

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 10-K

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

For the fiscal year ended December 31, 2017

or

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

For the transition period from _____ to _____

Commission File Number 0-23081

FARO TECHNOLOGIES, INC.

(Exact name of Registrant as Specified in Its Charter)

Florida

(State or Other Jurisdiction
of Incorporation or Organization)

250 Technology Park, Lake Mary, FL
(Address of Principal Executive Offices)

59-3157093

(I.R.S. Employer
Identification Number)

32746
(Zip Code)

Registrant's telephone number, including area code: (407) 333-9911

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, par value \$.001	Nasdaq Global Select Market

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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

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Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definite proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of the Registrant's common stock held by non-affiliates of the Registrant on June 30, 2017 (the last business day of the Registrant's most recently completed second fiscal quarter) was \$622,261,000 based on the closing price of the Registrant's common stock on such date on the Nasdaq Global Select Market, and assuming solely for the purposes of this calculation that all directors and executive officers of the Registrant are "affiliates."

As of February 19, 2018, there were outstanding 16,797,618 shares of the Registrant's common stock.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's proxy statement for the 2018 Annual Meeting of Shareholders are incorporated by reference in Part III of this Annual Report on Form 10-K.

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PART I

CAUTIONARY STATEMENTS FOR FORWARD-LOOKING INFORMATION

FARO Technologies, Inc. (“FARO,” the “Company,” “us,” “we” or “our”) has made “forward-looking statements” in this Annual Report on Form 10-K within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Statements that are not historical facts or that describe our plans, beliefs, goals, intentions, objectives, projections, expectations, assumptions, strategies, or future events are forward-looking statements. In addition, words such as “may,” “might,” “would,” “will,” “will be,” “future,” “strategy,” “believe,” “plan,” “should,” “could,” “seek,” “expect,” “anticipate,” “intend,” “estimate,” “goal,” “objective,” “project,” “forecast,” “target” and similar words identify forward-looking statements.

Forward-looking statements are not guarantees of future performance and are subject to a number of known and unknown risks, uncertainties, and other factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements. Consequently, undue reliance should not be placed on these forward-looking statements. We do not intend to update any forward-looking statements, whether as a result of new information, future events, or otherwise, unless otherwise required by law. Important factors that could cause actual results to differ materially from those contemplated in such forward-looking statements include, among others, the following:

- an economic downturn in the manufacturing industry or the domestic and international economies in the regions of the world where we operate;
- our inability to further penetrate our customer base and target markets;
- development by others of new or improved products, processes or technologies that make our products less competitive or obsolete;
- our inability to maintain what we believe to be our technological advantage by developing new products and enhancing our existing products;
- risks associated with expanding international operations, such as difficulties in staffing and managing foreign operations, increased political and economic instability, compliance with potentially evolving import and export regulations, and the burdens and potential exposure of complying with a wide variety of U.S. and foreign laws and labor practices;
- our inability to successfully identify and acquire target companies and achieve expected benefits from, and effectively integrate, acquisitions that are consummated;
- the cyclical nature of the industries of our customers and material adverse changes in our customers’ access to liquidity and capital;
- change in the potential for the computer-aided measurement (“CAM2”) market and the potential adoption rate for our products, which are difficult to quantify and predict;
- our inability to protect our patents and other proprietary rights in the United States and foreign countries;
- our inability to adequately establish and maintain effective internal controls over financial reporting;
- fluctuations in our annual and quarterly operating results and the inability to achieve our financial operating targets as a result of a number of factors including, without limitation (i) litigation and regulatory action brought against us, (ii) quality issues with our products, (iii) excess or obsolete inventory, shrinkage or other inventory losses due to product obsolescence, change in demand for our products, scrap or material price changes, (iv) raw material price fluctuations and other inflationary pressures, (v) expansion of our manufacturing capability, (vi) the size and timing of customer orders, (vii) the amount of time that it takes to fulfill orders and ship our products, (viii) the length of our sales cycle to new customers and the time and expense incurred in further penetrating our existing customer base, (ix) increases in operating expenses required for product development and new product marketing, (x) the timing and market acceptance of new products and product enhancements, (xi) customer order deferrals in anticipation of new products and product enhancements, (xii) the inability of our sales and marketing programs to achieve their sales targets, (xiii) start-up costs associated with opening new sales offices outside of the United States, (xiv) fluctuations in revenue without proportionate adjustments in fixed costs, (xv) inefficiencies in the management of our inventories and fixed assets, (xvi) compliance with government regulations including health, safety, and environmental matters, and (xvii) investment costs associated with the training and ramp-up time for new sales people;

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- changes in gross margin due to a changing mix of products sold and the different gross margins on different products and sales channels;
- our inability to successfully comply with the requirements of Restriction of use of Hazardous Substances (“ROHS2”) Directive and the Waste Electrical and Electronic Equipment (“WEEE”) Directive in the European Union;
- the inability of our products to displace traditional measurement devices and attain broad market acceptance;
- the impact of competitive products and pricing on our current offerings;
- the loss of our Chief Executive Officer or other key personnel;
- difficulties in recruiting research and development engineers and application engineers;
- the failure to effectively manage the effects of any future growth;
- the impact of reductions or projected reductions in government spending, or uncertainty regarding future levels of government expenditures, particularly in the defense sector;
- variations in our effective income tax rate, which make it difficult to predict our effective income tax rate on a quarterly and annual basis, and the impact of the U.S. Tax Cuts and Jobs Act of 2017;
- the loss of key suppliers and the inability to find sufficient alternative suppliers in a reasonable period of time or on commercially reasonable terms;
- the impact of fluctuations in exchange rates;
- the effect of estimates and assumptions with respect to critical accounting policies and the impact of the adoption of recently issued accounting pronouncements;
- the impact of new product introductions, including the costs associated with new product introductions, such as product development, marketing, assembly line start-up costs and low introductory period production volumes, and manufacturing inefficiencies associated with new product introductions;
- the magnitude of increased warranty costs from new product introductions and enhancements to existing products;
- the sufficiency of our plants to meet manufacturing requirements;
- the continuation of our share repurchase program;
- the sufficiency of our working capital and cash flow from operations to fund our long-term liquidity requirements;
- the impact of geographic changes in the manufacturing or sales of our products on our effective income tax rate; and
- our ability to comply with the requirements for favorable income tax rates in foreign jurisdictions.

A detailed discussion of these and other risks and uncertainties that could cause actual results and events to differ materially from such forward-looking statements is included throughout this filing and particularly in Part I, Item 1A of this Annual Report on Form 10-K. Moreover, new risks and uncertainties emerge from time to time, and we undertake no obligation to update publicly or review the risks and uncertainties included in this Annual Report on Form 10-K, unless otherwise required by law.

ITEM 1. BUSINESS

FARO was founded in 1982 and re-incorporated in Florida in 1992. Our worldwide headquarters are located at 250 Technology Park, Lake Mary, Florida 32746 and our telephone number is (407) 333-9911.

We are a global technology company that designs, develops, manufactures, markets and supports software driven, three-dimensional (“3D”) measurement, imaging and realization systems. This technology permits high-precision 3D measurement, imaging and comparison of parts and complex structures within production and quality assurance processes. Our devices are used for inspection of components and assemblies, rapid prototyping, reverse engineering, documenting large volume or structures in 3D, surveying and construction as well as for investigation and reconstruction of accident sites or crime scenes. We sell the majority of our products through a direct sales force across a broad number of customers in a range of manufacturing, industrial, architecture, surveying, building information modeling, construction, public safety forensics, cultural heritage and other applications. Our FaroArm[®], FARO ScanArm[®], FARO Gage[®], FARO Laser Tracker[™], FARO Cobalt Array Imager, FARO Laser Projector, and their companion CAM2[®], BuildIT, and RayTracer[™] software solutions, provide for Computer-Aided Design (“CAD”) based inspection, factory-level statistical process control, high-density surveying and laser-guided assembly and production. Together, these products integrate the measurement, quality inspection, and reverse engineering functions with CAD and 3D software to improve productivity, enhance product quality, and decrease rework and scrap in the manufacturing process, mainly supporting applications in our Factory Metrology vertical. Our FARO Focus and FARO Scanner Freestyle^{3DX} laser scanners, and their companion FARO SCENE, FARO PointSense, and FARO Zone public safety forensics software offerings, are utilized for a wide variety of 3D modeling, documentation and high-density surveying applications in our Construction Building Information Modeling - Construction Information Management (“Construction BIM-CIM”) and Public Safety Forensics verticals. Our FARO ScanArm[®], FARO Cobalt Array Imager, FARO Scanner Freestyle^{3DX} laser scanners and their companion SCENE software also enable a fully digital workflow used to capture real world geometry for the purpose of empowering design, enabling innovation, and speeding up the design cycle, supporting our Product Design vertical. FARO Visual Inspect enables large, complex 3D CAD data to be transferred to a tablet device and then used for mobile visualization and comparison to real world conditions, facilitating in-process inspection, assembly, guidance and positioning for applications in our Factory Metrology and Construction BIM-CIM verticals. Our line of galvanometer-based scan heads and laser scan controllers are used in a variety of laser applications and are integrated into larger components and systems.

Industry Background

We believe four principal forces drive the need for our products and services: 1) the widespread use by manufacturers of CAD in product development, which shortens product cycles; 2) the adoption by manufacturers of quality standards such as Six Sigma and ISO 9001 (and its offshoot QS 9000), which stress the measurement of every step in a manufacturing process to reduce or eliminate defects; 3) the inability of traditional measurement devices to address many manufacturing problems such as throughput, efficiency, and accuracy, especially with respect to large components for products such as automobiles, aircraft, heavy duty construction equipment and factory retrofits; and 4) the growing demand to capture and synthesize large volumes of three-dimensional data for modeling and analysis.

CAD improves the manufacturing process. The creation of physical products involves the processes of design, engineering, production, and measurement and quality inspection. These basic processes have been profoundly affected by the computer hardware and software revolution that began in the 1980s. CAD software was developed to automate the design process, providing manufacturers with computerized 3D design capability and shortening the time between design changes. Today, most manufacturers use some form of CAD software to create designs and engineering specifications for new products and to quantify and modify designs and specifications for existing products. While manufacturers previously designed their products to remain in production for longer periods of time, current manufacturing practices must accommodate more frequent product introductions and modifications, while satisfying more stringent quality and safety standards. Assembly fixtures and measurement tools must be linked to the CAD design to enable production to keep up with the rate of design change.

Quality standards dictate measurement to reduce defects. QS 9000 is the name given to the Quality System requirements of the automotive industry developed by Fiat Chrysler Automobiles N.V. (formerly Chrysler Corporation), Ford Motor Company, General Motors Company and major truck manufacturers. Companies registered under QS 9000 are considered to have higher standards and better quality products. Six Sigma is a set of quality standards that embodies the principles of total quality management, focused on measuring results and reducing product or service failure rates to 3.4 per million. All aspects of a Six Sigma company’s infrastructure must be analyzed and, if necessary, restructured to increase revenues and raise customer satisfaction levels. The all-encompassing nature of these and other quality standards has resulted in manufacturers measuring every aspect of their processes, including stages of product assembly that may never have been measured before, in part, because of the lack of suitable measurement equipment.

Traditional products do not measure up. A significant aspect of the manufacturing process entails measurement and quality inspection. Historically, manufacturers have measured and inspected products using hand-measurement tools such as scales, calipers, micrometers and plumb lines for simple measuring tasks, test (or check) fixtures for certain large manufactured products, and traditional (or fixed) coordinate measurement machines (“CMM”) for objects that require higher precision measurement. However, the broader utility of each of these measurement methods is limited.

Although hand-measurement tools are often appropriate for simple geometric measurements, including hole diameters or length and width of a rectangular component, their use for complex part measurements, such as the fender of a car, is limited. Also, these devices do not allow for the measurements to be directly compared electronically to the CAD model of the part. Test fixtures (customized fixed tools used to make comparative measurements of complex production parts to “master parts”) are relatively expensive and must be reworked or discarded each time a dimensional change is made in the part being measured. In addition, these manual measuring devices do not permit the manufacturer to electronically compare the dimensions of an object with its CAD model.

Conventional CMMs are generally large, fixed-base machines that provide very high levels of precision and provide a link to the CAD model of the object being measured. However, fixed-base CMMs require that the object being measured be brought to the CMM and fit within the CMM’s measurement grid. As manufactured subassemblies increase in size and become integrated into even larger assemblies, they become less transportable, thus diminishing the utility of a conventional CMM. Consequently, manufacturers must continue to use hand-measurement tools, or expensive customized test fixtures, to measure large or unconventionally shaped objects. In addition, some parts or assemblies are not easily accessible and cannot be measured using traditional devices.

The market demands three-dimensional data. Various factors contribute to market demand for FARO products and services. Conventional surveying equipment is limited to single-point measurements and does not have the capacity to capture and analyze large volumes of 3D data. As data requirements for construction, civil engineering and public safety applications become more complex, single-point measurement devices will become increasingly more difficult to utilize in those applications.

Escalating global competition has created a demand for higher quality products with shorter life cycles. Customers require more rapid design, greater control of the manufacturing process, tools to compare components to their CAD specifications, the ability to precisely measure components that cannot be measured or inspected by conventional devices, and the ability to capture and analyze large volumes of three-dimensional data. Moreover, they increasingly require measurement capabilities to be integrated into manufacturing processes and to be available on the factory floor. These changing demands have contributed to the demand for FARO’s products and services.

Business Segments and Markets

In 2016, we reorganized our business to align our sales, marketing, and product management to five specific vertical markets and better redefine our end market applications. In accordance with U.S. generally accepted accounting principles, vertical markets that do not meet the criteria to be a reportable segment are aggregated into one “Other” segment; therefore, we reorganized into three reporting segments encompassing our various applications and product lines: Factory Metrology, Construction BIM-CIM and Other. Our segments are distinguished by the applications they serve. Each segment is responsible for its own product management, sales, strategy and financial performance. Information regarding our net sales and profit by segment, as well as a reconciliation of total segment profit to income from operations, is set forth in Note 16 to the “Notes to Consolidated Financial Statements” included in Part II, Item 8 of this Annual Report on Form 10-K. Total assets are not allocated to a particular segment or segments.

Factory Metrology. The Factory Metrology segment provides solutions for manual and automated measurement and inspection in an industrial or manufacturing environment. Applications include alignment, part inspection, dimensional analysis, first article inspection, incoming and in-process inspection, machine calibration, non-contact inspection, robot calibration, tool building and set-up, and assembly guidance.

Construction BIM-CIM. The Construction BIM-CIM segment provides solutions for as-built data capturing and 3D visualization in building information modeling and construction information management applications, allowing our customers in the architecture, engineering and construction markets to quickly and accurately extract 2D and 3D measurement points. Applications include as-built documentation, construction monitoring, surveying, asset and facility management, and heritage preservation.

Other. The Other segment includes our Product Design, Public Safety Forensics and 3D Machine Vision (formerly known as 3D Solutions) operating segments. Our Product Design operating segment provides advanced 3D solutions to assist in the engineering or design of a movable object, enabling a full digital workflow for applications that include reverse engineering and virtual simulation. Our Public Safety Forensics operating segment provides solutions to public safety officials and professionals to capture environmental or situational scenes in 2D and 3D for crime, crash and fire scene investigations and environmental safety evaluations. Our 3D Machine Vision operating segment provides solutions to customers who require customized 3D measurement and realization solutions not otherwise addressed by our off-the-shelf product offerings.

All operating segments that do not meet the criteria to be reportable segments are aggregated in the Other reporting segment and have been combined based on the aggregation criteria and quantitative thresholds in accordance with the provisions of Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 280. Each of our reporting segments employs consistent accounting policies.

Recent Acquisitions

Instrument Associates, LLC. In April 2017, we acquired Instrument Associates, LLC d/b/a Nutfield Technology (“Nutfield”), located in Hudson, New Hampshire. Nutfield specializes in the design and manufacture of advanced galvanometer-based optical scanners, scan heads and laser kits. The acquisition supports our long-term strategy to expand our presence in key markets and improve our existing product lines with innovative technology.

MWF-Technology GmbH. In December 2016, we acquired MWF-Technology GmbH (“MWF”), located near Frankfurt, Germany. MWF is an innovator in mobile augmented reality solutions, with technology that enables large, complex 3D CAD data to be transferred to a tablet device and then used for mobile visualization and comparison to real world conditions. This enables real time, actionable manufacturing insight for in-process inspection, assembly, guidance and positioning.

