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# Annual Report 2001

## Letter to Shareholders

The year 2001 was a year for both market development and engineering enhancements. We began shipment of our new product, Autoscope Solo Pro, in the first quarter and subsequent sales exceeded our expectations. With our engineering team, and long-term partner, Econolite Control Products Inc. (ECPI), we continued to improve Autoscope technology with enhanced performance. Our engineers took advantage of new camera technology and reduced the cost to manufacture, providing more competitive end user pricing.

In an effort to grow outside our traditional market niche (Machine Vision) we developed plans to market into other geographies. Our business marketing team expanded our relationship with Wireless Technology, Inc. (WTI), a broadband video communications company, to market and sell their wireless products and to co-develop the Mobile Blocker, a product targeted for markets primarily in the Middle East and Europe. Due to a number of unforeseen market conditions this effort was aborted at the end of 2001 resulting in inventory write offs along with a restructuring of the Company in the first quarter of 2002. Our partnership with WTI, however, still remains very strategic in the assembling of our Autoscope product line. ECPI, our other major strategic partner, is responsible in the sales, marketing, and system integration of our total Autoscope product line.

During 2001, we formalized our alliance with a third strategic partner, Detector Electronics Corporation (DetTronics), a developer and global leader in flame detection technology. In May 2001, we entered into an agreement with DetTronics to develop an imaging flame detection system synergistic with Autoscope technology for DetTronics to sell in its market. An Autoscope based flame detection product was developed, and tested during 2001. The resulting prototype, an integrated product that combines flame detection with simultaneous high-resolution color-zoom surveillance video, was demonstrated at the NFPA International Fire Prevention Exposition early in May 2002 generating very strong market interest in DetTronics. Product development and testing of the open explosion proof version is scheduled to be completed in the third quarter of 2002 with product sale beginning immediately thereafter. Initial focus of DetTronics' sales and marketing effort will be in the petroleum industry, targeting oil platforms, and refineries.

### Financial Results

While ISS achieved revenue growth over the previous year of 10.7%, profit expectations were not realized primarily due to increased spending for sales and marketing personnel and other business development costs related to wireless products and the Mobile Blocker along with a \$368,000 inventory write off at year end. As a result, we incurred a net loss of \$455,000 or .14 per share. Econolite realized an impressive increase in Autoscope Video Vehicle Detection System sales, due primarily to the introduction of the new Autoscope Solo Pro, which resulted in a 49% increase in royalty income.

### Markets

The Autoscope product remains the dominant technology for Video Vehicle Detection in North America. Continued growth is due in large part to Econolite's Sales and Marketing team and ISS' key product enhancements (i.e. Autoscope Solo Pro), which have gained tremendous market acceptance throughout the year.

ISS is currently reviewing its international sales and marketing strategy. As a first step, ISS has entered into an exclusive Autoscope distribution agreement with Econolite for the Latin American territory.

Econolite currently has a Latin American sales and distribution team headed by an International Sales Director fluent in the local language and culture. Initial success of Econolite in Latin American sales of other traffic management products gives ISS the confidence that together we can duplicate some of the market success achieved in North America.

Our Asian business through Flow Traffic Limited, a wholly owned subsidiary, held up reasonably well. Our business in China is growing steadily and was profitable in the first quarter of 2002. Going forward, Flow Traffic will be taking a much more aggressive position in a number of major Asian markets.

### Technology

In the first quarter of 2001 we completed development and began shipment of our newest product — the Autoscope Solo Pro. The latest generation of Autoscope technology features a color camera with zoom lens, along with higher overall performance, allowing for improved detection and reporting accuracy of the presence of vehicles, speed, and a variety of incident conditions. Significant improvements and new features in our Communication Server Software, combined with our Autoscope Solo Software Suite takes the overall Autoscope system to a new level.

### Conclusion

In an effort to grow shareholder value, we had embarked on a growth strategy outside the Machine Vision market. This strategy veered ISS into uncharted markets, resulting in increased sales, marketing, and engineering costs along with distracting our efforts from our core technology strength, which is Machine Vision. The initiatives taken in the two previous years to build and add to our core business of Machine Vision unfortunately did not materialize. The Board decided to halt our losses, regroup, and get back to our core business. This was achieved through a year-end inventory write off and a downsizing of the Company during the first quarter of 2002. This painful undertaking resulted in year-end and first quarter losses.

We sharpened our focus on Machine Vision based growth. We accelerated joint testing and development of Autoscope synergistic flame detection system with DetTronics. This offers our core technology an immediate growth into the petroleum industry, with subsequent expansion to other fire safety related markets.

Going forward, we are committed, to staying focused on our core competency of Machine Vision and dedicated to continue as the dominant global provider of premiere Machine Vision technology for the Intelligent Transportation System (ITS) industry, efficient cash management, and supporting our major partners, Econolite Control Products, Inc., Wireless Technology and our newest partner, Detector Electronics Corporation. With our patented and proprietary machine vision technology, our global distribution, and strategic alliances along with continued technological enhancements, the Company is focused for growth in our traditional business that should provide profitability with increased Shareholder value.

Thank you for your continued commitment and support.

Jim Murdakes

Chairman, President and Chief Executive Officer

## Financial Highlights

Year Ended December 31	2001	2000	1999
<b>Operating Results</b> (in thousands except per share data)			
Revenue	\$6,682	\$6,036	\$4,772
Gross profit	4,601	3,711	3,549
Net income (loss)	(455)	(50)	251
Net income (loss) per common share	\$(0.14)	\$(.02)	\$0.08
Weighted average number of common shares and common share equivalents outstanding.	3,148	3,143	2,975

At December 31	2001	2000	1999
<b>Balance Sheet</b> (in thousands)			
Working capital	\$2,176	\$2,395	\$2,173
Total assets	5,004	5,282	4,478
Total shareholders' equity	3,814	4,241	3,602

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

FORM 10-KSB

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

For the fiscal year ended December 31, 2001

Transition Report Under Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 0-26056

**Image Sensing Systems, Inc.**

(Name of small business issuer in its charter)

Minnesota

State or other jurisdiction of  
incorporation of organization

41-1519168

IRS Employer Identification No.

500 Spruce Tree Centre  
1600 University Ave. W.

St. Paul, MN 55104

Address of principal executive offices

(651) 603-7700

Issuer's telephone number

Securities registered under Section 12(b) of the Exchange act:

None

Title of each class

Securities registered under Section 12(g) of the Exchange Act:

Common Stock, \$0.01 par value

Title of each class

Check whether the issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the past 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

Check if there is no disclosure of delinquent filers in response to Items 405 of Regulation S-B in this form, and no disclosure will be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-KSB or any amendment to this Form-10-KSB.

The registrant's revenues for the fiscal year ended December 31, 2001 totaled \$6,682,000.

Based on the closing bid price at March 12, 2002, the aggregate market value of the voting stock held by nonaffiliates of the registrant was \$6,305,554.

The number of shares outstanding of the registrant's \$.01 par value common stock, as of March 12, 2002, was 3,152,777 shares.

Transitional Small Business Issuer Format:  Yes  No

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of our proxy statement for our May 16, 2002 annual meeting of shareholders, which will be filed on or prior to April 30, 2002, are incorporated by reference into Part III of this Form 10-KSB.

SAFE HARBOR STATEMENT UNDER THE  
PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This Annual Report on Form 10-KSB contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange of 1934, as amended. Forward-looking statements represent our expectations or beliefs concerning future events and can be identified by the use of forward-looking words such as “believes,” “expects,” “may,” “will,” “should,” “intends,” “plans,” “estimates” or “anticipates” or other comparable terminology. Forward-looking statements are subject to risks and uncertainties that may cause our actual results to differ materially from the results discussed in the forward-looking statements. Factors that might cause these differences include, but are not limited to:

- lack of market acceptance of our products;
- dependence on third parties for manufacturing and marketing capabilities and continuing ability to pay royalties owed;
- inability to diversify our product offerings;
- revenue fluctuations caused by our dependence on sales to governmental entities;
- failure to secure adequate protection for our intellectual property rights;
- failure to respond to evolving industry standards and technological changes;
- inability to properly manage a growth in revenue and/or production requirements;
- inability to meet our future additional capital requirements; and
- control of our voting stock by insiders.

We caution that the forward-looking statements made in this report or in other announcements made by Image Sensing Systems are further qualified by the factors set forth in Exhibit 99 to this Annual Report on Form 10-KSB, under the caption “Cautionary Statement.”

## PART I

### Item 1. Description of Business

Image Sensing Systems develops and markets video image processing products for implementation in advanced traffic management systems, freeway incident detection and traffic data collection. Video image processing, also known as machine vision or artificial vision, is a technology that captures and analyzes video images through the use of sophisticated algorithms and computer software combined with special purpose hardware. Combining this technology with commercially available computer hardware and video cameras, we created our core product, the Autoscope® Wide Area Video Vehicle Detection System. The Autoscope system converts video images of a traffic scene into digitized traffic data that may be transmitted to local or remote locations for real-time traffic management or stored for later analysis. The Autoscope system is modular, flexible, and expandable and has a variety of applications in intersection control, freeway traffic management, and traffic data collection. The system can be used by traffic managers for traffic control, management, planning, research, and other applications and ultimately can help reduce traffic congestion, improve roadway planning, and increase cost efficiencies in traffic management and control.

The original Autoscope system was first marketed and sold commercially in 1991. Since that time, we have developed a number of Autoscope products, including the Autoscope 2004, the Autoscope Solo®, the Autoscope Solo Pro™ and the Autoscope Image Sensor Camera (AIS). The Autoscope 2004 system, introduced in 1991, generally consists of one to four video cameras, a flexible modular microprocessor with specialized software and circuitry, and a supervisor computer with a video monitor, keyboard, and mouse. The Autoscope Solo system, introduced in 1998, is a one-camera version of the Autoscope 2004. The Autoscope Solo Pro, introduced in 2000, upgraded the Autoscope Solo by including a zoom lens and producing a color video image. The new AIS is our stand-alone camera that takes advantage of the zoom lens and color video image. It can be used with our Autoscope 2004 and integrated with competitor products. A Microsoft Windows®-based graphical user interface enables standard video cameras to work with our Autoscope products.

In addition to the Autoscope family of products, in the past we also have marketed and sold a suite of products that provide wireless transmission of video and digital data, as well as the Mobile Blocker™ cellular telephone and pager jamming device. We have decided to exit this business generally because we have not seen satisfactory returns; in addition, the effort has been dilutive from our core Autoscope business. Consequently, we intend to discontinue the Mobile Blocker and non-traffic related wireless business in 2002 and focus on our core business of developing and marketing video imaging technology applications to address traffic and other transportation problems. We do however, intend to continue to market a wireless transmission system for video and data that is applicable to the transportation industry and is a value-added product to our core Autoscope business.

Image Sensing Systems was incorporated in Minnesota in 1984.

#### *The Autoscope System*

Automated vehicle detection for traffic management traditionally has been performed with inductive wire loops buried in the pavement. However, embedded loop detectors are difficult to install and maintain, are destructive to road surfaces, and are not capable of wide-area vehicle detection without the use of many loops. The Autoscope system is easier to install and maintain than embedded loop detectors, is non-destructive to road surfaces, and is capable of wide-area vehicle detection with a single camera, thus enabling one camera to do the work of many loops. We believe that the Autoscope system's range of applications and its ability to support new applications for advanced technology solutions to traffic management problems make it superior to loop detectors and most other commercially available vehicle detection systems.

The Autoscope system permits users to draw detection zones on a video screen displaying the traffic scene and to derive traffic data from the portion of the image specified by the detection zones displayed on the screen. The system analyzes virtual detection zones that appear only on the video screen, not on the roadway. Each detection zone represents an area in the field of view of the camera that the system user wishes to analyze for determining the presence of vehicles or extracting other pertinent traffic data. More than 100 detection zones can be

programmed into multi-camera systems. The system user determines the detection zones by drawing them on a video monitor with a mouse. Different types of detection zones can be selected and may be placed anywhere in any orientation within the field of view of the cameras using the system's unique interactive graphics. The detection zones can be changed easily by using the mouse to resize, reshape, or relocate the detection zones on the video monitor.

Once a detection configuration has been created, the supervisor computer system can display the detection zones on its own video monitor, together with the live video image, to monitor the system in operation. When a vehicle is under the detection zone, the detection zone changes in color or intensity, thereby providing visual verification of correct system operation. Measured traffic data may be displayed on the video monitor of the supervisor computer in numeric format. The traffic data may be transmitted to another host computer via modem and dial-up telephone lines, private cable, fiber optic network, direct cable connection, or various other wireless communications equipment. Vehicle detection output also can be routed to intersection signal controllers. A detection signal is generated each time a vehicle crosses one of the virtual detection zones, thus enabling the system to accumulate measured traffic data in user-selected categories, such as volume, average speed, time occupancy (percent of time the detection zone is occupied), headways (time interval between vehicles), flow rate (vehicles per hour per lane), and vehicle length. Information from the system can be processed in real time or stored for later analysis.

