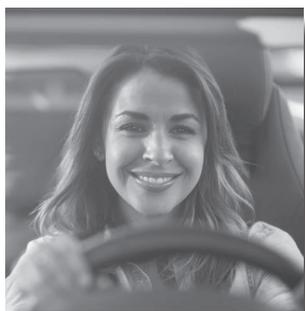




ImageSensing
systems



Annual Report 2016

To Our Shareholders:

2016 was a pivotal year for Image Sensing Systems (ISS) and one that will set the stage for future growth. We successfully launched our new flagship intersection product, the Autoscope Vision, as well as a new radar product, the RTMS Sx-300 BT. We have already realized an uptick on our Autoscope royalty revenue and continue to see our Sx-300 radar products provide reliable service. I am excited to be part of the future evolution of our business as we capitalize on our new technology, continue to focus on operating efficiencies, and enable our talented staff to create best in class solutions for our customers.

2016: Setting the stage for future growth

My belief is that our success begins and ends with the relevance of our technology. As with any technology centric business, you need to constantly monitor your competition and determine if and when an upgrade of core technology components is required. In 2014 we made the decision to launch a multi-year research and development project, the largest in the history of our company, which culminated in the Autoscope Vision product. The Autoscope Vision combines 25 years of industry knowledge with state of the art hardware and software designs, providing an unparalleled user experience. Collaborating with our partner Econolite, we successfully launched the Vision product through a series of roadshow events where the customers could gain first-hand experience with the new product. The success of the launch was apparent in the fourth quarter as we realized significant booking results. We are excited at the rate of market adoption and believe the Vision product will serve the intersection segment for many years.

2016 also marked the introduction of the RTMS Sx-300 BT which integrates our proven side-fired radar platform with a dual channel Bluetooth travel time module. This combination is the ideal sensor for monitoring travel time and origin/destination information alongside the data collection capabilities our customers have come to expect from RTMS. Our radar business experienced 8% growth in 2016, which is the first growth year in 5 years. This is largely due to the acceptance and proven

performance of the Sx-300 and earning back customer's trust after experiencing issues with our legacy product. We are happy to report that through 2016, the Sx-300 experienced a return rate of less than 3%. As an indication of our commitment to quality, we continue to offer a five-year warranty with every Sx-300 sold. Our product performance has been recognized in the United Kingdom (UK), where we have received type approval from Highways England which is one of the most stringent and respected certifications in all of Europe. Since receiving that type-approval, ISS has won 80% of the market share in the UK in 2016.

Feeding off of the renewed focus obtained in 2015, we were able to reduce our expenses and apply our resources to initiatives that hold future potential. We will continue to monitor our expenses and operate a lean, agile organization.

2017: New opportunities enabled by new technology

While we are excited about the fast market adoption of Vision, we are even more excited about the new opportunities presenting themselves as we realize the full potential of our new hardware and software platforms. Our new technology is designed around the concepts of modularity and portability which we believe will enable a common user experience across future products. Our research and development goals for 2017 include creation of new products and services to address our existing markets as well as re-enter markets previously dismissed due to poor product/market alignment. We will also continue to invest in ISS Labs, a research oriented team focused on identifying market trends and innovative technologies that could be realized in the three to five-year time frame.

To prepare for the future, we need to ensure that product and business decisions made today do not limit our ability to pivot as the market evolves. In order to make sound strategic decisions we must stay connected with the market, which is why you will see an increased focus on customer engagement in 2017. Our goal is to work directly with valued partners and end users to identify

features and functions as well as refine product concepts as they mature. These engagements also offer the opportunity to better understand market dynamics and more precisely apply resources to assist our partners in their sales objectives. We are also increasing the investment in our international sales resources and are actively pursuing additional sales channels to more aggressively seek out opportunities and promote our brand as new product offerings become available. We believe the combination of these initiatives will position the company for sustained growth in the coming years.

Results beyond expectations

I joined Image Sensing Systems in June of 2011 and immediately realized the potential of our company. Having come from the defense industry, I was only familiar with the slow moving, bureaucratic environment that seemed to limit individual contribution and influence on the success of a company. As a result of this experience, I have made it a personal goal to create a workplace culture where our employees are empowered to make decisions and directly influence our success through their efforts. This started within our algorithm development team and progressed through the larger engineering organization as I assumed the role of vice president of engineering, and will now expand to the company as a whole. There is a direct link between corporate culture and the success and profitability we will realize. Our culture is one where we empower our staff to create revolutionary products, manage and lead our talented staff, and oversee business initiatives within an environment that energizes resources and creates a self-imposed desire to achieve results beyond expectations.

In closing, this is an exciting time for Image Sensing as we begin to see our new technology, business initiatives, and leadership team clear a path for a bright future. Thank you, shareholders, customers, and strategic partners for your continued support. I look forward to updating you on our progress as the new year unfolds.

Sincerely,
Chad Stelzig
Chief Executive Officer



Corporate Information

Directors and Officers

Andrew T. Berger*†‡
Executive Chairman of the Board

James W. Bracke*†‡
Director

Geoffrey Davis
Director

Richard Ehrich
Chief Financial Officer

Paul F. Lidsky*†‡
Director

Chad Stelzig
President and Chief Executive Officer

* Member of audit committee

† Member of compensation and stock option committee

‡ Member of nominating and corporate governance committee

Annual Shareholders' Meeting

The annual meeting of the shareholders will be held on May 11, 2017, at 9:00 am CDT at Image Sensing Systems, 1600 University Avenue West, Suite 500, St. Paul, MN 55104.

Legal Counsel

Winthrop & Weinstine, P.A.

Independent Registered Public Accounting Firm

Boulay PLLP

Stock Transfer Agent

Continental Stock Transfer & Trust Company

Location

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

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

A copy of this 2016 Annual Report to Shareholders can be obtained from our Web site: imagesensing.com

Price Range for Common Stock

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

Quarter	2016		2015	
	High	Low	High	Low
First	\$ 3.43	\$ 2.63	\$ 2.78	\$ 2.24
Second	2.90	2.15	3.47	2.44
Third	4.09	2.24	4.66	3.38
Fourth	3.98	3.55	3.99	3.55



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