Laser Projection Technologies, Inc. In August 2016, we acquired Laser Projection Technologies, Inc. (“LPT”), located in Londonderry, New Hampshire. LPT specializes in laser projection and measurement systems used throughout manufacturing environments around the globe to maximize productivity and efficiency. The acquisition enhances our portfolio of 3D measurement solutions and supports our long-term strategy to expand our presence in key markets.

BuildIT Software & Solutions Ltd. In July 2016, we acquired BuildIT Software & Solutions Ltd. (“BuildIT”), located in Montreal, Canada. BuildIT specializes in process-configurable 3D metrology software solutions with hardware agnostic interfaces. The acquisition provides customers greater software options to use in a variety of applications to reduce inspection and assembly times and increase productivity.

FARO Products

FaroArm. The FaroArm is a combination of a portable, six or seven-axis, articulated measurement arm, a computer, and CAM2 software programs, which are described below under “FARO Software” and are primarily sold in the Factory Metrology and Product Design segments.

- **Articulated Arm** – The articulated arm is comprised of three major joints, each of which may consist of one, two or three axes of motion. The articulated arm is available in a variety of sizes, configurations and precision levels suitable for a broad range of applications. To take a measurement, the operator simply touches the object to be measured with a probe at the end of the arm and presses a button. Data can be captured at either individual points or a series of points. Optical encoders located at each of the joints of the arm measure the angles at those joints, and this rotational measurement data is transmitted to an on-board controller that converts the arm angles to precise locations in 3D space using “xyz” position coordinates and “ijk” orientation coordinates.
- **Computer** – We pre-install our CAM2 software primarily on either a notebook or desktop style computer, depending on the customer’s need, and the measurement arm, computer and installed software are sold as a system. We purchase the computers sold with our products from various suppliers.

FARO ScanArm. The FARO ScanArm is a FaroArm equipped with a combination of a hard probe (like that in the FaroArm) and a non-contact laser line probe. This product provides our customers with the ability to measure products without touching them and offers a seven-axis contact/non-contact measurement device with a fully integrated laser scanner. The ScanArm is used for contact and non-contact measurement applications, including inspection, cloud-to-CAD comparison, rapid prototyping, reverse engineering and 3D modeling. This product is primarily sold in the Factory Metrology and Product Design segments.

FARO Gage. The FARO Gage is a smaller, higher-accuracy version of the FaroArm that is sold as a combination of an articulated arm device with a computer and software. The FARO Gage is also distinguished from the FaroArm by the special mounting features and software unique to the FARO Gage. The FARO Gage is targeted at machine tools and bench tops around machine tools, where basic measurements of smaller machined parts must be taken. The CAM2 FARO Gage software developed for this device features basic 2D and 3D measurements common to these applications. This product is primarily sold in the Factory Metrology and Product Design segments.

FARO Laser Tracker. The FARO Laser Tracker combines a portable, large-volume laser measurement tool, a computer, and CAM2 software programs, representing a product offering primarily sold in the Factory Metrology segment.

- **Laser Tracker Vantage** – The FARO Laser Tracker Vantage utilizes an ultra-precise laser beam to measure objects of up to 80 meters. It enables manufacturing, engineering, and quality control professionals to measure and inspect large parts, machine tools and other large objects on-site and in-process.

In January 2017, we released the FARO Vantage^S and Vantage^E Laser Trackers. The Vantage^S is intended for short-to-long range measurement applications of up to 80 meters, while the Vantage^E supports short-to-medium range applications of up to 25 meters.

- **Laser Tracker ION** – The FARO Laser Tracker ION is an interferometer (IFM)-based measurement system that provides the high accuracy and range to complete measurement tasks, such as in-line measurements, high-speed dynamic measurements, or high-accuracy machine calibration.
- **Computer** – The FARO Laser Tracker includes a notebook or desktop style computer, depending on the customer's requirements, that includes the pre-installed CAM2 Software.

FARO Cobalt Array Imager. The FARO Cobalt Array Imager is a metrology-grade structured light imager that utilizes blue light technology to capture millions of high resolution 3D coordinate measurements in seconds. FARO Cobalt's versatility supports a variety of deployment options including rotary table, robot, industrial inspection cells and multiple imager arrays. This technology is used in quality control to improve product quality and reduce scrap, as well as for reverse engineering and rapid manufacturing. This product is primarily sold in the Factory Metrology segment.

FARO Laser Projector. The FARO Tracer^M accurately projects a laser line onto a surface or object, providing a virtual template that operators and assemblers can use to quickly and accurately position components with confidence. The laser template is created using a 3D CAD model that enables the system to visually project a laser outline of parts, reference points, or areas of interest. The result is a virtual and collaborative 3D template to streamline a wide range of assembly and production applications. This product is primarily sold in the Factory Metrology segment.

FARO Focus. The FARO Focus laser scanner utilizes laser technology to measure and collect a cloud of data points, allowing for the detailed and precise three-dimensional rendering of an object or an area as large as an industrial facility. This technology is currently used for factory planning, facility life-cycle management, quality control, forensic analysis and capturing large volumes of three-dimensional data. The FARO Focus simplifies modeling, reduces project time and maintains or increases the detail, identifies the colors and measures the dimensions of surrounding structures. The resulting data is used with major CAD systems or FARO's own proprietary FARO SCENE, PointSense, and FARO Zone. This product is primarily sold in the Construction BIM-CIM and Public Safety Forensics segments.

FARO Scanner Freestyle^{3DX}. The FARO Scanner Freestyle^{3DX} is a handheld scanner that quickly documents rooms, structures and objects in 3D and creates high-definition point clouds. The applications of the FARO Scanner Freestyle^{3DX} include architecture, construction, industrial production and forensics. The FARO Scanner Freestyle^{3DX}'s durable carbon fiber design equips the user with a versatile and ergonomic tool for performing accurate scanning in confined spaces. The FARO Scanner Freestyle^{3DX} can be used independently or as a complement to the FARO Focus. The FARO Scanner Freestyle^{3DX} comes with two software applications in addition to FARO's proprietary SCENE software: SCENE Capture, which is installed on a tablet computer to record and visualize the capturing of 3D data, and SCENE Process, which processes the captured 3D data. This product is primarily sold in the Construction BIM-CIM and Public Safety Forensics segments.

FARO Software. We provide a family of proprietary CAD-based measurement and laser scanner software used with our measurement and scanning devices.

- **CAM2 Measure 10** allows customers to complete measurement jobs quickly and gives customers the freedom to measure as required by the application, thereby improving every process where measuring is needed.

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- **CAM2 SmartInspect** is our CAM2 solution for measuring geometry and building dimensions. The software allows customers to quickly measure geometric features and report dimensions for control.
- **BuildIT** is a CAD-to-part inspection software that enables quick and easy dimensional verification of manufactured parts and assemblies for tool building, assembly, alignment, process automation, reverse engineering and quality control. BuildIT's advanced analysis and reporting capabilities combine measurement data from multiple sources to produce detailed graphical and textual reports that are used to quickly identify manufacturing and production trends. With both numerical and graphical feedback of real-time deviations, BuildIT allows users to position parts with micrometer accuracy for high-precision assembly and alignment applications.
- **FARO SCENE** software combines ease-of-use, networking, and an enhanced 3D experience to deliver a complete scan processing solution. With SCENE, customers can display, analyze, administer and edit 3D measurements in point clouds.
- **FARO Zone** software makes diagramming and pre-planning easier for law enforcement officers, firefighters and loss control engineers by allowing the users who need to draw site plans or crash or crime scene diagrams to be able to do so in a fast and efficient manner.
- **PointSense** software products enable and simplify the use of real world objects in CAD applications. Primarily serving the surveying and architecture, engineering and construction spaces, the offering allows the user to integrate 3D laser scan data with CAD environments. PointSense offerings include PointSense for Revit® (a registered trademark of Autodesk), PointSense Building, PointSense Heritage, PointSense Plant, and PointSense Pro.
- **FARO RayTracer™** software streamlines processes for factory workers and enables the projection of 3D templates. Primarily serving manufacturing environments, the offering can be used to establish databases, manage their components, configure jobs and control parameters, edit projection data and reference tool data. The FARO RayTracer™ offerings include RayTracer™ Administrator and RayTracer™ Operator.

Warranties and Services. We warrant our products against defects in design, materials and workmanship for one year. To support our product lines, we also separately sell extended warranties that typically range from less than one year to three years and comprehensive support, training and technology consulting services to our customers.

Customers

Our sales are diversified across a broad number of over 15,000 customers worldwide in our Factory Metrology, Construction BIM-CIM, Product Design, Public Safety Forensics, and 3D Machine Vision vertical markets. Our ten largest customers by revenue represented an aggregate of approximately 4.2% of our total sales in 2017. No customer represented more than 1.0% of our sales in 2017.

Sales and Marketing

We conduct our sales and marketing efforts on a vertical basis. Each vertical has its own sales and marketing team coordinated by our Lake Mary headquarters. Geographically, we have operations in three main regions around the world: Americas, Europe/Middle East/Africa ("EMEA") and Asia-Pacific. The regional headquarters for the Americas, which is also our global headquarters, is located in Lake Mary, Florida; the EMEA regional headquarters is located in Stuttgart, Germany; and the regional headquarters for the Asia-Pacific region is located in Singapore. Each of these regional sales and marketing organizations support each of our reporting segments. As of December 31, 2017, we employed 705 sales and marketing specialists globally.

We sell most of our products through direct sales representation in Australia, Brazil, Canada, China, France, Germany, India, Italy, Japan, Malaysia, Mexico, the Netherlands, Poland, Portugal, Singapore, South Korea, Spain, Sweden, Switzerland, Thailand, Turkey, the United Kingdom, and the United States. Our sales and marketing efforts use a process of integrated lead qualification and sales demonstration. Once a customer opportunity is identified, we employ a team-based sales approach involving inside and outside sales personnel who are supported by application engineers. Each team has the ability to sell multiple product lines. We employ a variety of marketing techniques to promote brand awareness and customer identification.

Information regarding our net sales and long-lived assets by geographic region is set forth in Note 16 to the "Notes to Consolidated Financial Statements" included in Part II, Item 8 of this Annual Report on Form 10-K.

Research and Development

We believe that our future success depends, in part, on our ability to maintain what we believe to be our technological leadership, which will require ongoing enhancements of our products and the development of new applications and products that provide 3D measurement solutions. The field of 3D measurement continues to expand, and new technologies and applications will be essential to competing in this market. Accordingly, we intend to continue to make substantial investments in the development of new technologies, the commercialization of new products that build on our existing technological base, and the enhancement and development of additional applications for our products.

Our research and development efforts are directed primarily at enhancing the functional adaptability of our current products and developing new and innovative products that respond to specific requirements of the emerging market for 3D measurement, imaging, and realization systems. Our engineering development efforts will continue to focus on enhancing the mechanical hardware, electronics, and software in our existing products and developing new products for the CAM2 market. Additionally, certain of our acquisitions are intended, in whole or in part, to further the development of technologies which, on a risk adjusted basis, are better to be acquired than developed internally by us. Research and development activities, especially with respect to new products and technologies, are subject to significant risks, and there can be no assurance that any of our research and development activities will be completed successfully or on schedule, or, if completed, will be commercially accepted.

At December 31, 2017, we employed 229 scientists and technicians in our research and development efforts. Research and development expenses were approximately \$35.4 million in 2017, compared to \$30.1 million in 2016 and \$26.7 million in 2015.

Intellectual Property

We own approximately 860 patents and pending patent applications worldwide, which generally expire on a rolling basis between 2018 and 2040. We also own approximately 73 trademark registrations worldwide, with 4 pending trademark applications.

Our success and ability to maintain a competitive position depends, in large part, on our ability to protect our intellectual property. We rely on a combination of contractual provisions and trade secret laws to protect our proprietary information. However, there can be no assurance that the steps taken by us to protect our trade secrets and proprietary information will be sufficient to prevent misappropriation of our proprietary information or preclude third-party development of similar intellectual property.

Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our products or to obtain and use information that we regard as proprietary. We intend to vigorously defend our proprietary rights against infringement by third parties. However, policing unauthorized use of our products is difficult, particularly in foreign countries, and we may be unable to determine the extent, if any, to which unauthorized uses of our products exist. In addition, the laws of some foreign countries do not protect our proprietary rights to the same extent as the laws of the United States.

We do not believe that any of our products infringe on the valid, proprietary rights of third parties. There can be no assurance, however, that third parties will not claim infringement by us with respect to current or future products. Any such claims, with or without merit, could be time consuming, result in costly litigation, cause product shipment delays or require us to enter into royalty or licensing agreements, which could have a material adverse effect upon our business, operating results and financial condition. In addition, such royalty or licensing agreements, if required, may not be available on terms acceptable to us, if at all.

Manufacturing and Assembly

Manufacturing consists primarily of assembling and integrating components and subassemblies purchased from suppliers into finished products. The primary components, which include machined parts and electronic circuit boards, are produced by subcontractors according to our specifications. Products are assembled, calibrated and tested for accuracy and functionality before shipment. We perform limited in-house circuit board assembly and component part machining. Typically, we enter into purchase commitments for manufacturing components to cover production requirements for 60 to 120 days. We have entered, and may continue to enter, into longer agreements to purchase sufficient inventory to satisfy warranty commitments or to ensure adequate component availability.

Our manufacturing, engineering, and design headquarters have been registered to the ISO 9001 standard since July 1998. Semi-annual surveillance audits have documented continuous improvement to this multinational standard. Currently, our manufacturing sites in Lake Mary, Florida; Exton, Pennsylvania; Stuttgart, Germany; Schaffhausen, Switzerland; and Singapore are jointly registered to ISO 9001. Our FARO Laser Tracker™, FaroArm®, FARO Gage, and FARO Cobalt Array Imager products are all registered to ISO 17025:2005. We continue to examine our scope of registration as our business evolves and we have chosen English as the standard business language for our operations.

Our efforts to register our manufacturing, engineering and design headquarters to the ISO 9001 standard in concert with the ISO 9001:2015 Quality Management System Certification verifies our commitment to quality through an internationally recognized standard. Additionally, we take a global approach to ISO 17025:2005 regarding the recognition of the Competence of Calibration and Testing Laboratories, seeking to have all locations registered with similar scopes of accreditation and capabilities for the products generated and serviced.

We manufacture our FaroArm®, FARO ScanArm®, and FARO Gage products in our manufacturing facility located in Switzerland for customer orders from EMEA, in our manufacturing facility located in Singapore for customer orders from the Asia-Pacific region, and in our manufacturing facility located in Florida for customer orders from the Americas. We manufacture our FARO Focus in our manufacturing facilities located in Germany and Switzerland for customer orders from EMEA and the Asia-Pacific region, and in our manufacturing facility located in Pennsylvania for customer orders from the Americas. We manufacture our FARO Freestyle^{3D}X products in our facility located in Germany. We manufacture our FARO Laser Tracker™, FARO Cobalt Array Imager and our FARO Laser Projector products in our facility located in Pennsylvania. We expect all of our existing manufacturing facilities to have the production capacity necessary to support our volume requirements during 2018.

Competition

Our measurement systems compete in the broad and highly competitive market for measurement devices for manufacturing and industrial applications, which, in addition to portable articulated arms, laser trackers, 3D imaging and laser scanner products, consist of fixed-base CMMs, templates and go/no-go gages, check fixtures, handheld measurement tools, and various categories of surveying equipment. In the FARO Gage product line, we compete with a number of manufacturers of handheld measurement tools and fixed-base CMMs, including some large, well-established companies. In the FaroArm®, FARO ScanArm®, FARO Laser Tracker™, and FARO Focus product lines, we compete primarily with Hexagon Manufacturing Intelligence, a division of Hexagon AB; Automated Precision Inc.; Artec Europe, S.a.r.l.; Leica Geosystems, Inc., a division of Hexagon AB; and Trimble Inc. In the FARO Cobalt Array Imager product lines, we compete primarily with Carl Zeiss Optotechnik GmbH, GOM GmbH, Hexagon Manufacturing Intelligence, and Nikon Metrology, Inc., a division of Nikon Inc. In the FARO Laser Projector product line, we compete primarily with ViRTEK, a division of Gerber Technology LLC. We also compete in these product lines with a number of other smaller companies. We compete on the basis of technical innovation, product performance, quality and price with respect to all of our products.