The Autoscope supervisor computer and video monitor may be disconnected once the detection zone configuration has been transferred to the microprocessor. The system can then operate independently, providing detection zone outputs and storing traffic data in the microprocessor's internal memory. The same portable supervisor computer and video monitor may be used with multiple Autoscope systems. New detection zone configurations can be saved to diskette, and previously saved detection zone configurations can be retrieved from diskette for downloading into each system. The same Autoscope microprocessor can be used with multiple cameras, each with its own detection zone configuration.

In 1998 we obtained Conformance Europeenne (CE) Mark approval for our Autoscope technology. The CE Mark is a worldwide standard for safety and quality assurance.

#### *Product Applications and New Product Development*

The Autoscope system currently is used primarily for intersections, freeways, tunnels, and traffic count stations. We also are continuously exploring new uses for the Autoscope system.

*Intersection Applications.* Installed at an intersection, the Autoscope system can be programmed to provide signal controllers with data including vehicle presence, traffic volume, time occupancy (percent of time the detection zone is occupied), vehicle speed, turning movements, queue lengths, stopped vehicles, vehicle direction, and vehicle length. This information can help signal controllers to control the flow of traffic at the intersection or provide alarms at centralized traffic control centers. For example, the Autoscope system can determine that a queue has developed at a stoplight and route that information to the intersection controller so that the signal times can be adjusted appropriately or a left turn signal phase can be engaged if a line develops at the left turn lane. In addition, the Autoscope system can be programmed so that selected detection zones detect cars moving in only one direction. This capability can be used to prevent undesired detections, such as a left-turning vehicle that has turned too sharply and is momentarily driving in the wrong lane. This capability also can be used to detect cars going the wrong way on a one-way street or the wrong way on a freeway exit ramp. The majority of all commercially installed Autoscope systems currently are being used for intersection control applications.

*Freeway and Tunnel Applications.* Typical freeway traffic and tunnel information provided by the Autoscope system includes traffic volumes, time occupancy, vehicle speeds, and vehicle counts of five different vehicle classes based on length. The system also can be programmed to signal an alarm if it detects stopped vehicles or the sudden onset of congestion in a detection zone indicating a traffic incident on the freeway or in the tunnel. By placing a video camera next to a freeway on-ramp, the Autoscope system detects traffic movement on the on-ramp or in the merging area onto the freeway. The resulting data can be used to prevent a queue from developing on a side street, to control on-ramp traffic signals, or to determine the capacity of a merge area for planning and control purposes.

*Traffic Information Gathering and Analysis.* Traffic planners use traffic data collected by the Autoscope system at intersections and on freeways and other roadways to design roadway changes, define signal timing plans, approve commercial development plans, and define the environmental impact of traffic congestion. The Autoscope system has been deployed in temporary or semi-permanent configurations as a portable detection system during road repairs, construction, or resurfacing and for special studies, such as traffic data collection by a planning department, a traffic consultant, or a university. The Autoscope system captures vast amounts of traffic data in its own memory or on a hard disk of the supervisor computer for later off-line graphing and analysis. Further flexibility is gained with the ability to videotape a section of roadway with a portable video camera and measure the traffic data off-line with the Autoscope microprocessor.

*Applications Under Development.* In May 2001 we entered into an agreement with Detector Electronics Corporation (also known as Det-Tronics), an international supplier of fire and gas detection products, to develop an integrated vehicular traffic and fire detection system to add to our Autoscope product line. With Det-Tronics we currently are testing and reviewing performance issues related to the fire detection aspects of the system. Once we are satisfied with product performance we intend to seek regulatory approvals so that we can commence domestic and international sales of the product.

*Ongoing Research and Development.* We engage in ongoing research and development to reduce manufacturing costs, develop less expensive system configurations, and improve product quality. We also engage in research and development to broaden current applications for the Autoscope system and to develop new products and product enhancements. The amount of our research and development cost varies depending on the allocation of engineering resources to outside projects and product support. As of March 1, 2002, 10 individuals, six of whom hold advanced degrees, are involved in research and development. We incurred \$961,000 in research and development costs in 2000, and \$615,000 research and development costs in 2001. In 2000 all of our research and development costs were related to software development costs for the development of the Autoscope Solo, Solo Pro and Comserver products, and were capitalized. We did not capitalize any software development costs in 2001. We expect our research and development costs in 2002 to be comparable to our research and development costs in 2001. In 2002 we will be working primarily on new applications and enhanced support for our existing products, including developing a replacement product for our four camera Autoscope 2004 system and releasing the new Solo Pro NC system that offers video processing remote from the camera sensor.

#### *Customers*

Our customers primarily consist of federal, state, city, and county departments of transportation; road commissions; and port, turnpike, tunnel, and other transportation authorities. We market and sell our products to customers both inside and outside the United States. The decision-makers within these government entities typically are traffic planners and government engineers, who in turn often rely on consulting firms that perform planning and feasibility studies for the government entities. Our products sometimes also are sold directly to system integrators or other suppliers of systems and services who are operating under subcontracts in connection with major road construction contracts.

#### *Manufacturing, Marketing, and Distribution*

Our products are manufactured in the United States pursuant to long-term production agreements with three companies: Econolite Control Products, Inc., the Electronic Division of Cohu, Inc., and Wireless Technology, Inc. The production agreements are described in more detail below. We have granted Econolite an exclusive right to market the Autoscope system in North America and the Caribbean. We market our products outside of North America through our wholly owned Asian subsidiary, Flow Traffic Ltd., and through agreements with 31 distributors covering countries in Europe, the Middle East, and South America. Under the distributor agreements, each distributor agrees to use its best efforts to market and sell the Autoscope system and to purchase one Autoscope demonstration system for use in its marketing efforts. Our Vice President for International Business is responsible for the operations of Flow Traffic Ltd. and for the business development activities of expanding the distribution network in Europe and Latin America. To date, we have installed Autoscope systems in more than 40 countries around the world, including a large number of U.S. sites. We intend to continue to increase our marketing efforts in foreign countries.



*Econolite Control Products, Inc.* Econolite manufactures and markets the Autoscope system in North America and the Caribbean pursuant to a manufacturing, distribution, and technology license agreement. Pursuant to that agreement, we have appointed Econolite as our licensee to make, have made, use, license, distribute and sell the Autoscope system and related technology in North America and the Caribbean. Econolite has agreed to use its best efforts to promote the sale of the Autoscope system in this territory and not to distribute products that compete with the Autoscope system. Econolite pays us a royalty on revenue derived by Econolite from sales of the Autoscope system. Econolite has more than 65 years of experience in the traditional traffic intersection control industry and is certified as to ISO 9002 standards in its manufacture of machine vision products for the transportation management industry.

We may terminate our agreement with Econolite if a minimum annual sales level is not met. The initial term of the agreement was 15 years, ending in 2007, automatically renewable thereafter for additional one-year periods unless terminated by either party on 60 days' notice prior to the end of the initial term or any extension term. At a board meeting on October 4, 2001, our board approved a five-year extension of our agreement with Econolite, extending its term to 2012.

Econolite's license encompasses any knowledge, information, know-how, software, or devices relating to vehicle detection, whether patentable or not, that is or are licensed to us pursuant to our license agreement with the University of Minnesota (described under "Patents and Proprietary Rights" below) and any knowledge, information, know-how, software, or devices relating to vehicle detection owned or licensable by us. Econolite has a right of first refusal for extension of its license to include rights related to distribution of the Autoscope system in countries outside North America and the Caribbean. Econolite also currently manufactures, on a non-exclusive basis, the Autoscope systems sold outside its distribution territory.

We support Econolite's marketing efforts in North America and the Caribbean through an integrated marketing communications program with Econolite. This program attempts to increase market awareness of our technology and our products by direct mailings of Autoscope brochures, manuals and videos to potential customers, also by joint planning and sharing of advertising and exhibition budgets.

Econolite provides a two-year warranty on the current Autoscope system and must provide all service required under this warranty.

*Cohu, Inc.* In July 1997 we entered into a production agreement with Econolite and the Electronic Division of Cohu, Inc. Under this agreement, Cohu manufactures and sells exclusively to us and Econolite as many units of the Autoscope Solo product as each of us may order from time to time, and each of us has agreed to purchase from Cohu all of our respective requirements for the Autoscope Solo product for sale to end users in our respective distribution territories until such time as Econolite and/or we have purchased 5,000 units in the aggregate. Econolite has agreed to continue thereafter to purchase all of its requirements for the Autoscope Solo product from Cohu, subject to Econolite's option to manufacture the Solo product and our right of termination. The agreement with Cohu does not require either us or Econolite to purchase a minimum number of units from Cohu on an annual basis. Under the agreement, we and Econolite granted Cohu a non-exclusive, non-transferable, non-assignable, royalty-free right and license to use such of our respective intellectual property as may be necessary to make, design, develop, assemble, manufacture, and repair the Autoscope Solo product solely for sale to us and Econolite. Cohu acquired no right, title, or interest in or to our intellectual property other than the foregoing limited license, nor does Cohu have the right or authority to sublicense all or any portion of either of our intellectual property.

We may terminate the agreement with Cohu, with or without cause, upon 60 days' prior written notice. Cohu may terminate the agreement, with or without cause, upon 12 months' prior written notice. If we terminate the agreement with cause, Cohu must deliver to us all tooling specific to production of the Autoscope Solo product, and Cohu is not entitled to any further payment after termination. If we terminate the agreement without cause, we must purchase from Cohu all of its inventory, including raw materials, unique parts, work in process, and finished goods, for a purchase price equal to Cohu's cost, up to a maximum purchase price of \$90,000.

Cohu provides a two-year warranty to Econolite and us for the Autoscope Solo product it manufactures.

*Wireless Technology, Inc.* In 2000, we entered into a verbal production agreement with Econolite and Wireless Technology, Inc. (or "WTI"), which was formalized and signed by all parties in February 2002. Under the agreement, WTI manufactures and sells exclusively to us and Econolite as many units of the Solo Pro and Autoscope Image Sensor (or "AIS") camera products as each of us may order from time to time, and each of us has agreed to purchase from WTI all of our respective requirements for the Solo Pro and AIS camera products for sale to end users in our respective distribution territories. The agreement does not require either us or Econolite to purchase a minimum number of units from WTI. Under the agreement, we and Econolite granted WTI a non-exclusive, non-transferable, non-assignable, royalty-free right and license to use such of our respective intellectual property as may be necessary to make, design, develop, assemble, manufacture, and repair the Solo Pro and AIS camera products solely for sale to us and Econolite. WTI acquired no right, title, or interest in or to our intellectual property or the Econolite intellectual property other than the foregoing limited license, nor does WTI have the right or authority to sublicense all or any portion of our intellectual property.

We may terminate the agreement with WTI, with or without cause, upon six months' prior written notice. WTI may terminate the agreement, with or without cause, upon 12 months' prior written notice. WTI is not entitled to any further payment after termination. If we terminate the agreement with cause, WTI must deliver to us all tooling specific to production of the Solo Pro and AIS camera products. If we terminate the WTI Agreement without cause, we must purchase all of WTI's inventory, including raw materials, unique parts, work in process, and finished goods, for a purchase price equal to WTI's cost plus 10%, up to a maximum purchase price of \$100,000.

WTI provides a two-year warranty to Econolite and us on the Solo Pro and AIS camera products it manufactures.

#### *Product Liability Insurance*

Econolite currently maintains \$15,000,000 of product liability insurance, and we maintain \$2,000,000 of product liability insurance. In addition, Econolite has agreed to indemnify us and hold us harmless from and against any losses, damages, or expenses arising out of the products made or sold by Econolite pursuant to our manufacturing, distribution, and technology license agreement with Econolite.

#### *Suppliers*

Some of the component hardware incorporated in the Autoscope products are standard computer hardware products that are available from multiple sources. Other parts, such as the Autoscope microprocessor and digitizer, are manufactured to our specifications by third-party vendors for integration into our products. To date, our current vendors of these components have met our quality and performance expectations. However, we believe alternative component vendors are available should the necessity arise. Nevertheless, shortages of parts or the need to change vendors could hinder Econolite's, Cohu's, and WTI's ability to manufacture our products, which could, in turn, decrease our revenues and harm our business.

#### *Backlog*

Our backlog of unfulfilled firm orders from distributors was not material as of December 31, 2001 and was approximately \$2,430,000 December 31, 2000. The 2000 backlog was attributable solely to an unfulfilled order for the Mobile Blocker product which was never confirmed. In 2002, we decided to exit certain markets for wireless products, including Mobile Blocker. Terms of agreements between distributors of our products and government contractors and other customers generally provide for cancellation or rescheduling of delivery in the case of backlogs. A backlog in our orders as of a particular date may not be a relevant factor in predicting our future revenue.

#### *Intellectual Property*

The technology underlying the Autoscope system was initially developed by Dr. Panos Michalopoulos, one of our directors and a professor at the University of Minnesota, and was further developed at the University of Minnesota from 1985 to 1991 with involvement by Dr. Michalopoulos. Between 1985 and 1989, additional system

developments were funded partially by the Minnesota Department of Transportation and the Federal Highway Administration. Dr. Michalopoulos has assigned all of his rights in the technology underlying the Autoscope system to us or to the University of Minnesota. The U.S. patent for aspects of the technology underlying the Autoscope system was issued in 1989 to the University of Minnesota. The University of Minnesota has filed to perfect related patents in France, Germany, the United Kingdom, and Japan.

