adoption of Statement 123R will have on our financial position and results of operations, and it is possible that our adoption of this standard may adversely affect our operating results in future periods.

**Table of Contents****Item 2. PROPERTIES****Office Facilities**

We lease the locations listed in the table below. We believe that our present and proposed facilities are adequate for our current business needs.

<u>Location</u>	<u>Square Feet</u>	<u>Expiration Date</u>
9020 Junction Drive (Warehouse) Annapolis Junction, MD 20701	14,630	April 30, 2011
9020 Junction Drive (Office/SCIF) Annapolis Junction, MD 20701	37,384	April 30, 2011
9140 Guilford Road Columbia, MD 21046	8,691	(1)
135 National Business Parkway Suite 214 Annapolis Junction, MD 20701	7,421	(1)
9150 Guilford Road Columbia, MD 21046	17,655	(1)
2300 Fall Hill Avenue Suite 210 Fredericksburg, VA 22401	6,636	December 31, 2007
1235 Evans Road Melbourne, FL 32904	20,000	May 31, 2007
9633 South 48th Street Suites 235-240 Phoenix, AZ 85044	3,331	September 30, 2007
6708 Alexander Bell Drive Columbia, MD 21046	39,203	March 31, 2012
(1)		

## Edgar Filing: ESSEX CORPORATION - Form 10-K

These leases will terminate upon our move to our office at 6708 Alexander Bell Drive listed above, which is currently projected for April 2005.

### **Item 3. LEGAL PROCEEDINGS**

We currently are not a party to any material legal proceedings.

### **Item 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS**

None.

**Table of Contents****PART II****Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS****Price Range of Common Stock**

Our common stock has traded on the Nasdaq National Market under the symbol KEYW since March 31, 2004. Prior to that, from June 4, 2003, our common stock traded on the American Stock Exchange under the symbol EYW. Prior to that, our common stock traded on the OTC Bulletin Board. The following table sets forth the range of high and low intra-day sales prices reported for our common stock on each of those markets for the periods indicated.

	<u>High</u>	<u>Low</u>
Year Ended December 29, 2002:		
First Quarter	\$ 8.25	\$ 3.60
Second Quarter	\$ 6.40	\$ 3.15
Third Quarter	\$ 4.25	\$ 2.15
Fourth Quarter	\$ 3.56	\$ 1.50
Year Ended December 28, 2003:		
First Quarter	\$ 3.90	\$ 2.55
Second Quarter	\$ 5.85	\$ 2.85
Third Quarter	\$ 6.28	\$ 4.31
Fourth Quarter	\$ 10.45	\$ 5.55
Year Ending December 31, 2004:		
First Quarter	\$ 9.86	\$ 7.30
Second Quarter	\$ 9.79	\$ 7.61
Third Quarter	\$ 12.22	\$ 7.80
Fourth Quarter	\$ 21.36	\$ 10.49

On March 1, 2005, the last reported sale price for our common stock on the Nasdaq National Market was \$19.35 per share. As of March 1, 2005, there were approximately 5,000 beneficial shareholders of our common stock.

**Table of Contents****Dividend Policy**

We have never declared or paid any cash dividends on our capital stock. We currently expect to retain future earnings, if any, to finance the growth and development of our business and do not anticipate paying any cash dividends in the foreseeable future.

**Equity Compensation Plan Information**

The following table sets forth information as of December 31, 2004 with respect to compensation plans under which equity securities of the Company are authorized for issuance.

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance (Excluding Column (a)) (c)
Equity compensation plans approved by security holders	1,960,119	\$ 5.14	1,656,795
Equity compensation plans not approved by security holders <sup>(1)</sup> <sup>(2)</sup>	453,776	\$ 2.57	7,550
<b>TOTAL</b>	<b>2,413,895</b>		<b>1,664,345</b>

<sup>(1)</sup> Represents shares of common stock underlying non-qualified stock options issued outside of any formal plan. Generally, options granted outside equity compensation plans have grant prices equal to or greater than the fair market value of the underlying stock on the grant date and have a term of 10 years. The Board will adjust non-plan awards to make appropriate adjustments in the number of shares underlying options in the event of a stock split, merger, or other change in capital structure of the Company. Other specific conditions of the awards, such as vesting and termination provisions, are individually determined.

<sup>(2)</sup> Includes remaining 50,276 options issued at below market prices in exchange for fully vested outstanding options of SDL.

**Table of Contents****Item 6. SELECTED FINANCIAL DATA**

The following table sets forth the selected consolidated statement of operations data, consolidated balance sheet data and other data for each of the periods indicated. The selected financial data for fiscal years 2000, 2001, 2002, 2003 and 2004 are derived from our audited financial statements and related notes. Such financial statements include all adjustments, consisting of normal recurring adjustments, which we consider necessary for a fair presentation of our financial position and results of operations for these periods. You should not assume that the results below indicate results that we will achieve in the future. The selected financial data presented below should be read in conjunction with

Management's Discussion and Analysis of Financial Condition and Results of Operations, the consolidated financial statements and related notes.

	Fiscal Year Ended				
	(In thousands, except per share data)				
	Dec. 31, 2000	Dec. 30, 2001	Dec. 29, 2002	Dec. 28, 2003	Dec. 31, 2004
<b>Consolidated Statement of Operations Data:</b>					
Revenues	\$ 3,255	\$ 2,642	\$ 4,506	\$ 16,286	\$ 70,471
Costs of goods sold and services provided	(1,626)	(1,342)	(2,594)	(10,389)	(55,830)
Gross margin	1,629	1,300	1,912	5,897	14,641
Selling, general and administrative expenses	(2,041)	(2,460)	(2,667)	(4,905)	(11,129)
Research and development	(771)	(2,417)	(1,395)	(403)	(1,038)
Amortization of other intangible assets				(381)	(523)
Operating income (loss)	(1,183)	(3,577)	(2,150)	208	1,951
Interest income (expense), net	(8)	8	(24)	(68)	332
Income (loss) before income taxes	(1,191)	(3,569)	(2,174)	140	2,283
Benefit (provision) for income taxes					(10)
Net income (loss)	(1,191)	(3,569)	(2,174)	140	2,273
Beneficial conversion feature of convertible preferred stock	(1,250)	(750)			
Net income (loss) attributable to common shareholders	\$ (2,441)	\$ (4,319)	\$ (2,174)	\$ 140	\$ 2,273
Net income (loss) per share - basic	\$ (0.52)	\$ (0.67)	\$ (0.29)	\$ 0.02	\$ 0.15
Net income (loss) per share - diluted	\$ (0.52)	\$ (0.67)	\$ (0.29)	\$ 0.01	\$ 0.13
Shares used in per share calculations - basic	4,717	6,494	7,411	8,706	15,603
Shares used in per share calculations - diluted	4,717	6,494	7,411	9,798	17,146



**Table of Contents**

	As of				
	Dec. 31, 2000	Dec. 30, 2001	Dec. 29, 2002	Dec. 28, 2003	Dec. 31, 2004
<b>Consolidated Balance Sheet Data:</b>					
Working capital	\$ 736	\$ 112	\$ 222	\$ 32,971	\$ 108,401
Total assets	1,619	1,553	2,343	39,726	135,566
Total debt	23	191	745	104	41
Shareholders' equity	1,091	645	358	36,745	127,545

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

The following discussion of our financial condition and results of operations should be read together with our consolidated financial statements and the notes to those statements included elsewhere in this Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties. See [Forward Looking Statements](#). For additional information regarding some of the risks and uncertainties that affect our business and the industry in which we operate, please see [Risk Factors](#).

**OVERVIEW**

Essex provides advanced signal, image, and information processing solutions primarily for U.S. Government intelligence and defense customers. We create our solutions by combining our services and expertise with hardware, software, and proprietary and patented technology to meet our customers' requirements. Within the intelligence and defense communities we have established and maintained long-standing and successful customer relationships. We are also developing next generation signal, image and information processing solutions under classified U.S. Government research and development awards. We have been able to develop our current proprietary technology using a combination of government funding and our own internal funding and we believe this combination will allow us to continue to enhance and expand our technology and services for future market needs.

Most of our revenues are derived from awards with the U.S. Government, where we are either the prime contractor or a subcontractor, depending on the award. For fiscal year ended December 31, 2004 and December 28, 2003, revenues derived from the U.S. intelligence and defense communities and other departments and agencies of the Department of Defense were \$68.5 million, or 97%, and \$15.9 million, or 98%, of our total revenues, respectively.

On certain projects, our customers require us to purchase and provide the hardware (which may also include software and firmware) portion of the total system solution, which entails our purchasing hardware from third party vendors and reselling it to our customers. We show the revenue and costs from purchased hardware separately since this revenue carries significantly lower margins than our products and services revenue. The purchased hardware revenue is highly variable from quarter to quarter.

## **Table of Contents**

Our most significant expenses are cost of goods sold and services provided, which consist primarily of direct labor and associated costs for program personnel and direct expenses incurred to complete projects, including the cost of materials and equipment and subcontract efforts. Our ability to accurately predict personnel requirements, salaries and other costs, as well as to manage personnel levels and utilize our personnel versus subcontracting the work, can have a significant impact on our cost of goods sold and services provided. Utilizing our own employees to complete projects results in higher gross margins as compared to our enlisting subcontracted employees for the same work. As a result, we seek to maximize our internal labor content on our awards. Selling, general and administrative expenses consist primarily of costs associated with our management, facilities, finance and administrative groups and business development expenses which include bid and proposal efforts, and occupancy, travel and other corporate costs. We have revenue from some awards on which our U.S. Government customers pay us to perform research and development on their behalf. We also spend funds on internal research and development, which are separately classified as such in the financial statements. We are in a net operating loss carry forward position.

On March 1, 2003, we acquired 100% of the common stock of Sensys Development Laboratories, Inc., or SDL. The assigned value of the consideration and related expenses was approximately \$4.4 million. SDL provides both system and software engineering technical support to U.S. Government customers and prime contractors supporting government programs. SDL has an established workforce with specialized experience and credentials. For its fiscal year ended September 30, 2002, SDL had revenues of \$3.1 million.

On April 30, 2004, we acquired 100% of the common stock of Computer Science Innovations, Inc., or CSI, which is headquartered in Melbourne, Florida, for approximately \$8.1 million in cash. CSI has proprietary techniques, algorithms and tools that are used to build custom cognitive engines for a broad range of intelligence, defense and commercial customers and applications. Cognitive engines are software that includes predictive models and classifiers, and they have applications in the areas of fraud and anomaly detection, image and signal recognition, information integration, knowledge management, network information assurance, semantic processing and waveform analysis. CSI had revenue of approximately \$7.6 million in its fiscal year ended March 31, 2004.

On June 25, 2004, we acquired substantially all of the assets of Performance Group, Inc., or PGI, with main offices in Fredericksburg, Virginia, for approximately \$5.8 million in cash and \$362,000 in assumed liabilities. PGI provides services and systems in the areas of GIS, image processing and analysis, spatial data development, environmental consulting, visualization, and IT solutions to government and private sector clients. PGI had revenue of approximately \$4.5 million in calendar year 2003.

## **Critical Accounting Policies and Estimates**

The preparation of financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we re-evaluate our estimates, including those related to revenue recognition, research and development, intangible assets and

**Table of Contents**

contingencies. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our financial statements.

**Revenue Recognition**

We enter into three types of U.S. Government agreements:

**Time and material.** On time and material agreements, revenue is recognized to the extent of billable rates multiplied by hours delivered, plus other direct costs.

**Cost plus fixed fee.** We recognize revenue on cost plus fixed fee arrangements to the extent costs are incurred plus a proportionate amount of fee earned. We must determine that the costs incurred are proper and that the ultimate costs incurred will not overrun the expected funding on the project and still deliver the scope of work proposed. Even though cost plus fixed fee arrangements generally do not require that we expend costs in excess of the award value, such expenditures may be required in order to achieve customer satisfaction and receive additional work. In addition, since the reimbursable costs include both direct and indirect costs, we must determine that the indirect costs are properly accounted and allocated in accordance with reasonable cost allocation methods.

**Fixed price.** On fixed price agreements, we must determine that the costs incurred provide a proportionate amount of progress on the work and that the ultimate costs incurred will not overrun the funding on the award and the required hours will be delivered.

We use historical technical performance experience where applicable to evaluate progress on fixed price and cost plus fixed fee jobs. We use historical government audit experience in the indirect cost area to evaluate the propriety and expected recovery of our indirect costs on cost plus fixed fee agreements. The following table sets forth the percentage of revenues under each type of contract for the fiscal years ended December 29, 2002, December 28, 2003 and December 31, 2004:

	Percentage of Revenues by Contract Type		
	Fiscal Year Ended		
	Dec. 29, 2002	Dec. 28, 2003	Dec. 31, 2004
Time and material	4.7%	56.9%	87.6%
Cost plus fixed fee	67.5	27.5	9.8
Fixed price	27.8	15.6	2.6
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>



## **Table of Contents**

### ***Costs of Goods Sold and Services Provided***

Our costs are categorized as either direct or indirect costs. Direct costs are those that can be identified with and allocated to specific contracts and tasks. They include labor, fringe (for example, leave time, medical/dental, retirement plan, payroll taxes, employee welfare, worker's compensation and other benefits), subcontractor costs, consultant fees, travel expenses, materials and equipment. Indirect costs are either overhead or general and administrative expenses. Indirect costs cannot generally be identified with specific contracts or tasks, and to the extent that they are allowable, they are allocated to contracts and tasks using appropriate government-approved methodologies. Costs determined to be unallowable under the Federal Acquisition Regulations cannot be allocated to projects. Our principal unallowable costs are interest expense, amortization expense for separately identified intangibles from acquisitions, certain general and administrative expenses, financing and merger/acquisition costs.

### ***Research and Development***

Research and development costs are expensed as incurred. Such costs include direct labor and materials as well as a reasonable allocation of overhead costs. However, no general and administrative costs are included. Equipment which has alternative future uses is capitalized and charged to expense over its estimated useful life.

### ***Goodwill and Other Intangible Assets***

Business acquisitions typically result in the recording of goodwill and other intangible assets, which affect the amount of future period amortization expense and possible impairment expense that we will incur. We have adopted Statement of Financial Accounting Standards, or SFAS, No. 142 which requires that we, on an annual basis, calculate the fair value of the reporting units that contain the goodwill and compare that to the carrying value of the reporting unit to determine if impairment exists. Impairment testing must take place more often if circumstances or events indicate a change in the impairment status. Management judgment is required in calculating the fair value of the reporting units. Because of the integral technologies and operations of the acquisitions to date, we have determined that Essex has only one corporate-wide reporting entity to which this test applies.

### ***Income Taxes***

As a result of cumulative tax losses in recent years along with the uncertainty of realizing tax loss carryforwards, we have recorded reserves against any tax benefit that may be derived should those carryforwards be realized through the recognition of taxable income in the future. At December 31, 2004, our management assessed the reserves and determined that reversing those existing reserves was not warranted at this time. That decision was primarily based on two factors. First, we continue to experience significant book tax differences which our management believes should reduce taxable income substantially below income reported on the financial statements. Those differences include amortization of goodwill over fifteen years and the deduction associated with the exercise of employee stock options. Second, while we achieved both book and taxable profit in 2004, we did not have sufficient future firm funded sales backlog (see Backlog under these Management's Discussion and Analysis of Financial Condition and Results of Operations ) at December 31, 2004 to ensure sufficient future taxable income to realize the deferred tax asset.

**Table of Contents**

***Business Combination***

We apply the provisions of SFAS No. 141, Business Combinations, whereby the net tangible and separately identifiable intangible assets acquired and liabilities assumed are recognized at their estimated fair market values at the acquisition date. The purchase price in excess of the estimated fair market value of the net tangible and separately identifiable intangible assets acquired represents goodwill. The allocation of the purchase price related to our business combinations involves significant estimates and management judgment that may be adjusted during the allocation period, but in no case beyond one year from the acquisition date. External costs incurred related to successful business combinations are capitalized as costs of business combinations, while internal costs incurred by us for acquisition opportunities are expensed.

***Off Balance Sheet Arrangements***

We do not have any off balance sheet arrangements with or through any unconsolidated entity or which have not been recognized and disclosed in these financial statements.

**Table of Contents****Results of Operations**

The following table sets forth, for each period indicated, the percentage of items in the statement of operations in relation to revenue.

	Fiscal Year Ended		
	Dec. 29, 2002	Dec. 28, 2003	Dec. 31, 2004
Revenues:			
Services and products	100%	100%	78.6%
Purchased hardware			21.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Costs of goods sold and services provided	(57.6)	(63.8)	(79.2)
Gross margin	42.4	36.2	20.8
Selling, general and administrative expenses	(59.2)	(30.1)	(15.8)
Research and development	(30.9)	(2.5)	(1.5)
Amortization of other intangible assets		(2.3)	(0.7)
Operating (loss) income	(47.7)	1.3	2.8
Interest income (expense), net	(0.5)	(0.4)	0.4
(Loss) income before income taxes	(48.2)	0.9	3.2
Benefit (provision) for income taxes			
Net (loss) income	(48.2)%	0.9%	3.2%

The following table sets forth, for each component of our revenues, the related cost of goods sold and services provided expressed as a percentage of the related revenues for the periods indicated.