We will be required to make continued investments in technology and product development to maintain and extend the technological advantage that we believe we currently have over our competition. However, we cannot be certain that our technology or our product development efforts will allow us to successfully compete as the industry evolves. As the market for our measurement systems expands, additional competition may emerge, and our existing and future competitors may commit more resources to the markets in which we participate.

Government Regulation

Our operations are subject to numerous governmental laws and regulations, including those governing antitrust and competition, the environment, import and export of products, currency conversions and repatriation, taxation of foreign earnings and earnings of expatriate personnel, and use of local employees and suppliers. Our foreign operations are subject to the U.S. Foreign Corrupt Practices Act, or FCPA, and similar foreign anti-corruption laws, which makes illegal any payments to government officials or government employees that are intended to induce their influence to assist us or to gain any improper advantage for us. We operate in certain regions in the Middle East, Africa, Latin America, and Asia-Pacific that are more prone to risk under these anti-corruption laws.

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Manufacturers of electrical goods are subject to the European Union's RoHS2 and WEEE directives, which took effect during 2006. RoHS2 prohibits the use of lead, mercury and certain other specified substances in electronics products, and WEEE makes producers of electrical goods financially responsible for specified collection, recycling, treatment, and disposal of covered electronic products and components. Parallel initiatives are being proposed in other jurisdictions, including several states in the United States and China. We currently hold RoHS2 and WEEE registration and are in compliance with such directives of the European Union.

Backlog and Seasonality

At December 31, 2017, we had orders representing approximately \$18.0 million in sales outstanding, of which \$6.8 million related to services that we expect to deliver within one year. The product-related outstanding orders as of December 31, 2017 were \$11.2 million, of which \$6.4 million were shipped by February 16, 2018. As of February 16, 2018, we had orders representing approximately \$20.5 million in sales outstanding, inclusive of 2017 open and undelivered orders, of which \$6.3 million related to service orders and \$14.2 million were product-related orders. We believe that substantially all of the outstanding product-related orders as of February 16, 2018 will be shipped during 2018. At December 31, 2016 and 2015, we had orders representing approximately \$13.4 million and \$9.1 million in sales outstanding, respectively.

We typically experience greater order volume during the fourth quarter as customers spend the remaining balances of their capital expenditure budgets.

Employees

At December 31, 2017, we had 1,669 full-time employees, consisting of 705 sales and marketing professionals, 291 customer service/training/application engineering specialists, 246 production staff, 229 research and development staff, and 198 administrative staff. We are not a party to any collective bargaining agreements and believe our employee relations are satisfactory. Management believes that our future growth and success will depend in part on our ability to retain and continue to attract highly-skilled personnel. We anticipate that we will be able to obtain the additional personnel required to satisfy our staffing requirements during 2018.

Available Information

We make available, free of charge on our Internet website at <http://www.faro.com>, our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after they are electronically filed with, or furnished to, the Securities and Exchange Commission, or the SEC. You can find these reports on our website at www.faro.com by first clicking "Investor Relations" and then "SEC Filings." The information on, or accessible through, our website is not a part of this Annual Report on Form 10-K.

These reports may also be obtained at the SEC's Public Reference Room at 100 F Street NE, Washington, DC 20549. Information on the operation of the Public Reference Room is available by calling the SEC at (800) SEC-0330. You may also access this information at the SEC's website at <http://www.sec.gov>. This site contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

ITEM 1A. RISK FACTORS.

The statements under this heading describe the most significant risks to our business identified by management and should be considered carefully in conjunction with the discussion in Management's Discussion and Analysis of Financial Condition and Results of Operations included in Part II, Item 7 of this Annual Report on Form 10-K and in our Consolidated Financial Statements and notes thereto included in Part II, Item 8 of this Annual Report on Form 10-K before deciding to invest in, or retain, shares of our common stock.

Any of the following risks and uncertainties could materially and adversely affect our business, results of operations, liquidity, and financial condition. These are not the only risks we face. Our operations could also be affected by additional factors that are not presently known by us or by factors that we currently do not consider material to our business.

Competitors may develop products that make our products obsolete or less competitive.

The CAM2 market is characterized by rapid technological change. Competitors may develop new or improved products, processes or technologies that may make our products obsolete or less competitive.

As a result, our success depends, in part, on our ability to maintain our technological advantage by developing new products and applications and enhancing our existing products, which can be complex and time-consuming and require substantial investment. Significant delays in new product releases or difficulties in developing new products could adversely affect our business and results of operations. We can provide no assurance that we will be able to adapt to evolving markets and technologies or maintain our technological advantage.

Our financial performance is dependent on the conditions of various industries, including the automotive, aerospace, and heavy equipment industries, which have from time to time experienced, and may again experience, significant disruptions in the economic environment.

A significant portion of our sales are to manufacturers in the automotive, aerospace, and heavy equipment industries. We are dependent upon the continued viability and financial stability of our customers in these industries, which are highly cyclical and dependent upon the general health of the economy and consumer spending.

Because a significant portion of our revenues and expenses are denominated in foreign currencies, we face significant exposure to foreign exchange rate risk.

Our results of operations are affected by fluctuations in exchange rates, which has caused, and may continue to cause, significant fluctuations in our quarterly and annual results of operations. Fluctuations in exchange rates may have a material adverse effect on our results of operations and financial condition and could result in potentially significant foreign exchange gains and losses. To the extent that the percentage of our non-U.S. dollar revenues derived from international sales increases in the future, our exposure to risks associated with fluctuations in foreign exchange rates will increase.

Product failures or product availability and performance issues could result in increased warranty costs and delays in new product introductions and enhancements, and could adversely affect our business and financial condition.

We regularly introduce new products and enhance existing products. The impact of new product introductions, including the costs associated with new product introductions, such as product development, marketing, assembly line start-up costs and low introductory period production volumes, and manufacturing inefficiencies associated with new product introductions could have an adverse effect on our business and financial condition. Failures in, or performance issues impacting, our new or existing products could result in increased warranty costs, delays in new product introductions or existing product enhancements, and a loss of sales and customers, which would have an adverse effect on our business and financial condition. The supply of raw materials for a new or existing product could be delayed or constrained, or a key vendor could delay shipments, which may decrease product availability, causing a loss of sales and customers.

Our growth depends on the ability of our products to attain broad market acceptance.

The market for traditional fixed-base CMMs, check fixtures, handheld measurement tools, and surveying equipment is mature. Part of our strategy is to continue to displace these traditional measurement devices. Displacing traditional measurement devices and achieving broad market acceptance for our products requires significant effort to convince customers to reevaluate their historical measurement procedures and methodologies.

The potential size and growth rate of the CAM2 market is uncertain and difficult to quantify. If the CAM2 market does not continue to expand or does not expand as quickly as we anticipate, we may not be able to grow our sales, which could materially adversely affect our results of operations and financial condition.

We market eight closely interdependent products (FaroArm®, FARO ScanArm®, FARO Gage, FARO Laser Tracker™, FARO Laser Projector, FARO Cobalt Array Imager, FARO Focus and FARO Scanner Freestyle^{3DX}) and related software for use in measurement, inspection, and high density surveying applications. Substantially all of our revenues are currently derived from sales of these products and software, and we plan to continue our business strategy of focusing on the software-driven, 3D measurement and inspection market. Consequently, our financial performance will depend, in large part, on computer-based measurement, inspection and high density surveying products achieving broad market acceptance. If our products cannot attain broad market acceptance, we will not grow as anticipated and may be required to make increased expenditures on research and development for new applications or new products.

We may not be able to identify or consummate acquisitions or achieve expected benefits from or effectively integrate acquisitions, which could harm our growth.

Our growth strategy partly depends on our ability to obtain additional technologies, complementary product lines and sales channels through selective acquisitions and strategic investments. We may not be able to identify and successfully negotiate suitable acquisitions, obtain financing for future acquisitions, if necessary, on satisfactory terms or otherwise complete acquisitions in the future. In the past, we have used our stock as consideration for acquisitions. Our common stock may not remain at a price at which it can be used as consideration for acquisitions without diluting our existing shareholders, and potential acquisition candidates may not view our stock attractively.

In addition, realization of the benefits of acquisitions often requires integration of some or all of the sales and marketing, distribution, manufacturing, engineering, software development, customer service, finance and administrative organizations of the acquired companies. The integration of acquisitions demands substantial attention from senior management and the management of the acquired companies. Our recent acquisitions and any future acquisitions may be subject to a variety of risks and uncertainties including:

- the inability to assimilate effectively the operations, products, technologies and personnel of the acquired companies (some of which may be located in diverse geographic regions);
- the inability to maintain uniform standards, controls, procedures and policies;
- the need or obligation to divest portions of the acquired companies; and
- the potential impairment of relationships with customers.

We cannot offer any assurance that we will be able to identify, complete or successfully integrate any suitable acquisitions, that any acquired companies will operate profitably, or that we will realize the expected synergies and other benefits from any acquisition.

The buying process for most of our customers for our measurement products is highly decentralized and typically requires significant time and expense for us to further penetrate the potential market of a specific customer, which may delay our ability to generate additional revenue.

Our success depends, in part, on our ability to further penetrate our customer base. During 2017, approximately 85% of our revenue was attributable to sales to our existing customers. If we are not able to continue to further penetrate our existing customer base, our future sales may decline. However, most of our customers have a decentralized buying process for measurement devices, and we must spend significant time and resources to increase revenues from a specific customer. For example, we may provide products to only one of our customer's manufacturing facilities or for a specific product line within a manufacturing facility. We cannot offer any assurance that we will be able to maintain or increase the amount of sales to our existing customers, which could adversely affect our financial results.

Our failure to attract and retain qualified personnel could lead to a loss of sales or decreased profitability.

The loss of any of our current executive officers, or other key personnel, could adversely affect our sales, profitability or growth. Moreover, we continue to rely, in part, on equity awards to attract and retain qualified personnel, which may result in an increase in compensation expense.

Any failure to protect our patents and proprietary rights in the United States and foreign countries could adversely affect our revenues.

Our success depends, in large part, on our ability to obtain and maintain patents and other proprietary rights protection for our processes and products in the United States and other countries. We also rely upon trade secrets, technical know-how and continuing inventions to maintain our competitive position. We seek to protect our technology and trade secrets, in part, by confidentiality agreements with our employees and contractors. However, our employees may breach these agreements; or our trade secrets may otherwise become known or be independently discovered by inventors. If we are unable to obtain or maintain protection of our patents, trade secrets and other proprietary rights, we may not be able to prevent third parties from using our proprietary rights, which could have a material adverse effect on our results of operations.

Our patent protection involves complex legal and technical questions. Our patents may be challenged, narrowed, invalidated or circumvented. Further, we may be able to protect our proprietary rights from infringement by third parties only to the extent that our proprietary processes and products are covered by valid and enforceable patents or are effectively maintained as trade secrets. Furthermore, others may independently develop similar or alternative technologies or design around our patented technologies. Litigation or other proceedings to defend or enforce our intellectual property rights could require us to spend significant time and money, which could have an adverse impact on our financial condition.

Claims from others that we infringed on their intellectual property rights may adversely affect our business and financial condition.

From time to time, we receive notices from others claiming that we infringed on their intellectual property rights. Resolving these claims may require us to enter into royalty or licensing agreements on unfavorable terms, require us to stop selling or to redesign affected products, or require us to pay damages. In addition, from time to time, we are involved in intellectual property lawsuits. We could, in the future, incur judgments or enter into settlements of lawsuits and claims that could have a material adverse effect on our financial condition. Any litigation or interference proceedings, regardless of their outcome, may be costly and may require significant time and attention of our management and technical personnel.

We may not be able to achieve financial results within our target goals, and our operating results may fluctuate due to a number of factors, many of which are beyond our control.

Our ability to achieve financial results that are within our goals is subject to a number of factors beyond our control. Moreover, our annual and quarterly operating results have varied significantly in the past and likely will vary significantly in the future. Factors that cause our financial results to fluctuate include, but are not limited to, the following:

- adverse changes in the manufacturing industry and general economic conditions;
- the effectiveness of sales promotions;
- geographic expansion in our regions;
- training and ramp-up time for new sales people;
- investments in strategic sales, product or other initiatives;
- investments in technologies and new products and product enhancements, including costs associated with new development and product introductions, and the timing and market acceptance of new products and product enhancements;
- manufacturing inefficiencies related to new product introductions;
- excess or obsolete inventory, shrinkage or other inventory losses due to product obsolescence, change in demand for our products, scrap or material price changes;
- expansion of our manufacturing capability;
- the size and timing of customer orders, many of which are received towards the end of a quarter;
- the amount of time that it takes to fulfill orders and ship our products;
- the length of our sales cycle to new customers;
- customer order deferrals in anticipation of new products and product enhancements;
- start-up costs and ramp-up time associated with opening new sales offices outside of the United States;

- variations in our effective income tax rate and difficulty in predicting our effective tax rate on a quarterly and annual basis; and
- litigation and regulatory action brought against us.

Any one or a combination of these factors could adversely affect our annual and quarterly operating results in the future and could cause us to fail to achieve our target financial results.

We compete with manufacturers of measurement systems and traditional measurement devices, many of which have more resources than us and may develop new products and technologies.

Our measurement systems compete in the broad and highly competitive market for measurement devices for manufacturing and industrial applications, which, in addition to portable articulated arms, laser trackers, 3D imaging and laser scanner products, consist of fixed-base CMMs, templates and go/no-go gages, check fixtures, handheld measurement tools, and various categories of surveying equipment. In the FARO Gage product line, we compete with a number of manufacturers of handheld measurement tools and fixed-base CMMs, including some large, well-established companies. In the FaroArm®, FARO ScanArm®, FARO Laser Tracker™, and FARO Focus product lines, we compete primarily with Hexagon Manufacturing Intelligence, a division of Hexagon AB; Automated Precision Inc.; Artec Europe, S.a.r.l.; Leica Geosystems, Inc., a division of Hexagon AB; and Trimble Inc. In the FARO Cobalt Array Imager product lines, we compete primarily with Carl Zeiss Optotechnik GmbH, GOM GmbH, Hexagon Manufacturing Intelligence, and Nikon Metrology, Inc., a division of Nikon Inc. In the FARO Laser Projector product line, we compete primarily with ViRTEK, a division of Gerber Technology LLC. We also compete in these product lines with a number of other smaller companies. We compete on the basis of technical innovation, product performance, quality and price with respect to all of our products.

We will be required to make continued investments in technology and product development to maintain the technological advantage that we believe we currently have over our competition. Some of our competitors possess substantially greater financial, technical, and marketing resources than we possess. Moreover, we cannot be certain that our technology or our product development efforts will allow us to successfully compete as the industry evolves. As the market for our measurement systems expands, additional competition may emerge and our existing and future competitors may commit more resources to the markets in which we participate. Our results of operations could be adversely affected by pricing strategies pursued by competitors or technological or product developments by competitors.

If we fail to establish and maintain effective internal controls over financial reporting, our financial statements could contain a material misstatement, which could adversely affect our business and financial condition.

Under Section 404 of the Sarbanes-Oxley Act of 2002 and the rules promulgated by the SEC, companies are required to conduct a comprehensive evaluation of their internal controls over financial reporting. As part of this process, we are required to document and test our internal controls over financial reporting; management is required to assess and issue a report concerning our internal controls over financial reporting; and our independent registered public accounting firm is required to attest to the effectiveness of our internal controls over financial reporting. Our internal controls over financial reporting may not prevent or detect misstatements because of their inherent limitations, including the possibility of human error, the circumvention or overriding of controls, or fraud. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and may not be prevented or detected on a timely basis. Even effective internal controls over financial reporting can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements. If we fail to adequately establish and maintain effective internal controls over financial reporting, our financial statements may contain material misstatements, and we could be required to restate our financial results. This could cause us to fail to meet our reporting obligations, lead to a loss of investor confidence and adversely affect our business, our financial condition, and the trading price of our common stock.

We derive a substantial part of our revenues from our international operations, which are subject to greater volatility and often require more management time and expense to achieve profitability than our domestic operations.