We entered into a license agreement with the University of Minnesota in 1991. Under the agreement, we have been granted an exclusive, worldwide license, with a right to grant sublicenses, to make, have made, use, sell, and lease any product that incorporates knowledge, information, know-how, software, and devices, whether patentable or not, in the possession of the University of Minnesota and related to a video vehicle detection system developed by the University of Minnesota, solely or jointly with us, including certain improvements made to this technology. In exchange for our license, we pay to the University of Minnesota:

- a royalty of 3% of the net sales of licensed products (as defined below);
- 50% of all site license revenue; and
- 10% of all of our sublicensing revenue.

For these purposes, the licensed products include any manufactured product that incorporates the technology or improvements covered by the license agreement. Site license revenue equals all revenue collected by us and specifically allocable to us for granting a license to use the licensed products at a specific location or by a specific user. Sublicensing revenue equals all revenue collected by us from parties to whom we grant sublicense rights to make or sell the licensed products. The University of Minnesota has retained a non-exclusive and non-transferable right to use the licensed technology for educational and research purposes. The license agreement terminates at the termination of the patent covering the technology. The University of Minnesota may terminate the License Agreement if the royalties are not paid, if there is a material breach of the agreement by us, or if we fail to use our best efforts to effect commercial sales of the licensed products. We have agreed to indemnify the University of Minnesota against all liabilities or losses arising from (1) the manufacture, use, lease, or sale of a licensed product by us or a sublicensee of us, (2) a third party's use of a licensed product purchased from us or a sublicensee of us, and (3) a third party's manufacture of a licensed product at our request.

We have sublicensed some of our rights in the Autoscope technology to Econolite pursuant to the Econolite Agreement. See "Marketing and Manufacturing" above.

Our technology is dependent upon the knowledge, experience, and skills of our key scientific and technical personnel. To protect our rights to our proprietary know-how and technology, we require all employees and consultants to execute confidentiality agreements that prohibit the disclosure of confidential information to any third parties. These agreements also require disclosure and assignment to us of any discoveries and inventions made by employees and consultants while they are devoted to our business activities.

We intend to actively protect our intellectual property assets and will actively seek, when appropriate, protection for owned or licensed products and proprietary information by means of United States and foreign patents, trademarks, and contractual arrangements. In addition, we rely upon trade secrets and contractual arrangements to protect some of our proprietary information. We have federally registered trademark rights to "Autoscope" and "Autoscope Solo."

#### *Competition*

Competition in the area of advanced traffic management and surveillance is growing, due in part to increased federal funding of advanced technologies under the U.S. government's national Intelligent Transportation Systems initiative, which was formally endorsed by the U.S. Congress in 1991 and was strengthened in 1998 when Congress earmarked more than \$10 billion of its transportation funding bill for mitigation of congestion, highway safety, transit, and other surface transportation projects for spending over the subsequent five years.

We are aware of several companies that are developing traffic management devices using machine vision technology or other advanced technology. Among the companies that are expected to provide direct competition to the Autoscope system are Traficon N.V., the Peek business unit of First Atlantic, Nestor, Inc., and Odetics, Inc. To our knowledge, Traficon, Odetics, and Peek have working installations of their machine vision systems in the United States and other parts of the world. However, these companies do not have as many installations as we have. To our knowledge, machine vision systems are also under development by Nestor. We are aware that these and other companies will continue to develop technologies for use in traffic management and surveillance. One or more of these technologies could in the future provide increased competition for the Autoscope system. Nevertheless, we believe that our products have undergone more extensive field-testing and are at a more advanced stage of development than any of our competitors' products.

Other potential competitors include companies that have substantially more financial, technological, marketing, personnel, and research and development resources than we have. Our products will compete not only with conventional methods of vehicle detection and traffic control, such as embedded loop detectors, but also with new technologies that may be applied to urban traffic congestion problems. Various technologies have been used as traffic sensing devices in the past and will continue to be developed for application to traffic management. These technologies include embedded loop detectors, pressure plates, pneumatic tubes, radars, lasers, magnetometers, acoustics, and microwaves. We estimate that more than 95% of the detector systems currently in use in the United States are embedded loop detectors. Embedded loop detectors are relatively easy to manufacture, are currently manufactured by numerous companies throughout the world, and require lower initial capital commitment than the Autoscope system.

#### *Employees*

As of March 1, 2002, we had 29 full-time employees, 11 of whom are employed by Flow Traffic Ltd. Of our U.S. employees, 10 are involved in research and development, two provide product and customer support, one is engaged in sales and marketing, and five are involved in management, administration, finance, and human resources. None of our employees is represented by a union. We believe our employee relations are good.

#### **Item 2. Description of Property**

Image Sensing Systems currently leases approximately 10,000 square feet of office space in St. Paul, Minnesota, pursuant to an operating lease that expires in November 2002, with options to renew through November 2004. The lease provides for monthly payments of \$13,230 and we are responsible for our proportionate share of increases in operating expenses that exceed a base rent factor. Rent expense amounted to \$153,400 in 2001 and \$145,000 in 2000. At December 31, 2001, future minimum annual lease payments are \$134,000.

We believe that our current space exceeds our future needs and intend to negotiate a new lease during 2002 for approximately 7,000 square feet of office space, in the same building at approximately the same lease cost per square foot.

Flow Traffic Ltd. leases office space in Hong Kong, China and Thailand. Aggregate lease payments under these leases are \$84,000 in 2002 and \$25,600 in total non-cancelable lease payments in 2003 through 2006. We believe these facilities will be sufficient for Flow Traffic's current and foreseeable future needs.

We do not otherwise invest in real estate in any manner.

#### **Item 3. Legal Proceedings**

During 2001, we were not involved in any legal proceedings, and we currently are not subject to any legal proceedings.

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

There were no matters submitted to a vote of security holders during the fourth quarter of the calendar year covered by this report.

### PART II

#### Item 5. Market for Common Equity and Related Shareholder Matters

##### *Market Information*

Our common stock is traded on the Nasdaq Small Cap Market under the symbol "ISNS." The quarterly high and low sales prices for our common stock for our last two fiscal years are set forth below.

Quarter	FY 2001		FY 2000	
	High	Low	High	Low
First	\$4.19	\$2.88	\$9.44	\$3.63
Second	4.60	1.99	11.50	5.75
Third	2.82	1.47	5.97	4.25
Fourth	3.25	1.76	5.98	3.63

##### *Shareholders*

As of March 12, 2002, there were 27 holders of record of our common stock and approximately 650 beneficial holders of our common stock.

##### *Dividends*

We have never declared or paid a cash dividend on our common stock. We currently intend to retain earnings for use in the operation and expansion of our business, and, consequently, we do not anticipate paying any dividends in the foreseeable future.

#### Item 6. Management's Discussion and Analysis of Financial Condition and Results of Operations

Our critical accounting policies, including the assumptions and judgments underlying them, are disclosed in Note 1 to the Consolidated Financial Statements. These policies have been consistently applied in all material respects and address such matters as revenue recognition, depreciation methods, asset impairment recognition, deferred tax valuation allowance, business combination and accounting. While the estimates and judgments associated with the application of these policies may be affected by different assumptions or conditions, we believe the estimates and judgments associated with the reported amounts are appropriate in the circumstances.

The following table sets forth, for the periods indicated, certain statements of operational data as a percent of revenue:

	Year Ended December 31	
	<u>2001</u>	<u>2000</u>
Product sales	36.1 %	53.2 %
Royalties	60.0	44.5
Consulting services	3.9	2.3
Total revenue	100.0	100.0
Cost of revenue	31.1	38.5
Gross profit	68.9	61.5
Selling, marketing and product support	33.4	26.7
General and administrative	30.0	38.2
Research and development	14.4	0.0
Loss from operations	(8.9)	(3.4)
Net loss	(6.8)	(.8)

Product sales for 2001 decreased to \$2,410,000 compared to \$3,210,000 in 2000. The decrease was due primarily to lower sales in Asia (\$1,866,000 in 2001 compared to \$2,643,000 in 2000). The difference is attributable to large orders from Korea and Hong Kong in 2000 with a value of approximately \$1,300,000. Royalty income increased to \$4,010,000 in 2001, compared to \$2,684,000 in 2000. The increase in royalty income in 2001 resulted primarily from the introduction of the AutoScope Solo Pro™, which is more cost effective than the prior version of the Solo product. Revenue from consulting services increased to \$262,000 in 2001 from \$142,000 in 2000. The majority of consulting income came from our contract with Oakland County in Michigan.

Gross profits were \$4,601,000, or 68.9% of revenue, in 2001, compared to \$3,711,000, or 61.5% of revenue, in 2000. The gross profit was 74.4% before the write-off of Mobile Blocker inventory and write down of old style Solo inventory. This inventory adjustment total was \$368,000. The increase in our gross profit margin percentage was due primarily to greater royalty revenue from Econolite as a percent of total revenues. We expect the revenue mix to be comparable to 2001 levels in 2002.

Selling, marketing, and product support expenses were \$2,229,000, or 33.4% of revenue, in 2001, compared to \$1,609,000, or 26.7% of revenue, in 2000. The increase resulted primarily from increased spending for sales and marketing personnel and other business development costs related to our international business, and the development of the business infrastructure for the sales and marketing of our suite of wireless products, including the Mobile Blocker product. We expect selling, marketing and product expenses to decrease in 2002 based on the fact that we are returning primary focus to our core business.

General and administrative expenses were \$2,006,000, or 30.0% of revenue, in 2001, compared to \$2,305,000, or 38.2% of revenue, in 2000. The decrease was due primarily to cost cutting in 2001, eliminating two part-time positions, cutting back in travel, dues, and quarterly shareholder mailings along with the absence in 2001 of the incremental expense we incurred in 2000 related to our stock dividend and fees related to the issuance of additional shares in connection with the dividend.

The research and development expenses and capitalized software development costs totaled \$961,000 in 2001 compared to \$615,000 in 2000. The increase resulted primarily from the fact that we focused on the development of enhancements to existing products in 2001, and additionally on the development work on Flame Detection. We also added two engineers in January 2001, which increased our research and development cost. In early 2002 we laid off five engineers and believe our development expense for 2002 will be closer to the levels in 2000.

Net loss was \$455,000 (Image Sensing Systems loss of \$416,000 and loss from Flow Traffic of \$39,000), or 6.8% of revenue, in 2001, compared to a loss of \$50,000 (Image Sensing Systems loss of \$242,000 and income from Flow Traffic of \$192,000), or 0.8% of revenue, in 2000. There was an \$87,000 domestic tax benefit in 2000 that mitigated 2000 losses. There was no tax provision in 2001. The primary difference in the 2001 loss as

compared to 2000 is the write off of \$370,000 of inventory, \$325,000 of which is attributable to the Mobile Blocker product. We took the write off in connection with our decision to cease our efforts to enter the Mobile Blocker and non-traffic related wireless business.

#### *Liquidity and Capital Resources*

At December 31, 2001, we had \$1,200,000 in cash and cash equivalents, compared to \$1,780,000 at December 31, 2000. We had working capital of \$2,175,000, and a ratio of current assets to current liabilities of 2.9 to 1 at December 31, 2001, compared to \$2,395,000 and 3.6 to 1, respectively, at the end of 2000. We believe that our decision to exit unprofitable business, related staff reductions and reduced business development expenses will have a positive impact on our liquidity in 2002.

Net cash provided by operating activities was \$374,000 in 2001, compared to \$563,000 in 2000. The decrease in 2001 was due primarily to an increase in accounts receivable, which was attributable to the increased royalty income from Econolite. We anticipate 2002 accounts receivable to be similar to 2001 levels, and cash from operating activity to increase, for the same reasons we expect liquidity to increase in 2002, as described above.

In 2001 we received cash of approximately \$28,000 in connection with the exercise of stock options and warrants.

We believe that cash and cash equivalents on hand at December 31, 2001, along with an available \$500,000 revolving line of credit with a bank and savings from recent restructuring, will satisfy our projected working capital needs, investing activities, and other cash requirements through 2002. Current availability on our line of credit is \$50,000 with the balance used to secure the letter of credit issued to our Flow Traffic minority shareholders (see Recent Developments).

#### *Recent Developments*

On January 7, 2002 we purchased all of the shares then held by the minority shareholders of our subsidiary Flow Traffic Ltd., making Flow Traffic our wholly owned subsidiary. The purchase was made in accordance with the Shares Sale and Purchase Agreement dated November 28, 2001, as amended on December 31, 2001, among Image Sensing Systems and the minority shareholders of Flow Traffic. The minority shareholders then included Johan Billow and Grove Place Limited (a consulting company), affiliated with Anthony H. Gould. Subsequently, in February 2002, Anthony Gould and Johan Billow were elected to our Board of Directors, Anthony Gould was appointed as our President and Chief Executive Officer and Johan Billow was appointed as our Vice President for International Business. The agreement is filed as an exhibit to this Form 10-KSB. Prior to this purchase, we owned six shares of Flow Traffic, and the minority shareholders collectively owned four shares of Flow Traffic.