	Dec. 29, 2002	Dec. 28, 2003	Dec. 31, 2004
Costs of goods sold and services provided:			
Services and products	57.6%	63.8%	74.4%
Purchased hardware <sup>(1)</sup>			96.8%

(1) 2002 and 2003 had no comparable purchases to 2004

**Fiscal Year Ended December 31, 2004 Compared to the Fiscal Year Ended December 28, 2003**

*Revenues.* Our revenues were \$70.5 million and \$16.3 million in fiscal 2004 and 2003, respectively. The key factors for the higher revenue were the increased activity on the October 2003 \$57.1 million multi-year award (increased to \$227.4 million at year end 2004) and a January 2004 \$4.5 million (increased in the third quarter of 2004 to \$6.2 million) two-year award for software and systems engineering and the delivery of custom systems to national priority programs. Revenues from these two awards in fiscal 2004 were \$45.2 million and \$3.4 million, respectively. Of this total of \$48.6 million, \$15.0 million was for purchased hardware. There was no comparable purchased hardware in 2003.



---

**Table of Contents**

*Cost of Goods Sold and Services Provided ( CGS ).* Total CGS increased \$45.4 million to \$55.8 million in fiscal 2004 from \$10.4 million in fiscal 2003. As a percentage of total revenues, total CGS was approximately 79.2% for fiscal 2004, compared to approximately 63.8% for fiscal 2003. For services and products revenue, CGS was 74.4% for fiscal 2004 as compared to 63.8% for fiscal 2003. The increase in CGS in 2004 reflects increased volume and revenue for the period. The increase in CGS as a percentage of revenue in 2004 reflects the change in the mix of work, primarily related to the two contracts awarded in October 2003 and January 2004, discussed above. Specifically, upon award and ramp up, a majority of the revenues under those contracts relate to subcontracts and purchased hardware which are at a lower margin. Over time, we anticipate a gradual shift of a portion of this work to our staff. For purchased hardware revenues, CGS was 96.8% in fiscal 2004, and there were no comparable purchases in fiscal 2003.

*Selling, General and Administrative Expenses ( SG&A ).* Selling, general and administrative expenses increased \$6.2 million to \$11.1 million for fiscal 2004 from \$4.9 million for fiscal 2003. SG&A costs have increased as the volume of business has increased through internal and acquisition growth. SG&A decreased as a percentage of revenues from 30.1% of revenues in 2003 to 15.8% of revenues for 2004.

*Research and Development Expenses ( R&D ).* Research and development expenses increased \$635,000 to \$1.0 million for fiscal 2004 from \$403,000 in fiscal 2003. We incurred the majority of our research and development on efforts related to optical communications technology and have incurred R&D since May 2004 in the newly-acquired CSI operation.

*Amortization of Other Intangible Assets.* During fiscal 2004, amortization of other intangible assets was \$523,000, which was primarily related to the CSI and PGI acquisitions. There was \$381,000 of amortization costs in the comparable period in 2003 relating to the SDL acquisition. The remaining balance of \$36,000 of other intangible assets was fully amortized during the first and second quarters of 2004. We had no amortization cost in fiscal 2002.

*Net Interest/Dividend Income (Expense).* Net interest/dividend income was \$332,000 in fiscal 2004 compared to net interest expense of \$68,000 in the comparable period of 2003. The net interest income reflects the temporary investment of the proceeds from our 2003 and 2004 stock offerings.

*Net Income.* Net income was \$2.3 million and \$140,000 in fiscal 2004 and 2003, respectively. We are in a net operating loss carry forward position for book and tax purposes. We recognized a provision for state income taxes in 2004 of \$10,000 where our net operating loss is not available.

**Fiscal Year Ended December 28, 2003 Compared to the Fiscal Year Ended December 29, 2002**

*Revenues.* Our revenues were \$16.3 million and \$4.5 million in fiscal 2003 and 2002, respectively. Revenues in fiscal 2003 include \$5.8 million for ten months of operations from SDL, which we acquired in March 2003. Excluding SDL, revenues in 2003 were \$10.5 million or \$6.0 million higher than 2002 due to several factors. A key factor was the increased activity on the U.S. Government Missile Defense Agency program for design of a next generation

## **Table of Contents**

advanced optoelectronics radar processor, or AOP, demonstration unit. This program generated revenues of \$3.3 million in fiscal 2003 compared to revenues of \$2.1 million in 2002 as we did not begin this program until May 2002. Our November 2002 \$30 million award contributed \$3.5 million of revenues in fiscal 2003 and \$32,000 of revenues in fiscal 2002. Additionally, in fiscal 2003 we sold \$1.1 million of products and equipment, including the sale of ten *hyperfine WDM* family devices, consisting of five prototype demultiplexers and five of the new flat-top *hyperfine WDM* devices for use in building advanced optical code division multiple access systems, for \$460,000 to several government and intermediate customers. We had only \$107,000 of such products and equipment sales in fiscal 2002.

*Cost of Goods Sold and Services Provided.* Our cost of goods sold and services provided increased by \$7.8 million to \$10.4 million in fiscal 2003 from \$2.6 million in fiscal 2002. As a percentage of revenues, cost of goods sold and services provided was approximately 63.8% for fiscal 2003, compared to approximately 57.6% for fiscal 2002. In fiscal 2003, due to the SDL acquisition and communications sales referenced previously, there was a significant increase in the direct labor and associated costs for work performed at our customers' facilities. We receive a lower markup on work performed at customer facilities. Overall, the higher volume during 2003 contributed a larger amount of gross profit, though at a lower gross profit percentage.

*Selling, General and Administrative Expenses.* Selling, general and administrative expenses increased \$2.2 million to \$4.9 million for fiscal 2003 from \$2.7 million for fiscal 2002. The increase was due to increased business development and higher management costs in the government contracts area, and to the recurring costs of the acquired company related to its operations.

*Research and Development Expenses.* Research and development expenses declined by \$992,000 to \$403,000 for fiscal 2003 from \$1.4 million in fiscal 2002. We incurred the majority of our research and development expenses on efforts related to development of our optical communications technology.

*Amortization of Other Intangible Assets.* During fiscal 2003, amortization of other intangible assets was \$381,000, all of which was related to the SDL acquisition. The remaining balance of \$36,000 of other intangible assets was fully amortized during the first and second quarters of 2004. We had no amortization cost in fiscal 2002.

*Net Interest Expense.* Net interest expense was \$68,000 and \$24,000 in fiscal 2003 and 2002, respectively. The increase in net interest expense reflects an increase in our debt and costs related to our accounts receivable facility prior to the completion of our follow-on public offering in mid December 2003.

*Net Income (Loss).* Net income was \$140,000 and net loss was \$2.2 million in fiscal 2003 and 2002, respectively. We are in a net operating loss carry forward position for book and tax purposes. Our provision for income taxes in 2003 was zero due to our net operating loss carryforwards.

## **Backlog**

Our awards with the U.S. Government generally extend over multiple years. Funded backlog generally consists of the sum of all awards amounts of work for which funding has been



## **Table of Contents**

approved and awards granted, less the value of work performed under such awards. Since the U.S. Government operates under annual appropriations, our customers typically fund awards on an incremental basis, generally for periods of one year or less. In many cases, our awards include unexercised options. Accordingly, a significant amount of our backlog is unfunded. We include in unfunded backlog the total value of signed contracts, less funding to date. Unfunded backlog includes awards options based upon expected performance levels for those options. Unfunded backlog does not include any estimate of future potential delivery orders that might be awarded under indefinite delivery indefinite quantity contracts. We have recently revised our definition of unfunded backlog and the amounts presented are consistent with this new definition. The effect of our change reduced backlog by \$13.8 million at December 28, 2003.

As of December 31, 2004, we had total backlog, funded and unfunded, of \$230.8 million as compared with \$93.8 million at December 28, 2003. Of these amounts, funded backlog was \$29.7 million and unfunded backlog was \$201.1 million at fiscal year end 2004 compared to \$15.0 million and \$78.8 million, respectively, at fiscal year end 2003. Unfunded backlog as of December 31, 2004 includes the remaining balance of \$19.2 million on our \$30.0 million, ten-year award through 2011 to provide communications systems support to the intelligence community. Unfunded backlog at December 31, 2004 also includes the remaining balance of \$170 million on our \$227.4 million multi-year award in which the ceiling was significantly increased (from its original \$57.1 million October 2003 award) in December 2004 for software and systems engineering.

We currently expect to recognize revenue during fiscal year 2005 from approximately 32.6% of our total backlog as of December 31, 2004.

## **Net Operating Loss Carry Forward**

We are in a net operating loss ( NOL ) carry forward position. No provision or benefit from federal income taxes was recognized in fiscal years 2004, 2003 or 2002. The NOL and other tax credits can be used to offset future taxable income and taxes payable, except for those states where our NOL is not available. We recognized \$10,000 in state tax expense in 2004.

## **Liquidity and Capital Resources**

Our primary liquidity and capital resource needs are to finance the costs of our operations and to make capital expenditures and acquisitions. Based upon our current level of operations, we expect that our cash flow from operations and amounts of cash on hand will be adequate to meet our anticipated needs for at least the next twelve months. A significant part of our business strategy is to pursue one or more significant strategic acquisitions and we used a substantial portion of our cash balance at fiscal year end 2004 for the acquisition of The Windermere Group, LLC.

During fiscal year 2004, net cash provided by operating activities was \$3.3 million, a significant improvement from 2003 and 2002 where cash used in operations was \$228,000 and \$1.6 million, respectively. Cash provided in fiscal year 2004 was from net income and non-cash depreciation, amortization and other charges of approximately \$3.5 million and a decrease of \$200,000 in accounts payable and accrued items net of the change in accounts receivable and prepaids. An increase in accounts receivable during 2004 was due to the increase in sales and does not reflect any significant change in payment cycle.

**Table of Contents**

During fiscal year 2004, net cash used in investing activities was \$16.2 million, of which \$14.1 million was for the acquisitions of CSI and substantially all of the assets of PGI. We also expended \$2.0 million for property, equipment and leasehold improvements to support our growing work force. Our working capital at December 31, 2004 increased to \$108.4 million from \$33.0 million at fiscal year end 2003. The increase was primarily a result of the proceeds from our public offering of common stock in 2004.

During fiscal year 2004, net cash provided by financing activities was \$86.1 million. Cash received of \$88.6 million from the sale of common stock and proceeds from exercises of stock options was offset by cash of \$2.4 million that was provided to a landlord under an obligation to finance special facility security improvements as described below in **Contractual Obligations and Commitments**.

**Inflation**

Because of the Company's substantial activities in professional services and product development, the Company is more labor intensive than firms involved primarily in industrial activities. To attract and maintain higher caliber professional staff, the Company must structure its compensation programs competitively. The wage demand effect of inflation is felt almost immediately in the Company's costs; however, the net effect during the periods presented is minimal.

The inflation rate in the United States generally has little impact on the Company's cost-reimbursable type contracts and other short-term contracts. For longer-term, fixed-price and time and material type contracts, the Company endeavors to protect its margins by including cost escalation provisions or other specific inflation protective terms in these contracts.

**The preceding paragraphs discussing the Company's financial condition contain forward-looking statements. The factors affecting the ability of the Company to meet its funding requirements and manage its cash resources include, among other things, the amount and timing of product sales, inventory turnover, the magnitude of fixed costs, sales growth and the ability to obtain working capital, all of which involve risks and uncertainties that are difficult to predict.**

**Contractual Obligations and Commitments***Contractual Cash Obligations*

The following table shows our contractual cash obligations due in each of fiscal 2005 through 2012. We have no contractual cash obligations due after 2012.

	2005	2006	2007	2008	2009 - 2012
Operating leases	\$ 2,303,915	\$ 2,559,475	\$ 2,486,114	\$ 1,838,119	\$ 4,211,485
Capital leases, including interest	13,790	13,790	13,790	3,448	

Edgar Filing: ESSEX CORPORATION - Form 10-K

Total	\$ 2,317,705	\$ 2,573,265	\$ 2,499,904	\$ 1,841,567	\$ 4,211,485
-------	--------------	--------------	--------------	--------------	--------------

## **Table of Contents**

The Company entered into leases for production and office space in Maryland in connection with the work on its largest program. The leases are for seven years ending approximately April 2011 and total rent is approximately \$6.3 million. The leases contain normal clauses for payment of operating, real estate and common area maintenance over base year amounts and provide for a one-time option to terminate the leases after 4 years from the commencement date of the respective lease.

In connection with these leases, the Company agreed to provide an estimated \$3 million to the landlord to finance special security-related leasehold improvements. The Company has recorded a note receivable in connection with the lease as the landlord will repay the funds over thirty-nine months following construction completion at 7% interest. At December 31, 2004, the Company had funded \$2.4 million of this commitment.

The Company has entered into a lease for replacement office space for certain of its Maryland operations, including its corporate headquarters. The lease is for a term of seven years beginning in approximately April 2005 and total rent is approximately \$6 million. The leases contain normal clauses for payment of operating, real estate and common area maintenance over base year amounts.

## **Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK**

The Company has no variable rate debt outstanding as of December 31, 2004.

Our exposure to market risk relates to changes in interest rates on short-term investment of the remaining proceeds of our stock offerings. Presently, such investments earn approximately 2.5%. Based upon our investments for fiscal 2004, a hypothetical 1% increase or decrease in interest rates would have increased or decreased income by \$10,000 for every \$1.0 million invested and would have increased or decreased our annual cash flow and interest income by a comparable amount.

## **New Accounting Pronouncements**

In December 2004, the Financial Accounting Standards Board ( FASB ) issued Statement of Financial Accounting Standards ( SFAS ) No. 123R, Share-Based Payment , which is a revision of SFAS No. 123, Accounting for Stock Issued to Employees . SFAS No. 123R requires that all share-based payments to employees, including grants of employee stock options, be valued at fair value on the grant date and be expensed over the applicable vesting period. SFAS No. 123R is effective for the Company on July 1, 2005. The Company will transition to SFAS No. 123R using the modified prospective application . Under the modified prospective application , compensation costs will be recognized in the financial statements for all new share-based payments granted after July 1, 2005. Additionally, the Company will recognize compensation costs for the portion of previously granted awards for which the requisite service has not been rendered ( nonvested awards ) that are outstanding as of July 1, 2005 over the remaining requisite service period of the awards. The compensation expense to be recognized for the nonvested awards will be based on the fair value of the awards. We are currently

**Table of Contents**

evaluating the effect that the adoption of SFAS No. 123R will have on our Financial Position and Results of Operations, and it is possible that our adoption of this Standard may adversely affect our operational results in future periods. At December 31, 2004, the total valuation of options issued and vesting after July 1, 2005 is expected to be \$267,000 with \$192,000 vesting in the year ending December 31, 2005.

**Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

See Item 15(a)(1) in Part IV of this Form 10-K.

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

None.

**Item 9A. CONTROLS AND PROCEDURES**

**DISCLOSURE CONTROLS AND PROCEDURES**

Based on their most recent evaluation, the Company's Chief Executive Officer and Chief Financial Officer believe the Company's disclosure controls and procedures (as defined in Exchange Act Rules 13a-15e and 15d-15e) are effective as of the end of the period covered by this Form 10-K to ensure that information required to be disclosed by the Company in this report is accumulated and communicated to the Company's management, including its principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. There were no significant changes in the Company's internal controls over financial reporting or other factors that could significantly affect these controls subsequent to the date of their evaluation and there were no corrective actions with regard to significant deficiencies and material weaknesses.

**INTERNAL CONTROL OVER FINANCIAL REPORTING**

We are not an accelerated filer, as we were eligible to use Form 10-KSB at the end of 2004. As such, for 2004, we are not required to provide certain management and outside auditor reports. For 2004, we voluntarily elected to file on Form 10-K and to make only the additional financial statement disclosures, as appropriate.



**Table of Contents****PART III****Item 10. DIRECTORS AND EXECUTIVE OFFICERS**

Our executive officers and directors, and their respective ages and positions, are set forth below.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Leonard E. Moodispaw	62	President; Chief Executive Officer and Director
Terry M. Turpin	62	Sr. Vice President; Chief Scientist and Director
James J. Devine	65	Executive Vice President and General Manager
Lisa G. Jacobson	46	Executive Vice President and Chief Financial Officer
Joseph R. Kurry, Jr.	54	Sr. Vice President and Treasurer
Matthew S. Bechta	51	Vice President
Kimberly J. DeChello	43	Vice President, Chief Administrative Officer and Secretary
Edwin M. Jaehne	52	Vice President and Chief Strategy Officer
Ronald M. Klash	42	Vice President and Controller
Rudolf Liskovec	52	Vice President
Craig H. Price	55	Vice President
H. Jeffrey Leonard	50	Chairman; Director
John G. Hannon	67	Director
Robert W. Hicks	67	Director
Anthony M. Johnson	50	Director
Ray M. Keeler	73	Director
Marie S. Minton	43	Director
Arthur L. Money	65	Director

*Leonard E. Moodispaw*, President, Chief Executive Officer and Director of Essex, rejoined Essex in 1998. He held the office of Chief Operating Officer until September 2000 when he was elected Chief Executive Officer. Mr. Moodispaw was an employee and consultant with Essex during 1988 to 1993. From 1988 to 1993, he was President of the former Essex subsidiary, System Engineering and Development Corporation, or SEDC, and later served as Essex Chief Administrative Officer and General Counsel. From April 1994 to April 1998, Mr. Moodispaw was President of ManTech Advanced Systems International, Inc., a subsidiary of ManTech International Corporation. From 1965 to 1978, Mr. Moodispaw was a senior manager in the National Security Agency, or NSA. After leaving the NSA he was engaged in the private

**Table of Contents**

practice of law. He is the Founder of the Security Affairs Support Association that brings government and industry together to solve problems of mutual interest. He also serves as a member of the board of directors of Griffin Services, Inc., a subsidiary of Vosper-Thornycroft, a UK company. He received a Bachelor of Science degree in Business Administration from the American University in Washington, D.C. in 1965, a Master of Science degree in Business Administration from George Washington University in Washington D.C. in 1969 and Juris Doctor in Law from the University of Baltimore, Maryland in 1977. He is still growing older but not up, enjoys Rock n Roll, chocolate and Key West, Florida. He takes pride in accomplishing things.