We derive more than half of our revenues from international operations. Our international operations are subject to various risks, including:

- difficulties in staffing and managing foreign operations;
- political and economic instability;

- unexpected changes in regulatory requirements and laws;
- longer customer payment cycles and difficulty collecting accounts receivable;
- compliance with export and import regulations, including tariffs, and trade restrictions;
- governmental restrictions on the transfer of funds to us from our operations outside the United States; and
- burdens of complying with a wide variety of foreign laws and labor practices.

Several of the countries where we operate have emerging or developing economies, which may be subject to greater currency volatility, negative growth, high inflation, limited availability of foreign exchange and other risks. These factors may harm our results of operations and any measures that we may implement to reduce the effect of volatile currencies and other risks of our international operations may not be effective.

Our financial results may be adversely affected by exposure to additional tax liabilities.

As a multinational corporation, we are subject to income tax in the United States and numerous foreign jurisdictions. Our effective tax rate is directly impacted by the application of complex tax laws and regulations and is highly dependent upon the geographic mix of our worldwide earnings or losses, the tax regulations in each country or geographic region in which we operate, and the availability of tax credits and loss carry-forwards. Our provision for income taxes and tax liability in the future could be adversely affected by many factors including, but not limited to, income before taxes being lower than anticipated in countries with lower statutory tax rates and higher than anticipated in countries with higher statutory tax rates, changes in the valuation of deferred tax assets and liabilities, and changes in tax laws, regulations, accounting principles or interpretation of accounting principles. Application of tax laws and regulations is also subject to legal and factual interpretation, judgment, and uncertainty. Further, tax laws are subject to change as a result of changes in fiscal policy and legislation and the evolution of regulations and court rulings.

On December 22, 2017, the United States enacted tax reform legislation commonly known as the Tax Cuts and Jobs Act of 2017 (the “Tax Cuts Act”), resulting in significant modifications to existing law. SEC Staff Accounting Bulletin 118 (“SAB 118”) provides additional clarification regarding the application of Accounting Standards Codification (“ASC”) Topic 740 in situations where a company does not have the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting for certain income tax effects of the Tax Cuts Act for the reporting period in which the Tax Cuts Act was enacted. SAB 118 provides for a measurement period beginning in the reporting period that includes the Tax Cuts Act’s December 2017 enactment date and ending when we have obtained, prepared, and analyzed the information needed in order to complete the accounting for such income tax effects, but in no circumstances will the measurement period extend beyond one year from the enactment date. Additional work is necessary to perform a more detailed analysis of historical foreign earnings. Upon gathering all necessary data, interpreting any additional guidance from tax authorities, and completing the analysis, our provisional amount will be adjusted in the measurement period allowable in accordance with SAB 118. Our provisional amount relating to the transition tax on the mandatory deemed repatriation of foreign earnings may materially differ upon completing the analysis compared to the amount accrued as of December 31, 2017.

The income and non-income tax regimes we are subject to or operate under may be subject to significant change. Changes in tax laws or tax rulings, or changes in interpretations of existing laws, could materially affect our financial position and results of operations. Certain countries in Europe, as well as a number of other countries and organizations, have recently proposed or recommended changes to existing tax laws that could significantly increase our tax obligations in many countries where we do business or require us to change the manner in which we operate our business. The Organization for Economic Cooperation and Development (“OECD”) has continued to work on a Base Erosion and Profit Sharing (“BEPS”) initiative. In 2015, the OECD issued initial guidelines and proposals that may change various aspects of the existing framework under which our tax obligations are determined in many of the countries in which we do business. As BEPS guidance is further released, legislative changes may result that could potentially impact the recorded amounts of our deferred tax assets, deferred tax liabilities and our effective tax rate. The European Commission has conducted investigations in multiple countries focusing on whether local country tax rulings or tax legislation provides preferential tax treatment that violates European Union state aid rules and concluded that certain countries, including Ireland, have provided illegal state aid in certain cases. These investigations may result in changes to the tax treatment of our foreign operations.

Implementation of the United Kingdom's ("UK") exit from European Union membership could adversely impact our business.

On June 23, 2016, the UK held a referendum in which voters approved an exit from the European Union. In March 2017, the UK invoked Article 50 of the Treaty on European Union, which triggered a two-year period, subject to extension by unanimous consent of the European Union member states, during which the UK government will negotiate its withdrawal agreement with the European Union. Although it is unknown what the terms of the UK's future relationship with the European Union will be after the UK's exit from European Union membership, it is possible that there will be greater restrictions on imports and exports between the UK and European Union members, including, without limitation, the imposition of tariffs, and increased regulatory complexities. Any of these factors could adversely affect our business and operating results by adversely affecting customer demand and our relationships with customers in the UK and the European Union.

Reductions in defense spending could adversely affect our business.

Certain of our customers operate in the defense sector and depend significantly on U.S. government spending. In August 2011, Congress enacted the Budget Control Act of 2011, which imposed spending caps and certain reductions in defense spending through 2021. Automatic spending reductions, referred to as sequestration, were implemented in March 2013. Ongoing budgetary discussions in the federal government may result in other cuts to defense spending. Reductions in defense spending that impact the aerospace and defense industries, or uncertainty regarding future levels of government expenditures, could have an adverse effect on our results of operations.

We are subject to the impact of governmental and other similar certification processes and regulations, which could adversely affect our business and results of operations.

Our operations are subject to numerous governmental laws and regulations, including those governing antitrust and competition, the environment, collection, recycling, treatment and disposal of covered electronic products and components, import and export of products, currency conversions and repatriation, taxation of foreign earnings and earnings of expatriate personnel, and use of local employees and suppliers. An inability to comply with these regulations or obtain any necessary certifications in a timely manner could have an adverse effect on our business and results of operations.

Manufacturers of electrical goods are subject to the European Union's RoHS2 and WEEE directives, which took effect during 2006. RoHS2 prohibits the use of lead, mercury and certain other specified substances in electronics products, and WEEE makes producers of electrical goods financially responsible for specified collection, recycling, treatment, and disposal of covered electronic products and components. While we currently hold WEEE registration and are in compliance with the directives of the European Union, including the RoHS2 directive, parallel initiatives are being proposed in other jurisdictions, including several states in the United States and China. If we do not comply with any such initiatives, our sales and results of operations could be materially impacted.

Any failure to comply with the Foreign Corrupt Practices Act or similar anti-corruption laws could subject us to fines and penalties.

In 2012, our monitorship expired pursuant to our settlement with the SEC and the United States Department of Justice, or DOJ, concerning certain payments made by our subsidiary in China that may have violated the Foreign Corrupt Practices Act, or the FCPA, and other applicable laws. We are, of course, still subject to such laws and have adopted and maintain a compliance program designed to ensure compliance with these laws; however, in light of our prior conduct, any future failure to comply with any such continuing obligations could result in the SEC and the DOJ aggressively seeking to impose penalties against us. In addition, many countries in which we operate have increased regulation regarding anti-corruption practices generally. Compliance with such regulations could be costly and could adversely impact our results of operations or delay entry into new markets.

We may face difficulties managing the effects of any future growth.

If our business grows rapidly in the future, we expect it to result in:

- increased complexity;
- increased responsibility for existing and new management personnel; and
- incremental strain on our operations and financial and management systems.

If we are not able to manage the effects of any future growth, our business, financial condition and operating results may be harmed.

Our dependence on suppliers for materials could impair our ability to manufacture our products.

Outside vendors provide key components used in the manufacture of our products. Any supply interruption in a limited source component would hinder our ability to manufacture our products until a new source of supply is identified. In addition, an uncorrected defect or supplier's variation in a component, either known or unknown, or incompatibility with our manufacturing processes could hinder our ability to manufacture our products. We may not be able to find a sufficient alternative supplier in a reasonable period of time, or on commercially reasonable terms, if at all. If we fail to obtain a supplier for the manufacture of components of our potential products, we may experience delays or interruptions in our operations, which would adversely affect our business, results of operations and financial condition.

A valuation allowance may be required for our U.S. deferred tax assets, which may reduce our earnings and have a material adverse effect on our business, results of operations and financial condition.

Our balance sheet includes \$15.6 million in deferred tax assets. Approximately half of that amount relates to U.S. deferred tax assets. On a quarterly basis, we assess our ability to realize our deferred tax assets to ensure no valuation allowance is required. The ultimate realization of our U.S. deferred tax assets is dependent upon our ability to generate future U.S. taxable income during the periods in which those deferred tax assets would be deductible. Our inability to realize our U.S. deferred tax assets may reduce our earnings and have a material adverse effect on our business, results of operations and financial condition. Based on an evaluation we conducted, we determined that it was not necessary to establish a valuation allowance against any of our U.S. deferred tax assets as of December 31, 2017. However, we will continue to monitor whether a valuation allowance is necessary, and if we are required to establish a valuation allowance against our deferred tax assets, it could have a material adverse effect on our results of operations and financial condition.

Risks generally associated with our information systems could adversely affect our business reputation and results of operations.

We rely on our information systems to obtain, rapidly process, analyze and manage data to, among other things:

- facilitate the purchase and distribution of thousands of inventory items;
- receive, process and ship orders on a timely basis;
- accurately bill and collect from customers;
- process payments to suppliers and employees; and
- summarize results and manage our business.

Our primary and back-up computer systems are subject to damage or interruption from power outages, computer and telecommunication failures, computer viruses, security breaches, natural disasters and errors by employees. Though losses arising from some of these issues would be covered by insurance, interruptions of our critical business computer systems or failure of our back-up systems could lead to a loss of sales or decreased profitability.

A cyberattack or security breach of our systems may compromise the confidentiality, integrity, or availability of our internal data and the availability of our products and websites designed to support our customers or their data. Computer hackers, foreign governments or cyber terrorists may attempt to penetrate our network security and our website. Unauthorized access to our proprietary business information or customer data may be obtained through break-ins, sabotage, breach of our secure network by an unauthorized party, computer viruses, computer denial-of-service attacks, employee theft or misuse or other misconduct. Because the techniques used by computer programmers who may attempt to penetrate and sabotage our network security or our website change frequently and may not be recognized until launched against a target, we may be unable to anticipate these techniques. It is also possible that unauthorized access to customer data may be obtained through inadequate use of security controls by customers, suppliers or other vendors. Any security breach, cyberattack or cyber security breach, and any incident involving the misappropriation, loss or other unauthorized disclosure of, or access to, sensitive or confidential customer information, whether involving us or involving one of our vendors, could require us to expend significant resources to remediate any damage, could interrupt our operations and damage our reputation, and could also result in regulatory enforcement actions, material fines and penalties, litigation or other actions which could have a material adverse effect on our business, reputation and results of operations.

We are subject to risks of natural disasters.

The occurrence of one or more natural disasters, such as tornadoes, hurricanes, earthquakes, floods and other forms of severe weather where we have a manufacturing facility could result in physical damage to, and complete or partial closure of, our manufacturing facilities, which could adversely affect our business, operations and financial performance. Interruptions in our manufacturing operations or damage to our manufacturing facilities could reduce our revenues and increase our costs, and the extent of losses from natural disasters and severe weather will be a function of both the severity of the event and the total amount of insured exposure. Although we maintain insurance coverage, we can offer no assurance that our insurance coverage will be adequate to cover any losses or that we will be able to maintain insurance at a reasonable cost in the future. If losses from business interruption or property damage exceed the amounts for which we are insured, our business, results of operations and financial condition could be adversely affected.

We may experience volatility in our stock price.

The price of our common stock has been, and may continue to be, highly volatile in response to various factors, many of which are beyond our control, including:

- fluctuations in demand for, and sales of, our products or prolonged downturns in the industries that we serve;
- actual or anticipated variations in quarterly or annual operating results;
- general economic uncertainties;
- speculation in the press or investment community; and
- announcements of technological innovations or new products by us or our competitors.

The market price of our common stock may also be affected by our inability to meet analyst and investor expectations and failure to achieve projected financial results. Any failure to meet such expectations or projected financial results, even if minor, could cause the market price of our common stock to decline significantly. Volatility in our stock price may result in the inability of our shareholders to sell their shares at or above the price at which they purchased them.

Our relatively small public float and daily trading volume have in the past caused, and may in the future result in, significant volatility in our stock price. At December 31, 2017, we had approximately 16.5 million shares outstanding held by non-affiliates. Our daily trading volume for the year ended December 31, 2017 averaged approximately 97,523 shares.

In addition, stock markets have experienced in the past and may in the future experience a high level of price and volume volatility, and the market prices of equity securities of many companies have experienced in the past and may in the future experience wide price fluctuations not necessarily related to the operating performance of such companies. These broad market fluctuations may adversely affect the market price of our common stock. In the past, securities class action lawsuits frequently have been instituted against such companies following periods of volatility in the market price of such companies' securities. If any such litigation is instigated against us, it could result in substantial costs and a diversion of management's attention and resources, which could have a material adverse effect on our results of operations and financial condition.

Anti-takeover provisions in our articles of incorporation, bylaws and provisions of Florida law could delay or prevent a change of control that you may favor.

Our articles of incorporation, bylaws and provisions of Florida law could make it more difficult for a third party to acquire us. Although we believe such provisions are appropriate to protect long-term value for our shareholders, these provisions could discourage potential takeover attempts and could adversely affect the market price of our shares. Because of these provisions, you might not be able to receive a premium on your investment. These provisions include:

- a limitation on shareholders' ability to call a special meeting of our shareholders;
- advance notice requirements to nominate directors for election to our board of directors or to propose matters that can be acted on by shareholders at shareholder meetings;

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- our classified board of directors, which means that approximately one-third of our directors are elected each year; and
- the authority of the board of directors to issue, without shareholder approval, preferred stock with such terms as the board of directors may determine.

The provisions described above could delay or make more difficult transactions involving a change in control of the Company or our management.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES

The Americas

Our headquarters is located in a leased building in Lake Mary, Florida containing approximately 46,500 square feet. This facility houses our sales, marketing, customer service/application operations and administrative staff. Our U.S. production, research and development, service operations and manufacturing are located in another leased building in Lake Mary, Florida, which consists of approximately 35,000 square feet, a leased facility consisting of approximately 90,400 square feet located in Exton, Pennsylvania containing research and development, manufacturing and service operations of our FARO Laser Tracker™, FARO Cobalt Array Imager, FARO Focus, and FARO Laser Projector product lines, as well as a leased facility consisting of approximately 21,400 square feet located in Hudson, New Hampshire containing research and development, manufacturing, sales, and the service operations of our advanced galvanometer-based optical scanner product lines. We also lease a facility in Nuevo Leon, Mexico containing service and sales operations, which consists of approximately 36,000 square feet. The facilities in the Americas region serve all of our reporting segments.

Europe/Middle East/Africa

Our EMEA headquarters is located in a leased building in Stuttgart, Germany containing approximately 105,300 square feet. This facility houses the manufacturing, research and development, administration, sales, marketing and service management personnel for our EMEA operations. Additionally, we have a leased facility consisting of approximately 15,900 square feet located in Schaffhausen, Switzerland containing manufacturing operations for our products shipped to customers in EMEA. We also have a leased service and sales facility located in Warwickshire, Great Britain consisting of approximately 12,700 square feet. The facilities in the EMEA region serve all of our reporting segments.

Asia-Pacific

Our Asia-Pacific headquarters is located in a leased building in Singapore containing approximately 22,000 square feet. This facility houses the administration, sales, marketing, service management personnel and manufacturing for our Asia-Pacific operations. Our Japan operations are located in a leased building in Nagoya, Japan containing approximately 15,900 square feet. This facility houses our Japanese sales, marketing and service operations. Our China operations are located in a leased building in Shanghai, China containing approximately 24,700 square feet for sales, marketing and service operations. The facilities in the Asia-Pacific region serve all of our reporting segments.

We believe our current facilities will be adequate for our needs in 2018 and that we will be able to locate suitable space for additional regional offices or enhanced production needs as necessary.

The information required by the remainder of this Item is incorporated herein by reference to Exhibit 99.1 to this Annual Report on Form 10-K.

ITEM 3. LEGAL PROCEEDINGS

We are not involved in any legal proceedings other than routine litigation arising in the normal course of business, none of which we believe will have a material adverse effect on our business, financial condition or results of operations.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II**ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.****Market Information and Holders**

Our common stock is listed and traded on the Nasdaq Global Select Market under the symbol "FARO".