We agreed to pay the following amounts to the minority shareholders as consideration for their shares:

- Cash payments at the time of purchase totaling \$250,000.
- Additional payments totaling \$450,000, payable at any time between April 1, 2003 and April 30, 2003 upon the request of the minority shareholders, which payments are secured by letters of credit drawn in favor of the minority shareholders and expiring on April 30, 2003.
- Non-interest bearing notes, maturing on January 7, 2007, in the aggregate principal amount of \$250,000, and convertible into an aggregate of 100,000 shares of our common stock. The holders may demand payment for their notes at any time after April 1, 2003. The notes may be prepaid by us at any time during calendar year 2002 for their aggregate principal amount of \$250,000 and without penalty or additional fees, or may be prepaid by us at any time after April 1, 2003, for the aggregate principal amount of \$250,000 plus additional payments totaling \$50,000. If not converted or paid by January 7, 2007, each note will be redeemed by us on that date for its principal amount. Each note also provides that if the note is converted into shares of our common

stock, we will register such shares with the Securities and Exchange Commission, if so requested by the holder.

In addition to the foregoing consideration, if Flow Traffic achieves an audited net profit before tax of HK\$1,418,000 (approximately US\$181,795) or greater for fiscal year 2002, we will make an additional cash payment totaling \$100,000 to the minority shareholders, payable within 10 days after completion of Flow Traffic's annual audit.

In the first quarter of 2002 we laid off seven full-time employees. Of the seven employees, five were in engineering and two were in sales and marketing. Additionally in the first quarter of 2002, William L. Russell, our Chairman, President and Chief Executive Officer, left Image Sensing Systems to pursue other interests. Mr. Russell was replaced as President and Chief Executive Officer by Anthony H. Gould, then serving as Managing Director of our subsidiary Flow Traffic Ltd. We will incur \$277,000 in severance expense in the first quarter of 2002.



Item 7. Financial Statements and Supplementary Data

IMAGE SENSING SYSTEMS, INC.  
CONSOLIDATED BALANCE SHEET

	December 31	
	2001	2000
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$1,200,000	\$1,780,000
Accounts receivable, net of allowance for returns and doubtful accounts of \$41,000 in 2001 & \$43,000 in 2000	1,589,000	943,000
Inventories	341,000	370,000
Prepaid expenses	88,000	117,000
Deferred income taxes	92,000	92,000
Total current assets	<u>3,310,000</u>	<u>3,302,000</u>
Property and equipment:		
Furniture and fixtures	181,000	210,000
Leasehold improvements	107,000	104,000
Equipment	1,444,000	1,234,000
	<u>1,732,000</u>	<u>1,548,000</u>
Accumulated depreciation	<u>(1,381,000)</u>	<u>(1,165,000)</u>
	351,000	383,000
Deferred income taxes	34,000	34,000
Goodwill, net of accumulated amortization of \$13,000 in 2001 & \$9,000 in 2000	77,000	81,000
Other Assets	37,000	29,000
Capitalized software development costs, net of accumulated amortization of \$607,000 in 2001 (\$349,000 in 2000)	1,195,000	1,453,000
<b>TOTAL ASSETS</b>	<u><u>\$5,004,000</u></u>	<u><u>\$5,282,000</u></u>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$720,000	\$433,000
Accrued compensation	374,000	365,000
Deferred revenue	40,000	109,000
Total current liabilities	<u>1,134,000</u>	<u>907,000</u>
Minority Interest	56,000	134,000
Shareholders' equity:		
Preferred stock, \$.01 par value:		
Authorized shares – 2,000,000		
Issued and outstanding – none		
Common stock, \$.01 par value:		
Authorized shares – 5,000,000		
Issued and outstanding – 3,153,000 in 2001 & 3,143,000 in 2000	32,000	32,000
Additional paid-in capital	4,600,000	4,572,000
Retained earnings (deficit)	(818,000)	(363,000)
Total shareholders' equity	<u>3,814,000</u>	<u>4,241,000</u>
<b>TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY</b>	<u><u>\$ 5,004,000</u></u>	<u><u>\$ 5,282,000</u></u>

**IMAGE SENSING SYSTEMS, INC.**  
**CONSOLIDATED STATEMENT OF OPERATIONS**

	Year ended December 31	
	2001	2000
Revenue:		
Product sales	\$2,410,000	\$3,210,000
Royalties	4,010,000	2,684,000
Consulting services	262,000	142,000
	6,682,000	6,036,000
Cost of revenue:		
Product sales (see Note 2)	1,613,000	1,936,000
Royalties	285,000	271,000
Consulting services	183,000	118,000
	2,081,000	2,325,000
Gross profit	4,601,000	3,711,000
Operating expenses:		
Selling, marketing and product support	2,230,000	1,609,000
General and administrative	2,006,000	2,305,000
Research and development	961,000	-
	5,197,000	3,914,000
Loss from operations	(596,000)	(203,000)
Interest income	115,000	120,000
Loss before income taxes	(481,000)	(83,000)
Income taxes (benefit)	2,000	(87,000)
Income/(loss) before minority interest	(483,000)	4,000
Minority interest	28,000	(54,000)
Net loss	\$(455,000)	\$(50,000)
Net loss per common share—basic and diluted	\$(0.14)	\$(0.02)
Weighted average number of common shares outstanding	3,147,567	3,142,837

*See accompanying notes.*

IMAGE SENSING SYSTEMS, INC.  
CONSOLIDATED STATEMENT OF CASH FLOW

	Year ended December 31 .	
	2001	2000
Operating activities:		
Net loss	\$(455,000)	\$ (50,000)
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	216,000	238,000
Amortization	262,000	181,000
Minority interest in subsidiary's earnings	(28,000)	54,000
Changes in operating assets and liabilities:		
Receivables	(646,000)	485,000
Inventories	29,000	(286,000)
Deferred income taxes	-	(117,000)
Prepaid expenses	21,000	(89,000)
Accounts payable	287,000	4,000
Accrued compensation	9,000	87,000
Deferred revenue	(69,000)	56,000
Net cash (used in) provided by operating activities	(374,000)	563,000
Investing activities:		
Flow Traffic Dividend	(50,000)	-
Purchases of property and equipment	(184,000)	(176,000)
Capitalized software development costs	-	(615,000)
Net cash used in investing activities	(234,000)	(791,000)
Financing activities:		
Proceeds from sale of common stock	28,000	689,000
Net cash provided by financing activities	28,000	689,000
Increase (decrease) in cash	(580,000)	461,000
Cash and cash equivalents at beginning of year	1,780,000	1,319,000
Cash and cash equivalents at end of year	\$ 1,200,000	\$ 1,780,000

*See accompanying notes.*

**IMAGE SENSING SYSTEMS, INC.**  
**CONSOLIDATED STATEMENT OF SHAREHOLDERS' EQUITY**

<u>Description</u>	<u>Shares Issued</u>	<u>Common Stock</u>	<u>Additional Paid-In Capital</u>	<u>Retained Earnings (Deficit)</u>	<u>Total</u>
Balance at December 31, 1999	2,479,200	\$25,000	\$3,890,000	\$(313,000)	\$3,602,000
Common stock issued in 20% Dividend	503,000	5,000	(5,000)	-	-
Common stock issued for options and warrants exercised	161,200	2,000	687,000	-	689,000
Net Loss	-	-	-	(50,000)	(50,000)
Balance at December 31, 2000	<u>3,143,400</u>	<u>\$32,000</u>	<u>\$4,572,000</u>	<u>\$(363,000)</u>	<u>\$4,241,000</u>
Common stock issued for options exercised	9,940	-	28,000	-	28,000
Net Loss	-	-	-	(455,000)	(455,000)
Balance at December 31, 2001	<u><u>3,153,340</u></u>	<u><u>\$32,000</u></u>	<u><u>\$4,600,000</u></u>	<u><u>\$(818,000)</u></u>	<u><u>\$3,814,000</u></u>

December 31, 2001

1. SIGNIFICANT ACCOUNTING POLICIES  
DESCRIPTION OF BUSINESS

Image Sensing Systems, Inc. ("ISS") develops and markets video image processing technology and products for use in advanced traffic management systems and traffic data collection. ISS sells its products primarily to foreign distributors of its products and receives a royalty for sales made by a sub licensee to North American distributors. ISS also provides technical expertise in image processing, hardware and software design, and traffic management and control. ISS's products are used primarily by governmental entities.

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the accounts of ISS and its majority-owned subsidiary, Flow Traffic Ltd., located in Hong Kong. All significant inter-company transactions and accounts have been eliminated in consolidation.

REVENUE RECOGNITION

Revenue from product sales and royalties from the sale of products by a sub-licensee are recorded upon shipment by the sub licensee. All direct and distributor sales are recorded upon shipment. Consulting fees are recorded as earned.

CASH AND CASH EQUIVALENTS

ISS considers all highly liquid investments with a maturity date of three months or less when purchased to be cash equivalents. Investments classified as cash equivalents consist of commercial paper. The market value of these investments approximates cost at December 31, 2001 and 2000.

INVENTORIES

Inventories are primarily finished goods and are valued at the lower of cost or market on the first-in, first-out (FIFO) method.

PROPERTY AND EQUIPMENT

Property and equipment are stated at cost. Depreciation is computed by the straight-line method over a three- to seven-year period for financial reporting purposes and by accelerated methods for income tax purposes.

INCOME TAXES

Income taxes are accounted for under the liability method. Deferred income taxes reflect the effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and amounts used for income tax purposes.

STOCK-BASED COMPENSATION

ISS follows Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* ("APB 25"), and related interpretations in accounting for its stock options. Under APB 25, when the exercise price of stock options equals the market price of the underlying stock on the date of grant, no compensation expense is recognized.

ISS has adopted the disclosure-only provisions of Statement of Financial Accounting Standards (SFAS) No. 123, *Accounting for Stock-Based Compensation* ("SFAS 123"). Accordingly, ISS has made pro forma disclosures of what net income and net income per share would have been had the provisions of SFAS 123 been applied to ISS's stock options.

ADVERTISING

Advertising and promotion costs are expensed as incurred and amounted to approximately \$224,000 and \$117,000 in the fiscal years ended 2001 and 2000, respectively.

#### USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from the estimates.

#### ACCOUNTING FOR IMPAIRMENT OF LONG-LIVED ASSETS

ISS records losses on long-lived assets used in operations when indicators of impairment are present and the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying amount.

#### RESEARCH AND DEVELOPMENT

Research and development costs are charged to operations in the period incurred.

#### SOFTWARE DEVELOPMENT COSTS

ISS capitalizes software development costs in accordance with the provisions of SFAS No. 86, *Accounting for the Costs of Computer Software to be Sold, Leased, or Otherwise Marketed*. Capitalization of software development costs, including significant product enhancements, begins upon the establishment of technological feasibility for the product and concludes when the product is available for release to distributors. The establishment of technological feasibility and the ongoing assessment of the recoverability of these costs requires considerable judgment by management with respect to certain external factors, including, but not limited to, anticipated future gross product revenue or royalties, estimated economic life, and changes in software and hardware technology. ISS amortizes software development costs based on projected revenue, with minimum annual amortization based on a seven-year life using the straight-line method.

#### EARNINGS PER COMMON SHARE

Basic earnings per share are computed using the weighted average number of common shares outstanding during the period. Fully diluted and basic earnings per share are the same because the effect of common equivalent shares from stock options are not material and were antidilutive for 2001 and 2000.

#### NEW ACCOUNTING PRONOUNCEMENTS

In June 2001, the Financial Accounting Standards Board issued Statements of Financial Accounting Standards No. 141, Business Combinations, and No. 142, Goodwill and Other Intangible Assets, effective for fiscal years beginning after December 15, 2001. Under the new rules, goodwill will no longer be amortized but will be subject to annual impairment tests in accordance with the Statements. Other intangible assets will continue to be amortized over their useful lives.

The Company will apply the new rules on accounting for goodwill and other intangible assets beginning in the first quarter of 2002. During 2002, the Company will perform the first of the required impairment tests of goodwill and indefinite lived intangible assets and has not yet determined what the effect of these tests will be on the earnings and financial position of the Company.

#### RECLASSIFICATIONS

Certain prior year amounts have been reclassified to conform to the current year presentation.

### 2. INVENTORY

Cost of revenue for 2001 product sales included a write-off of \$368,000 related to Mobile Blocker and our old-style Solo product.

### 3. CREDIT FACILITY

ISS has a credit agreement that provides up to \$500,000 in short-term borrowings at 1.25% over the prime rate. (6.00% at December 31, 2001). The agreement limits the amount of short-term borrowings to 65% of eligible receivables. Substantially all assets are pledged as collateral on the borrowings. The credit agreement further includes covenants that relate to certain financial statement ratios and restrictions. ISS had no outstanding borrowings in 2001 or 2000.

#### 4. LEASE COMMITMENT

ISS rents office space under an operating lease agreement expiring in November 2002, with options to renew through November 2004. The lease provides for monthly payments of \$12,000 and ISS is responsible for its proportionate share of increases in operating expenses that exceed a base rent factor. Rent expense amounted to \$153,400 in 2001 and \$145,000 in 2000.

At December 31, 2001, future minimum annual lease payments are \$134,000 for 2002.