*Terry M. Turpin* was elected a Director of Essex in January 1997 and became our Senior Vice President and Chief Scientist for Essex, positions he has held since 1996. He joined Essex through merger with SEDC where he was Vice President and Chief Scientist from September 1984 through June 1989. Currently Mr. Turpin is the Chairman of the Industrial Advisory Board for the Optoelectronic Computing Center at the University of Colorado. From December 1983 to September 1984 he was an independent consultant. From 1963 through December 1983, Mr. Turpin was employed by the NSA. He was Chief of the Advanced Processing Technologies Division for ten years. He holds patents for optical computers and adaptive optical components. Mr. Turpin represented NSA on the Tri-Service Optical Processing Committee organized by the Under Secretary of Defense for Research and Engineering. He received a Bachelor of Science degree in Electrical Engineering from the University of Akron in 1966 and a Master of Science degree in Electrical Engineering from Catholic University in Washington, D.C. in 1970.

*James J. Devine*, Executive Vice President and General Manager for the Company, joined Essex in February 2004. From November 2000 through January 2004 he was a Principal at Booz Allen Hamilton leading the Corporate Enterprise and Mission Operations lines of business supporting the Intelligence Community. From 1964 to 2000, Mr. Devine was a senior executive at NSA. He served three overseas assignments in Europe and Asia and led two of the major NSA Directorates during his 36 year career. He holds a Bachelor of Science in Engineering from Johns Hopkins University and a Master of Engineering Administration from George Washington University. He is a graduate of the National War College. He enjoys golf (despite never having broken 100), hiking, cross country skiing, and travel.

*Lisa G. Jacobson*, Executive Vice President and Chief Financial Officer (CFO) for the Company, joined Essex in July 2004. From 2000 to spring of 2004 she was CFO for ACS Government Services, Inc. (ACS-GS), a subsidiary of Fortune 500 ACS, Inc. She continued as CFO following the acquisition of ACS-GS by Lockheed Martin Government Services Group, Inc. in 2003 until her departure in spring 2004. ACS-GS provided commercial solutions as well as engineering and technology services to the U.S. Government and other customers. Annual revenue for ACS-GS for fiscal 2003 was reported by the company to be approximately \$700 million. From 1990 to November 2000, Ms. Jacobson was Director, Accounting and Financial Management Division of the U.S. Government Accountability Office (GAO). From 1979 to 1987, and from 1989-90 she was at Deloitte & Touche, where her final position was Senior Manager. She was a GAO Fellow from 1987 to 1989. She is a Certified Public Accountant and holds a Bachelor Degree in Accounting from Oklahoma State University.

*Joseph R. Kurry, Jr.* joined Essex Corporation in March 1985. He is Treasurer, a position he has held since 1985, and a Senior Vice President. Mr. Kurry was controller of ManTech International Corporation from December 1979 to March 1985. Mr. Kurry graduated in 1972 from Georgetown University, in Washington, D.C. and is a Certified Public Accountant.

**Table of Contents**

*Matthew S. Bechta* was elected Vice President in October 1993. He is currently the Manager of the Geospatial Solutions Group, responsible for GIS and Environmental Services, Radar Systems, and Information Systems Development. Mr. Bechta was recently the head of the Processing Systems Group, developing and fielding world-class radar imaging solutions to National Security problems. Mr. Bechta joined Essex in 1989 with the merger of Essex and SEDC. Mr. Bechta was one of the founders of SEDC, where he served in various technical and management capacities since incorporation in 1980. At SEDC he led projects for systems engineering and development of signal processing systems for satellite communications and reconnaissance programs. He was also responsible for the development of applications for and sales of opto-electronic processing systems. Prior to 1980, Mr. Bechta was employed as a project engineer with NSA, where he was involved in the analysis of optical storage systems, installation of network communications systems, and the acquisition of processing systems for satellite reconnaissance. Mr. Bechta earned a Master of Science degree in Computer Science from the Johns Hopkins University and a Bachelor of Science degree in Electrical Engineering from Spring Garden College. In the off-hours, Matt is a coach with the Columbia Reds Baseball Club, President of the Centennial High School Boosters, and a fan of University of Pennsylvania baseball.

*Kimberly J. DeChello* joined Essex in May 1987 and has served in various administrative and management capacities. She was elected Vice President in December 2003, appointed Chief Administrative Officer in November 1997 and Corporate Secretary in January 1998. Ms. DeChello is responsible for corporate administration, human resources, stock/stock option administration and assists with investor relations. Ms. DeChello received a Master of Science degree in Human Resources Management in 2000 from the University of Maryland. Ms. DeChello also holds an Associate of Arts degree in Accounting and a Bachelor of Science degree in Criminal Justice/Criminology from the University of Maryland. She enjoys dancing and bird watching. She participates in the Smithsonian's Neighborhood Nest Watch Program where she assists in catching, banding and data collection of birds in her backyard.

*Edwin M. Jaehne* joined Essex Corporation as Vice President and Chief Strategy Officer in 2003. He is a veteran entrepreneur with over 20 years of international experience as an executive of information technology companies. He is experienced in creating rapid growth companies as well as in the strategic acquisition and merger of companies to form strong solutions focused companies in both the communications and government markets. As Chief Strategy Officer, Mr. Jaehne is focused on the strategic growth of Essex, expanding on existing technology and capabilities, and creating product and service lines for both the commercial and government markets. From 1996 until 2003 he served as either President or Chief Operating Officer of several information technology companies, where he led several successful mergers and acquisitions. He started his first company, Jaehne Associates, LTD (an information security consultancy), in 1983, which he sold in 1988 to ManTech International, Inc. From 1988 until 1996, he served as President of ManTech Strategic Associates, Ltd. Mr. Jaehne has a diverse educational background. In 1975 he earned two Bachelor of Arts degrees (Physics and Russian) from the University of Utah. Mr. Jaehne continued at the University of Utah to earn a Master of Arts degree in Physics (1976). In 1977, he earned a Master of Arts in the History and Philosophy of Science at the University of Toronto, Toronto, Canada.

**Table of Contents**

*Ronald M. Klash* joined Essex Corporation in November 2004 as Vice President and Controller. From August 2003 until joining Essex in 2004, he was CFO for ACS Educational Solutions, Inc., a subsidiary of Fortune 500 ACS, Inc. and Senior Business Operations Manager for Lockheed Martin Government Services Group, Inc. From 1996 to August 2003, Mr. Klash was the Corporate Controller of ACS Government Services, Inc. (ACS-GS) and Intellisource Inc. (for which a majority of the assets were purchased by ACS-GS). ACS-GS provided commercial solutions as well as engineering and technology services to the U.S. Government and other customers. Annual revenue for ACS-GS for fiscal 2003 was reported by the company to be approximately \$700 million. Prior to joining Intellisource, Mr. Klash held various responsible positions with Raytheon STX Corporation, U.S. Airways, Inc. and Computer Data Systems, Inc. (which was purchased by ACS-GS). He is a certified public accountant and holds a Bachelor of Science degree in Accounting from West Liberty State College in West Virginia. He enjoys golfing with his son.

*Rudolf (Rudy) Liskovec* joined Essex in 2003 as Vice President of Essex's Technical Services Group. Mr. Liskovec provides leadership to Essex technology professionals that support enterprise-wide, life-cycle engineering and technical services, application development, systems integration and business process reengineering to systems of national importance. Mr. Liskovec has 25 years of international management and engineering experience where he has developed a track record of excellence in organizational development, operational and engineering management, business development, and systems engineering. During 2002-2003, Mr. Liskovec was President/CEO of Lisk Technical Services, LLC, a consulting firm to government contractors, including Essex. From 2001 to 2002, Mr. Liskovec was a director for the communications and networks group of General Dynamics and from 1993 to 2001 he was an Executive Vice President for ManTech International. He holds a Master of Science degree (honors) in Computer Information Systems from Boston University, a Bachelor of Science degree (Cum Laude) in Computer Science from the University of Maryland and a Bachelor of Science degree (Summa Cum Laude) in Business Management from the University of Maryland.

*Craig H. Price* was elected Vice President in October 1993. Dr. Price is presently Senior Technical Advisor to the General Manager and is responsible for fostering cross-group technology synergy within the Company. From May 2004 through January 2005, Dr. Price was Director of the Intelligent Systems Group in Melbourne, FL and led the integration of this operation into the Company upon its acquisition as part of CSI in May 2004. Prior to this, Dr. Price was Director of Optical Solutions where he was responsible for the development of products utilizing Essex patented optical technologies. Dr. Price joined Essex in 1989 as a result of the merger of Essex and SEDC. Dr. Price had joined SEDC in 1985, with varied assignments in engineering, analysis and advanced technologies. Previously, he served in numerous technical and project positions in the U.S. Air Force during the period 1974 - 1985, ending with service in the Secretary of the Air Force Office of Special Projects, where he was awarded the Distinguished Service Medal. Dr. Price holds a Bachelor of Science degree in Electrical Engineering from Kansas State University, a Master of Science degree in Electrical Engineering from Purdue University and a Doctor of Philosophy degree in Electrical Engineering, from Stanford University.

*H. Jeffrey Leonard*, was elected a Director of Essex in September 2000 and Chairman of the Board in December 2000. Dr. Leonard is the President and founding shareholder of Global Environment Fund, or GEF, a private equity investment management company. Dr. Leonard serves as Chairman of the Investment Committee for GEF's investment funds. He has extensive experience in international private equity and project finance investments, and advanced

**Table of Contents**

technology investments in the energy, environmental, applications software, intelligent systems engineering, biological and medical fields. Dr. Leonard also serves as a member of the board of directors of the National Cooperative Bank, Xymetrex Corporation, Aurora Flight Sciences Corp., Athena Technologies, Sorbent Technologies, and Global Forest Products Company Limited. He has served as an advisor to the U.S. Office of Technology Assessment and is a member of the board of directors of the National Council for Science and the Environment. Dr. Leonard received a Bachelor of Arts degree in 1976 from Harvard College, a Master of Science degree from the London School of Economics in 1978 and a Doctor of Philosophy degree from Princeton University in 1984. Dr. Leonard is the Chairman of the Board of Beacon House, a not-for-profit community development and education organization assisting children and their families in Northeast Washington D.C. He is a marathon runner and was the winner of the 2003 Cleantech Pioneer Award from the Cleantech Venture Capital Network.

*John G. Hannon* was elected a Director of Essex in September 2000. From early 2000 to 2002, Mr. Hannon was the managing member of Networking Ventures, L.L.C., a privately held company that invested in technology companies. From 1979 to March 2000, Mr. Hannon served as the Chief Executive Officer of Pulse Engineering, Inc. an information security and signals processing company which was sold in March 2000. Mr. Hannon started his business career in 1963 after serving in the United States Marine Corps. Since that time, he has been involved in numerous entrepreneurial ventures. He is a past Director of the Armed Forces Communications and Electronics Association.

*Robert W. Hicks* was elected a Director of Essex in August 1988. He has been an independent consultant since 1986. During this period he was engaged for three and one-half years by the State of Maryland Deposit Insurance Fund Corporation as Receiver of several savings and loan associations, first as an Agent and then as a Special Representative (both court-approved positions). He was a principal officer and shareholder in Asset Management & Recovery, Inc., a consulting firm which primarily provided services, directly and as a subcontractor, to the Resolution Trust Corporation and law firms engaged by the Resolution Trust Corporation. Mr. Hicks is also a Director and the Corporate Secretary of the Kirby Lithographic Company, Inc. In 1998 he formed Hicks Little Company, LLC for the purpose of conducting consulting activity.

*Anthony M. Johnson* was nominated by CEO Moodispaw, reviewed and recommended by the Independent Directors, approved by the full Board and elected a Director of the Company in April 2004. Dr. Johnson became the Director of the Center for Advanced Studies in Photonics Research (CASPR) in 2003 and is a Professor of Physics and a Professor of Computer Science & Electrical Engineering at the University of Maryland, Baltimore County (UMBC). He was the Chairperson & Distinguished Professor of the Department of Applied Physics and Professor of Electrical and Computer Engineering at the New Jersey Institute of Technology from 1995 to 2003. Prior to this, from 1981 until 1995, he was a Member of Technical Staff at AT&T Bell Laboratories in Holmdel, NJ. In 2002, he served as the President of the Optical Society of America and is a Fellow of the American Physical Society, the American Association for the Advancement of Science, the Institute of Electrical and Electronics Engineers, the Optical Society of America, and a Charter Fellow of the National Society of Black Physicists. He received his B.S. in Physics (Magna Cum Laude) in 1975 from Polytechnic Institute of New York, and his Ph.D. in Physics from City College of New York in 1981.

---

**Table of Contents**

*Ray M. Keeler* was elected a Director of Essex in July 1989. Since 1986, he has been an independent consultant to both industry and government organizations in areas related to national and tactical intelligence programs. Mr. Keeler served on the Board of Directors of SEDC from December 1987 through April 1989. From 1988 to November 1995, he was President of CRYTEC, Inc., a service company providing management, business development and technical support to companies involved in classified cryptologic projects. Since December 1995, he has been a consultant to companies involved in national technical intelligence programs. From 1982 to 1986, Mr. Keeler was Director of Program and Budget for the NSA. He received a Bachelor of Arts degree from the University of Wisconsin-Madison in 1957.

*Marie S. Minton* was elected a Director of Essex in December 2000. In late 2003, Ms. Minton formed Transition Finance Strategies, LLC, an investment company that invests in small businesses in the professional services areas. From 1994 to June 2003, Ms. Minton was a Managing Director and the Chief Financial Officer of Global Environment Fund, an international private equity investment management firm. Before joining GEF, Ms. Minton was the Vice President of Finance for Clean Air Capital Markets Corporation, a boutique investment banking firm. From 1986 through 1993, Ms. Minton was an Audit Manager in the Entrepreneurial Services Division of Ernst & Young. Ms. Minton graduated from the University of Virginia in 1986 with a Bachelor of Science degree in Commerce. She is a member of the Virginia Society and American Institute of Certified Public Accountants, the Washington Society of Investment Analysts, or WSIA, and the CFA Institute. She serves as a faculty member for the WSIA's CFA Education Program. Ms. Minton is a Certified Public Accountant and a Chartered Financial Analyst. Ms. Minton volunteers as a Girl Scout leader and enjoys riding her horse, Abner.

*Arthur L. Money* was elected a Director of Essex in January 2003. Mr. Money served as the Assistant Secretary of Defense for Command, Control, Communication and Intelligence (C3I) from October 1999 to April 2001. Prior to his Senate confirmation in that role, he was the Senior Civilian Official, Office of the ASD (C3I) from February 1998. Mr. Money also served as the Chief Information Officer for the Department of Defense from 1998 to 2001. From 1996 to 1998, he served as Assistant Secretary of the Air Force for Research, Development and Acquisition, and as CIO for the Air Force. Prior to his government service, Mr. Money held senior management positions (including President) with ESL Inc., a subsidiary of TRW, and the TRW Avionics and Surveillance Group. Mr. Money serves on numerous United States Government Panels, Boards and Commissions. He additionally serves on many U.S. Company Boards, Advisory Boards and Advisory Groups. Mr. Money received a Bachelor of Science degree in Mechanical Engineering from San Jose State University in 1965, a Master of Science degree in Mechanical Engineering from University of Santa Clara in 1970 and attended the Harvard Executive Security Program in 1985 and the Program for Senior Executives at the Massachusetts Institute of Technology in 1988.

**Section 16(a) Beneficial Ownership Reporting Compliance**

Section 16(a) of the Securities Exchange Act of 1934, as amended (the Exchange Act) requires the Company's officers and directors, and persons who own more than ten percent of a registered class of the Company's equity securities (the Reporting Persons), to file reports of ownership and changes in ownership of equity securities of the Company with the Securities and Exchange Commission (SEC). Officers, directors, and greater than ten percent shareholders are required by SEC regulations to furnish the Company with copies of all Section 16(a) forms that they file.