The following table sets forth, for the periods indicated, the high and low sales prices of our common stock as reported by the Nasdaq Global Select Market:

	2017		2016	
	High	Low	High	Low
First Quarter	\$ 38.95	\$ 33.10	\$ 35.70	\$ 20.72
Second Quarter	40.00	31.90	38.01	27.87
Third Quarter	40.60	32.25	36.87	30.20
Fourth Quarter	54.40	37.30	40.15	29.00

As of February 19, 2018, we had 50 holders of record of common stock.

Dividends

To date, we have not paid any cash dividends on our common stock. We expect to retain future earnings for use in operating and expanding our business and we do not anticipate paying any cash dividends in the reasonably foreseeable future.

Recent Sales of Unregistered Securities

During the year ended December 31, 2017, we did not sell any equity securities that were not registered under the Securities Act.

Purchases of Equity Securities

On November 24, 2008, our Board of Directors approved a \$30 million share repurchase program. Acquisitions for the share repurchase program may be made from time to time at prevailing prices, as permitted by securities laws and other legal requirements and subject to market conditions and other factors. The share repurchase program may be discontinued at any time. There is no expiration date or other restriction governing the period over which we can repurchase shares under the program. In October 2015, our Board of Directors authorized an increase to the existing share repurchase program from \$30 million to \$50 million. We made no stock repurchases during the year ended December 31, 2017 under this program. As of December 31, 2017, we had authorization to repurchase \$18.3 million remaining under the repurchase program.

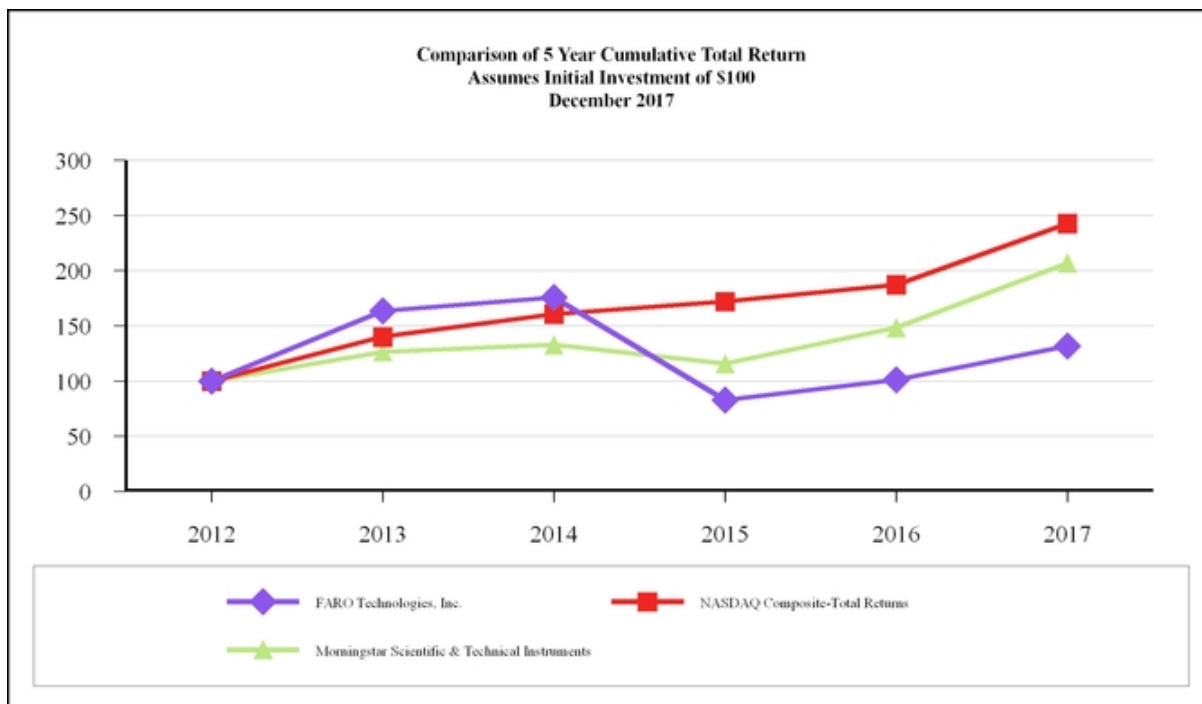
Performance Graph

The following performance graph and related information shall not be deemed "soliciting material" or to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act or the Exchange Act, except to the extent that we specifically incorporate it by reference into such filing.

The following line graph compares the cumulative five-year returns of our common stock with (1) the cumulative returns of the Nasdaq Composite-Total Returns and (2) the Morningstar Scientific & Technical Instruments Index.

For purposes of preparing the graph, we assumed that an investment of \$100 was made at market close on December 31, 2012, the last trading day before the beginning of our fifth preceding fiscal year, with reinvestment of any dividends at the time they were paid. We did not pay any dividends during the period indicated.

The comparison in the graph below is based on historical data. The stock price performance shown on the graph is not necessarily indicative of future price performance. Information used in the graph and table was obtained from Zacks Investment Research, a source believed to be reliable, but we are not responsible for any errors or omissions in such information.



Company/Market/Peer Group	2012	2013	2014	2015	2016	2017
FARO Technologies, Inc.	\$ 100.00	\$ 163.40	\$ 175.67	\$ 82.74	\$ 100.90	\$ 131.73
Nasdaq Composite-Total Returns	\$ 100.00	\$ 140.12	\$ 160.78	\$ 171.97	\$ 187.22	\$ 242.71
Morningstar Scientific & Technical Instruments	\$ 100.00	\$ 126.56	\$ 132.76	\$ 115.65	\$ 148.25	\$ 206.73

ITEM 6. SELECTED FINANCIAL DATA.

in thousands, except share and per-share data	Year ended December 31,				
	2017	2016	2015	2014	2013
Consolidated Statement of Operations Data:					
Sales	\$ 360,917	\$ 325,584	\$ 317,548	\$ 341,826	\$ 291,784
Gross profit (1)	204,637	177,960	167,236	188,510	161,651
Income from operations	5,322	13,284	13,122	37,340	30,154
Income before income tax expense(benefit)	5,827	12,626	12,806	37,522	28,862
Net (loss) income	(14,516)	11,107	12,813	33,649	21,509
Net (loss) income per common share:					
Basic	\$ (0.87)	\$ 0.67	\$ 0.74	\$ 1.95	\$ 1.26
Diluted	\$ (0.87)	\$ 0.67	\$ 0.74	\$ 1.93	\$ 1.25
Weighted average shares outstanding:					
Basic	16,711,534	16,654,786	17,288,665	17,247,727	17,087,104
Diluted	16,711,534	16,681,710	17,389,473	17,416,453	17,241,115
	As of December 31,				
	2017	2016	2015	2014	2013
Consolidated Balance Sheet Data:					
Working capital (2) (3)	\$ 218,274	\$ 212,055	\$ 221,335	\$ 250,234	\$ 258,565
Total assets	458,578	423,714	409,186	425,463	391,496
Total debt-capital leases	475	21	28	8	16
Total shareholders' equity	352,066	339,657	327,644	343,854	315,950

- (1) In 2016, certain prior year stock compensation expenses were reclassified between cost of sales, general and administrative, selling and marketing, and research and development expenses to reflect the appropriate departmental costs. As a result of this reclassification, gross profit for the years ended December 31, 2015, 2014, and 2013 was reduced by \$0.4 million, \$0.4 million and \$0.2 million, respectively.
- (2) In 2015 management reassessed certain inventory policies based on the then-current sales and customer trends. As a result, we now expect our sales demonstration inventory to be held by our sales representatives for more than one year. To reflect this change in policy, we reclassified \$18.5 million as of December 31, 2015 and December 31, 2014 from current assets to long-term assets, impacting the working capital calculation. Working capital as of December 31, 2013 has not been adjusted to reflect this change in policy as it is not practical to do so.
- (3) In 2017, we adopted Accounting Standards Update 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes* ("ASU 2015-11"), as issued by the Financial Accounting Standards Board, which requires that deferred tax liabilities and assets be classified as non-current in a classified balance sheet. We adopted ASU 2015-11 on a retrospective basis. As a result, the working capital amounts as of December 31, 2016, 2015, 2014 and 2013 have been reduced by \$7.6 million, \$7.8 million, \$5.9 million and \$4.6 million, respectively, to conform with the current year presentation of deferred tax assets as non-current assets.

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

The following information should be read in conjunction with our Consolidated Financial Statements, including the notes thereto, included in Part II, Item 8 of this Annual Report on Form 10-K.

Overview and Highlights

We are a global technology company that designs, develops, manufactures, markets and supports software driven, three-dimensional ("3D") measurement, imaging and realization systems. This technology permits high-precision 3D measurement, imaging and comparison of parts and complex structures within production and quality assurance processes. Our devices are used for inspection of components and assemblies, rapid prototyping, reverse engineering, documenting large volume or structures in 3D, surveying and construction, as well as for investigation and reconstruction of accident sites or crime scenes. We sell the majority of our products through a direct sales force across a broad number of customers in a range of manufacturing, industrial, architecture, surveying, building information modeling, construction, public safety forensics, cultural heritage and other applications. Our FaroArm[®], FARO ScanArm[®], FARO Gage[®], FARO Laser Tracker[™], FARO Cobalt Array Imager, FARO Laser Projector, and their companion CAM2[®], BuildIT, and RayTracer[™] software solutions, provide for Computer-Aided Design ("CAD") based inspection, factory-level statistical process control, high-density surveying and laser-guided assembly and production. Together, these products integrate the measurement, quality inspection, and reverse engineering functions with CAD and 3D software to improve productivity, enhance product quality, and decrease rework and scrap in the manufacturing process, mainly supporting applications in our Factory Metrology vertical. Our FARO Focus and FARO Scanner Freestyle^{3DX} laser scanners, and their companion FARO SCENE, FARO PointSense, and FARO Zone public safety forensics software offerings, are utilized for a wide variety of 3D modeling, documentation and high-density surveying applications in our Construction Building Information Modeling - Construction Information Management ("Construction BIM-CIM") and Public Safety Forensics verticals. Our FARO ScanArm[®], FARO Cobalt Array Imager, FARO Scanner Freestyle^{3DX} laser scanners and their companion SCENE software also enable a fully digital workflow used to capture real world geometry for the purpose of empowering design, enabling innovation, and speeding up the design cycle, supporting our Product Design vertical. FARO Visual Inspect enables large, complex 3D CAD data to be transferred to a tablet device and then used for mobile visualization and comparison to real world conditions, facilitating in-process inspection, assembly, guidance and positioning for applications in our Factory Metrology and Construction BIM-CIM verticals. Our line of galvanometer-based scan heads and laser scan controllers are used in a variety of laser applications and are integrated into larger components and systems.

We derive our revenues primarily from the sale of our measurement equipment and related multi-faceted software programs. Revenue related to these products is generally recognized upon shipment. In addition, we sell extended warranties and training and technology consulting services relating to our products. We recognize the revenue from extended warranties on a straight-line basis over the term of the warranty, and revenue from training and technology consulting services when the services are provided.

We operate in international markets throughout the world and maintain sales offices in Australia, Brazil, Canada, China, France, Germany, India, Italy, Japan, Malaysia, Mexico, the Netherlands, Poland, Portugal, Singapore, South Korea, Spain, Switzerland, Thailand, Turkey, the United Kingdom, and the United States.

We manufacture our FaroArm[®], FARO ScanArm[®], and FARO Gage products in our manufacturing facility located in Switzerland for customer orders from Europe, the Middle East and Africa ("EMEA"), in our manufacturing facility located in Singapore for customer orders from the Asia-Pacific region, and in our manufacturing facility located in Florida for customer orders from the Americas. We manufacture our FARO Focus in our manufacturing facilities located in Germany and Switzerland for customer orders from EMEA and the Asia-Pacific region, and in our manufacturing facility located in Pennsylvania for customer orders from the Americas. We manufacture our FARO Freestyle^{3DX} products in our facility located in Germany. We manufacture our FARO Laser Tracker[™], FARO Cobalt Array Imager and our FARO Laser Projection products in our facility located in Pennsylvania. We expect all of our existing manufacturing facilities to have the production capacity necessary to support our volume requirements during 2018.

We account for wholly-owned foreign subsidiaries in the currency of the respective foreign jurisdiction; therefore, fluctuations in exchange rates may have an impact on the value of the intercompany account balances denominated in different currencies and reflected in our consolidated financial statements. We are aware of the availability of off-balance sheet financial instruments to hedge exposure to foreign currency exchange rates, including cross-currency swaps, forward contracts and foreign currency options. However, we have not used such instruments in the past, and none were utilized in 2017, 2016 or 2015.

Executive Summary

Our total sales increased \$35.3 million, or 10.9%, to \$360.9 million for the year ended December 31, 2017 from \$325.6 million for the year ended December 31, 2016. This increase reflected improved growth in both product and service revenue as we have continued to grow our global sales force consistent with our strategy.

We began undertaking several important strategic initiatives in 2016 that we believe will drive our long-term growth and profitability, including reorganizing our business to align our sales, marketing, product management and research and development around specific vertical markets and to better define our end market applications; modernizing our sales process to improve the efficiency of our sales organization by supplementing our current direct sales approach of conducting on-site demonstrations with multimedia, web-based demonstrations and cloud-based customer relations development; accelerating and maintaining a consistent schedule of new product introductions; and reorganizing all functions, processes and people to a harmonized global mindset to improve operational efficiencies. Our vertical approach, coupled with our continued investment in our global sales force, release of new products and cost optimization represent important steps towards our long-term financial objectives. We successfully completed these strategic initiatives during 2017.

We achieved numerous milestones in 2017 involving significant product launches, sales force growth and acquisitions:

Product innovation – In 2017, we launched several new products including:

- **FARO Quantum^S FaroArm[®]** - This introduction is certified to ISO 10360 - 12:2016. The Quantum^S tests to the International Electrical Commission (IEC 60068-2) standards for shock, vibration and temperature stress relief of electro-mechanical or electronic equipment and devices.
- **FARO Focus^S 70** - This addition to the FARO Focus laser scanner portfolio provides industrial grade performance, which includes an Ingress Protection Rating for use in high particulate and wet weather conditions, high dynamic range imaging and extended temperature range.
- **FARO Focus^M 70** - This addition to the FARO Focus laser scanner portfolio provides an entry point for all professional users considering laser scanning in the Construction BIM-CIM and Public Safety Forensics markets.
- **FARO Vantage^S and Vantage^E Laser Trackers** - The Vantage^S is intended for short-to-long range measurement applications of up to 80 meters, while the Vantage^E supports short-to-medium range applications of up to 25 meters.
- **FARO PointSense 18.0 Software Suite** – This software platform delivers seamless integration into the latest 2018 AutoCAD[®] and Revit[®] (registered trademarks of Autodesk) design tools.
- **FARO CAM2 Measure 10.5** – This software platform provides users with streamlined analysis and visual reporting. Workflow efficiencies are enhanced through programming data analysis to reduce required training time and minimize operator errors.
- **FARO Zone** – This platform enables investigators to move fluidly between 2D and 3D environments for public safety professionals. The application is used for presentations in courtroom exhibits, and enhances the ability of public safety professionals to plan for and respond to emergencies by creating accurate representations of real-world locations within local communities.
- **FARO SCENE 7.0** – This software platform includes the quality and functionality of SCENE 6.2, such as automatic object recognition, scan registration and position. It adds additional functionality by enabling 3D scan data, whether it be from a single scan or multiple scans in process simultaneously, to be wirelessly transmitted directly to an onsite computer workstation in real time.

Global Sales Force – In 2017, consistent with our strategic initiative to drive sales growth, our worldwide period-ending selling headcount increased by 95, or 17.7%, to 631 at December 31, 2017 from 536 at December 31, 2016.

Acquisition – During 2017, we acquired Instrument Associates, LLC d/b/a Nutfield Technology (“Nutfield”), which is located in Hudson, New Hampshire. Nutfield specializes in the design and manufacture of advanced galvanometer-based optical scanners, scan heads and laser kits. The acquisition, which was completed in April 2017 for a total purchase price of approximately \$5.5 million, supports our long-term strategy to expand our presence in key markets and improve our existing product lines with innovative technology.