#### 5. INCOME TAXES

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of ISS's deferred tax assets and liabilities are as follows:

	December 31	
	2001	2000
Deferred tax assets:		
Accounts receivable allowances	\$ 3,000	\$ 15,000
Other reserves	16,000	-
Accrued compensation	23,000	32,000
Warranty reserve	5,000	5,000
Inventory reserve	126,000	-
Deferred revenue	15,000	40,000
Research and development tax credits	290,000	245,000
Net operating loss carry forward	548,000	549,000
Less valuation allowance	(458,000)	(216,000)
	<u>568,000</u>	<u>670,000</u>
Deferred tax liabilities:		
Tax depreciation in excess of book	\$ -	\$ 6,000
Capitalized SW development costs	442,000	538,000
	<u>442,000</u>	<u>544,000</u>
Net deferred taxes	<u>\$126,000</u>	<u>\$ 126,000</u>

ISS has net operating loss carry forwards for income tax purposes of \$1,882,000 and research and development tax credits of \$290,000 that expire in the years 2007 through 2020. Included in the NOL is approximately \$170,000 of deductions resulting from disqualifying dispositions of stock options. These deductions currently have a full valuation allowance; and when realized for financial statement purposes, they will not result in a reduction in income tax expense. Rather, the benefit will be recorded as additional paid-in capital.

Cash paid for income taxes amounted to \$1,900 in 2001 and \$4,400 in 2000.

Deferred tax assets have been offset by a valuation allowance as deemed necessary based on ISS's estimates of its future sources of taxable income and the expected timing of temporary difference reversals. Despite the reported cumulative net loss for fiscal 2001, ISS believes recorded net deferred tax assets are more likely than not to be recoverable, based upon its estimates of future sources of taxable income and the expected timing of temporary difference reversals.

There are no undistributed earnings of ISS's foreign subsidiary at December 31, 2001.

The components of income tax (benefit) expense as recorded by the Company for December 31, 2001 and 2000 are as follows:

Year Ended December 31

	2001	2000
Current:		
Federal	\$ -	\$ -
State	4,000	4,000
Foreign	(2,000)	26,000
	2,000	30,000
Deferred:		
Federal	-	(117,000)
State	-	-
Foreign	-	-
	-	(117,000)
Total income tax expense	\$ 2,000	\$ (87,000)

A reconciliation of income taxes to the statutory federal rate is as follows:

	December 31	
	2001	2000
Federal tax (benefit) statutory rate	\$(163,000)	\$ (28,000)
State taxes net of federal benefit	(19,000)	(14,000)
Meals and entertainment	7,000	7,000
Research and development tax credits	(45,000)	-
Effect of lower rates for Flow Traffic Ltd.	22,000	(65,000)
Change in valuation allowance	242,000	24,000
Other	(42,000)	(11,000)
Income taxes (benefit)	\$ 2,000	\$ (87,000)

## 6. LICENSING

The United States patent for some aspects of the technology underlying ISS's Autoscope system was issued in 1989 to the University of Minnesota. ISS has an exclusive worldwide license from the University of Minnesota for that technology and pays royalties to the University of Minnesota in exchange for such license. Royalty expense under the agreement was \$285,000 in 2001 and \$271,000 in 2000.

ISS has sublicensed the right to manufacture and market the Autoscope technology in North America and the Caribbean to Econolite Control Products, Inc., of Anaheim, California and receives royalties from Econolite on sales of the Autoscope system in those territories. Econolite also manufactures the Autoscope system on a non-exclusive basis for direct sales by ISS outside of North America and the Caribbean. ISS recognized royalty income from this agreement of \$4,010,000 in 2001 and \$2,684,000 in 2000. Accounts receivable from Econolite were \$1,276,000 and \$859,000 at December 31, 2001 and 2000, respectively.

## 7. SIGNIFICANT CUSTOMERS AND CONCENTRATION OF CREDIT RISK

ISS derived the following percentages of its net revenues from the following geographic regions:

	2001	2000
Asia Pacific	28%	44%
Europe	5%	9%
North America	67%	47%



Shown below are the percentages of sales of specific customers, which exceed 10% for the years shown.

	2001	2000
Econolite Control Products, Inc.	60%	44%

#### 8. RETIREMENT PLAN

Substantially all employees of ISS may participate in a qualified defined contribution 401(k) plan in which participants may elect to have a specified portion of their salary contributed to the plan. ISS may make contributions to the plan. No discretionary contributions were made by ISS in 2001 and 2000.

#### 9. EMPLOYMENT AGREEMENTS

ISS has employment agreements with its chief executive officer and chief financial officer. The agreements provide for a minimum salary and a stock option grant and include non-compete and non-solicitation provisions. The agreement with the chief financial officer additionally provides for severance pay in the event of involuntary termination or termination resulting from a sale, acquisition or merger of ISS. The maximum severance is the chief financial officer's current salary for up to one year. During the first quarter of 2002, ISS will incur approximately \$277,000 in severance related expenses primarily as a result of the replacement of its President and Chief Executive Officer.

#### 10. STOCK OPTIONS

In February 1995, ISS adopted the 1995 Long-Term Incentive and Stock Option Plan (the "1995 Plan"), which provides for the granting of incentive (ISO) and non-incentive (NSO) stock options, stock appreciation rights, restricted stock awards and performance awards to officers, directors, employees, consultants and independent contractors of ISS and its subsidiaries. The following table summarizes stock option activity for 2001 and 2000:

	Plan Options Available For Grant	Plan Options Outstanding		Non-Plan Options Outstanding	Weighted Average Exercise Price Per Share
		ISO	NSO		
Balance at December 31, 1999	50,450	327,350	18,000	244,200	\$3.77
Stock Dividend - 20%					
Granted	10,090	60,470	3,600	44,840	-
Exercised	(15,000)	15,000	-	126,000	6.90
Canceled	-	(27,200)	(6,000)	(20,000)	3.29
Balance at December 31, 2000	53,100	(37,500)	(15,600)	-	3.96
Balance at December 31, 2000	98,640	338,120	-	395,040	3.68
Reserved for options under Plan					
Granted	420,000	-	-	-	-
Exercised	(28,000)	28,000	-	-	4.13
Canceled	-	(9,940)	-	-	2.83
Balance at December 31, 2001	62,160	(52,560)	-	(9,600)	3.11
Balance at December 31, 2001	552,800	303,620	-	385,440	\$3.93

The following table summarizes information about the stock options outstanding at December 31, 2001.

Options Outstanding			Options Exercisable		
Exercisable					
Range of Exercise Price	Number Outstanding	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$2.40 – 3.80	300,740	6.4 years	\$2.53	236,600	\$2.53
3.01 – 4.00	219,320	4.7 years	3.41	239,960	3.41
Over 4.00	163,000	8.5 years	6.44	49,000	5.38
\$2.40 – 7.50	689,060	6.3 years	\$3.93	525,560	\$3.20

Options under the 1995 Plan and Non-Plan options expire at various dates through 2010. At December 31, 2001 there were 689,060 options exercisable at a weighted average exercise price of \$3.93. Options outstanding have a weighted average remaining contractual life of 6.3 years. The weighted average fair value of options granted during 2001 and 2000 was \$1.63 and \$3.84, respectively.

Pro forma information regarding net loss and net loss per share is required by SFAS 123 and has been determined as if ISS had accounted for its employee stock options under the fair value method of SFAS 123. The fair value for these options was estimated at the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions: a risk-free interest rate of 4.82% for 2001 and 6.05% for 2000, a volatility factor of the expected market price of ISS's common stock of .742 for 2001 and .518 for 2000, and a weighted average expected life of the option of ten years.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options, which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions. Because ISS's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions may materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the options' vesting period. ISS's pro forma information is as follows:

	2001	2002
Pro forma net loss	\$(689,000)	\$(302,000)
Pro forma net loss per common share, basic and diluted	\$ (.22)	\$ (.10)

#### 11. SUBSEQUENT EVENT

On January 7, 2002, ISS acquired the remaining 40% of Flow Traffic Ltd. The acquisition included a \$250,000 cash payment, additional future cash payments totaling \$450,000, secured by letters of credit, and notes payable totaling \$250,000. The additional payments of \$450,000 are payable at any time between April 1, 2003 and April 30, 2003, and the letters of credit expire on April 30, 2003. The notes payable totaling \$250,000 are due on demand after April 1, 2003, mature on January 7, 2007, are non-interest bearing and are unsecured.

The total purchase consideration does not reflect contingent consideration related to earn-out arrangements totaling \$100,000. Any contingent consideration will result in additional goodwill when earned.

## Report of Independent Auditors

Shareholders and Board of Directors

Image Sensing Systems, Inc.

We have audited the accompanying consolidated balance sheets of Image Sensing Systems, Inc. as of December 31, 2001 and 2000, and the related consolidated statements of operations, shareholders' equity and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We did not audit the financial statements of Flow Traffic Ltd., a 60%-owned subsidiary, which statements reflect total assets of \$638,000 and \$738,000 as of December 31, 2001 and 2000, respectively, and total revenues of \$1,866,000 and \$2,643,000, respectively, for the years then ended. Those statements were audited by other auditors whose report was furnished to us, and our opinion, insofar as it relates to data included for Flow Traffic Ltd., is based solely on the report of the other auditors.

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

In our opinion, based on our audits and the report of other auditors, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Image Sensing Systems, Inc. at December 31, 2001 and 2000, and the consolidated results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States.

/s/Ernst & Young LLP

Minneapolis, Minnesota  
February 8, 2002

**Item 8. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

None.

**PART III**

**Item 9. Directors and Officers of the Registrant**

The sections entitled "Election of Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance" in our definitive proxy statement for our 2002 annual meeting of shareholders to be filed on or before April 30, 2002 are incorporated into this Form 10-KSB by reference.

**Item 10. Executive Compensation**

The section entitled "Executive Compensation" in our definitive proxy statement for the 2002 annual meeting of shareholders is incorporated into this Form 10-KSB by reference.

**Item 11. Security Ownership of Certain Beneficial Owners and Management**

The section entitled "Security Ownership of Certain Beneficial Owners and Management" in our definitive proxy statement for the 2002 annual meeting of shareholders is incorporated into this Form 10-KSB by reference.

**Item 12. Certain Relationships and Related Transactions**

The section entitled "Certain Relationships and Related Transactions" in our definitive proxy statement for the 2002 annual meeting of shareholders is incorporated into this Form 10-KSB by reference.

**Item 13. Exhibits, Financial Statement Schedules, and Reports on Form 8-K**

(a) List of documents filed as part of the report:

1. Financial statements referenced in Item 7
2. Exhibits:

<u>Exhibit No.</u>	<u>Description</u>
3.1	Restated Articles of Incorporation of ISS, incorporated by reference to ISS's registration statement on Form SB-2 (Registration No. 90298C) filed on March 14, 1995.
3.2	Articles of Amendment to Articles of Incorporation of ISS, incorporated by reference to ISS's quarterly report on Form 10-QSB for the quarter ended June 30, 2001.
3.3	Bylaws of ISS, incorporated by reference to ISS's registration statement on Form SB-2 (Registration No. 90298C) filed on March 14, 1995.
4.1	Specimen form of ISS's common stock certificate, incorporated by reference to ISS's registration statement on Form SB-2 (Registration No. 90298C) filed on March 14, 1995.
10.1	Manufacturing, Distributing and Technology License Agreement dated June 11, 1991, as amended on December 15, 1992, between Econolite Control Products, Inc. and ISS, incorporated by reference to ISS's registration statement on Form SB-2 (Registration No. 90298C) filed on March 14, 1995.

- 10.2 License Agreement dated June 10, 1991, between the University of Minnesota and ISS, incorporated by reference to ISS's registration statement on Form SB-2 (Registration No. 90298C) filed on March 14, 1995.
- 10.3 Form of Distributor Agreement, incorporated by reference to ISS's registration statement on Form SB-2 (Registration No. 90298C) filed on March 14, 1995.
- 10.4 Assignment from Panos G. Michalopoulos to ISS dated January 19, 1985, incorporated by reference to ISS's registration statement on Form SB-2 (Registration No. 90298C) filed on March 14, 1995.
- 10.5 Production Agreement dated July 8, 1997, between ISS, Cohu, Inc., and Econolite Control Products, Inc., incorporated by reference to Exhibit 10.14 to ISS's annual report on Form 10-KSB for the year ended December 31, 1997.
- 10.6 Conditional Credit Line Letter Agreement with Wells Fargo Bank Minnesota, N.A. dated September 14, 1998, incorporated by reference to Exhibit 10.17 to ISS's annual report on Form 10-KSB for the year ended December 31, 1998.
- 10.7 Office Lease Agreement by and between Spruce Tree Centre L.L.P and ISS, dated November 24, 1998, incorporated by reference to Exhibit 10.18 to ISS's annual report on Form 10-KSB for the year ended December 31, 1998.
- 10.8\* Executive Employment Agreement between ISS and Jeffrey F. Martin, dated December 21, 1999, incorporated by reference to Exhibit 10.19 to ISS's annual report on Form 10-KSB for the year ended December 31, 1999.
- 10.9\* Executive Employment Agreement dated June 12, 2000, between ISS and William L. Russell, incorporated by reference to Exhibit 10.21 to ISS's quarterly report on Form 10-QSB for the quarter ended June 30, 2000.
- 10.10\* 1995 Long-Term Incentive and Stock Option Plan, amended and restated through May 17, 2001.
- 10.11 Distribution Agreement dated April 20, 2001, between ISS and Wireless Technology, Inc., incorporated by reference to ISS's quarterly report on Form 10-QSB for the quarter ended June 30, 2001.
- 10.12 Extension and Second Modification dated July 13, 2001, to Manufacturing, Distributing and Technology License Agreement dated June 11, 1991, between ISS and Econolite Control Products, Inc.
- 10.13 Definitive Agreement dated July 20, 2001, between ISS and Detector Electronics Corporation, incorporated by reference to ISS's quarterly report on Form 10-QSB for the quarter ended September 30, 2001.
- 10.14 Shares Sale and Purchase Agreement dated November 28, 2001, among ISS and Berkeley Development Limited, Mats Johan Billow and Grove Place Limited.
- 10.15 Amendment No. 1 dated as of December 31, 2001, to Shares Sale and Purchase Agreement dated November 28, 2001, among ISS and Berkeley Development Limited, Mats Johan Billow and Grove Place Limited.
- 10.16 Non-Interest Bearing Convertible Note due January 7, 2002, of Image Sensing Systems, Inc. in favor of Mats Johan Billow.