## **Table of Contents**

Based solely upon a review of Forms 3 and Forms 4 furnished to the Company pursuant to Rule 16(a)-3 under the Exchange Act during its most recent fiscal year and Forms 5 with respect to its most recent fiscal year, the Company believes that all such forms required to be filed pursuant to Section 16(a) of the Exchange Act were timely filed by the Reporting Persons during the fiscal year ended December 31, 2004.

### **Advisory Boards**

We have two advisory boards, composed of recognized leaders in the intelligence community, defense industry and communications industry, to assist us in identifying opportunities to market our services and products.

#### ***National Programs Advisory Board***

The National Programs Advisory Board provides us with strategic guidance concerning the application of our optoelectronic and signal processing technology for high priority national security projects. Members of this board routinely meet with our technical and business development teams to assist in identifying opportunities in the intelligence community. The following individuals are members of our National Programs Advisory Board:

*Lieutenant General Claudia Kennedy* (retired) is the first and only woman to receive this flag rank in the United States Army. She served in the U.S. Army with distinction for 32 years, culminating in her appointment as Deputy Chief of Staff for Intelligence from 1997 to 2000. During her career, General Kennedy received numerous awards and decorations including the National Intelligence Distinguished Service Medal, the Legion of Merit (three Oak Leaf Clusters), and the Women's International Center's 1998 Living Legacy Patriot Award. General Kennedy has been named to a list of Best Women Role Models, and Vanity Fair's Most Influential. She was also named to the Ladies Home Journal's 100 Most Important Women's list. General Kennedy has been honored for leadership and lifetime achievement by such organizations as Business and Professional Women (USA), Girl Scout Council of Hawaii, Women Executives and State Government, National Women's Law Center, and the National Center for Women and Policy. She has received honorary degrees from Trinity College in Hartford, Connecticut, Rhodes College in Memphis, Tennessee, and Gannon University in Erie, Pennsylvania.

*Lieutenant General Kenneth Minihan* retired from the U.S. Air Force in 1999 after more than 33 years of distinguished service. He has served in many important positions including Director of the National Security Agency/Central Security Service and Director of the Defense Intelligence Agency. Currently, he is President of the Security Affairs Support Association, an organization for industry and government partnership to enhance intelligence business development. Among his awards and decorations are the National Security Medal, the Defense Distinguished Service Medal, the Bronze Star and the National Intelligence Distinguished Service Medal.

*Rear Admiral Don McDowell* retired from the U.S. Navy after more than 32 years of distinguished service. For over three years, he commanded the worldwide, 10,000 person Naval Security Group responsible for ship, airborne, and shore cryptologic systems. He also served as the Deputy Director of Naval Intelligence and Chief of Support to Military Operations at the National Security Agency. Since retiring from the Navy, he has been an active consultant to the intelligence industry on cryptologic and intelligence operations and systems.

## **Table of Contents**

### ***Technical Advisory Board***

Our Technical Advisory Board provides us with valuable advice, experience and access. By introducing us to key participants in our industry, we are better able to promote our services and products. The following individuals are members of our Technical Advisory Board:

*Dr. Fred Leonberger* served as Senior Vice President and Chief Technology Officer of JDS Uniphase Corporation, a leading optical components supplier, from 1999 until his retirement in June 2003. He previously held a similar position at Uniphase Corporation prior to its merger with JDS Fitel in 1999. He joined Uniphase in 1995 upon its acquisition of UTP, a company he co-founded and served as General Manager. He has been active in optoelectronics for over 25 years, an author of numerous patents and has also held a variety of staff and management positions at MIT Lincoln Laboratory and United Technologies Research Center. He presently is the Principal of EOvation Technologies LLC, a technology advisory firm, and serves on the Board of Directors of RF MicroDevices, Inc and Agility Communications. He is a member of the National Academy of Engineering.

*Dr. Paul Green* is a well-known communications expert recognized as the progenitor of the all-optical network with the publication of his book, *Fiber Optic Networks* in 1993 by Prentice Hall. His career began at MIT Lincoln Labs where he developed the first operational spread spectrum system. In 1958 he was the co-inventor and co-developer of RAKE receivers that are now widely used in cellular code division multiple access, or CDMA. In 1969, he became a senior manager at IBM Research Division where he later formed a team to develop the first wavelength division multiplexing network. He became the Director of the Optical Networking Technology Group at Tellabs in 1997 where he led a team to develop one of the first all-optical cross connect. Dr. Green is the past president of two Institute of Electrical and Electronics Engineers, or IEEE, professional societies, a member or chairman of several U.S. Government panels and editor of many IEEE publications. In 1981 he received the IEEE Pioneer Award and a National Academy of Engineering Award for his spread spectrum work. In 1994, Dr. Green received the Association of Computing Machinery SigComm Annual Award for data communications theory, protocols, architectures and technology.

*Sam Greenholtz* is a recently retired senior engineer in long distance planning for Verizon. He is a 27-year veteran of Verizon with a well-rounded background in various segments of the communications industry. Mr. Greenholtz is well known in the optical networking industry and has been selected to write and present position papers at such national transport network conferences as Optical Fiber Conference, National Fiber Optic Engineers Conference, Institute for International Research and COMPForum. Mr. Greenholtz's primary responsibility for his last six years at Verizon was technical evaluation of optical networking products including DWDM, OC-192 and optical cross-connects. In this role, Mr. Greenholtz completed the paper and laboratory evaluations for new optical networking products and had the responsibility for placing the first office applications into the interoffice network. Mr. Greenholtz now serves as a senior communications consultant and is the founder of Telecom Pragmatics, LLC, an advisory company to communication and financial services businesses.



## **Table of Contents**

*Joe Houston* has 39 years of engineering expertise and technical management experience. Mr. Houston is a former President of the International Society for Optical Engineering, and a noted author of numerous articles on optical processing. He was the Itek Vice President for Advanced Development and Special Projects where he pioneered work in optical signal processors. He also was the President of Houston Research Associates, a private consulting firm.

## **Board Composition**

Our board of directors consists of nine individuals. Directors are elected annually, and each director holds office for a one-year term. The board generally meets quarterly. Additionally, our bylaws provide for special meetings and, as also permitted by Virginia law, board action may be taken without a meeting upon unanimous written consent of all directors.

Our board of directors has adopted a policy providing that any transaction or series of similar transactions entered into between us (or any of our subsidiaries) and one or more of our executive officers, directors or greater than five percent shareholders, an immediate family member of any of the foregoing persons, or an entity in which any of the foregoing persons has or have a direct or indirect material interest, must be approved by a majority of the directors who do not have an interest in such transaction(s), if the amount involved in the transaction(s) exceeds \$60,000. There were no such transactions in fiscal year 2004 requiring board approval.

## **Board Committees**

The board of directors has two standing committees: the audit committee and the ethics committee.

***Audit Committee.*** Our audit committee is established in accordance with Section 3(a)(58)(A) of the Exchange Act of 1934 as amended, and composed of the following three directors: Messrs. Hicks and Keeler and Ms. Minton. Messrs. Hicks and Keeler and Ms. Minton are independent directors within the meaning of the independence standards of audit committee members of SEC Rule 10A-3(b) under the Securities Exchange Act of 1934 in addition to the current Nasdaq listing rules. Ms. Minton is an audit committee financial expert as defined by Item 401(h) of Regulation S-K of the Securities Act of 1933, as amended.

The primary responsibilities of the audit committee are to:

Oversee management's conduct of our financial reporting process and systems of internal accounting and financial control;

Monitor the independence and performance of our outside auditors;

Provide an avenue of communication among the outside auditors, management and our board of directors;

## Edgar Filing: ESSEX CORPORATION - Form 10-K

Make reports and recommendations to our board and our shareholders as necessary under the rules of the Securities and Exchange Commission or as otherwise within the scope of its functions; and

Oversee and, where appropriate, report to our board on our review of and response to any government audit, inquiry or investigation, as they determine to be appropriate.

## **Table of Contents**

The Board has implemented all necessary changes to the audit committee's charter to comply with Nasdaq's revised listing standards and may consider further changes to its charter and designated responsibilities as it deems necessary and appropriate. The Audit Committee held six meetings in 2004. One member was absent from one of the six meetings.

**Ethics Committee.** Mr. Leonard E. Moodispaw and Frank E. Manning composed our ethics committee until April 2004. Current members are Mr. Leonard Moodispaw and Mr. John G. Hannon. The primary responsibilities of the ethics committee are to:

Advise our management and the entire board of directors of means of ensuring that we adhere to the highest ethical standards in our day to day operations;

Ensure that a positive working environment is created and maintained for all our employees and that those employees are challenged to meet such a standard;

Provide a forum for advice to the corporate counsel, our management and any of our employees to consider ethical issues; and

Recommend to our management and the entire board of directors means of training managers and employees.

## **Code of Ethics**

The Company has adopted a Code of Ethics which applies to all directors and officers, including the Company's Chief Executive Officer and Chief Financial Officer. The Company has posted a copy of its Code of Ethics on its website at [www.essexcorp.com](http://www.essexcorp.com). Any person may receive a copy of this Code of Ethics at no charge by contacting the Company's Chief Administrative Officer, c/o Human Resources Department via mail, email or 1-800-533-7739.

**Compensation.** Nasdaq allows companies to have a separate Compensation Committee or have Independent Directors of the Board vote on compensation related items. The Board agreed as a whole to have Independent Directors act as the Compensation Committee beginning March 16, 2004. The Independent Directors of the Board will recommend to the full Board the levels of compensation paid to the CEO and other executive officers. The Directors performing these functions are Messrs. Hannon, Hicks, Johnson, Keeler, Money and Ms. Minton, all independent directors within the meaning of current Nasdaq listing rules.

The Company's executive compensation program is designed to attract and retain executives responsible for the Company's long-term success, to reward executives for achieving both financial and strategic company goals, to align executive and stockholder interests through long-term, equity-based plans, and to provide a compensation package that recognizes individual contributions as well as overall business results. As a result, a substantial portion of each executive's total compensation is intended to be variable and to be tied closely to the achievement of specific business objectives and corporate financial goals, as well as the attainment of the executive's individual performance objectives. The Company's executive compensation program also takes into account the compensation practices of companies with whom Essex competes for executive talent.

**Table of Contents**

The three key components of the Company's executive compensation program are base salary, variable incentive compensation, and long-term incentive awards in the form of stock options. Overall compensation is intended to be competitive for comparable positions at the peer companies.

**Item 11. EXECUTIVE COMPENSATION**

The following table sets forth the aggregate compensation paid or accrued for services rendered during the last three fiscal years by the Chief Executive Officer and the four other most highly compensated executive officers who served as such at the end of, or during, the last fiscal year and whose total compensation exceeded \$100,000. Ms. Jacobson is also listed due to her position as Executive Vice President and Chief Financial Officer.

**Summary Compensation Table**

Name and Principal Position	Year	Annual Compensation			Long-Term Compensation Awards
		Salary (\$) (1)	Bonus (\$)	Compensation (\$) (2)	Securities
					Other Annual Compensation
					Options/SARs (#)
Leonard E. Moodispaw President, CEO and Director	2004	255,024	100,000	12,966	
	2003	192,556	75,000	5,777	30,000
	2002	175,032		5,251	30,000
Terry M. Turpin Senior Vice President, Chief Scientist and Director	2004	204,774	30,000	10,394	
	2003	164,706	35,000	5,269	30,000
	2002	155,064		4,652	20,000
Rudolf Liskovec, Jr. Vice President (3)	2004	195,660	107,000	7,003	20,000
	2003	201,845	52,000	9,418	40,000
James J. Devine Executive Vice President and General Manager (4)	2004	177,008	50,000	8,960	50,000
Lisa G. Jacobson Executive Vice President and Chief Financial Officer (5)	2004	96,200	15,000	4,335	40,000
Joseph R. Kurry, Jr. Senior Vice President and Treasurer	2004	164,484	35,000	9,666	10,000
	2003	140,036	35,000	4,509	15,000
	2002	134,992		4,050	10,000

- 
- (1) Includes amounts deferred at the election of the named executive officer pursuant to Section 401(k) of the Internal Revenue Code ( 401(k) ).
  - (2) Represents matching 401(k) contributions made on behalf of the respective named executive officer pursuant to Essex s Retirement Plan and Trust. Excludes other perquisites and benefits not exceeding the lesser of \$50,000 or 10% of each named executive officer s total annual salary and bonus.
  - (3) Mr. Liskovec was hired on May 5, 2003. Prior to that time, Mr. Liskovec was a self employed consultant on direct program work for Essex and was paid \$4,620 in the period October December 2002 and \$90,860 in the period January 2003 April 2003. The amount paid in 2003 for consulting is included in salary in the table above. Mr. Liskovec also received a non qualified stock option for 10,000 shares in November 2002 with an exercise price at the market price of \$2.36. Mr. Liskovec was paid signing and other bonuses in 2003 of \$32,000.
  - (4) Mr. Devine was hired on February 9, 2004.
  - (5) Ms. Jacobson was hired on July 6, 2004.

**Table of Contents**

**Employee Benefit Plans**

***Defined Contribution Retirement Plan.*** The Essex Corporation Retirement Plan and Trust is a qualified defined contribution retirement plan which includes a 401(k) salary reduction feature for its employees. This plan calls for an employer matching contribution of up to 4.5% of eligible employee compensation under the salary reduction feature and a discretionary contribution as determined by the board of directors. We did not make any discretionary contribution between 2002 and 2004. The total authorized contribution under the matching contribution feature of this plan was approximately \$458,000 in 2004, \$130,000 in 2003 and \$75,000 in 2002. All employee contributions are 100% vested at all times and our contributions, prior to 2004, vested based on length of service. In accordance with the retirement plan and trust, as amended in 2004, employees vested 100% in our contributions. Vested contributions are distributable and benefits are payable only upon death, disability, retirement or break in service. Participants may request that their accrued benefits under the Section 401(k) portion of the plan be allocated among various investment options established by the plan administrator.

We terminated the qualified defined contribution and profit sharing retirement plan of one of our acquired companies, SDL, in December 2004. Under this plan, we recognized the required contributions of 8% or approximately \$216,000 and \$154,000 and additional contributions of 5% or approximately \$135,000 and \$96,000, for 2004 and for the period since acquisition, March 1, 2003 to December 28, 2003, respectively.

Our contributions under these plans for the persons referred to in the Summary Compensation Table are included in that table.

***Employee Incentive Performance Award Plan.*** We have an Employee Incentive Performance Award Plan under which bonuses are distributed to employees. All employees are eligible to receive such awards under flexible criteria designed to compensate for superior division and individual performance during each fiscal year. Awards are generally recommended annually by management and approved by the board of directors. These awards may be constrained by our overall financial performance. In 2004, we paid or accrued approximately \$1.3 million, including the \$337,000 awarded to the persons named in the Summary Compensation Table, under this plan. In 2003, we paid or accrued approximately \$269,000, including the \$197,000 awarded to the persons named in the Summary Compensation Table, under this plan. We did not make any awards under this plan in 2002.

***Restricted Stock Bonus Plan.*** We have a Restricted Stock Bonus Plan under which up to 50,000 shares of our common stock may be reserved for issuance to non-employee members of the board of directors and key employees selected by the board of directors. Shares of restricted stock may be issued under the Plan subject to forfeiture during a restriction period, fixed in each

**Table of Contents**

instance by the board of directors, whereby all rights of the grantee to the stock terminate upon certain conditions such as cessation of continuous employment during the restriction period. Upon expiration of the restriction period, or earlier upon the death or substantial disability of the grantee, the restrictions applicable to all shares of restricted stock of the grantee expire. While this plan also provides that we may advance loans to a grantee to pay income taxes due on the taxable value of shares granted under the plan, we have never issued any such loans. The Board of Directors has prohibited these loans.

**Stock Option Plans.** We have established several stock option and stock appreciation rights plans. These plans provide for the grant of options to purchase shares of our common stock which qualify as incentive stock options under Section 422 of the Internal Revenue Code of 1986, as amended, or the Code, to persons who are our employees, as well as non-qualified options which do not so qualify to be issued to persons or consultants, including those who are not employees. These plans also provide for grants of stock appreciation rights, or SARs, in connection with the grant of options under the plans. The exercise price of an incentive stock option under the plans may not be less than the fair market value of the shares at the time of grant; the exercise price of non-qualified options and the appreciation base price of SARs are determined in the discretion of the board of directors except that the SAR appreciation base price may not be less than 50% of the fair market value of a share of common stock on the grant date with respect to awards to persons who are officers or directors of Essex.

**Employee Stock Purchase Plan.** We have an Employee Stock Purchase Plan, or ESPP, to provide our employees with an opportunity to purchase our common stock through accumulated payroll deductions and direct payments. The ESPP, established in 2004, qualifies as an Employee Stock Purchase Plan under Section 423 of the Code. The purchase price per share is 85% of the fair market value per share of our common stock on the respective purchase date. One million of our unissued shares were reserved for the ESPP. In 2004, the ESPP purchased 2,582 shares of our common stock on behalf of the employees. The available balance in the ESPP as of February 28, 2005 is 997,418 shares.

We grant non-plan, non-qualified options from time to time directly to certain parties. In 2003, we issued such options for 30,000 shares to our Chief Scientist and 10,000 shares to our Treasurer. We did not grant any non-plan, non-qualified options in 2004 or 2002.