Results of Operations

2017 Compared to 2016

(dollars in millions)	Years ended December 31,				Change 2017 vs 2016
	2017		2016		
		% of Sales		% of Sales	
Sales	\$ 360.9	100.0 %	\$ 325.6	100.0%	\$ 35.3
Cost of sales	156.3	43.3 %	147.6	45.3%	8.7
Gross profit	204.6	56.7 %	178.0	54.7%	26.6
Operating expenses					
Selling and marketing	103.5	28.7 %	79.9	24.5%	23.6
General and administrative	43.8	12.1 %	40.8	12.5%	3.0
Depreciation and amortization	16.6	4.6 %	13.9	4.3%	2.7
Research and development	35.4	9.8 %	30.1	9.3%	5.3
Total operating expenses	199.3	55.2 %	164.7	50.6%	34.6
Other (income) expense	(0.5)	(0.1)%	0.7	0.2%	(1.2)
Income tax expense	20.3	5.6 %	1.5	0.5%	18.8
Net (loss) income	\$ (14.5)	(4.0)%	\$ 11.1	3.4%	\$ (25.6)

Consolidated Results

Sales. Total sales increased by \$35.3 million, or 10.9%, to \$360.9 million for the year ended December 31, 2017 from \$325.6 million for the year ended December 31, 2016. Our sales increase was primarily driven by a strong increase in our Construction BIM-CIM segment, growth in warranty revenue, and a modest increase in average selling prices. Total product sales increased by \$21.9 million, or 8.6%, to \$277.9 million for the year ended December 31, 2017 from \$256.0 million for the year ended December 31, 2016. Our product sales increase reflected an increase in unit sales within our Construction BIM-CIM segment, as well as higher average selling prices attributable to technological advances. Service revenue increased by \$13.4 million, or 19.3%, to \$83.0 million for the year ended December 31, 2017 from \$69.6 million for the year ended December 31, 2016, primarily due to an increase in warranty and customer service revenue driven by the growth of our installed, serviceable base and focused sales initiatives. Foreign exchange rates had a slightly positive impact on sales of \$1.9 million, increasing our overall sales growth by 0.6 percentage points, primarily due to the strengthening of the Euro relative to the U.S. dollar offset partly by the weakening of the Japanese Yen relative to the U.S. dollar.

Gross profit. Gross profit increased by \$26.6 million, or 15.0%, to \$204.6 million for the year ended December 31, 2017 from \$178.0 million for the year ended December 31, 2016. Gross margin increased to 56.7% for the year ended December 31, 2017 from 54.7% in the prior year period. Gross margin from product revenue increased by 2.6 percentage points to 60.4% for the year ended December 31, 2017 from 57.8% in the prior year period. This increase was primarily due to higher average selling prices in our products attributable to our new product introductions and improved manufacturing efficiencies. Gross margin from service revenue increased by 1.4 percentage points to 44.4% for the year ended December 31, 2017 from 43.0% for the prior year period, primarily due to higher warranty and customer service revenue.

Selling and Marketing Expenses. Selling and marketing expenses increased by \$23.6 million, or 29.6%, to \$103.5 million, for the year ended December 31, 2017 from \$79.9 million for the year ended December 31, 2016. This increase was driven primarily by higher compensation expense, reflecting an investment in selling headcount as part of our global strategic initiatives to drive sales growth. Selling and marketing expenses as a percentage of sales were 28.7% for the year ended December 31, 2017 compared with 24.5% for the year ended December 31, 2016. Our worldwide period-ending selling headcount increased by 95, or 17.7%, to 631 at December 31, 2017 from 536 at December 31, 2016.

General and administrative expenses. General and administrative expenses increased by \$3.0 million, or 7.3%, to \$43.8 million for the year ended December 31, 2017 from \$40.8 million for the year ended December 31, 2016. This increase in general and administrative expenses was primarily driven by higher compensation and global system expenses. The higher global system expenses resulted from our strategic initiative to harmonize global verticals through the implementation of entity-wide systems, such as our human resource information system. General and administrative expenses were 12.1% of sales for the year ended December 31, 2017 compared to 12.5% of sales in the prior year.

Depreciation and amortization expenses. Depreciation and amortization expenses increased by \$2.7 million, or 19.6%, to \$16.6 million for the year ended December 31, 2017 from \$13.9 million for the year ended December 31, 2016. This increase in depreciation and amortization expenses was primarily due to higher amortization of intangible assets related to acquisitions and new production tooling for the manufacture of our new products.

Research and development expenses. Research and development expenses increased \$5.3 million, or 17.4%, to \$35.4 million for the year ended December 31, 2017 from \$30.1 million for the year ended December 31, 2016. This increase in research and development expenses was mainly due to higher compensation expense resulting from increased headcount in connection with our acquisitions. Research and development expenses as a percentage of sales increased to 9.8% for the year ended December 31, 2017 from 9.3% for the year ended December 31, 2016.

Other (income) expense. Other income was \$0.5 million for the year ended December 31, 2017 compared to Other expense of \$0.7 million for the year ended December 31, 2016. The change was primarily driven by foreign exchange transaction gains resulting from the positive impact of changes in foreign exchange rates on the value of the current intercompany account balances of our subsidiaries denominated in other currencies during the year ended December 31, 2017 compared to losses resulting from the negative impact of changes in foreign exchange rates during the year ended December 31, 2016.

Income tax expense. Income tax expense for the year ended December 31, 2017 was \$20.3 million compared with income tax expense of \$1.5 million for the year ended December 31, 2016. The increase was primarily related to tax expense of \$19.4 million recorded in the fourth quarter of 2017 pursuant to the Tax Cuts Act. \$17.4 million of this expense related to the provisional transition tax expense on the mandatory deemed repatriation of foreign earnings. \$2.0 million of this expense related to the remeasurement of our deferred tax assets and liabilities that we expect to utilize in the future as a result of the Tax Cuts Act decreasing the United States statutory corporate tax rate from 35% to 21% for tax years beginning January 1, 2018.

Net (loss) income. Net loss was \$14.5 million for the year ended December 31, 2017 compared with net income of \$11.1 million for the year ended December 31, 2016, reflecting the impact of the factors described above.

Segment Results

We use segment profit to evaluate the performance of our reportable segments, which are Factory Metrology, Construction BIM-CIM and Other. Segment profit is calculated as gross profit, net of selling and marketing expenses, for the reporting segment. The discussion of segment results for the years ended December 31, 2017 and 2016 presented below is based on segment profit, as described above, and segment profit as a percent of sales, which is calculated as segment profit divided by net sales for such reporting segment. Our definition of segment profit may not be comparable to similarly titled measures reported by other companies. For additional information, including a reconciliation of total segment profit to income from operations, see Note 16 to the "Notes to Consolidated Financial Statements" included in Part II, Item 8 of this Annual Report on Form 10-K.

Factory Metrology

(dollars in millions)	December 31, 2017		December 31, 2016	
Net sales	\$	245.1	\$	236.3
Segment profit	\$	78.9	\$	73.7
Segment profit as a % of Sales		32.2%		31.2%

Sales. Sales in our Factory Metrology segment increased \$8.8 million, or 3.7%, to \$245.1 million for the year ended December 31, 2017 from \$236.3 million in the prior year, primarily reflecting higher average selling prices and higher service revenue.

Segment profit. Segment profit in our Factory Metrology segment increased \$5.2 million, or 7.1%, to \$78.9 million for the year ended December 31, 2017 from \$73.7 million in the prior year. This increase was primarily due to the increase in average selling prices and service revenue, partially offset by an increase in selling and marketing expenses reflecting higher headcount.

Construction BIM-CIM

(dollars in millions)	December 31, 2017		December 31, 2016	
Net sales	\$	86.3	\$	65.1
Segment profit	\$	21.1	\$	14.8
Segment profit as a % of Sales		24.4%		22.7%

Sales. Sales in our Construction BIM-CIM segment increased \$21.2 million, or 32.7%, to \$86.3 million for the year ended December 31, 2017 from \$65.1 million in the prior year, primarily reflecting an increase in units sold and higher service revenue.

Segment profit. Segment profit in our Construction BIM-CIM segment increased \$6.3 million, or 42.4%, to \$21.1 million for the year ended December 31, 2017 from \$14.8 million in the prior year. This increase was primarily due to the increase in units sold and higher service revenue, partially offset by an increase in selling and marketing expenses reflecting higher headcount.

Other

(dollars in millions)	December 31, 2017		December 31, 2016	
Net sales	\$	29.5	\$	24.2
Segment profit	\$	1.2	\$	9.6
Segment profit as a % of Sales		3.9%		39.8%

Sales. Sales in our Other segment increased \$5.2 million, or 21.6%, to \$29.5 million for the year ended December 31, 2017 from \$24.2 million in the prior year, primarily reflecting an increase in unit sales and higher service revenue.

Segment profit. Segment profit in our Other segment decreased \$8.5 million, or 88.0%, to \$1.2 million for the year ended December 31, 2017 from \$9.6 million in the prior year. This decrease was primarily due to an increase in selling and marketing expenses reflecting higher headcount as part of our long-term initiatives to grow these emerging verticals, partially offset by an increase in unit sales and higher service revenue.

2016 Compared to 2015

	Years ended December 31,				Change 2016 vs 2015
	2016		2015		
(dollars in millions)		% of Sales		% of Sales	
Sales	\$ 325.6	100.0%	\$ 317.5	100.0%	\$ 8.1
Cost of sales	147.6	45.3%	150.3	47.3%	(2.7)
Gross profit	178.0	54.7%	167.2	52.7%	10.8
Operating expenses					
Selling and marketing	79.9	24.5%	79.8	25.1%	0.1
General and administrative	40.8	12.5%	36.4	11.5%	4.4
Depreciation and amortization	13.9	4.3%	11.2	3.5%	2.7
Research and development	30.1	9.2%	26.7	8.4%	3.4
Total operating expenses	164.7	50.6%	154.1	48.5%	10.6
Other expense	0.7	0.2%	0.3	0.1%	0.4
Income tax expense (benefit)	1.5	0.5%	—	—%	1.5
Net income	\$ 11.1	3.4%	\$ 12.8	4.0%	\$ (1.7)

Consolidated Results

Sales. Total sales increased \$8.1 million, or 2.5%, to \$325.6 million for the year ended December 31, 2016 from \$317.5 million for the year ended December 31, 2015. Our sales increase was primarily driven by higher service revenue and a modest increase in average selling prices, partially offset by a decrease in product sales. Total product sales decreased by \$3.8 million, or 1.5%, to \$256.0 million for the year ended December 31, 2016 from \$259.8 million for the year ended December 31, 2015. Our product sales decrease reflected a decline in unit sales partially offset by an increase in average selling prices in our products. Service revenue increased by \$11.9 million, or 20.6%, to \$69.6 million for the year ended December 31, 2016 from \$57.7 million for the year ended December 31, 2015, primarily due to an increase in warranty and customer service revenue driven by the growth of our installed, serviceable base and focused sales initiatives. Foreign exchange rates had a slightly negative impact on sales of \$1.8 million, decreasing our overall sales growth by 0.6 percentage points, primarily due to the decline of the British pound sterling and the Chinese yuan renminbi relative to the U.S. dollar.

Gross profit. Gross profit increased by \$10.8 million, or 6.4%, to \$178.0 million for the year ended December 31, 2016 from \$167.2 million for the year ended December 31, 2015. Gross margin increased to 54.7% for the year ended December 31, 2016 from 52.7% in the prior year period. Gross margin from product revenue increased by 1.8 percentage points to 57.8% for the year ended December 31, 2016 from 56.0% in the prior year period. This increase was primarily due to higher average selling prices in our products and a lower write-down of inventory, partially offset by increased sales of service and demonstration inventory, which results in lower gross margins. Gross margin from service revenue increased by 5.5 percentage points to 43.0% for the year ended December 31, 2016 from 37.5% for the prior year period, primarily due to higher warranty and customer service revenue.

Selling and marketing expenses. Selling and marketing expenses were virtually flat year-over-year as a result of increased compensation expenses reflecting higher headcount, higher incentive compensation, and higher base salaries from a change in our commission structure as well as higher recruiting-related expense, almost entirely offset by lower costs resulting from not holding our annual sales meeting in 2016 and a decrease in commissions due to lower product sales and the change in our commission structure. Selling and marketing expenses as a percentage of sales were 24.5% for the year ended December 31, 2016 compared with 25.1% for the year ended December 31, 2015. Our worldwide selling period-ending headcount increased by 85, or 18.8%, to 536 at December 31, 2016 from 451 at December 31, 2015.

General and administrative expenses. General and administrative expenses increased by \$4.4 million, or 12.2%, to \$40.8 million, for the year ended December 31, 2016 from \$36.4 million for the year ended December 31, 2015. The increase in general and administrative expenses was primarily driven by higher compensation expense due to higher headcount, higher incentive compensation, increased recruiting costs and higher costs related to businesses acquired, partially offset by lower year-over-year consulting fees. General and administrative expenses were 12.5% of sales for the year ended December 31, 2016 compared to 11.5% of sales in the prior year.

Depreciation and amortization expenses. Depreciation and amortization expenses increased by \$2.7 million, or 23.6%, to \$13.9 million for the year ended December 31, 2016 from \$11.2 million for the year ended December 31, 2015, primarily due to increased depreciation for our new enterprise resource planning (ERP) system and service inventory that was transferred to fixed assets, as well as increased amortization of intangibles related to our prior and current year acquisitions.

Research and development expenses. Research and development expenses increased \$3.4 million, or 12.9%, to \$30.1 million for the year ended December 31, 2016 from \$26.7 million for the year ended December 31, 2015. This increase was mainly due to higher project material costs and higher compensation expense resulting from increased engineering headcount in connection with our initiative to accelerate new product development and introductions, and an overall increase in incentive compensation. Research and development expenses as a percentage of sales increased to 9.2% for the year ended December 31, 2016 from 8.4% for the year ended December 31, 2015.

Other expense (income). Other expense increased by \$0.4 million to \$0.7 million for the year ended December 31, 2016 compared with \$0.3 million for the year ended December 31, 2015. The increase was primarily driven by foreign exchange transaction losses resulting from the negative impact of changes in foreign exchange rates on the value of the current intercompany account balances of our subsidiaries denominated in other currencies.

Income tax (benefit) expense. Income tax expense for the year ended December 31, 2016 was \$1.5 million compared with income tax benefit of less than \$0.1 million for the year ended December 31, 2015. This change was primarily the result of a shift in the distribution of profits and losses among our tax jurisdictions. Our effective tax rate was 12.0% for the year ended December 31, 2016 compared with (0.1%) in the prior year. Our effective tax rate continues to be lower than the statutory tax rate in the United States primarily because of our global footprint in foreign jurisdictions with lower tax rates. Our effective tax rate could be impacted positively or negatively by geographic changes in the manufacturing or sales of our products and a change in statutory tax rates in a jurisdiction, as well as the resulting effect on taxable income in each jurisdiction.

Net income. Net income was \$11.1 million for the year ended December 31, 2016 compared with \$12.8 million for the year ended December 31, 2015 reflecting the impact of the factors described above.

Segment Results

Factory Metrology

(dollars in millions)	December 31, 2016		December 31, 2015	
Net sales	\$	236.3	\$	222.7
Segment profit	\$	73.7	\$	63.5
Segment profit as a % of Sales		31.2%		28.5%

Sales. Sales in our Factory Metrology segment increased \$13.6 million, or 6.1%, to \$236.3 million for the year ended December 31, 2016 from \$222.7 million in the prior year, primarily reflecting higher average selling prices and higher service revenue across all our regions, partially offset by a decline in units sold mainly in the EMEA region. Foreign exchange rates had a negative impact on sales of \$1.5 million, decreasing sales growth by 0.7 percentage points.

Segment profit. Segment profit in our Factory Metrology segment increased \$10.2 million, or 16.1%, to \$73.7 million for the year ended December 31, 2016 from \$63.5 million in the prior year. This increase was primarily due to the increase in segment sales in addition to a higher write-down of inventory recorded in 2015 compared to 2016, partially offset by an increase in selling and marketing expenses reflecting higher headcount allocated to this segment partially offset by cost savings due to not holding the annual sales meeting in 2016.