- 10.17 Non-Interest Bearing Convertible Note due January 7, 2002, of Image Sensing Systems, Inc. in favor of Anthony H. Gould.
- 10.18\* Settlement and Release Agreement dated February 11, 2002 between ISS and William L. Russell.
- 10.19\* Employment Arrangement between ISS and Anthony H. Gould.
- 10.20 Production Agreement dated February 14, 2002, among ISS, Wireless Technology, Inc. and Econolite Control Products, Inc.
- 21 List of Subsidiaries of ISS.
- 23 Consent of Ernst & Young LLP.
- 24 Power of Attorney (included on signature page).
- 99 Cautionary Statement.

\*Management contract or compensatory plan or arrangement.

**b) Reports on Form 8-K filed during fourth quarter of 2001:**

None

## SIGNATURES

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

Image Sensing Systems, Inc.

/s/ Anthony H. Gould

Date: April 1, 2002

By: Anthony H. Gould, President and Chief Executive Officer

## POWER OF ATTORNEY

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated. Each person whose signature to this report on Form 10-KSB appears below hereby constitutes and appoints Anthony H. Gould and Jeffrey F. Martin, and each of them, as his or her true and lawful attorney-in-fact and agent, with full power of substitution, to sign on his or her behalf individually and in the capacity stated below and to perform any acts necessary to be done in order to file all amendments to this report on Form 10-KSB, and any and all instruments or documents filed as part of or in connection with this report on Form 10-KSB or the amendments hereto, and each of the undersigned does hereby ratify and confirm all that said attorney-in-fact and agent, or his substitutes, shall do or cause to be done by virtue hereof.

/s/ Anthony H. Gould

Date: April 1, 2002

By: Anthony H. Gould  
President and Chief Executive Officer, Director (Principal Executive Officer)

/s/ Jeffrey F. Martin

Date: April 1, 2002

By: Jeffrey F. Martin  
Chief Financial Officer (Principal Financial & Accounting Officer)

/s/ James Murdakes

Date: April 1, 2002

By: James Murdakes  
Chairman of the Board

/s/ Panos G. Michalopoulos

Date: April 1, 2002

By: Panos G. Michalopoulos  
Director

/s/ Richard P. Braun

Date: April 1, 2002

By: Richard P. Braun  
Director

/s/ Richard C. Magnuson

Date: April 1, 2002

By: Richard C. Magnuson  
Director

/s/ Mats Johan Billow

Date: April 1, 2002

By: Mats Johan Billow  
Director

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

FORM 10-KSB/A-1

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

For the fiscal year ended December 31, 2001

Transition Report Under Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 0-26056

**Image Sensing Systems, Inc.**

(Name of small business issuer in its charter)

Minnesota

State or other jurisdiction of  
incorporation of organization

41-1519168

IRS Employer Identification No.

500 Spruce Tree Centre  
1600 University Ave. W.

St. Paul, MN 55104

Address of principal executive offices

(651) 603-7700

Issuer's telephone number

Securities registered under Section 12(b) of the Exchange act:

None

Title of each class

Securities registered under Section 12(g) of the Exchange Act:

Common Stock, \$.01 par value

Title of each class

Check whether the issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the past 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

Check if there is no disclosure of delinquent filers in response to Items 405 of Regulation SB in this form, and no disclosure will be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-KSB or any amendment to this Form-10-KSB.  [X]

The registrant's revenues for the fiscal year ended December 31, 2001 totaled \$6,682,000.

Based on the closing bid price at March 12, 2002, the aggregate market value of the voting stock held by nonaffiliates of the registrant was \$6,305,554.

The number of shares outstanding of the registrant's \$.01 par value common stock, as of March 12, 2002, was 3,152,777 shares.

Transitional Small Business Issuer Format:  Yes  No

**EXPLANATORY NOTE**

This Amendment No. 1 to the Form 10-KSB of Image Sensing Systems, Inc. for the fiscal year ended December 31, 2001 is being filed in order to add the information required by Part III of the Form 10-KSB, to update the "Recent Developments" section of Part I, Item 6 of the Form 10-KSB and to file additional exhibits. Other than these items, none of the information contained in our Form 10-KSB filed on April 1, 2002, has been amended or restated.



PART I

Item 6. Management's Discussion and Analysis of Financial Condition and Results of Operations

Our critical accounting policies, including the assumptions and judgments underlying them, are disclosed in Note 1 to the Consolidated Financial Statements. These policies have been consistently applied in all material respects and address such matters as revenue recognition, depreciation methods, asset impairment recognition, deferred tax valuation allowance, business combination and accounting. While the estimates and judgments associated with the application of these policies may be affected by different assumptions or conditions, we believe the estimates and judgments associated with the reported amounts are appropriate in the circumstances.

The following table sets forth, for the periods indicated, certain statements of operational data as a percent of revenue:

	Year Ended December 31	
	<u>2001</u>	<u>2000</u>
Product sales	36.1 %	53.2 %
Royalties	60.0	44.5
Consulting services	3.9	2.3
Total revenue	100.0	100.0
Cost of revenue	31.1	38.5
Gross profit	68.9	61.5
Selling, marketing and product support	33.4	26.7
General and administrative	30.0	38.2
Research and development	14.4	0.0
Loss from operations	(8.9)	(3.4)
Net loss	(6.8)	(.8)

Product sales for 2001 decreased to \$2,410,000 compared to \$3,210,000 in 2000. The decrease was due primarily to lower sales in Asia (\$1,866,000 in 2001 compared to \$2,643,000 in 2000). The difference is attributable to large orders from Korea and Hong Kong in 2000 with a value of approximately \$1,300,000. Royalty income increased to \$4,010,000 in 2001, compared to \$2,684,000 in 2000. The increase in royalty income in 2001 resulted primarily from the introduction of the AutoScope Solo Pro™, which is more cost effective than the prior version of the Solo product. Revenue from consulting services increased to \$262,000 in 2001 from \$142,000 in 2000. The majority of consulting income came from our contract with Oakland County in Michigan.

Gross profits were \$4,601,000, or 68.9% of revenue, in 2001, compared to \$3,711,000, or 61.5% of revenue, in 2000. The gross profit was 74.4% before the write-off of Mobile Blocker inventory and write down of old style Solo inventory. This inventory adjustment total was \$368,000. The increase in our gross profit margin percentage was due primarily to greater royalty revenue from Econolite as a percent of total revenues. We expect the revenue mix to be comparable to 2001 levels in 2002.

Selling, marketing, and product support expenses were \$2,229,000, or 33.4% of revenue, in 2001, compared to \$1,609,000, or 26.7% of revenue, in 2000. The increase resulted primarily from increased spending for sales and marketing personnel and other business development costs related to our international business, and the development of the business infrastructure for the sales and marketing of our suite of wireless products, including the Mobile Blocker product. We expect selling, marketing and product expenses to decrease in 2002 based on the fact that we are returning primary focus to our core business.

General and administrative expenses were \$2,006,000, or 30.0% of revenue, in 2001, compared to \$2,305,000, or 38.2% of revenue, in 2000. The decrease was due primarily to cost cutting in 2001, eliminating two part-time positions, cutting back in travel, dues, and quarterly shareholder mailings along with the absence in 2001 of the incremental expense we incurred in 2000 related to our stock dividend and fees related to the issuance of additional shares in connection with the dividend.

The research and development expenses and capitalized software development costs totaled \$961,000 in 2001 compared to \$615,000 in 2000. The increase resulted primarily from the fact that we focused on the development of enhancements to existing products in 2001, and additionally on the development work on Flame Detection. We also added two engineers in January 2001, which increased our research and development cost. In early 2002 we laid off five engineers and believe our development expense for 2002 will be closer to the levels in 2000.

Net loss was \$455,000 (Image Sensing Systems loss of \$416,000 and loss from Flow Traffic of \$39,000), or 6.8% of revenue, in 2001, compared to a loss of \$50,000 (Image Sensing Systems loss of \$242,000 and income from Flow Traffic of \$192,000), or 0.8% of revenue, in 2000. There was an \$87,000 domestic tax benefit in 2000 that mitigated 2000 losses. There was no tax provision in 2001. The primary difference in the 2001 loss as compared to 2000 is the write off of \$370,000 of inventory, \$325,000 of which is attributable to the Mobile Blocker product. We took the write off in connection with our decision to cease our efforts to enter the Mobile Blocker and non-traffic related wireless business.

#### *Liquidity and Capital Resources*

At December 31, 2001, we had \$1,200,000 in cash and cash equivalents, compared to \$1,780,000 at December 31, 2000. We had working capital of \$2,175,000, and a ratio of current assets to current liabilities of 2.9 to 1 at December 31, 2001, compared to \$2,395,000 and 3.6 to 1, respectively, at the end of 2000. We believe that our decision to exit unprofitable business, related staff reductions and reduced business development expenses will have a positive impact on our liquidity in 2002.

Net cash provided by operating activities was \$374,000 in 2001, compared to \$563,000 in 2000. The decrease in 2001 was due primarily to an increase in accounts receivable, which was attributable to the increased royalty income from Econolite. We anticipate 2002 accounts receivable to be similar to 2001 levels, and cash from operating activity to increase, for the same reasons we expect liquidity to increase in 2002, as described above.

In 2001 we received cash of approximately \$28,000 in connection with the exercise of stock options and warrants.

We believe that cash and cash equivalents on hand at December 31, 2001, along with an available \$500,000 revolving line of credit with a bank and savings from recent restructuring, will satisfy our projected working capital needs, investing activities, and other cash requirements through 2002. Current availability on our line of credit is \$50,000 with the balance used to secure the letter of credit issued to our Flow Traffic minority shareholders (see Recent Developments).

#### *Recent Developments*

On January 7, 2002 we purchased all of the shares then held by the minority shareholders of our subsidiary Flow Traffic Ltd., making Flow Traffic our wholly owned subsidiary. The purchase was made in accordance with the Shares Sale and Purchase Agreement dated November 28, 2001, as amended on December 31, 2001 and April 15, 2002, among Image Sensing Systems and the minority shareholders of Flow Traffic. The minority shareholders then included Johan Billow and Grove Place Limited, a consulting company affiliated with Anthony H. Gould. Subsequently, in February 2002, Anthony Gould and Johan Billow were elected to our Board of Directors, Anthony Gould was appointed as our interim President and Chief Executive Officer and Johan Billow was appointed as our Vice President for International Business. The agreement and amendments are filed as exhibits to this Form 10-KSB. Prior to this purchase, we owned six shares of Flow Traffic, and the minority shareholders collectively owned four shares of Flow Traffic.

We agreed to pay the following amounts to the minority shareholders as consideration for their shares:

- Cash payments at the time of purchase totaling \$250,000.

- A cash payment to Grove Place Limited only in the amount of \$50,000, payable on April 19, 2002.
- Additional payments totaling \$450,000, payable at any time between April 1, 2003 and April 30, 2003 upon the request of the minority shareholders, which payments are secured by letters of credit drawn in favor of the minority shareholders and expiring on April 30, 2003.
- Non-interest bearing notes, maturing on January 7, 2007, in the aggregate principal amount of \$250,000, and convertible into an aggregate of 100,000 shares of our common stock. The holders may demand payment for their notes at any time after April 1, 2003. The notes may be prepaid by us at any time during calendar year 2002 for their aggregate principal amount of \$250,000 and without penalty or additional fees, or may be prepaid by us at any time after April 1, 2003, for the aggregate principal amount of \$250,000 plus additional payments totaling \$50,000. If not converted or paid by January 7, 2007, each note will be redeemed by us on that date for its principal amount. Each note also provides that if the note is converted into shares of our common stock, we will register such shares with the Securities and Exchange Commission, if so requested by the holder.

In addition to the foregoing consideration, if Flow Traffic achieves an audited net profit before tax of HK\$1,418,000 (approximately US\$181,795) or greater for fiscal year 2002, we will make an additional cash payment totaling \$50,000 to Mr. Billow, payable within 10 days after completion of Flow Traffic's annual audit.

In the first quarter of 2002 we laid off seven full-time employees. Of the seven employees, five were in engineering and two were in sales and marketing. Additionally in the first quarter of 2002, William L. Russell, our Chairman, President and Chief Executive Officer, left Image Sensing Systems to pursue other interests. In connection with these resignations and terminations, we incurred \$280,000 in severance expense in the first quarter of 2002.