**Table of Contents**

The following table shows for the fiscal year ended December 31, 2004 for the persons named in the Summary Compensation Table, information with respect to options to purchase common stock granted during 2004.

**Stock Option Grants****For Fiscal Year Ended December 31, 2004**

Name	Number of Securities Underlying Options Granted	% Of Total Options/SARs Granted to Employees in 2004	Exercise or Base Price Per Share	Expiration Date	Potential realizable value at assumed annual rates of stock price appreciation for option term	
					5%	10%
Leonard E. Moodispaw			\$		\$	\$
Terry M. Turpin			\$		\$	\$
Rudolf Liskovec	10,000 <sup>(2)</sup> 10,000 <sup>(4)</sup>	1.7 1.7	\$ 7.65 \$ 9.00	03-25-14 07-25-11	\$ 124,610 \$ 126,639	\$ 198,421 \$ 175,385
James J. Devine	47,600 <sup>(1)</sup> 2,400 <sup>(1)</sup>	8.3 0.4	\$ 8.40 \$ 8.40	02-08-14 02-08-09	\$ 651,297 \$ 25,730	\$ 1,037,082 \$ 32,468
Lisa G. Jacobson	24,000 <sup>(3)</sup> 6,000 <sup>(3)</sup> 10,000 <sup>(4)</sup>	4.2 1.0 1.7	\$ 8.05 \$ 8.05 \$ 9.00	07-08-14 07-08-09 07-25-11	\$ 314,702 \$ 61,644 \$ 126,639	\$ 501,111 \$ 77,788 \$ 175,385
Joseph R. Kurry, Jr.	10,000 <sup>(4)</sup>	1.7	\$ 9.00	07-25-11	\$ 126,639	\$ 175,385

(1) Such options became exercisable beginning February 9, 2004.

(2) Such options became exercisable beginning March 26, 2004.

(3) Such options became exercisable beginning July 9, 2004.

(4) Such options became exercisable beginning July 26, 2004.

The following table shows for the fiscal year ended December 31, 2004 for the persons named in the Summary Compensation Table, information with respect to option/SAR exercises and fiscal year end values for unexercised options/SARs.

**Aggregated Option/SAR Exercises and Option/SAR****Values for Fiscal Year Ended December 31, 2004**



Edgar Filing: ESSEX CORPORATION - Form 10-K

Name	Shares		Number of Securities		Value of Unexercised	
	Acquired		Underlying Unexercised		In-the-Money Options at	
	on	Value	Options at FY-End #		FY-End \$ (1)	
	Exercise	Realized	Exercisable	Unexercisable	Exercisable	Unexercisable
Leonard E. Moodispaw		\$	395,000		\$ 7,016,300	\$
Terry M. Turpin		\$	221,450	550	\$ 3,822,380	\$ 9,840
Rudolf Liskovec		\$	56,900	13,100	\$ 903,690	\$ 158,310
James J. Devine	11,151	\$ 74,157	3,149	35,700	\$ 37,316	\$ 423,045
Lisa G. Jacobson		\$	20,000	20,000	\$ 239,250	\$ 239,250
Joseph R. Kurry, Jr.	7,500	\$ 48,375	175,500	5,000	\$ 3,047,040	\$ 56,250

(1) Market value of underlying securities based on the closing price of Essex's Common Stock on December 31, 2004 (last trading day of fiscal 2004) on the Nasdaq National Market of \$20.25 minus the exercise price.

## **Table of Contents**

### **Compensation Committee Interlocks and Insider Participation**

None of our executive officers serves on the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our board of directors or compensation committee.

### **Director Compensation**

Non-employee members of the board of directors receive a maximum of \$1,500 for each board meeting and \$750 for each board committee meeting they attend. Such members are also reimbursed for travel expenses incurred in connection with their attendance at board and committee meetings. Two members of the board of directors, Marie S. Minton and Arthur L. Money, receive \$1,500 per month for serving on an informal committee of the board with Messrs. Hannon and Leonard. The members of our board of directors who are affiliated with our significant shareholders, GEF and The Hannon Family LLC, have waived the right to receive any board fees. Employee directors do not receive fees for their service on our board of directors.

In addition, non-employee members of the board of directors are eligible to participate in our Restricted Stock Bonus Plan. Shares of restricted stock may be issued under this plan subject to forfeiture during a restriction period, fixed in each instance by the board of directors, whereby all rights of the grantee to the stock terminate upon certain conditions such as cessation of continuous membership on our board during the restriction period. Upon expiration of the restriction period, or earlier upon the death or substantial disability of the grantee, the restrictions applicable to all shares of restricted stock of the grantee expire. While this plan also provides that we may advance loans to a grantee to pay income taxes due on the taxable value of shares granted under the plan, we have never issued any such loans. The Board of Directors has prohibited these loans.

**Table of Contents****Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

The following table and accompanying notes set forth as of March 1, 2005, information with respect to the beneficial ownership of the Company's voting securities by (i) each person or group who beneficially owns more than 5% of the voting securities, (ii) each of the directors of the Company, (iii) each of the officers of the Company named in the Summary Compensation Table, and (iv) all directors and executive officers of the Company as a group.

Name and Address of Beneficial Owner*	Amount and Nature of Beneficial Ownership <sup>(1)</sup>	Percentage of Outstanding Shares of Common Stock Beneficially Owned
John G. Hannon <sup>(2)</sup>	1,949,498	9.3
H. Jeffrey Leonard <sup>(3)</sup>	1,096,162	5.2
Terry M. Turpin <sup>(4)</sup>	502,193	2.4
Leonard E. Moodispaw <sup>(5)</sup>	453,950	2.1
Joseph R. Kurry, Jr. <sup>(6)</sup>	207,861	1.0
Rudy Liskovec <sup>(7)</sup>	65,000	**
James J. Devine <sup>(8)</sup>	15,943	**
Lisa G. Jacobson <sup>(9)</sup>	20,000	**
Robert W. Hicks <sup>(10)</sup>	74,200	**
Anthony M. Johnson <sup>(11)</sup>	2,500	**
Ray M. Keeler <sup>(12)</sup>	46,000	**
Marie S. Minton <sup>(13)</sup>	15,000	**
Arthur L. Money <sup>(14)</sup>	27,500	**
The Hannon Family LLC <sup>(15)</sup>	1,438,973	6.9
GEF Management Corporation ( GEFMC <sup>(16)</sup> )	1,082,392	5.2
All Directors and Executive Officers as a Group (18 persons) <sup>(17)</sup>	4,804,059	21.6

\* Except as noted below, all beneficial owners are directors and/or officers of the Company and can be reached c/o Essex Corporation, 9150 Guilford Road, Columbia, MD 21046.

\*\* Less than 1%.

(1) The shares listed above include options and rights to acquire shares within sixty (60) days and shares held of record by the Essex Corporation Retirement Trust as to which shares the respective participant has disposition and voting rights. The percentage ownership is computed based upon the number of shares which would be outstanding if such options and rights were exercised.

(2) John G. Hannon is a Director of the Company. Of the shares of Common Stock shown as beneficially owned, 510,525 are owned directly by Mr. Hannon. In addition, The Hannon Family LLC owns 1,438,973 shares of Common Stock which may be deemed to be beneficially owned by Mr. Hannon.

---

**Table of Contents**

- (3) H. Jeffrey Leonard is Chairman of the Board of the Company and the President and a director of GEFMC. Of the shares of Common Stock shown as beneficially owned, 13,770 are owned directly by Mr. Leonard. In addition, 1,082,392 shares of Common Stock Mr. Leonard has shared voting power as described in footnotes (16) and (18) below. Mr. Leonard's address is c/o GEF Management Corporation, 1225 Eye Street, N.W., Suite 900, Washington, DC 20005.
- (4) Terry M. Turpin is a Director, Senior Vice President and Chief Scientist of the Company. Of the shares shown as beneficially owned, 227,000 represent presently exercisable rights to acquire Common Stock through stock options.
- (5) Leonard E. Moodispaw is President, Chief Executive Officer and a Director of the Company. Of the shares shown as beneficially owned, 395,000 represent presently exercisable rights to acquire Common Stock through stock options.
- (6) Joseph R. Kurry, Jr. is Senior Vice President and Treasurer of the Company. Of the shares shown as beneficially owned, 116,500 represent presently exercisable rights to acquire Common Stock through stock options.
- (7) Rudy Liskovec is Vice President of the Company. Of the shares shown as beneficially owned, 65,000 represent presently exercisable rights to acquire Common Stock through stock options.
- (8) James J. Devine is Executive Vice President and General Manager of the Company. Of the shares shown as beneficially owned, 2,400 represent presently exercisable rights to acquire Common Stock through stock options.
- (9) Lisa G. Jacobson is Executive Vice President and Chief Financial Officer of the Company. Of the shares shown as beneficially owned, 20,000 represent presently exercisable rights to acquire Common Stock through stock options.
- (10) Robert W. Hicks is a Director of the Company. Of the shares shown as beneficially owned, 34,000 represent presently exercisable rights to acquire Common Stock through stock options.
- (11) Anthony M. Johnson is a Director of the Company. Of the shares shown as beneficially owned, 2,500 represent presently exercisable rights to acquire Common Stock through stock options.
- (12) Ray M. Keeler is a Director of the Company. Of the shares shown as beneficially owned, 35,000 represent presently exercisable rights to acquire Common Stock through stock options.
- (13) Marie S. Minton is a Director of the Company. Of the shares shown as beneficially owned, 15,000 represent presently exercisable rights to acquire Common Stock through stock options.
- (14) Arthur L. Money is a Director of the Company. Of the shares shown as beneficially owned, 27,500 represent presently exercisable rights to acquire Common Stock through stock options.
- (15) Consists of 1,438,973 shares directly held by The Hannon Family LLC. Mr. John G. Hannon is the managing person of this entity.
- (16) Consists of 514,839 shares of Common Stock directly owned by GEFMC. Also consists of (i) 567,553 shares of Common Stock directly owned by GEFTM, by virtue of the arrangements described in footnote (18) below. GEF is a Delaware limited liability company with its principal executive offices located at 1225 Eye Street, N.W., Suite 900, Washington, DC 20005.
- (17) Of the shares shown as beneficially owned, 1,215,300 represent presently exercisable rights to acquire Common Stock through stock options.
- (18) Based on a Schedule 13D/A filed with the SEC on December 21, 2004, GEFMC and Mr. Leonard have shared voting power of 1,082,392 shares of Common Stock directly held for the account of GEF.

**Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

**Policy on Future Related Party Transactions**

Our board of directors has adopted a policy that transactions over \$60,000 between Essex and our officers, directors, principal shareholders and their affiliates must be (i) approved by a majority of the disinterested directors and (ii) on terms no less favorable to us than could be obtained from unaffiliated third parties. There were no such transactions during fiscal year 2004 requiring board approval.

**Table of Contents****Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The Company uses Stegman & Company ( Stegman ) as its principal accountant. The following table shows the fees that were billed to the Corporation by Stegman for professional services rendered for the fiscal years ended December 31, 2004 and December 28, 2003.

Fee Category	2004	2003
Audit Fees	\$ 50,500	\$ 32,000
Audit-Related Fees	68,750	44,000
Tax Fees	12,800	8,000
All Other Fees		
Total Fees	\$ 132,050	\$ 84,000

**Audit Fees**

This category includes fees for the audit of the Company's annual financial statements and review of financial statements included in the quarterly reports on Form 10-Q.

**Audit-Related Fees**

This category includes fees for assurance and related services that are reasonably related to the performance of the audit or review of the Corporation's financial statements and are not included above under Audit Fees. These services include services in connection with acquisitions and stock offerings, including comfort letters to underwriters.

**Tax Fees**

This category includes fees for tax return preparation, tax advice and tax planning.

**All Other Fees**

This category includes fees for products and services provided by Stegman that are not included in the services reported above.

**Pre-Approval of Services**

The Audit Committee pre-approves all services, including both audit and non-audit services, provided by the Company's independent accountants. For audit services, each year the independent auditor provides the Committee with an engagement letter outlining the scope of the audit services proposed to be performed during the year, which must be formally accepted by the Committee before the audit commences. The independent auditor also submits an audit services fee proposal, which also must be approved by the Committee before the audit commences.

**Table of Contents****PART IV****Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

(a) (1)	Consolidated Financial Statements	
	<u>Report of Independent Registered Public Accounting Firm</u>	63
	<u>Consolidated Balance Sheets</u>	64 - 65
	<u>Consolidated Statements of Operations</u>	66
	<u>Consolidated Statements of Changes in Shareholders' Equity</u>	67
	<u>Consolidated Statements of Cash Flows</u>	68
	<u>Notes to Consolidated Financial Statements</u>	69 - 86
(2)	Exhibits	
(i)	Exhibit 2 Plans of Acquisition	
	2.1 Agreement and Plan of Merger among Essex Corporation, CSI Acquisition Corp., Computer Science Innovations, Inc and Computer Science Innovations Employee Stock Ownership Plan dated as of April 19, 2004 and executed on April 28, 2004	A
	2.2 Asset Purchase Agreement by and between Essex Corporation and the Performance Group, Inc. ( PGI ) dated as of June 3, 2004.	B
	2.3 Purchase Agreement By and Among Essex Corporation, The Windermere Group, LLC, Windermere HDS, LLC, Windermere Information Technology Systems, LLC and the Sellers of The Windermere Group, LLC dated February 28, 2005	C
(i)	Exhibit 3(i) - Articles of Incorporation	D
	Exhibit 3(i) - Articles of Amendment	D
	Exhibit 3(ii) - By-Laws, as amended	E
(ii)	Exhibit 4 - Instruments defining the Rights of Holders	
	4.3 Specimen of Common Stock Certificate	F
(iii)	Exhibit 10 - Material Contracts	
	10.3 Restricted Stock Bonus Plan	F
	10.4 Option and Stock Appreciation Rights Plan	F
	10.6 Pension Plan and Trust Agreement	F
	10.7 Defined Contribution Retirement Plan	F
	10.8 Incentive Performance Award Plan	F
	10.11 Option Agreement between the Company and Rumsey Associates Limited Partnership	F
	10.13 Registration Rights Agreement	F
	10.15 1996 Stock Option and Appreciation Rights Plan	G
	10.22 1998 Stock Option and Appreciation Rights Plan	H
	10.23 1999 Stock Option and Appreciation Rights Plan	I
	10.24 2000 Stock Option and Appreciation Rights Plan	J
	10.25 Flex Lease Agreement Between PHL-OPCO, LP, as Landlord and Essex Corporation, As Tenant, Rivers 95 Columbia, MD	K
	10.26 2001 Stock Option and Appreciation Rights Plan	L
	10.27 2002 Stock Option and Appreciation Rights Plan	M
	10.28 2004 Stock Incentive Plan	D
	10.29 2004 Employee Stock Purchase Plan	D
(iv)	Exhibit 23 - Consent of Experts and Counsel	
	23.1 Consent of Independent Registered Public Accounting Firm	87
(v)	Exhibit 31 Rule 13a-14(a)/15d-14(a) Certifications	
	31.1 Rule 13a-14(a)/15d-14(a) Certification of the Chief Executive Officer	88
	31.2 Rule 13a-14(a)/15d-14(a) Certification of the Chief Financial Officer	89
(vi)	Exhibit 32 Section 1350 Certifications	

**Table of Contents**

32.1	Section 1350 Certification of the Chief Executive Officer	N
32.2	Section 1350 Certification of the Chief Financial Officer	N
(vii)	Exhibit 99	
(a)	Securities Purchase Agreement dated September 7, 2000	O
(b)	Registration Rights Agreement dated September 7, 2000	O
(c)	Common Stock Purchase Warrants dated September 12, 2000	O
(3)	Financial Statement Schedules	
	None	

A	Filed as Exhibit to Registrant's Form 8-K dated April 30, 2004
B	Filed as Exhibit to Registrant's Form 8-K dated June 28, 2004
C	Filed as Exhibit to Registrant's Form 8-K dated February 28, 2005
D	Filed as Exhibit to Form 10-Q dated November 8, 2004
E	Filed as Exhibit 3(ii) to Registrant's Registration Statement on Form SB-2 filed October 17, 1994, Registration No. 33-82920
F	Filed as Exhibit to Registrant's Registration Statement on Form SB-2 filed October 17, 1994, Registration No. 33-82920
G	Filed as Exhibit to Registrant's Form 8-K dated November 13, 1996
H	Filed as Exhibit to Form Def 14a - Definitive Proxy Statement dated October 12, 1998
I	Filed as Exhibit to Form Def 14a - Definitive Proxy Statement dated October 11, 1999
J	Filed as Exhibit to Form Def 14a - Definitive Proxy Statement dated November 10, 2000
K	Filed as Exhibit to Registrant's Form 8-K dated December 12, 2001
L	Filed as Exhibit to Form Def 14a - Definitive Proxy Statement dated May 23, 2001
M	Filed as Exhibit to Form Def 14a - Definitive Proxy Statement dated October 10, 2002
N	These exhibits are being furnished with this periodic report and are not deemed filed with the Securities and Exchange Commission and are not incorporated by reference in any filing of the Company under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation by reference language in any such filing.
O	Filed as Exhibit to Registrant's Form 8-K dated September 20, 2000



Table of Contents

**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.

ESSEX CORPORATION

(Registrant)

By:                     /s/ Leonard E. Moodispaw

Leonard E. Moodispaw  
President and Chief Executive Officer;

Principal Executive Officer

March 29, 2005

By:                     /s/ Lisa G. Jacobson

Lisa G. Jacobson  
Executive Vice President and Chief Financial Officer;  
Principal Financial and Accounting Officer

March 29, 2005

In accordance with the Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

                    /s/ John G. Hannon

John G. Hannon, Director  
March 29, 2005

                    /s/ Robert W. Hicks

Robert W. Hicks, Director  
March 29, 2005

                    /s/ Ray M. Keeler

Ray M. Keeler, Director  
March 29, 2005

                    /s/ Anthony M. Johnson

Anthony M. Johnson, Director

                    /s/ Marie S. Minton

Marie S. Minton, Director  
March 29, 2005

                    /s/ Arthur L. Money

Arthur L. Money, Director  
March 29, 2005

                    /s/ Leonard E. Moodispaw

Leonard E. Moodispaw, Director  
March 29, 2005

                    /s/ Terry M. Turpin

Terry M. Turpin, Director

Edgar Filing: ESSEX CORPORATION - Form 10-K

March 29, 2005

March 29, 2005

/s/ H. Jeffrey Leonard

---

H. Jeffrey Leonard, Director  
March 29, 2005

**Table of Contents**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Shareholders of

Essex Corporation and Subsidiary

Columbia, Maryland

We have audited the accompanying consolidated balance sheets of Essex Corporation and subsidiary (the Company) as of December 31, 2004 and December 28, 2003 and the related consolidated statements of operations, changes in shareholders' equity and cash flows for the fiscal years ended December 31, 2004, December 28, 2003 and December 29, 2002. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2004 and December 28, 2003 and the results of its operations and its cash flows for the fiscal years ended December 31, 2004, December 28, 2003 and December 29, 2002, in conformity with accounting principles generally accepted in the United States of America.