Construction BIM-CIM

(dollars in millions)	December 31, 2016		December 31, 2015	
Net sales	\$	65.1	\$	70.8
Segment profit	\$	14.8	\$	16.3
Segment profit as a % of Sales		22.7%		23.0%

Sales. Sales in our Construction BIM-CIM segment decreased \$5.8 million, or 8.2%, to \$65.1 million for the year ended December 31, 2016 from \$70.8 million in the prior year, primarily reflecting a decline in units sold mostly in the Americas and the EMEA regions, partially offset by an increase in average selling prices and higher service revenue across all of our regions. Foreign exchange rates had a slightly negative impact on sales of \$0.1 million, decreasing sales growth by 0.2 percentage points.

Segment profit. Segment profit in our Construction BIM-CIM segment decreased \$1.5 million, or 9.2%, to \$14.8 million for the year ended December 31, 2016 from \$16.3 million in the prior year. This decrease was primarily due to the decrease in product sales.

Other

(dollars in millions)	December 31, 2016		December 31, 2015	
Net sales	\$	24.2	\$	24.0
Segment profit	\$	9.6	\$	7.6
Segment profit as a % of Sales		39.8%		31.9%

Sales. Sales in our Other segment increased \$0.2 million, or 1.1%, to \$24.2 million for the year ended December 31, 2016 from \$24.0 million in the prior year, primarily reflecting higher average selling prices mostly in the Americas region, and higher service revenue across all of our regions, partially offset by a decline in unit sales particularly in the EMEA region. Foreign exchange rates had a slightly negative impact on sales of \$0.2 million, decreasing sales growth by 0.6 percentage points.

Segment profit. Segment profit in our Other segment increased \$2.0 million, or 26.2%, to \$9.6 million for the year ended December 31, 2016 from \$7.6 million in the prior year. This increase was primarily due to a shift in our product and services sales mix resulting in higher gross margins, partially offset by an increase in selling and marketing expenses reflecting higher headcount and cost savings due to not holding the annual sales meeting in 2016.

Liquidity and Capital Resources

Cash and cash equivalents increased by \$34.8 million to \$141.0 million at December 31, 2017 from \$106.2 million at December 31, 2016. The increase was primarily driven by the maturity of U.S. Treasury Bills that were not re-invested, cash flow from operations and the proceeds from the issuance of stock, partially offset by the purchase of property and equipment and cash used in the Nutfield acquisition.

Cash flows from operating activities provide our primary source of liquidity. We generated positive cash flows from operations of \$10.4 million during the year ended December 31, 2017 compared to cash provided by operations of \$37.6 million during the year ended December 31, 2016. The decrease was mainly due to our strategic growth initiatives increasing our service and sales demonstration inventory and higher accounts receivable.

Cash flows provided by investing activities during the year ended December 31, 2017 were \$15.1 million compared with cash flows used in investing activities of \$37.1 million during the year ended December 31, 2016. The change was primarily due to the maturity of U.S. Treasury Bills that were not re-invested during the year ended December 31, 2017 and a \$22.1 million decrease in cash used for acquisitions during the year ended December 31, 2017 compared to the year ended December 31, 2016.

Cash flows provided by financing activities during the years ended December 31, 2017 and December 31, 2016 were \$3.0 million and \$0.2 million, respectively. The increase was primarily driven by the proceeds from the issuance of stock relating to the exercise of stock options during the year ended December 31, 2017.

Of our cash and cash equivalents, \$98.8 million was held by foreign subsidiaries as of December 31, 2017. On December 22, 2017, the United States enacted the Tax Cuts Act, resulting in significant modifications to existing law. We continue to gather and analyze information, including whether or not we will repatriate cash to the United States from our foreign subsidiaries. During the fourth quarter of 2017, we recorded a provisional amount of \$17.4 million related to the increase to our taxes payable pursuant to the Tax Cuts Act associated with earnings of foreign subsidiaries. We will pay this liability over 8 years, with 8% of the liability paid each year for the first 5 years, followed by 15% in the sixth year, 20% in the seventh year, and concluding with 25% in the eighth year.

On November 24, 2008, our Board of Directors approved a \$30 million share repurchase program. Acquisitions for the share repurchase program may be made from time to time at prevailing prices as permitted by securities laws and other legal requirements, and subject to market conditions and other factors. The share repurchase program may be discontinued at any time. There is no expiration date or other restriction governing the period over which we can repurchase shares under the program. In October 2015, our Board of Directors authorized an increase to the existing share repurchase program from \$30 million to \$50 million. We made no stock repurchases during the years ended December 31, 2017 and 2016. As of December 31, 2017, we had authorization to repurchase \$18.3 million remaining under the repurchase program.

We believe that our working capital and anticipated cash flow from operations will be sufficient to fund our long-term liquidity operating requirements during 2018.

We have no off balance sheet arrangements.

Contractual Obligations and Commercial Commitments

We are party to capital leases on equipment with an initial term of 36 to 60 months and other non-cancellable operating leases. These obligations are presented below as of December 31, 2017 (dollars in thousands):

Contractual Obligations	Payments Due by Period				
	Total	< 1 Year	1-3 Years	3-5 Years	> 5 Years
Operating lease obligations	\$ 20,639	\$ 6,563	\$ 8,048	\$ 2,464	\$ 3,564
Capital lease obligations	475	119	229	127	
Purchase obligations	54,029	53,320	709	—	—
Transition tax liability	17,340	\$ 1,387	\$ 2,774	\$ 2,774	\$ 10,405
Other obligations	412	\$ 412	—	\$ —	\$ —
Total	\$ 92,895	\$ 61,801	\$ 11,760	\$ 5,365	\$ 13,969

We enter into purchase commitments for products and services in the ordinary course of business. These purchases generally cover production requirements for 60 to 120 days as well as materials necessary to service customer units through the product lifecycle and for warranty commitments. As of December 31, 2017, we had approximately \$53.3 million in purchase commitments that are expected to be delivered within the next 12 months. To ensure adequate component availability in preparation for new product introductions, we also had \$0.7 million in long-term commitments for purchases to be delivered after 12 months. During the fourth quarter of 2017, we recorded a provisional amount of \$17.4 million related to the increase to our taxes payable pursuant to the Tax Cuts Act associated with the mandatory deemed repatriation of the earnings of our foreign subsidiaries. We will pay this liability over eight years, with 8% of the liability paid each year for the first five years, followed by 15% in the sixth year, 20% in the seventh year, and concluding with 25% in the eighth year. Other obligations included in the table primarily represent estimated payments due for acquisition related earn-outs.

Inflation

Inflation did not have a material impact on our results of operations in recent years, and we do not expect inflation to have a material impact on our operations in 2018.

Critical Accounting Policies

The preparation of our consolidated financial statements requires our management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses, as well as disclosure of contingent assets and liabilities. We base our estimates on historical experience, along with various other factors believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Some of these judgments can be subjective and complex and, consequently, actual results may differ from these estimates under different assumptions or conditions. While for any given estimate or assumption made by our management there may be other estimates or assumptions that are reasonable, we believe that, given the current facts and circumstances, it is unlikely that applying any such other reasonable estimate or assumption would materially impact the financial statements.

In response to the SEC's financial reporting release, FR-60, "Cautionary Advice Regarding Disclosure About Critical Accounting Policies," we have selected our critical accounting policies for purposes of explaining the methodology used in our calculation, in addition to any inherent uncertainties pertaining to the possible effects on our financial condition. The critical policies discussed below are our processes of recognizing revenue, the reserve for excess and obsolete inventory, income taxes, the reserve for warranties, goodwill impairment, business combinations and stock-based compensation. These policies affect current assets, current liabilities and operating results and are therefore critical in assessing our financial and operating status. These policies involve certain assumptions that, if incorrect, could have an adverse impact on our operating results and financial position.

Revenue Recognition

Revenue is recognized when the price is fixed, collectability is reasonably assured, the title and risks and rewards of ownership have passed to the customer, and the earnings process is complete. Revenue related to our measurement, imaging, and realization equipment and related software is generally recognized upon shipment, as we consider the earnings process complete as of the shipping date. Fees billed to customers associated with the distribution of products are classified as revenue. We warrant our products against defects in design, materials and workmanship for one year. A provision for estimated future costs relating to warranty expense is recorded when products are shipped. We separately sell extended warranties. Extended warranty revenues are recognized on a straight-line basis over the term of the warranty. Costs relating to extended warranties are recognized as incurred. Revenue from sales of software only is recognized when no further significant production, modification or customization of the software is required and when the following criteria are met: persuasive evidence of a sales agreement exists, delivery has occurred, and the sales price is fixed or determinable and deemed collectible. These software arrangements generally include short-term maintenance that is considered post-contract support ("PCS"). We generally establish vendor-specific objective evidence ("VSOE") of fair value for this PCS component based on our maintenance renewal rate. Maintenance renewals, when sold, are recognized on a straight-line basis over the term of the maintenance agreement. Revenues resulting from sales of comprehensive support, training and technology consulting services are recognized as such services are performed and are deferred when billed in advance of the performance of services. Revenues are presented net of sales-related taxes.

Reserve for Excess and Obsolete Inventory

Because the value of inventory that will ultimately be realized cannot be known with exact certainty, we rely upon both past sales history and future sales forecasts to provide a basis for the determination of the reserve. Inventory is considered potentially obsolete if we have withdrawn those products from the market or had no sales of the product for the past 12 months and have no sales forecasted for the next 12 months. Inventory is considered potentially excess if the quantity on hand exceeds 12 months of expected remaining usage. The resulting obsolete and excess parts are then reviewed to determine if a substitute usage or a future need exists. Items without an identified current or future usage are reserved in an amount equal to 100% of the first-in first-out ("FIFO") cost of such inventory. Our products are subject to changes in technologies that may make certain of our products or their components obsolete or less competitive, which may increase our historical provisions to the reserve.

Income Taxes

We review our deferred tax assets on a regular basis to evaluate their recoverability based upon expected future reversals of deferred tax liabilities, projections of future taxable income over a two-year period, and tax planning strategies that we might employ to utilize such assets, including net operating loss carryforwards. Based on the positive and negative evidence of recoverability, we establish a valuation allowance against the net deferred assets of a taxing jurisdiction in which we operate, unless it is “more likely than not” that we will recover such assets through the above means. In the future, our evaluation of the need for the valuation allowance will be significantly influenced by our ability to achieve profitability and our ability to predict and achieve future projections of taxable income over at least a two-year period.

Significant judgment is required in determining our worldwide provision for income taxes. In the ordinary course of operating a global business, there are many transactions for which the ultimate tax outcome is uncertain. We establish provisions for income taxes when, despite the belief that tax positions are fully supportable, there remain certain positions that do not meet the minimum probability threshold as described by Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 740, *Income Taxes*, which is a tax position that is more likely than not to be sustained upon examination by the applicable taxing authority. In the ordinary course of business, we are examined by various federal, state, and foreign tax authorities. We regularly assess the potential outcome of these examinations and any future examinations for the current or prior years in determining the adequacy of our provision for income taxes. We assess the likelihood and amount of potential adjustments and adjust the income tax provision, the current tax liability and deferred taxes in the period in which the facts that gave rise to a revision become known.

Reserve for Warranties

We establish at the time of sale a liability for the one year warranty included with the initial purchase price of equipment, based upon an estimate of the repair expenses likely to be incurred for the warranty period. The warranty period is measured in installation-months for each major product group. The warranty reserve is included in accrued liabilities in the accompanying consolidated balance sheets. The warranty expense is estimated by applying the actual total repair expenses for each product group in the prior period and determining a rate of repair expense per installation-month. This repair rate is multiplied by the number of installation-months of warranty for each product group to determine the provision for warranty expenses for the period. We evaluate our exposure to warranty costs at the end of each period using the estimated expense per installation-month for each major product group, the number of units remaining under warranty, and the remaining number of months each unit will be under warranty. We have a history of new product introductions and enhancements to existing products, which may result in unforeseen issues that increase our warranty costs. While such expenses have historically been within expectations, we cannot guarantee this will continue in the future.

Goodwill Impairment

Goodwill represents the excess cost of a business acquisition over the fair value of the net assets acquired. We do not amortize goodwill; however, we perform an annual review each year, or more frequently if indicators of potential impairment exist, to determine if the carrying value of the recorded goodwill or indefinite lived intangible assets is impaired. We have historically evaluated goodwill for impairment annually as of December 31, or when an indicator of impairment exists. During 2017, we changed the date of annual impairment assessment for our reporting units to October 1. This voluntary change in the annual goodwill testing date is a change in accounting policy, which we concluded is preferable as it better aligns the timing of the assessment with our annual budgeting process. This change in the date of the annual impairment assessment was applied prospectively and did not accelerate, delay or avoid a potential impairment charge. If an asset is impaired, the difference between the value of the asset reflected in the financial statements and its current fair value is recognized as an expense in the period in which the impairment occurs.

Each period, and for any of our reporting units, we can elect to perform a qualitative assessment to determine whether it is necessary to perform the two-step quantitative goodwill impairment test. If we believe, as a result of our qualitative assessment, that it is not more likely than not that the fair value of a reporting unit containing goodwill is less than its carrying amount, then the first and second steps of the quantitative goodwill impairment test are unnecessary. If we elect to bypass the qualitative assessment option, or if the qualitative assessment was performed and resulted in the Company being unable to conclude that it is not more likely than not that the fair value of a reporting unit containing goodwill is greater than its carrying amount, we will perform the two-step quantitative goodwill impairment test. We perform the first step of the two-step quantitative goodwill impairment test by calculating the fair value of the reporting unit using a discounted cash flow method and market approach method, and then comparing the respective fair value with the carrying amount of the reporting unit. If the carrying amount of the reporting unit exceeds its fair value, we perform the second step of the quantitative goodwill impairment test to measure the amount of the impairment loss, if any. Management has concluded there was no goodwill impairment for the years ended December 31, 2017, 2016 and 2015.

Business Combinations

We allocate the fair value of purchase consideration to the assets acquired and liabilities assumed based on their fair values at the acquisition date. The excess of the fair value of purchase consideration over the fair value of the assets acquired and liabilities assumed is recorded as goodwill. When determining the fair values of assets acquired and liabilities assumed, management makes significant estimates and assumptions, especially with respect to intangible assets. Critical estimates in valuing intangible assets include, but are not limited to, expected future cash flows, which include consideration of future growth rates and margins, customer attrition rates, future changes in technology and brand awareness, loyalty and position, and discount rates. Fair value estimates are based on the assumptions management believes a market participant would use in pricing the asset or liability. Amounts recorded in a business combination may change during the measurement period, which is a period not to exceed one year from the date of acquisition, as additional information about conditions existing at the acquisition date becomes available.

Stock-Based Compensation

We measure and record compensation expense using the applicable accounting guidance for share-based payments related to stock options, restricted stock, and performance-based awards granted to our directors and employees. The fair value of stock options, including performance awards, without a market condition is determined by using the Black-Scholes option valuation model. The fair value of restricted stock awards and stock options with a market condition is estimated, at the date of grant, using the Monte Carlo Simulation valuation model. The Black-Scholes and Monte Carlo Simulation valuation models incorporate assumptions as to stock price volatility, the expected life of options or awards, a risk-free interest rate and dividend yield. In valuing our stock options, significant judgment is required in determining the expected volatility of our common stock and the expected life that individuals will hold their stock options prior to exercising. Expected volatility for stock options is based on the historical and implied volatility of our own common stock while the volatility for our restricted stock units with a market condition is based on the historical volatility of our own stock and the stock of companies within our defined peer group. The expected life of stock options is derived from the historical actual term of option grants and an estimate of future exercises during the remaining contractual period of the option. While volatility and estimated life are assumptions that do not bear the risk of change subsequent to the grant date of stock options, these assumptions may be difficult to measure as they represent future expectations based on historical experience. Further, our expected volatility and expected life may change in the future, which could substantially change the grant-date fair value of future awards of stock options and, ultimately, the expense we record. The fair value of restricted stock, including performance awards, without a market condition is estimated using the current market price of our common stock on the date of grant. Additionally, in calculating compensation expense for these awards, we are also required to estimate the extent to which awards will be forfeited prior to vesting. Many factors are considered when estimating expected forfeitures, including types of awards, employee class and historical experience. To the extent actual results or updated estimates of forfeiture differ from current estimates, such amounts are recorded as a cumulative adjustment to the previously recorded amounts.