Anthony H. Gould, who previously served as Managing Director and an indirect minority shareholder of our subsidiary Flow Traffic Ltd., acted as interim President and Chief Executive Officer from February 11, 2002 through April 15, 2002, when he left Image Sensing Systems to pursue other interests. James Murdakes, our Chairman of the Board, has served as interim President and Chief Executive Officer since April 15, 2002 and will continue serving in this capacity until we designate a new President and Chief Executive Officer.

Jeffrey F. Martin, our Chief Financial Officer, has announced his intention to resign effective as of the close of business on April 30, 2002. We have retained the services of an independent contractor to assist us with financial matters until we designate a replacement for Mr. Martin.

In connection with Mr. Gould's departure, we will incur \$60,000 in severance expense in the second quarter of 2002, \$60,000 in the third quarter of 2002, and \$58,000 in the first quarter of 2003. In connection with Mr. Martin's departure, in the second quarter of 2002, we will incur severance expense in the amount of \$35,628.57 (less any applicable tax withholding).

### PART III

**Item 9. Directors and Executive Officers of the Registrant; Compliance with Section 16(a) of the Exchange Act.**

#### DIRECTORS AND OFFICERS OF THE REGISTRANT

Our directors and executive officers provided the following information about themselves as of April 5, 2002.

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*Mats Johan Billow*, age 39, director since February 2002. Mr. Billow became Vice President for International Business of Image Sensing Systems in February 2002. Prior to that, he served as General Manager for our wholly owned subsidiary Flow Traffic Ltd., a Hong Kong-based distributor of traffic management products and systems that provides marketing and technical support for a broad range of traffic technologies throughout Asia. Mr. Billow founded Flow Traffic in 1998. Between 1996 and 1998, Mr. Billow was the General Manager of Peek Ltd., the Asia-Pacific arm of Peek plc, a provider of products and services for improving traffic and the traveler environment, with responsibility for Peek's traffic business in East Asia. During this time he managed Peek's Chinese joint venture business and various traffic projects funded by the World Bank and Asian Development Bank.

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*Richard P. Braun*, age 76, director since 1994. Mr. Braun served as Director of the Center for Transportation Studies at the University of Minnesota from 1987 to 1994. From September 1993 to February 1995, Mr. Braun also served as Chairman of the State of Minnesota's Metropolitan Airports Commission, and he was Commissioner of Transportation for the State of Minnesota from 1979 to 1987. He retired from full-time employment in 1994. Mr. Braun is a member of the compensation and stock option committee.

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*C. Michael Eleftheriou*, age 57, director since April 2002. Since July 2001, Mr. Eleftheriou has served as President and Chief Executive Officer of Creative Publishing International, a Minneapolis-based publisher of how-to books, and a premier publisher of nature, photography and wildlife books for children and adults. From 1998 to July 2001, Mr. Eleftheriou was President, Systems Integration Services at Syntegra U.S.A., a global consulting and systems integration business. He served as Vice President, Systems Integration Services at Syntegra U.S.A. from 1997 to 1998.

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*Richard C. Magnuson*, age 60, director since 1990. Since 1997, Mr. Magnuson has served as President and Chief Executive Officer of BioMedix, Inc., a medical device company. From 1995 to 1997 he operated his own management consulting firm, Operations Management, Inc. Prior to 1995, Mr. Magnuson served as President and Chief Executive Officer of Image Sensing Systems from 1991 to 1995 and as Vice President and Secretary during 1995. From 1988 to 1990, Mr. Magnuson worked with Image Sensing Systems as a private consultant. Mr. Magnuson is a member of the audit committee.

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*Panos G. Michalopoulos*, age 53, director since 1984. Dr. Michalopoulos was Chairman of the Board of Image Sensing Systems from our inception in 1984 through 1999, and served as Chief Scientific Advisor from 1995 through 2000. Since 1977, Dr. Michalopoulos has been a professor in the Department of Civil Engineering at the University of Minnesota. Dr. Michalopoulos has more than 27 years of research, teaching, and consulting experience in traffic engineering operations and control. He has taught at several universities, consulted with many firms in the United States and abroad in the area of traffic control, and has worked as a traffic engineer.

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*James Murdakes*, age 69, director since 1994. Mr. Murdakes was elected Chairman of the Board of Image Sensing Systems in February 2002. He served as President and Chief Executive Officer of LSC, Inc., a Minneapolis-based systems integrator for computer network storage servers, from 1993 through 1996, and was Chairman of the Board of Directors and a management consultant to LSC in 1997. He retired from full-time employment in 1998. Mr. Murdakes is a member of the audit committee and the compensation and stock option committee.

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*Jeffrey F. Martin*, age 46, has served as Chief Financial Officer and Treasurer since December 1999. From 1998 through 1999, Mr. Martin was the Chief Financial Officer, Secretary and a director of Tech Squared Inc., a catalog mail order and fulfillment company. From 1996 through 1998 he was the Chief Financial Officer of Utiligent, LLC, an Andersen Consulting Enterprise subsidiary. Mr. Martin has an MBA in Finance.

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#### SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires executive officers and directors and persons who beneficially own more than 10% of our common stock to file initial reports of ownership and reports of changes in ownership with the Securities and Exchange Commission. Executive officers, directors and greater-than-10% beneficial owners are required by SEC regulations to furnish us with copies of all Section 16(a) reports they file. Based solely on a review of the copies of such forms furnished to us during 2001 and written representations from the executive officers, directors and greater-than-10% beneficial owners of our common stock, we believe that all of our executive officers, directors and greater-than-10% shareholders complied with all Section 16(a) filing requirements applicable to them.

**Item 10. Executive Compensation**

**SUMMARY COMPENSATION TABLE**

The following table sets forth the cash and non-cash compensation awarded to or earned in the last three fiscal years by our chief executive officer and each of our other executive officers and significant employees whose salary and bonus paid by us in fiscal 2001 exceeded \$100,000.

<u>Name and Principal Position</u>	<u>Year</u>	<u>Annual Compensation</u>		<u>Long-Term Compensation</u>	<u>All Other Compensation</u>
		<u>Salary</u>	<u>Bonus</u>	<u>Securities Underlying Options<sup>(5)</sup></u>	
		<u>(\$)</u>	<u>(\$)</u>	<u>(#)</u>	<u>(\$)</u>
William L. Russell <sup>(1)</sup> President and Chief Executive Officer	2001	157,500	13,750	—	—
	2000	152,694	—	135,000	—
	1999	144,585	26,250	—	2,165 <sup>(6)</sup>
Anthony H. Gould <sup>(2)</sup> President and Chief Executive Officer	2001	203,400	—	—	—
	2000	198,900	—	—	—
	1999	194,400	—	12,000	—
Mats Johan Billow <sup>(3)</sup> Vice President for International Business	2001	170,964	7,067	—	4,241 <sup>(7)</sup>
	2000	123,910	45,000	—	—
	1999	105,128	11,538	—	—
Jeffrey F. Martin <sup>(4)</sup> Chief Financial Officer	2001	110,250	—	—	—
	2000	106,380	—	—	—
	1999	2,827	—	30,000	—

<sup>(1)</sup> Mr. Russell resigned as President and Chief Executive Officer on February 11, 2002.

<sup>(2)</sup> Mr. Gould served as Managing Director, Image Sensing Systems Asia and Managing Director of our subsidiary Flow Traffic Ltd. from December 1998 and served as interim President and Chief Executive Officer of Image Sensing Systems, Inc. from February 12, 2002. He resigned from all of these positions on April 15, 2002.

<sup>(3)</sup> Mr. Billow became Vice President for International Business on February 11, 2002. He previously served as General Manager of our subsidiary Flow Traffic Ltd.

<sup>(4)</sup> Mr. Martin commenced employment with us in December 1999. He has announced his intention to resign effective as of the close of business on April 30, 2002.

<sup>(5)</sup> The options were granted under the Image Sensing Systems, Inc. 1995 Long-Term Incentive and Stock Option Plan.

<sup>(6)</sup> Represents matching contributions paid by Image Sensing Systems pursuant to our 401(k) plan.

<sup>(7)</sup> Represents a pension plan contribution paid by Flow Traffic Ltd.

## STOCK OPTIONS

In fiscal 2001, no stock options were awarded to the individuals named in the Summary Compensation Table above. The following table provides information concerning option exercises during fiscal 2001 by these individuals.

### Aggregated Option Exercises in Fiscal 2001 and Value of Options at End of Fiscal 2001

Name	Shares	Value Realized <sup>(1)</sup>	Number of Securities Underlying Unexercised Options at 12/31/01	Value of Unexercised In-the-Money Options at 12/31/01 <sup>(2)</sup>
	Acquired on Exercise (#)		Exercisable/ Unexercisable	Exercisable/ Unexercisable
William L. Russell	1,900	3,401	121,100/120,000	—
Anthony H. Gould	—	—	9,000/12,000	—
Mats Johan Billow	—	—	—	—
Jeffrey F. Martin	—	—	15,000/30,000	—

<sup>(1)</sup> Value determined by subtracting the exercise price per share from the closing price per share of our common stock on the date of exercise.

<sup>(2)</sup> Because the exercise price of the options exceeded the fair market value of our common stock on December 31, 2001, none of the options held by these individuals were in the money as of December 31, 2001.

## COMPENSATION OF DIRECTORS

### Compensation of Directors

Each of our non-employee directors receives an annual retainer for serving as a director. In 2001, each non-employee director received a total annual retainer of \$10,000, with \$4,000 paid immediately after the annual shareholders' meeting and \$500 paid each month during which the director served on the Board. Directors who are appointed to the Board at any time after the annual meeting receive a pro rata amount. The amount of the annual retainer and its payment schedule will remain unchanged in 2002. Non-employee directors also are granted a non-qualified stock option to purchase 25,000 shares of our common stock after completing their first year of service on the Board of Directors. These grants are made under our 1995 Long-Term Incentive and Stock Option Plan. Directors who are employees of Image Sensing Systems do not receive any additional compensation for their service on the Board of Directors.

## EMPLOYMENT AGREEMENTS

### Anthony H. Gould

From December 1998 and until Mr. Gould's resignation on April 15, 2002, we were parties to a consulting agreement with Grove Place Limited, a consulting company of which Mr. Gould is an employee, pursuant to which Mr. Gould agreed to serve as Managing Director of Image Sensing Systems Asia effective as of December 1, 1998. The consulting agreement continued to govern our employment arrangement with Mr. Gould when he served as interim President and Chief Executive Officer from February 12, 2002 through April 15, 2002. Under the agreement, Mr. Gould was entitled to a monthly salary of \$16,200, subject to annual review and adjustment. The agreement provided for the grant of an option to purchase 12,000 shares of our common stock and entitled Mr. Gould to participate in any annual bonus plan for Image Sensing System's management. In the event of Mr. Gould's serious illness, accident or other medical incapacity, Mr. Gould was entitled to up to 180 days base pay in any 12-month period and such remuneration thereafter as the Board determined in its discretion. The agreement also could be terminated by Image Sensing Systems immediately in the event for cause (as described in the agreement) or upon four months' notice in the event of Mr. Gould's incapacity for a continuous period of 180 days

or periods aggregating 125 working days in the preceding 12 months. The agreement could be terminated by either party for any reason upon six months' prior written notice. During the term of the agreement, Mr. Gould was prohibited from undertaking any other business or profession or becoming an employee or agent of any other company, firm or person or assist in any other business or profession. For a period of 12 months following termination of the agreement, Mr. Gould may not (a) directly or indirectly engage in any business activity that is competitive with any business of Image Sensing Systems, (b) provide technical, commercial or professional advice to any business that is competitive with Image Sensing Systems, or (c) solicit or otherwise interfere with the relationship between Image Sensing Systems and any entity or individual who has been a customer, supplier or employee of Image Sensing Systems at any time during the 12 months prior to Mr. Gould's termination. In addition, the agreement provided for the nondisclosure of confidential information of Image Sensing Systems both during the term and following termination of the agreement.

In connection with his resignation on April 15, 2002, we entered into a settlement and release agreement with Mr. Gould pursuant to which we mutually agreed to Mr. Gould's resignation from all positions held with Image Sensing Systems and the termination of his employment agreement, other than provisions relating to non-competition, non-solicitation and confidentiality, which will survive termination of the employment agreement. Under the settlement and release agreement, we agreed to pay Mr. Gould a severance payment of \$178,000, payable in three installments on or before April 19, 2002, September 1, 2002, and January 7, 2003.

#### **William L. Russell**

During fiscal 2001 and until his resignation on February 11, 2002, Mr. Russell was party to an employment agreement with Image Sensing Systems, effective as of June 2000, under which he agreed to serve as President and Chief Executive Officer for a term of six years, after which time the agreement was terminable by either party upon 12 months' notice. Under the agreement, Mr. Russell's base salary was \$157,500, subject to annual reevaluation, and Mr. Russell was eligible for incentive compensation upon achieving performance objectives established annually by Mr. Russell and the Board of Directors. Mr. Russell's salary and bonus in fiscal 2001 was \$167,000. Under the agreement, if we terminated Mr. Russell other than for Good Cause (as defined in the agreement) or if Mr. Russell's employment terminated as a result of our sale, acquisition or merger, Mr. Russell would be entitled to severance equal to 12 months' salary (plus benefits if termination is other than for Good Cause). Under his agreement, Mr. Russell also agreed that for one year following termination of his employment, he would not directly or indirectly engage in any business activity that is competitive with any business of Image Sensing Systems or any business that is engaged in the development or production of products intended to compete with our products, and that he will not solicit or assist anyone else in the solicitation of any of our then-current employees or solicit any of our then-current customers. In addition, the agreement provided for the nondisclosure of confidential information of Image Sensing Systems both during the term and following termination of the agreement.