*/s/ Stegman & Company*

Baltimore, Maryland

March 7, 2005

**Table of Contents****ESSEX CORPORATION AND SUBSIDIARY****CONSOLIDATED BALANCE SHEETS****AS OF DECEMBER 31, 2004 AND DECEMBER 28, 2003**

	<b>December 31, 2004</b>	<b>December 28, 2003</b>
<b>ASSETS</b>		
Current Assets		
Cash and cash equivalents	\$ 105,094,229	\$ 31,835,294
Accounts receivable, net	10,197,634	3,969,601
Note receivable - current portion	593,719	
Prepayments and other	506,207	146,517
<b>Total Current Assets</b>	<b>116,391,789</b>	<b>35,951,412</b>
Property and Equipment		
Computers and special equipment	2,667,067	1,226,349
Furniture, equipment and other	1,174,275	250,138
	3,841,342	1,476,487
Accumulated depreciation and amortization	(1,544,261)	(1,107,790)
<b>Net Property and Equipment</b>	<b>2,297,081</b>	<b>368,697</b>
Other Assets		
Goodwill	11,842,193	2,998,000
Patents, net	312,548	333,648
Other intangibles, net	2,294,102	50,141
Note receivable - non-current	2,045,033	
Other	383,130	23,764
<b>Total Other Assets</b>	<b>16,877,006</b>	<b>3,405,553</b>
<b>TOTAL ASSETS</b>	<b>\$ 135,565,876</b>	<b>\$ 39,725,662</b>

The accompanying notes are an integral part of these statements.

**Table of Contents****ESSEX CORPORATION AND SUBSIDIARY****CONSOLIDATED BALANCE SHEETS****AS OF DECEMBER 31, 2004 AND DECEMBER 28, 2003**

	<b>December 31, 2004</b>	<b>December 28, 2003</b>
	<u>          </u>	<u>          </u>
<b>LIABILITIES AND SHAREHOLDERS EQUITY</b>		
Current Liabilities		
Accounts payable	\$ 3,643,408	\$ 694,434
Note payable		100,000
Accrued wages and vacation	1,845,542	898,498
Accrued retirement plans contribution payable	235,749	298,551
Advance payments	481,727	462,000
Other accrued expenses	1,772,657	522,538
Capital leases	12,000	4,390
	<u>          </u>	<u>          </u>
Total Current Liabilities	7,991,083	2,980,411
	<u>          </u>	<u>          </u>
Long-Term Debt		
Capital leases, net of current portion	29,358	
	<u>          </u>	<u>          </u>
Total Long-Term Debt	29,358	
	<u>          </u>	<u>          </u>
Total Liabilities	8,020,441	2,980,411
	<u>          </u>	<u>          </u>
Shareholders Equity		
Common stock, no par value; 50 million and 25 million shares authorized, respectively; 20,917,493 and 15,241,257 shares issued and outstanding, respectively	137,531,225	49,004,021
Additional paid-in capital	2,000,000	2,000,000
Accumulated deficit	(11,985,790)	(14,258,770)
	<u>          </u>	<u>          </u>
Total Shareholders Equity	127,545,435	36,745,251
	<u>          </u>	<u>          </u>
<b>TOTAL LIABILITIES AND SHAREHOLDERS EQUITY</b>	<b>\$ 135,565,876</b>	<b>\$ 39,725,662</b>
	<u>          </u>	<u>          </u>

The accompanying notes are an integral part of these statements.

Table of Contents

**ESSEX CORPORATION AND SUBSIDIARY**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**FOR THE FISCAL YEARS ENDED**

**DECEMBER 31, 2004, DECEMBER 28, 2003 AND DECEMBER 29, 2002**

	<u>2004</u>	<u>2003</u>	<u>2002</u>
<b>Revenues:</b>			
Services and Products	\$ 55,421,914	\$ 16,286,210	\$ 4,506,419
Purchased Hardware	15,049,520		
<b>Total</b>	<b>70,471,434</b>	<b>16,286,210</b>	<b>4,506,419</b>
<b>Costs of goods sold and services provided:</b>			
Services and Products	(41,261,451)	(10,388,831)	(2,593,677)
Purchased Hardware	(14,568,973)		
<b>Total</b>	<b>(55,830,424)</b>	<b>(10,388,831)</b>	<b>(2,593,677)</b>
<b>Gross Margin</b>	<b>14,641,010</b>	<b>5,897,379</b>	<b>1,912,742</b>
Selling, general and administrative expenses	(11,129,393)	(4,905,475)	(2,668,117)
Research and development expenses	(1,038,017)	(403,051)	(1,394,784)
Amortization of other intangibles	(522,880)	(380,608)	
<b>Operating Income (Loss)</b>	<b>1,950,720</b>	<b>208,245</b>	<b>(2,150,159)</b>
Interest/dividend income (expense), net	332,260	(68,653)	(23,458)
<b>Income (Loss) Before Income Taxes</b>	<b>2,282,980</b>	<b>139,592</b>	<b>(2,173,617)</b>
Provision for income taxes	(10,000)		
<b>Net Income (Loss)</b>	<b>\$ 2,272,980</b>	<b>\$ 139,592</b>	<b>\$ (2,173,617)</b>
<b>Basic Earnings (Loss) Per Common Share</b>	<b>\$ 0.15</b>	<b>\$ 0.02</b>	<b>\$ (0.29)</b>
<b>Diluted Earnings (Loss) Per Common Share</b>	<b>\$ 0.13</b>	<b>\$ 0.01</b>	<b>\$ (0.29)</b>
<b>Weighted Average Number of Shares</b>			
Basic	15,603,495	8,706,498	7,410,647
Effect of dilution Stock options	1,542,878	1,091,456	
<b>Diluted</b>	<b>17,146,373</b>	<b>9,797,954</b>	<b>7,410,647</b>

The accompanying notes are an integral part of these statements.



**Table of Contents****ESSEX CORPORATION AND SUBSIDIARY****CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY****FOR THE FISCAL YEARS ENDED DECEMBER 31, 2004, DECEMBER 28, 2003 AND DECEMBER 29, 2002**

	Common Stock		Preferred Stock		Prepaid Warrant	Additional Paid-In Capital	Accumulated Deficit	Total
	Shares	Amount	Shares	Amount				Share- Holder s Equity
BALANCE, DECEMBER 30, 2001	5,155,605	\$ 8,870,044	500,000	\$ 2,000,000	\$	\$ 2,000,000	\$ (12,224,745)	\$ 645,299
Preferred stock converted	2,000,000	2,000,000	(500,000)	(2,000,000)				
Common stock issued	511,538	1,400,003						1,400,003
Stock options exercised	81,350	143,398						143,398
Retired shares/cashless stock option tender	(6,261)	(26,250)						(26,250)
Stock compensation	31,500	269,325						269,325
Prepaid warrant issued					100,000			100,000
Prepaid warrant converted	16,666	50,000			(50,000)			
Net loss							(2,173,617)	(2,173,617)
BALANCE, DECEMBER 29, 2002	7,790,398	12,706,520			50,000	2,000,000	(14,398,362)	358,158
Common stock sold	4,000,000	31,391,242						31,391,242
Stock warrants exercised, net	1,999,892	1,000						1,000
Conversion of note payable	192,307	551,528						551,528
Acquisition of company	1,104,907	4,020,361						4,020,361
Stock options exercised	141,017	316,369						316,369
Retired shares/cashless stock option tender	(3,930)	(32,999)						(32,999)
Prepaid warrant converted	16,666	50,000			(50,000)			
Net income							139,592	139,592
BALANCE, DECEMBER 28, 2003	15,241,257	49,004,021				2,000,000	(14,258,770)	36,745,251
Common stock sold	5,717,634	87,721,800						87,721,800
Stock warrants exercised, net	15,833							
Stock compensation		18,000						18,000
Stock options exercised	369,307	840,568						840,568
Employee stock purchase plan	2,582	46,382						46,382
Retired shares/cashless stock	(7,451)	(99,546)						(99,546)



Edgar Filing: ESSEX CORPORATION - Form 10-K

option tender								
Returnable contingent shares	(421,669)							
Net income							2,272,980	2,272,980
BALANCE, DECEMBER 31, 2004	20,917,493	\$ 137,531,225		\$	\$	\$ 2,000,000	\$ (11,985,790)	\$ 127,545,435

The accompanying notes are an integral part of these statements.

**Table of Contents****ESSEX CORPORATION AND SUBSIDIARY****CONSOLIDATED STATEMENTS OF CASH FLOWS****FOR THE FISCAL YEARS ENDED DECEMBER 31, 2004, DECEMBER 28, 2003****AND DECEMBER 29, 2002**

	<u>2004</u>	<u>2003</u>	<u>2002</u>
<b>Cash Flows From Operating Activities:</b>			
Net Income (Loss)	\$ 2,272,980	\$ 139,592	\$ (2,173,617)
Adjustments to reconcile Net Income (Loss) to Net Cash Provided By (Used In) Operating Activities:			
Depreciation and amortization	463,335	187,085	147,401
Amortization of other intangibles	522,880	380,608	
Stock compensation expense			269,325
Contract reserve/account allowance	240,000	120,000	
Other		52,643	29,892
<b>Change in Assets and Liabilities:</b>			
Accounts receivable	(4,109,456)	(2,256,428)	(280,977)
Prepayments and other assets	(299,368)	25,906	(30,480)
Accounts payable	2,759,350	(66,615)	346,236
Accrued wages, vacation and retirement	574,617	683,641	(2,536)
Advance payments	19,727	327,000	135,000
Other accrued expenses	891,341	178,134	(57,861)
<b>Net Cash Provided By (Used In) Operating Activities</b>	<u>3,335,406</u>	<u>(228,434)</u>	<u>(1,617,617)</u>
<b>Cash Flows From Investing Activities:</b>			
Acquisitions, net of cash acquired	(14,113,425)	(309,000)	
Purchases of property and equipment	(2,044,000)	(193,956)	(29,677)
Proceeds from sale of property and equipment		2,118	
<b>Net Cash Used In Investing Activities</b>	<u>(16,157,425)</u>	<u>(500,838)</u>	<u>(29,677)</u>
<b>Cash Flows From Financing Activities:</b>			
Sales of common stock	87,803,853	31,391,242	1,450,003
Note receivable	(2,397,283)		
Convertible note payable			500,000
Exercise of stock options	787,404	283,370	117,148
Note payable	(100,000)	100,000	
Short-term borrowings/repayments, net		(169,432)	169,432
Prepaid warrant			50,000
Payment of capital lease obligations	(13,020)	(71,261)	(177,220)
Other		400	
<b>Net Cash Provided By Financing Activities</b>	<u>86,080,954</u>	<u>31,534,319</u>	<u>2,109,363</u>
<b>Cash and Cash Equivalents</b>			
Net increase	73,258,935	30,805,047	462,069
Balance beginning of period	31,835,294	1,030,247	568,178

Edgar Filing: ESSEX CORPORATION - Form 10-K

Balance	end of period	<u>\$ 105,094,229</u>	<u>\$ 31,835,294</u>	<u>\$ 1,030,247</u>
---------	---------------	-----------------------	----------------------	---------------------

The accompanying notes are an integral part of these statements.

**Table of Contents**

**ESSEX CORPORATION AND SUBSIDIARY**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002**

**NOTE 1: Summary of Significant Accounting Policies and Other Important Factors**

These consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, Computer Science Innovations, Inc. ( CSI ). All material intercompany transactions have been eliminated in consolidation.

***Reporting Year and Presentation***

For 2004, the Company has changed to a calendar year-end. For 2003 and 2002, the Company was on a 52/53 week fiscal year which ended the last Sunday in December. Years 2003 and 2002 were 52-week fiscal years.

The Company's bylaws provide that its fiscal year-end is determined by resolution of the board of directors. On December 22, 2004, the Board of Directors approved changing Essex's financial reporting to calendar year-end and quarterly reporting. Historically, Essex closed its fiscal year on the last Sunday in December and each fiscal quarter had ninety-one days. This change is effective for fiscal year end 2004 and added the five days from December 27 to December 31, inclusive, to fiscal 2004 results.

This change is relatively minor and is not significant for comparative purposes. As a result, there is no requirement under SEC rules to file a separate transition period report or intention to restate prior periods. Calendar reporting is more commonly used by industry peers and the Company believes this change will eliminate potential confusion about the periods for which the Company is reporting and the due dates for such reports.

The information furnished in the accompanying Consolidated Balance Sheets, Consolidated Statements of Operations and Consolidated Statements of Cash Flows have been prepared in accordance with accounting principles generally accepted in the United States of America for financial information. In the opinion of management, such information contains all adjustments considered necessary for a fair presentation of such information. The operating results for the year ended December 31, 2004 may not be indicative of the results of operations for any future period.

***Use of Estimates***

## Edgar Filing: ESSEX CORPORATION - Form 10-K

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. Estimates are used when accounting for uncollectible accounts receivable, inventory obsolescence and valuation, depreciation and amortization, intangible assets, goodwill, and employee benefit plans and contingencies, among others. Actual results could differ from those estimates.

**Table of Contents**

**ESSEX CORPORATION AND SUBSIDIARY**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002**

***Important Business Risk Factors***

The Company has historically been principally a supplier of technical services under contracts or subcontracts with departments or agencies of the U.S. Government, primarily the military services and other departments and agencies of the Department of Defense, or DoD. The Company's revenues have been and continue to come from such programs. The Company is focusing and expanding in this business area. See Note 11 Acquisitions and Note 16 Subsequent Event.

In recent years, the Company has expended significant funds to transition into the commercial marketplace, particularly the productization of its proprietary technologies in telecommunications and optoelectronic processors. In June 2000, the Company announced that it had filed applications to secure patent protection for innovative technologies in two communications device families: *hyperfine WDM* (wavelength division multiplexing) devices and wireless optical processor enhanced receiver architecture. The long-term success of the Company in these areas is dependent on its ability to successfully develop and market products related to its communications devices and optoelectronic processors. The success of these efforts is subject to changing technologies, competition and ultimately, market acceptance.

Primarily due to the expenditures for research and development ( R&D ) and marketing of its optoelectronics products and services, particularly the optical telecommunications device technologies, the Company incurred significant losses in 2002 and 2001. The Company increased R&D expenses to \$1.0 million in 2004 from \$403,000 in 2003 and had \$2.3 million and \$140,000 in net income, for the same periods. The Company plans to continue research and development spending in 2005 in the optoelectronics operations.

The Company is seeking to establish joint ventures or strategic partnerships including licensing of its technologies with major industrial concerns to facilitate these goals. Significant delays in the commercialization of the Company's optoelectronic products or failure to market such products could have an adverse effect on the Company's future operating results.

***Contract Accounting***

Revenues consist of services rendered on cost-plus-fixed-fee, time and materials and fixed-price contracts. Revenue on time and materials contracts (approximately 88%, 57% and 5% of total revenues in 2004, 2003 and 2002, respectively) is recognized to the extent of billable rates multiplied by hours delivered, plus other direct costs. Revenue on cost-plus-fixed-fee contracts (approximately 10%, 27% and 67% of total revenues in 2004, 2003 and 2002, respectively) is recognized to the extent of costs incurred plus a proportionate amount of fee earned. Revenue on fixed-price contracts (approximately 2%, 16% and 28% of total revenues in 2004, 2003 and 2002, respectively) is recognized on the percentage-of-completion method of accounting based on costs incurred in relation to the total estimated costs. Anticipated losses are recognized

as soon as they become known. A portion of the Company's business is with agencies of the

**Table of Contents**

**ESSEX CORPORATION AND SUBSIDIARY**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002**

U.S. Government and such contracts are subject to audit by cognizant government audit agencies. Furthermore, while such contracts are fully funded by appropriations, they may be subject to other risks inherent in government contracts, such as termination for the convenience of the government. Because of the inherent uncertainties in estimating costs and the potential for audit adjustments by U.S. Government agencies, it is at least reasonably possible that the estimates will change in the near term.

***Cash and Cash Equivalents***

The Company considers all highly liquid investments purchased with expected original maturities of three months or less to be cash equivalents.

***Property and Equipment***

Property and equipment are stated at cost. Depreciation is calculated using straight-line methods based on useful lives as follows:

Leasehold improvements	Life of lease
Computers and special equipment	3 to 5 years
Furniture and equipment	3 to 5 years

Repairs and maintenance are charged to expense as incurred. When assets are retired or otherwise disposed of, the asset and related allowance for depreciation are eliminated from the accounts and any resulting gain or loss is reflected in income.

Depreciation expense was \$436,000 in 2004, \$171,000 in 2003 and \$132,000 in 2002.

***Goodwill and Other Intangible Assets***



## Edgar Filing: ESSEX CORPORATION - Form 10-K

Business acquisitions typically result in the recording of goodwill and other intangible assets, which affect the amount of future period amortization expense and possible impairment expense that we will incur. We have adopted Statement of Financial Accounting Standards, or SFAS, No. 142 which requires that we, on an annual basis, calculate the fair value of the reporting units that contain the goodwill and compare that to the carrying value of the reporting unit to determine if impairment exists. Impairment testing must take place more often if circumstances or events indicate a change in the impairment status. Management judgment is required in calculating the fair value of the reporting units. Because of the integral technologies and operations of the acquisitions to date, we have determined that Essex has only one corporate-wide reporting entity to which this test applies.

**Table of Contents**

**ESSEX CORPORATION AND SUBSIDIARY**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002**

***Patent Costs***

Patent costs include legal and filing fees covering the various patents which have been issued or are issuable to the Company. Patent costs are amortized over their respective lives (15-20 years) and amortization was \$27,000 in 2004, \$16,000 in 2003 and \$15,000 in 2002.

***Research and Development***

Research and development costs are expensed as incurred. Such costs include direct labor and materials as well as a reasonable allocation of overhead costs. However, no general and administrative costs are included. Equipment which has alternative future uses is capitalized and charged to expense over its estimated useful life.

***Impairment of Long-Lived Assets***

Long-lived assets and identifiable intangibles to be held and used are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount should be addressed. Impairment is measured by comparing the carrying value to the estimated undiscounted future cash flows expected to result from use of the assets and their eventual disposition. No impairment was recognized in 2002-2004.

***Income Taxes***

Deferred income taxes are recorded under the asset and liability method whereby deferred tax assets and liabilities are recognized for the future tax consequences, measured by enacted tax rates, attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss carryforwards. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period the rate change becomes effective. Management periodically evaluates the valuation allowance recorded against net operating loss carryforwards to assess whether information exists to warrant reversal. At December 31, 2004, management has determined that reversal of the existing valuation allowance is not warranted at this time because the Company continues to experience significant book tax differences which the Company's management believes should reduce taxable income substantially below income reported on the financial statements. Those differences include amortization of goodwill over fifteen years and the deduction associated with the exercise of employee stock options. Also, while the Company achieved both book and taxable profit in 2004, it did not have sufficient future firm funded sales backlog at December 31, 2004 to ensure sufficient future taxable income to realize the deferred tax asset.

*Stock Based Compensation*

As discussed in Note 9, the Company has several stock option plans. The Company currently applies the intrinsic value method in accounting for those plans. Under the intrinsic value method, compensation cost is the excess, if any, of the quoted market price of the stock at grant date or other measurement date over the amount an employee must pay to acquire the stock.

Table of Contents

## ESSEX CORPORATION AND SUBSIDIARY

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002

If the Company had used the fair value based method of accounting, net earnings and earnings per share would have been reduced to the pro forma amounts listed in the below table.

	December 31, 2004	December 28, 2003	December 29, 2002
Net income (loss)	\$ 2,272,980	\$ 139,592	\$ (2,173,617)
Less: Total stock-based employee compensation expense determined under fair value based method for all awards	(3,163,434)	(837,553)	(897,452)
Pro forma loss	\$ (890,454)	\$ (697,961)	\$ (3,071,069)
Earnings (loss) per share:			
Basic-as reported	\$ 0.15	\$ 0.02	\$ (0.29)
Basic-pro forma	\$ (0.06)	\$ (0.08)	\$ (0.41)
Diluted-as reported	\$ 0.13	\$ 0.01	\$ (0.29)
Diluted-pro forma	\$ (0.06)	\$ (0.08)	\$ (0.41)

The fair value of each option is estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions:

	2004	2003	2002
Dividend yield	0.00%	0.00%	0.00%
Volatility	55.25%	63.97%	101.50%
Weighted average risk free interest rate	4.50%	3.97%	4.32%
Weighted average expected lives of grants	8.1 years	10 years	9.7 years

The weighted average grant date fair value of the options issued in 2004, 2003 and 2002 was approximately \$6.39, \$3.23 and \$2.30, respectively.

**NOTE 2: Recent Accounting Pronouncements**

## Edgar Filing: ESSEX CORPORATION - Form 10-K

In December 2004, the Financial Accounting Standards Board ( FASB ) issued Statement of Financial Accounting Standards ( SFAS ) No. 123R, Share-Based Payment , which is a revision of SFAS No. 123, Accounting for Stock Issued to Employees . SFAS No. 123R requires that all share-based payments to employees, including grants of employee stock options, be valued at fair value on the grant date and be expensed over the applicable vesting period. SFAS No. 123R is effective for the Company on July 1, 2005. The Company will transition to SFAS No. 123R using the modified prospective application . Under the modified prospective application , compensation costs will be recognized in the financial statements for all new share-based payments granted after July 1, 2005. Additionally, the Company will recognize

**Table of Contents****ESSEX CORPORATION AND SUBSIDIARY****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002**

compensation costs for the portion of previously granted awards for which the requisite service has not been rendered ( nonvested awards ) that are outstanding as of July 1, 2005 over the remaining requisite service period of the awards. The compensation expense to be recognized for the nonvested awards will be based on the fair value of the awards. We are currently evaluating the effect that the adoption of SFAS No. 123R will have on our financial position and results of operations, and it is possible that our adoption of this Standard may adversely affect our operational results in future periods. At December 31, 2004, the total valuation of options issued and vesting after July 1, 2005 is expected to be \$267,000 with \$192,000 vesting in the year ending December 31, 2005.

**NOTE 3: Accounts Receivable**

Accounts receivable consist of the following:

	<u>2004</u>	<u>2003</u>
U.S. Government		
Amounts billed, including retainages	\$ 8,389,178	\$ 3,899,779
Amounts unbilled	\$ 1,864,001	\$ 239,822
Commercial and other	374,455	
	<u>10,627,634</u>	<u>4,139,601</u>
Contract reserves and allowances for doubtful accounts	(430,000)	(170,000)
	<u>\$ 10,197,634</u>	<u>\$ 3,969,601</u>

U.S. Government receivables arise from U.S. Government prime contracts and subcontracts. Retainages (which are not material) will be collected upon job completion or settlement of audits performed by cognizant U.S. Government audit agencies. The accuracy and appropriateness of the Company's direct and indirect costs and expenses under its government contracts and, therefore, its receivables recorded pursuant to such contracts, are subject to extensive regulation and audit by the Defense Contract Audit Agency or by other appropriate governmental agencies. These agencies have the right to challenge the Company's direct and indirect costs charged to any such contract. Additionally, substantial portions of the payments to the Company under government contracts are provisional payments that are subject to potential adjustment upon audit by such agencies. Company cost records have been audited through 2001. In the year an audit is settled, the difference between audit adjustments and previously established reserves is reflected in income.

Edgar Filing: ESSEX CORPORATION - Form 10-K

Contract reserves and allowances for doubtful accounts have been provided where less than full recovery under the contract is expected.

Table of Contents

## ESSEX CORPORATION AND SUBSIDIARY

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002

**NOTE 4: Major Customer Information**

The Company had revenues of \$45.2 million (approximately 64.1% of revenues) and \$1.5 million (approximately 9%) in 2004 and 2003, respectively, from our largest award with the NSA. The Company had revenue of \$4.0 million in 2004 and \$3.5 million in 2003 (approximately 5.7% and 21.5% of respective revenues) from its subcontract to provide communications systems support to the intelligence community. In addition, the Company had \$1.3 million in revenues (approximately 1.9% of revenues) from the DoD Missile Defense Agency to design a next generation optoelectronic radar processor. Begun in 2002, such work amounted to \$3.3 million of 2003 (20.6% of revenues) and \$2.1 million of 2002 revenues (46% of revenues).

**NOTE 5: Convertible Note Payable**

On December 17, 2002, the Company entered into a Convertible Note Purchase Agreement with one of its Private Investors. The Company issued a \$500,000 unsecured promissory note due December 31, 2004. The note bore interest at 10%; such interest was deferrable until maturity. The outstanding principal balance was convertible into common stock at \$2.60 per share, the approximate market price of the Company's stock at the date of issuance of the note. If the note was converted, then no interest would be paid. The note was converted into 192,307 shares of common stock on December 22, 2003 and \$51,528 of interest was waived.

**NOTE 6: Other Accrued Expenses**

Other accrued expenses consists of the following:

	2004	2003
Subcontractors payable	\$ 851,208	\$
Obligation to landlord	241,469	
Payroll tax withholding	145,391	105,192
Legal and printing registration statement expenses	82,053	230,439
Patent legal expenses	58,995	89,262
Other	393,541	97,645



## Edgar Filing: ESSEX CORPORATION - Form 10-K

Total accrued expenses	\$ 1,772,657	\$ 522,538
------------------------	--------------	------------

### NOTE 7: Common Stock; Warrants; Preferred Stock

The Company's Articles of Incorporation authorize 50 million shares of common stock, no par value per share. The increase in authorized shares from 25 million shares to 50 million shares was approved by the shareholders at the Annual Meeting in July 2004.

The Company's Articles of Incorporation authorize 1 million shares of preferred stock, par value \$0.01 per share, the series and rights of which may be designated by the Board of Directors in accordance with applicable state and federal law. In September 2000, the Board designated 500,000 shares of such preferred stock as Series B. There were 312,500 shares of Series B issued in 2000 for \$1,250,000 and the remaining 187,500 issued in 2001 for \$750,000 to the Company's Private Investors. The 500,000 Series B shares were converted as required into 2 million shares of common stock in September 2002. No preferred shares are currently outstanding.

**Table of Contents**

**ESSEX CORPORATION AND SUBSIDIARY**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002**

In connection with the issuance of the preferred stock, the Company also issued common stock warrants to the preferred stock holders. These warrants were for an additional 2 million shares of common stock. The warrants did not become exercisable until certain terms and conditions were met. The Company determined that the warrants had a nominal fair value at issuance due to the restrictive covenants. The warrants became exercisable upon the completion of the follow-on public offering on December 9, 2003. The warrants were exercised in December 2003 at a price of \$1,000, net of cashless tenders.

In addition to the preferred stock transactions, the Company completed several private placement transactions of its common stock directly with its Private Investors or their affiliates. In 2002, the Company received \$1,450,000 and issued approximately 528,000 shares of common stock. In January 2003, a prepaid warrant for \$50,000 was converted into approximately 16,000 shares of common stock.

The Company completed a follow-on public offering in December 2003 and issued 4,000,000 shares of common stock. The Company received net proceeds of \$31.4 million. In January 2004, the underwriters exercised their overallotment option and the Company sold an additional 150,000 common shares and received net proceeds of \$1.2 million.

In connection with the March 1, 2003 acquisition of Sensys Development Laboratories, Inc. ( "SDL" ), the Company, had issued approximately 422,000 common shares into escrow. These shares were to be released to certain SDL shareholders or returned to Essex based upon certain factors, principally the future market price of the Company's stock. During the first quarter of 2004, the 422,000 shares in escrow were returned to the Company in accordance with the terms of the purchase agreement.

In December 2004, the Company completed a follow-on underwritten public offering of 5.6 million shares of its common stock and received net proceeds of approximately \$87.0 million.

**NOTE 8: Retirement Plan**

The Company has a qualified defined contribution retirement plan, the Essex Corporation Retirement Plan and Trust, which includes a salary reduction 401(k) feature for its employees. The Plan calls for an employer matching contribution of up to 4.5% of eligible employee compensation under the salary reduction feature and allows for a discretionary contribution. Total authorized contributions under the matching contribution feature of the Plan were approximately \$458,000 in 2004, \$130,000 in 2003 and \$75,000 in 2002. There were no discretionary contributions in these years.

## Edgar Filing: ESSEX CORPORATION - Form 10-K

In accordance with the retirement plan and trust, as amended in 2003 or prior, such authorized contributions and the resulting annual expense can be reduced by forfeitures by

**Table of Contents****ESSEX CORPORATION AND SUBSIDIARY****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002**

terminated employees of unvested amounts of prior years' contributions. Forfeitures of \$5,000 and \$13,000 were utilized to reduce annual expenses in 2003 and 2002, respectively. In accordance with the retirement plan and trust, as amended in 2004, all employees became fully vested in contributions, thus forfeitures are no longer applicable.

The Company terminated the qualified defined contribution and profit sharing retirement plan of its acquired company, SDL, in December 2004. Under this plan, the Company recognized the required contributions of 8% or approximately \$216,000 and \$154,000 and additional contributions of 5% or approximately \$135,000 and \$96,000, for 2004 and for the period since acquisition, March 1, 2003 to December 28, 2003, respectively.

**NOTE 9: Stock Option and Stock Bonus Plans; Other Stock Options**

The Company has several stock option plans with similar terms and conditions. The plans reserve 2,619,496 shares of the Company's unissued shares for option and stock appreciation rights (SAR) grants. The plans expire through 2014. Options, which may be tax qualified (ISOs) and non-qualified (NSOs), are exercisable for a period of up to 10 years at prices at or above market price as established on the date of grant. Under the plans, the Company will accept shares of its stock that were previously owned for at least 6 months by the option holder as payment for options being exercised. In such a transaction, the Company retires the stock tendered and issues the new shares at the same overall consideration. There is no change on the capital accounts but there is a net increase in the shares outstanding. In other transactions, the option holder may use a broker to sell a portion of the option shares in the open market to provide the option exercise proceeds. In this case, the option holder is the owner of the option shares being sold and the broker/option holder bear the risk of the open market sale. Upon the exercise of a stock appreciation right, the recipient will receive payment in the form of stock, cash, or both, as determined by the Company, equal to the appreciation in value of the shares to which the rights were awarded. A total of 617,023 ISO or NSO options were granted under the plans in 2004. No SARs were granted under the plans in 2004 or are outstanding.

**Stock Option Plans**

	Number of Shares	Weighted Average Exercise Price Per Share (\$)
Outstanding, 12/30/01	1,348,818	2.79
Granted	199,250	2.70
Exercised	(71,350)	1.83

Edgar Filing: ESSEX CORPORATION - Form 10-K

Canceled	(14,500)	3.69
Outstanding, 12/29/02	1,462,218	2.79
Granted	228,500	4.38
Exercised	(50,418)	2.56
Canceled	(103,100)	2.95
Outstanding, 12/28/03	1,537,200	3.05
Granted	617,023	9.82
Exercised	(190,604)	3.37
Canceled	(3,500)	6.75
Outstanding, 12/31/04	1,960,119	5.14
Exercisable, 12/31/04	1,732,449	4.53

**Table of Contents****ESSEX CORPORATION AND SUBSIDIARY****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002**

As of December 31, 2004, the weighted average price for options outstanding was \$5.14 and for options exercisable \$4.53. The weighted average life for options outstanding was 6.1 years and for options exercisable 5.3 years. The following table summarizes information about all plan stock options outstanding at December 31, 2004:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Shares #	Weighted- Average Remaining Contractual Life (Years)	Weighted- Average Exercise Price (\$)	Shares #	Weighted- Average Exercise Price (\$)
\$1.00 - \$1.69	279,500	4.1	1.17	279,500	1.17
\$2.04 - \$2.70	353,550	6.4	2.22	353,550	2.22
\$3.00 - \$3.96	546,300	5.5	3.67	546,300	3.67
\$4.65 - \$5.71	67,000	6.3	5.23	67,000	5.23
\$6.07 - \$8.70	395,074	7.7	7.44	286,004	7.23
\$9.00 - \$11.37	251,695	6.5	10.06	157,195	10.06
\$16.85 - \$18.54	67,000	6.9	17.10	42,900	17.05
	<b>1,960,119</b>			<b>1,732,449</b>	

The Company has an Employee Stock Purchase Plan, or ESPP, to provide its employees with an opportunity to purchase common stock of the Company through accumulated payroll deductions and direct payments. The ESPP, established in 2004, qualifies as an Employee Stock Purchase Plan under Section 423 of the Code. The purchase price per share is 85% of the fair market value per share of the Company's common stock on the respective purchase date. One million of the Company's unissued shares were reserved for the ESPP. In 2004, the ESPP purchased 2,582 shares of Essex Common Stock on behalf of the employees. The available balance in the ESPP as of February 28, 2005 is 997,418 shares.