In connection with his resignation on February 11, 2002, we entered into a settlement and release agreement with Mr. Russell pursuant to which we mutually agreed to Mr. Russell's resignation from all positions held with Image Sensing Systems and the termination of his employment agreement, other than provisions relating to non-competition, non-solicitation and confidentiality, which will survive termination of the employment agreement. Under the settlement and release agreement, we agreed to pay Mr. Russell a lump-sum severance payment of \$167,000.

#### **Jeffrey F. Martin**

Mr. Martin entered into an employment agreement in December 1999 to serve as Chief Financial Officer for an indefinite term. The agreement was terminable by either party for any reason or no reason upon 90 days' notice, except that we could terminate the agreement at any time without notice for Good Cause (as defined in the agreement). The agreement provided that if we terminate Mr. Martin at any time after Mr. Martin's first year of employment other than for Good Cause, we will pay Mr. Martin severance equal to three months' salary and benefits. The agreement also provided that if Mr. Martin is terminated as a result of our sale, acquisition or merger, he would be entitled to severance equal to his salary for the term of one year from his termination date or until Mr. Martin obtained new employment, whichever occurred earlier. Under the terms of his employment agreement, Mr. Martin was entitled to receive an annual base salary of \$110,250, subject to reevaluation from time to time, and was eligible for incentive compensation subject to his achievement of performance objectives established annually by Mr. Martin and the Board of Directors. Additionally, upon commencement of his employment in December 1999, Mr. Martin received an option to purchase 25,000 shares of our common stock, vesting in four equal, annual



increments on the first four anniversaries of the date of the employment agreement. The agreement also provides that during and for one year following termination of his employment with us, Mr. Martin will not directly or indirectly engage in any business activity that is competitive with any business of Image Sensing Systems and that is engaged in the development or production of products intended to compete with our products, and he will not solicit or assist anyone else in the solicitation of any of our then-current employees or solicit any of our then-current customers.

Mr. Martin has announced his intention to resign effective as of the close of business on April 30, 2002. In connection with his resignation, we have entered into a settlement and release agreement with Mr. Martin pursuant to which we mutually agreed to Mr. Martin's resignation from all positions held with Image Sensing Systems and the termination of his employment agreement, other than provisions relating to non-competition, non-solicitation and confidentiality, which will survive termination of the employment agreement. Under the settlement and release agreement, we agreed to pay a lump-sum severance payment to Mr. Martin in the amount of \$35,628.57, less any applicable tax withholding.

**Item 11. Security Ownership of Certain Beneficial Owners and Management**

The following table sets forth certain information with respect to beneficial ownership of our common stock as of April 5, 2002, by: (a) each person or entity known by us to own beneficially more than five percent of our common stock; (b) each director of Image Sensing Systems; (c) each of the named executive officers included in the Summary Compensation Table set forth under the caption "Executive Compensation" below; and (d) all directors and executive officers as a group.

Beneficial ownership is determined in accordance with rules of the Securities and Exchange Commission and includes generally voting power and/or investment power with respect to securities. Shares of common stock issuable pursuant to stock options that are currently exercisable or exercisable within 60 days of the date of this proxy statement are deemed outstanding for computing the beneficial ownership percentage of the person holding the options but are not deemed outstanding for computing the beneficial ownership percentage of any other person. Except as indicated by footnote, the persons named in the table above have the sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them. The address of each director and named executive officer is the same as that of Image Sensing Systems.

Name and Address of Beneficial Owner	Common Stock Beneficially Owned	Percent of Common Stock Outstanding
Betty P. Papapanou 2483 Albert St N Roseville, MN 55113	737,368 <sup>(1)</sup>	23.0%
Brown Brothers Harriman & Co. 59 Wall Street New York, NY 10005	332,600	10.5%
Mats Johan Billow	55,000 <sup>(2)</sup>	1.7%
Richard P. Braun	134,134 <sup>(2)(3)</sup>	4.2%
C. Michael Eleftheriou	—	—
Anthony H. Gould	59,000 <sup>(2)</sup>	1.8%
Richard C. Magnuson	101,405 <sup>(2)(4)</sup>	3.2%
Jeffrey F. Martin	15,000 <sup>(2)</sup>	*
Panos G. Michalopoulos	1,450,860 <sup>(1)(2)(5)</sup>	44.3%
James Murdakes	66,526 <sup>(2)</sup>	2.1%
William L. Russell	121,100 <sup>(2)</sup>	3.7%
All directors and executive officers as a group (9 persons)	2,003,025 <sup>(2)(6)</sup>	55.9%

\* Less than 1%.

- (1) Includes 655,291 shares of common stock and 57,000 shares issuable pursuant to options exercisable within 60 days of April 29, 2002 held by Ms. Papapanou, as to all of which shares Dr. Michalopoulos has sole voting power in accordance with an agreement between Dr. Michalopoulos and Ms. Papapanou.
- (2) Includes shares issuable pursuant to options exercisable within 60 days after April 29, 2002: for Mr. Billow, 50,000 shares; for Mr. Braun, 36,000 shares; for Mr. Gould, 59,000 shares; for Mr. Magnuson, 12,000 shares; for Mr. Martin, 15,000 shares; for Dr. Michalopoulos, 120,000 shares; for Mr. Murdakes, 20,000 shares; for Mr. Russell, 121,100 shares; and for all directors and executive officers as a group, 433,100 shares.
- (3) Includes 78,000 shares held indirectly through a trust of which Mr. Braun is a trustee and as to which shares Mr. Braun has shared voting and investment power.
- (4) Includes 39,852 shares held by Operating Management, Inc., a corporation controlled by Mr. Magnuson.
- (5) Includes 360 shares held by Dr. Michalopoulos' son, as to which Dr. Michalopoulos disclaims beneficial ownership.
- (6) Includes shares beneficially owned by Messrs. Gould and Russell, who resigned all positions held with us on February 11, 2002 and April 15, 2002, respectively, and by Mr. Martin, who has announced his intention to resign effective as of the close of business on April 30, 2002.

**Item 12. Certain Relationships and Related Transactions**

On January 7, 2002 we purchased all of the shares then held by the minority shareholders of our subsidiary Flow Traffic Ltd., making Flow Traffic our wholly owned subsidiary. The purchase was made in accordance with the Shares Sale and Purchase Agreement dated November 28, 2001, as amended on December 31, 2001 and April 15, 2002, among Image Sensing Systems and the minority shareholders of Flow Traffic. The minority shareholders then included Johan Billow and Grove Place Limited, a consulting company affiliated with Anthony H. Gould. Subsequently, in February 2002, Anthony Gould and Johan Billow were elected to our Board of Directors, Anthony Gould was appointed as our interim President and Chief Executive Officer and Johan Billow was appointed as our Vice President for International Business. As discussed elsewhere in this Form 10-KSB, Mr. Gould resigned from all positions held with Image Sensing Systems on April 15, 2002. The agreement and amendments are filed as exhibits to this Form 10-KSB. Prior to this purchase, we owned six shares of Flow Traffic, and the minority shareholders collectively owned four shares of Flow Traffic.

We agreed to pay the following amounts to the minority shareholders as consideration for their shares:

- Cash payments at the time of purchase totaling \$250,000.
- A cash payment to Grove Place Limited only in the amount of \$50,000, payable on April 19, 2002.
- Additional payments totaling \$450,000, payable at any time between April 1, 2003 and April 30, 2003 upon the request of the minority shareholders, which payments are secured by letters of credit drawn in favor of the minority shareholders and expiring on April 30, 2003.
- Non-interest bearing notes, maturing on January 7, 2007, in the aggregate principal amount of \$250,000, and convertible into an aggregate of 100,000 shares of our common stock. The holders may demand payment for their notes at any time after April 1, 2003. The notes may be prepaid by us at any time during calendar year 2002 for their aggregate principal amount of \$250,000 and without penalty or additional fees, or may be prepaid by us at any time after April 1, 2003, for the aggregate principal amount of \$250,000 plus additional payments totaling \$50,000. If not converted or paid by January 7, 2007, each note will be redeemed by us on that date for its principal amount. Each note also provides that if the note is converted into shares of our common

stock, we will register such shares with the Securities and Exchange Commission, if so requested by the holder.

In addition to the foregoing consideration, if Flow Traffic achieves an audited net profit before tax of HK\$1,418,000 (approximately US\$181,795) or greater for fiscal year 2002, we will make an additional cash payment totaling \$50,000 to Mr. Billow, payable within 10 days after completion of Flow Traffic's annual audit.

In fiscal 2001, Flow Traffic paid a cash dividend to each of its shareholders, pursuant to which Mr. Billow and Mr. Gould each received \$25,641.

**Item 13. Exhibits, Financial Statement Schedules, and Reports on Form 8-K**

(a) List of documents filed as part of the report:

1. Financial statements referenced in Item 7
2. Exhibits:

<u>Exhibit No.</u>	<u>Description</u>
10.22*	Settlement and Release Agreement dated April 15, 2002, between ISS, Flow Traffic Limited, Grove Place Limited and Anthony Gould.
10.23	Amendment No. 2, dated as of April 15, 2002, to Shares Sale and Purchase Agreement dated November 28, 2001, among ISS and Berkeley Development Limited, Mats Johan Billow and Grove Place Limited.
10.24*	Settlement and Release Agreement dated April 29, 2002, between ISS and Jeffrey Martin.

\*Management contract or compensatory plan or arrangement.

b) Reports on Form 8-K filed during fourth quarter of 2001:

None

## SIGNATURES

In accordance with Section 13 or 15(d) of the Securities Exchange Act of 1934, Image Sensing Systems, Inc. has duly caused this Amendment No. 1 to the Form 10-KSB to be signed on its behalf by the undersigned, thereunto duly authorized:

### Image Sensing Systems, Inc.

/s/ James Murdakes  
By: James Murdakes, Chairman of the Board

Date: April 29, 2002

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/ James Murdakes  
James Murdakes  
Chairman of the Board,  
President and Chief Executive Officer (Principal Executive Officer)

Date: April 29, 2002

/s/ Jeffrey F. Martin  
Jeffrey F. Martin  
Chief Financial Officer (Principal Financial & Accounting Officer)

Date: April 29, 2002

/s/ Panos G. Michalopoulos\*  
Panos G. Michalopoulos  
Director

Date: April 29, 2002

/s/ Richard P. Braun\*  
Richard P. Braun  
Director

Date: April 29, 2002

/s/ C. Michael Eleftheriou\*  
C. Michael Eleftheriou  
Director

Date: April 29, 2002

/s/ Richard C. Magnuson\*  
Richard C. Magnuson  
Director

Date: April 29, 2002

/s/ Mats Johan Billow\*  
Mats Johan Billow  
Director

Date: April 29, 2002

\*By /s/ Jeffrey F. Martin  
Jeffrey F. Martin  
Attorney-in-Fact

EXHIBIT INDEX

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## Corporate Information

### Directors and Officers

James Murdakes  
*Chairman of the Board, President, Chief  
Executive Officer and Secretary*

Panos G. Michalopoulos<sup>†</sup>  
*Director*

Richard P. Braun<sup>†</sup>  
*Director*

Richard C. Magnuson\*  
*Director*

Michael Eleftheriou\*  
*Director*

Mats Johan Billow  
*Director*  
*Vice President of International Business*

Arthur J. Bourgeois  
*Chief Financial Officer and Treasurer*

\*Member of audit committee  
<sup>†</sup>Member of compensation committee

### Annual Shareholders' Meeting

The annual meeting of the shareholders will be held on August 7, 2002, at 3:30pm CDT at the Science Museum of Minnesota, St. Paul, Minnesota.

### Legal Counsel

Dorsey & Whitney LLP

### Independent Auditors

Ernst & Young LLP

### Stock Transfer Agent

Wells Fargo Bank, N.A.

### Location

Corporate Headquarters  
500 Spruce Tree Centre  
1600 University Avenue West  
St. Paul, Minnesota 55104-3825 USA

A copy of Form 10-KSB, filed with the Securities and Exchange Commission, may be obtained without charge upon written request to the Company.

### Price Range of Common Stock

The Company's common stock trades on The Nasdaq SmallCap Market tier of The Nasdaq Stock Market under the symbol ISNS. The table below presents the price range of high and low trading prices for the Company's common stock for each period indicated as reported by Nasdaq.

Quarter	2001		2000		1999	
	High	Low	High	Low	High	Low
First	\$ 4.19	\$ 2.88	\$ 9.44	\$ 3.63	\$ 4.75	\$ 2.38
Second	4.60	1.99	11.50	5.75	4.50	3.06
Third	2.82	1.47	5.97	4.25	4.75	1.56
Fourth	3.25	1.76	5.98	3.63	4.63	2.25

visionary solutions



**image sensing systems**  
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