The Company has a Restricted Stock Bonus Plan covering key employees and directors of the Company. The Plan can reserve up to 50,000 of the Company's unissued shares for awards. There were no shares awarded in 2004, 2003 or 2002. As of December 31, 2004, there were 4,050 shares available for award under the Plan.

The Company has issued, outside of existing plans, non-qualified stock options and warrants directly to certain parties, including employees. In connection with a 1994 lease settlement, an



**Table of Contents****ESSEX CORPORATION AND SUBSIDIARY****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002**

option for 125,000 shares was issued with an exercise price (as adjusted) of \$1.29 per share. Holders exercised 10,000 and 40,000 of these options in fiscal 2002 and 2003, respectively, and the remaining balance of 75,000 in January 2004. In 2003, the Company issued non-qualified options for 30,000 shares to its Chief Scientist and for 10,000 shares to its Treasurer. In all cases, the exercise price to these employees was equal to the market price on the date of grant.

In connection with the March 2003 acquisition, the Company issued approximately 195,000 non-qualified fully vested options for its common stock at below market prices in exchange for the fully vested outstanding options of the acquired company. As of December 31, 2004, there were 50,276 of these options outstanding at prices ranging from \$1.01 to \$2.29.

As of December 31, 2004, a summary of all non plan stock options and warrants is as follows:

Range of Exercise Prices	Options Outstanding and Exercisable		
	Shares #	Weighted- Average Remaining Contractual Life (Years)	Weighted- Average Exercise Price (\$)
\$1.00 - \$1.69	131,037	4.4	1.12
\$2.04 - \$3.69	287,739	6.1	2.80
\$6.07	35,000	6.8	6.07
	<b>453,776</b>		

**NOTE 10: Income Taxes**

The components of the Company's net deferred tax asset account are as follows as of the end of each fiscal year:

2004

2003



Edgar Filing: ESSEX CORPORATION - Form 10-K

NOL and tax credit carryforward	\$ 4,338,000	\$ 4,043,000
Acquisition NOL	947,000	
Accrued employee benefit costs	259,000	81,000
Advance payments	186,000	(146,000)
Allowance for doubtful accounts	166,000	58,000
Inventory valuation reserve	61,000	104,000
Other, net	8,000	6,000
	<hr/>	<hr/>
Deferred tax assets	5,965,000	4,146,000
	<hr/>	<hr/>
Cash basis tax reporting	(526,000)	(613,000)
	<hr/>	<hr/>
Deferred tax liabilities	(526,000)	(613,000)
	<hr/>	<hr/>
Net deferred tax assets	5,439,000	3,533,000
Valuation Reserve	(5,439,000)	(3,533,000)
	<hr/>	<hr/>
Net Deferred Tax Asset	\$	\$
	<hr/>	<hr/>

Table of Contents

## ESSEX CORPORATION AND SUBSIDIARY

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002

The valuation allowance increased in 2004 primarily due to the acquired net operating loss ( NOL ) and decreased during 2003, due primarily to cash basis reporting for an acquired company.

Income taxes (benefit) are reconciled to the amount computed by applying the federal corporate tax rate of 34% to income (loss) before taxes as follows:

	Fiscal Year		
	2004	2003	2002
Income tax expense (benefit) at federal corporate rate	\$ 776,000	\$ 47,000	\$ (739,000)
State taxes, net of federal benefit	136,000		
Non deductible amortization of intangibles/other	173,000		
Change in valuation allowance	1,888,000	(725,000)	712,000
Acquisition adjustments	(910,000)	613,000	
Stock-based compensation	(1,073,000)		
Effect of state income taxes	(498,000)		
Other	(482,000)	65,000	27,000
	<u>          </u>	<u>          </u>	<u>          </u>
Income tax expense	\$ 10,000	\$	\$
	<u>          </u>	<u>          </u>	<u>          </u>

In 2004, the Company adjusted its deferred tax assets for the effect of state income tax. Other items in 2004 primarily represent the effect of the differences between estimated 2003 tax position and the 2003 tax returns as filed in 2004.

As of December 31, 2004, the Company has a net operating loss ( NOL ) carryforward of \$10.3 million and tax credit carryforwards of \$344,000 that are available, subject to certain limitations, to offset future book income and taxes payable. The NOL begins to expire in 2008 and the tax credit carryforwards expire through 2023. Approximately \$3.6 million of the remaining \$10.3 million of this NOL is attributable to certain stock options transactions. In accordance with FASB No. 123 (revised 2004), Share-Based Payment, when this portion of the NOL is realized, the Company will recognize an increase in additional paid-in capital equal to the reduction in income taxes payable.

As a result of an acquisition in 2004, the Company has the additional acquisition NOL of \$2.5 million that is available to offset future taxable income, subject to certain limitations. When the acquired NOL is utilized, goodwill will be reduced by the amount of tax savings realized

## Edgar Filing: ESSEX CORPORATION - Form 10-K

(approximately \$947,000 at estimated federal and state statutory rates).

The evaluation of the realizability of deferred tax assets in future periods is made based upon a variety of factors for generating future taxable income, such as historical and projected operating performance and intent and ability to sell assets. At this time, the Company has retained the previously established valuation reserve for its deferred tax assets. Such tax assets are available to be recognized and benefit future periods to the extent they can be utilized to reduce taxes payable.

Table of Contents

## ESSEX CORPORATION AND SUBSIDIARY

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002

**NOTE 11: Acquisitions**

In April 2004, the Company agreed to acquire 100% of the common stock of Computer Science Innovations, Inc. ( CSI ), which is headquartered in Melbourne, Florida, for approximately \$8.1 million in cash. The Company incurred another \$125,000 in related legal and accounting fees. CSI has proprietary techniques, algorithms and tools that are used to build custom cognitive engines for a broad range of intelligence, defense and commercial customers and applications. CSI had revenue of approximately \$7.6 million in its fiscal year ended March 31, 2004. The Company closed this transaction effective April 30, 2004.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the date of acquisition.

Current assets	\$ 1,548,000
Equipment and other	172,000
Goodwill	5,776,000
Intangible assets	1,279,000
	<hr/>
Total assets acquired	8,775,000
Current liabilities	(550,000)
	<hr/>
Net assets acquired	\$ 8,225,000
	<hr/>

Of the intangible assets of \$1,279,000, there was \$923,000 assigned to contracts which have an estimated overall amortization life of less than three years. The remaining balance was primarily assigned to intellectual property with an estimated overall amortization life of less than five years.

The following information is presented on a pro forma basis as though the business combination had been completed as of the beginning of fiscal 2003.

<b>For The Year Ended December 31, 2004</b>	<b>For The Year Ended December 28, 2003</b>
---	---

Edgar Filing: ESSEX CORPORATION - Form 10-K

	(in Thousands)		(in Thousands)	
	As Reported	Pro Forma	As Reported	Pro Forma
Revenues	\$ 70,471	\$ 72,559	\$ 16,286	\$ 24,457
Net Income	\$ 2,273	\$ 1,984	\$ 140	\$ 697
Earnings Per Share:				
Basic	\$ 0.15	\$ 0.13	\$ 0.02	\$ 0.08
Fully diluted	\$ 0.13	\$ 0.12	\$ 0.01	\$ 0.07

**Table of Contents****ESSEX CORPORATION AND SUBSIDIARY****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002**

On June 25, 2004, the Company completed the acquisition of substantially all of the assets of Performance Group, Inc. ( PGI ) with main offices in Fredericksburg, VA. PGI provides services and systems in the areas of Geographic Information Systems (GIS), Imagery Processing and Analysis, Spatial Data Development, Environmental Consulting, Visualization, and IT Solutions to government and private sector clients. PGI had revenue of approximately \$4.5 million in calendar year 2003.

The Company paid approximately \$5.8 million in cash and assumed \$362,000 of liabilities. The Company also incurred \$125,000 in outside expenses.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the date of acquisition.

Current assets	\$ 1,597,000
Equipment and other	117,000
Goodwill	3,068,000
Intangible assets	1,498,000
	<hr/>
Total assets acquired	6,280,000
Current liabilities	(362,000)
	<hr/>
Net assets acquired	\$ 5,918,000

Of the intangible assets of \$1.5 million, there was \$1.2 million assigned to contracts which have an estimated overall amortization life of less than five years. The remaining balance was primarily assigned to intellectual property with an estimated overall amortization life of less than five years.

The following information is presented on a pro forma basis as though the business combination had been completed as of the beginning of fiscal 2003.

<b>For The Year Ended December 31, 2004</b>	<b>For The Year Ended December 28, 2003</b>
(in Thousands)	(in Thousands)

Edgar Filing: ESSEX CORPORATION - Form 10-K

	As Reported	Pro Forma	As Reported	Pro Forma
Revenues	\$ 70,471	\$ 73,102	\$ 16,286	\$ 20,789
Net Income	\$ 2,273	\$ 2,776	\$ 140	\$ 688
Earnings Per Share:				
Basic	\$ 0.15	\$ 0.18	\$ 0.02	\$ 0.08
Fully diluted	\$ 0.13	\$ 0.16	\$ 0.01	\$ 0.07

Refer to Note 16 for discussion of the acquisition of The Windermere Group, LLC subsequent to the financial statement date.

**Table of Contents****ESSEX CORPORATION AND SUBSIDIARY****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002****NOTE 12: Amortization of Other Intangible Assets**

In connection with the March 1, 2003 acquisition of SDL, there was \$431,000 of intangible value assigned primarily to contracts. In connection with the April 30, 2004 acquisition of CSI, there was \$1,279,000 of value assigned, primarily to contracts. In connection with the June 25, 2004 acquisition of substantially all of the assets of Performance Group, Inc., there was \$1,498,000 of value assigned, primarily to contracts (see Note 11). During fiscal 2004, amortization of other intangible assets was \$523,000, which was primarily related to the CSI and PGI acquisitions. There was \$381,000 of amortization costs in the comparable period in 2003 relating to the SDL acquisition. The amortization of other intangibles related to the SDL acquisition was substantially complete in the first quarter of 2004. Amortization expense for each of the next five years is estimated as follows:

2005	\$ 711,418
2006	\$ 704,815
2007	\$ 429,529
2008	\$ 394,788
2009	\$ 38,551

**NOTE 13: Basic and Diluted Earnings (Loss) Per Common Share**

Basic earnings (loss) per common share are computed using the weighted average number of common shares outstanding during the period reduced by contingently returnable shares. Diluted earnings per common share incorporates the incremental shares issuable upon the assumed exercise of stock options, warrants, and conversion of convertible debt. Such incremental shares were anti dilutive in 2002.

**NOTE 14: Commitments and Contingencies*****Lease Obligations***

The Company leases office space and certain equipment. As of December 31, 2004, the Company is committed to pay aggregate rentals under these leases as follows:



Edgar Filing: ESSEX CORPORATION - Form 10-K

2005	\$ 2,317,705
2006	\$ 2,573,265
2007	\$ 2,499,904
2008	\$ 1,841,567
2009	\$ 1,412,675
Thereafter	\$ 2,798,810

**Table of Contents**

**ESSEX CORPORATION AND SUBSIDIARY**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002**

The Company entered into leases for production and office space in Maryland in connection with the work on its largest program. The leases are for seven years ending approximately April 2011 and total rent is approximately \$6.3 million. The leases contain normal clauses for payment of operating, real estate and common area maintenance over base year amounts and provide for a one-time option to terminate the leases after 4 years from the commencement date of the respective lease.

In connection with these leases, the Company agreed to provide an estimated \$3 million to the landlord to finance special security-related leasehold improvements. The Company has recorded a note receivable in connection with the lease as the landlord will repay the funds over thirty-nine months following construction completion at 7% interest. At December 31, 2004, the Company had funded \$2.4 million of this commitment.

The Company has entered into a lease for replacement office space for certain of its Maryland operations, including its corporate headquarters. The lease is for a term of seven years beginning in approximately April 2005 and total rent is approximately \$6 million. The leases contain normal clauses for payment of operating, real estate and common area maintenance over base year amounts.

Rental expense charged to operations, including payments made under short-term leases, amounted to \$984,000, \$442,000 and \$275,000 in 2004, 2003 and 2002, respectively.

The Company has several other office facilities under long-term leases which expire in 2007. The leases contain provisions to pay for proportionate increases in operating costs and property taxes.

**NOTE 15: Statement of Cash Flows- Supplemental Disclosures**

Supplemental disclosures of cash flow information are as follows:

A. Cash paid during the year for

2004	2003	2002
------	------	------

## Edgar Filing: ESSEX CORPORATION - Form 10-K

Interest	\$ 3,000	\$ 39,000	\$ 27,000
Income taxes	\$	\$	\$

- B. In 2004 there were new capital leases for \$50,000. There were no new capital leases in 2003. In 2002, there were new capital leases of \$62,000.
- C. The Company issued approximately 683,000 shares of common stock related to the March 1, 2003 acquisition of Sensys Development Laboratories. The additional 422,000 shares of common stock issued into escrow were returned in early 2004.

**Table of Contents**

**ESSEX CORPORATION AND SUBSIDIARY**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002**

- D. The Company issued 15,833 additional shares of common stock in relation to warrants that were exercised on a cashless basis.
- E. In connection with the acquisition of substantially all of the assets of PGI, the Company assumed approximately \$362,000 of liabilities.

**NOTE 16: Subsequent Event Acquisition of The Windermere Group, LLC**

On February 28, 2005, the Company acquired 100% of the ownership and membership interests of The Windermere Group, LLC and its active subsidiaries ( Windermere ). The initial purchase price of \$69.4 million includes repayment of a \$25 million bridge loan. The Company also incurred accounting, legal and other fees of approximately \$2.7 million. In addition, the purchase agreement includes terms for an additional purchase payment based on excess working capital and profitability during an earn-out period.

Windermere has an existing \$10.0 million line of credit with a bank which is secured primarily by its accounts receivable. The line of credit extends through May 31, 2005. The Company is a guarantor of the line of credit which had an outstanding balance of approximately \$7.9 million on February 28, 2005.

Windermere provides engineering services, software development and information technology solutions to government agencies, the intelligence community and commercial customers. Windermere had revenues of approximately \$65.0 million for the year ended December 31, 2004.

The Company is in the process of having an outside review performed on the Windermere balance sheet and other financial information as of the closing date, February 28, 2005. The Company is also in the process of establishing the fair values of all assets and liabilities, including intangibles. The Company expects to report on the results of these processes in its Form 10-Q for the first quarter of 2005.

**NOTE 17: Quarterly Financial Data (Unaudited)**

(In thousands, except per share data)

**2004 Quarter Ended**

**Dec. 31      Sept. 26      June 27      March 28**

Edgar Filing: ESSEX CORPORATION - Form 10-K

Revenue	\$ 18,969	\$ 16,658	\$ 20,603	\$ 14,241
Gross margin	\$ 4,802	\$ 4,036	\$ 3,557	\$ 2,246
Net income	\$ 892	\$ 589	\$ 480	\$ 312
Earnings per share <sup>(1)</sup> :				
Basic	\$ 0.05	\$ 0.04	\$ 0.03	\$ 0.02
Diluted	\$ 0.05	\$ 0.04	\$ 0.03	\$ 0.02

**Table of Contents****ESSEX CORPORATION AND SUBSIDIARY****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

For the Fiscal Years Ended December 31, 2004, December 28, 2003 and December 29, 2002

2003 Quarter Ended	Dec. 28	Sept. 28	June 29	March 30
Revenue	\$ 5,066	\$ 4,071	\$ 4,148	\$ 3,001
Gross margin	\$ 1,719	\$ 1,690	\$ 1,529	\$ 959
Net income (loss)	\$ 74	\$ 11	\$ 75	\$ (20)
Earnings per share <sup>(1)</sup> :				
Basic	\$ 0.01	\$ 0.00	\$ 0.01	\$ 0.00
Diluted	\$ 0.01	\$ 0.00	\$ 0.01	\$ 0.00
2002 Quarter Ended	Dec. 29	Sept. 29	June 30	March 31
Revenue	\$ 1,413	\$ 1,601	\$ 729	\$ 763
Gross margin	\$ 533	\$ 636	\$ 370	\$ 374
Net loss	\$ (327)	\$ (182)	\$ (835)	\$ (830)
Loss per share <sup>(1)</sup> :				
Basic	\$ (0.04)	\$ (0.02)	\$ (0.12)	\$ (0.11)
Diluted	\$ (0.04)	\$ (0.02)	\$ (0.12)	\$ (0.11)

(1) Quarterly per share amounts may not total to full-year amounts due to rounding.