We expense stock-based compensation for stock options, restricted stock awards, and performance awards over the requisite service period. For awards with only a service condition, we expense stock-based compensation, adjusted for estimated forfeitures, using the straight-line method over the requisite service period for the entire award. For awards with both performance and service conditions, we expense the stock-based compensation, adjusted for estimated forfeitures, on a straight-line basis over the requisite service period for each separately vesting portion of the award, taking into account the probability that we will satisfy the performance condition. Furthermore, we expense awards with a market condition over the three-year vesting period regardless of the value that the award recipients ultimately receive.

Impact of Recently Adopted Accounting Standards

In January 2017, the FASB issued Accounting Standards Update ("ASU") No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business* ("ASU 2017-01") in order to clarify the definition of a business and provide additional guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. Currently, ASC Topic 805 recognizes three elements of a business: inputs, processes, and outputs. While an integrated set of assets and activities (collectively referred to as a "set") that is a business usually has outputs, outputs are not required to be present. Additionally, all the inputs and processes that a seller uses in operating a set are not required if market participants can acquire the set and continue to produce outputs. ASU 2017-01 provides a screen to determine when a set is not a business. The screen requires that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set is not a business. If the screen is not met, the new guidance (1) requires that to be considered a business, a set must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output and (2) removes the evaluation of whether a market participant could replace missing elements. The new guidance provides a framework to assist entities in evaluating whether both an input and a substantive process are present. This framework includes two sets of criteria to consider that depend on whether a set has outputs. Although outputs are not required for a set to be a business, outputs generally are a key element of a business. ASU 2017-01 provides more stringent criteria for sets without outputs and more narrowly defines the term output. ASU 2017-01 became effective for us on January 1, 2018 and was applied prospectively. Our adoption of the new guidance did not have a material impact on our consolidated financial statements.

In October 2016, the FASB issued ASU No. 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other than Inventory* ("ASU 2016-16"), which removes the prohibition in ASC 740 against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. This ASU requires the tax effects of intercompany transactions, other than sales of inventory, to be recognized when the transfer occurs, instead of deferred until the transferred asset is sold to a third party or otherwise recovered through use of the asset. The new guidance must be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption and is effective for annual periods beginning after December 15, 2017, and interim period therein. ASU 2016-16 became effective for us on January 1, 2018 and was applied on a modified retrospective basis. Our adoption of the new guidance did not have a material impact on our consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"), which clarifies how companies present and classify certain cash receipts and cash payments in the statement of cash flows. ASU 2016-15 became effective for us on January 1, 2018 and was applied on a modified retrospective basis. Our adoption of the new guidance did not have a material impact on our consolidated financial statements.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers: (Topic 606)* ("ASU 2014-09"), amending its accounting guidance related to revenue recognition. Under this ASU and subsequently issued amendments, revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Additional disclosures are required to provide the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract.

We have evaluated the effect that this guidance will have on our consolidated financial statements by analyzing both transactional and analytical data for each of our revenue streams. The following is a status of our evaluation of impacts by significant revenue stream:

- **Measurement equipment and related software:** Under the prior accounting guidance, sales of measurement, imaging and realization equipment and related software sales were generally recognized upon shipment, as we considered the earnings process complete as of the shipping date. The related software sold with our measurement, imaging and realization equipment functions together with such equipment to deliver the tangible product's essential functionality. Our adoption of the new guidance did not result in material changes to our accounting for revenue related to our measurement, imaging and realization equipment and related software.
- **Extended warranties:** Under the prior accounting guidance, extended warranty sales were recognized on a straight-line basis over the term of the warranty. Our adoption of the new guidance did not result in material changes to our accounting for revenue related to extended warranties.

- **Software:** Under the prior accounting guidance, software only sales were recognized when no further significant production, modification or customization of the software was required and when the following criteria were met: persuasive evidence of a sales agreement existed, delivery had occurred, and the sales price was fixed or determinable and deemed collectible. These software arrangements generally include short-term maintenance that is considered post-contract support. Maintenance renewals, when sold, were recognized on a straight-line basis over the term of the maintenance agreement. Our adoption of the new guidance did not result in material changes to our accounting for revenue related to software only sales and maintenance renewals.

Under the prior accounting guidance, we recognized sales commission expense as incurred. Under the new guidance, we will capitalize the commission expense for those sales arrangements that extend beyond one year and amortize such costs ratably over the term of the contract. As a result, we will recognize a deferred cost asset on our consolidated balance sheet upon the adoption of the new guidance; however, the impact of this change on our consolidated balance sheet is not material. The adoption of the new guidance did not have a material change to our results of operations or cash flows. We adopted this guidance utilizing the modified retrospective method but are applying it only to contracts that are not completed as of the date of initial adoption, an option that is available under ASC Topic 606.

In March 2016, the FASB issued ASU 2016-09, *Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* (“ASU 2016-09”), which is intended to simplify several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. ASU 2016-09 became effective for annual periods beginning after December 15, 2016, and interim periods therein (our fiscal year 2017). We adopted ASU 2016-09 effective January 1, 2017. Under the new guidance, excess tax benefits that were not previously recognized because the related tax deduction had not reduced current taxes payable are to be recorded on a modified retrospective basis. This is achieved through a cumulative-effect adjustment to retained earnings as of the beginning of the period in which the new guidance is adopted. Historically, we recognized all excess tax benefits when an option was exercised or a share vested since we did not have a U.S. net operating loss carryforward. Therefore, the tax benefit will be allowed under the current guidance and no adjustment to retained earnings is required.

Under the new guidance, all tax-related cash flows resulting from share-based payments are reported as operating activities in the statement of cash flows. Effective January 1, 2017, we adopted this portion of the guidance on a prospective basis. This approach incorporates the net of the inflow and outflow from all tax-related cash flows resulting from share-based payments in the deferred income tax (benefit) expense line item and presents it along with other income tax cash flows as operating activities in the statement of cash flows.

We also elected to account for forfeitures related to the service condition-based awards as they occur effective January 1, 2017, which is a change from our treatment of estimating forfeitures in previous years. However, we continue to assess performance condition-based awards quarterly as required. In adopting the new policy using a modified retrospective approach, we assessed the cumulative effect adjustment and recorded to retaining earnings the difference between the amount of compensation cost previously recorded and the amount that would have been recorded without assuming forfeitures. The cumulative effect adjustment recorded to retained earnings was not material. We will continue to assess the impact of the adopted guidance on a quarterly basis and do not expect the adoption of this guidance will have a material impact on our consolidated financial statements.

In July 2015, the FASB issued ASU 2015-11, *Inventory (Topic 330): Simplifying the Measurement of Inventory* (“ASU 2015-11”), which changes the measurement principle for inventory from the lower of cost or market to the lower of cost and net realizable value. ASU 2015-11 defines net realizable value as estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. The new guidance must be applied on a prospective basis. We adopted ASU 2015-11 effective January 1, 2017. The adoption of this guidance did not have a material impact on our consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes* (“ASU 2015-17”), which requires that deferred tax liabilities and assets be classified as non-current in a classified balance sheet. ASU 2015-17 became effective for us on January 1, 2017. We adopted this guidance on a retrospective basis, which resulted in the reclassification of current deferred tax assets totaling approximately \$7.6 million as of December 31, 2016 from current to non-current in our consolidated financial statements.

Impact of Recently Issued Accounting Standards

In January 2017, the FASB issued ASU No. 2017-04, *Intangible - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* (“ASU 2017-04”), which is intended to simplify the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. Under the current guidance, performance of Step 2 requires us to calculate the implied fair value of goodwill by following procedures that would be required to determine the fair value of assets acquired and liabilities assumed in a business combination. Under the new guidance, we will perform our goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An impairment charge will be recognized for the amount by which the carrying amount exceeds the reporting unit’s fair value up to the amount of the goodwill allocated to the reporting unit. The new guidance also eliminates the requirements for any reporting unit with a zero or negative carrying amount to perform Step 2 of the goodwill impairment test if it fails the qualitative assessment. As a result, all reporting units will be subject to the same impairment assessment. We will still have the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary. ASU 2017-04 becomes effective for annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019, with early adoption permitted for annual or any interim goodwill impairment tests after January 1, 2017. The amendments in this ASU will be applied on a prospective basis. Disclosure of the nature and reason for the change in accounting principle is required upon transition. This disclosure is required in the first annual period and in the interim period within the first annual period when we initially adopt the amendments in this ASU. We plan to adopt this guidance for our fiscal year ending December 31, 2020. We do not expect that the adoption of this guidance will have a material impact on our consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* (“ASU 2016-02”), which is intended to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements to enable users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. ASU 2016-02 must be applied on a modified retrospective basis and is effective for fiscal years beginning after December 15, 2018, and interim periods within those years, with early adoption permitted. We plan to adopt ASU 2016-02 in the first quarter of 2019. Although we are in the process of evaluating the impact of adoption of this ASU on our consolidated financial statements, we currently believe the most significant changes will be related to the recognition of new right-of-use assets and lease liabilities on our balance sheet for real estate operating leases.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Exchange Exposure

We conduct a significant portion of our business outside the United States. In 2017, 61% of our revenue was invoiced, and a significant portion of our operating expenses were paid in foreign currencies. At December 31, 2017, 58% of our assets were denominated in foreign currencies. Fluctuations in exchange rates between the U.S. dollar and such foreign currencies may have a material adverse effect on our results of operations and financial condition and could specifically result in foreign exchange gains and losses. The impact of future exchange rate fluctuations on the results of our operations cannot be accurately predicted due to the constantly changing exposure to various currencies, the fact that all foreign currencies do not react in the same manner in relation to the U.S. dollar and the number of currencies involved, although our most significant exposures are to the Euro, Swiss franc, Japanese yen, and Brazilian real. To the extent that the percentage of our non-U.S. dollar revenues derived from international sales increases in the future, our exposure to risks associated with fluctuations in foreign exchange rates may increase. We are aware of the availability of off-balance sheet financial instruments to hedge exposure to foreign currency exchange rates, including cross-currency swaps, forward contracts and foreign currency options. However, we have not used such instruments in the past, and none were utilized in 2017, 2016 or 2015.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders
FARO Technologies, Inc. and Subsidiaries

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of FARO Technologies, Inc. (a Florida corporation) and subsidiaries (the “Company”) as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive income (loss), changes in shareholders’ equity, and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of December 31, 2017, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”), and our report dated February 21, 2018 expressed an unqualified opinion.

Basis for opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ GRANT THORNTON LLP

We have served as the Company’s auditor since 2004.

Orlando, Florida
February 21, 2018

FARO TECHNOLOGIES, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share data)

	December 31, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 140,960	\$ 106,169
Short-term investments	10,997	42,942
Accounts receivable, net	72,105	61,364
Inventories, net	53,786	51,886
Prepaid expenses and other current assets	16,311	16,304
Total current assets	294,159	278,665
Property and equipment:		
Machinery and equipment	66,514	57,063
Furniture and fixtures	6,945	6,099
Leasehold improvements	19,872	18,778
Property and equipment at cost	93,331	81,940
Less: accumulated depreciation and amortization	(61,452)	(50,262)
Property and equipment, net	31,879	31,678
Goodwill	52,750	46,744
Intangible assets, net	22,540	22,279
Service and sales demonstration inventory, net	39,614	29,136
Deferred income tax assets, net	15,606	14,307
Other long-term assets	2,030	905
Total assets	\$ 458,578	\$ 423,714
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 11,569	\$ 11,126
Accrued liabilities	27,362	24,572
Income taxes payable	4,676	618
Current portion of unearned service revenues	29,674	27,422
Customer deposits	2,604	2,872
Total current liabilities	75,885	66,610
Unearned service revenues - less current portion	11,815	13,813
Deferred income tax liabilities	695	1,409
Income taxes payable - less current portion	15,952	—
Other long-term liabilities	2,165	2,225
Total liabilities	106,512	84,057
Commitments and contingencies - See Note 12		
Shareholders' equity:		
Preferred stock - par value \$0.01, 10,000,000 shares authorized; none issued	—	—
Common stock - par value \$.001, 50,000,000 shares authorized; 18,277,142 and 18,170,267 issued; 16,796,884 and 16,680,791 outstanding, respectively	18	18
Additional paid-in capital	223,055	212,602
Retained earnings	168,624	183,436
Accumulated other comprehensive loss	(7,822)	(24,561)
Common stock in treasury, at cost - 1,480,258 shares and 1,489,476, respectively	(31,809)	(31,838)
Total shareholders' equity	352,066	339,657
Total liabilities and shareholders' equity	\$ 458,578	\$ 423,714

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

FARO TECHNOLOGIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except share and per share data)	Years ended December 31,		
	2017	2016	2015
SALES			
Product	\$ 277,922	\$ 256,010	\$ 259,842
Service	82,995	69,574	57,706
Total sales	360,917	325,584	317,548
COST OF SALES			
Product	110,143	107,965	114,257
Service	46,137	39,659	36,055
Total cost of sales (exclusive of depreciation and amortization, shown separately below)	156,280	147,624	150,312
GROSS PROFIT	204,637	177,960	167,236
OPERATING EXPENSES			
Selling and marketing	103,544	79,870	79,837
General and administrative	43,807	40,813	36,370
Depreciation and amortization	16,588	13,868	11,217
Research and development	35,376	30,125	26,690
Total operating expenses	199,315	164,676 ¹	154,114
INCOME FROM OPERATIONS	5,322	13,284	13,122
OTHER EXPENSE (INCOME)			
Interest income	(319)	(212)	(111)
Other (income) expense, net	(190)	822	371
Interest expense	4	48	56
INCOME BEFORE INCOME TAX EXPENSE (BENEFIT)	5,827	12,626	12,806
INCOME TAX EXPENSE (BENEFIT)	20,343	1,519	(7)
NET (LOSS) INCOME	\$ (14,516)	\$ 11,107	\$ 12,813
NET (LOSS) INCOME PER SHARE - BASIC	\$ (0.87)	\$ 0.67	\$ 0.74
NET (LOSS) INCOME PER SHARE - DILUTED	\$ (0.87)	\$ 0.67	\$ 0.74
Weighted average shares - Basic	16,711,534	16,654,786	17,288,665
Weighted average shares - Diluted	16,711,534	16,681,710	17,389,473

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

FARO TECHNOLOGIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(in thousands)	Years ended December 31,		
	2017	2016	2015
Net (loss) income	\$ (14,516)	\$ 11,107	\$ 12,813
Currency translation adjustments, net of income tax	16,739	(4,700)	(13,166)
Comprehensive income (loss)	<u>\$ 2,223</u>	<u>\$ 6,407</u>	<u>\$ (353)</u>

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

FARO TECHNOLOGIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2017, 2016, AND 2015

(in thousands, except share data)	Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Common Stock in Treasury	Total
	Shares	Amounts					
BALANCE JANUARY 1, 2015	<u>17,317,430</u>	<u>\$ 18</u>	<u>\$ 200,090</u>	<u>\$ 159,516</u>	<u>\$ (6,695)</u>	<u>\$ (9,075)</u>	<u>\$ 343,854</u>
Net income				12,813			12,813
Currency translation adjustment, net of income tax					(13,166)		(13,166)
Restricted stock issued and stock based compensation under incentive plans	13,143		4,306				4,306
Stock options exercised	66,786		2,287				2,287
Tax impact from restricted stock and stock options			313				313
Repurchase of common stock	(809,241)					(22,763)	(22,763)
BALANCE DECEMBER 31, 2015	<u>16,588,118</u>	<u>\$ 18</u>	<u>\$ 206,996</u>	<u>\$ 172,329</u>	<u>\$ (19,861)</u>	<u>\$ (31,838)</u>	<u>\$ 327,644</u>
Net income				11,107			11,107
Currency translation adjustment, net of income tax					(4,700)		(4,700)
Restricted stock issued and stock based compensation under incentive plans	20,925		5,374				5,374
Stock options exercised	71,748		674				674
Tax impact from restricted stock and stock options			(442)				(442)
BALANCE DECEMBER 31, 2016	<u>16,680,791</u>	<u>\$ 18</u>	<u>\$ 212,602</u>	<u>\$ 183,436</u>	<u>\$ (24,561)</u>	<u>\$ (31,838)</u>	<u>\$ 339,657</u>
Net loss				(14,516)			(14,516)
Currency translation adjustment, net of income tax					16,739		16,739
Restricted stock issued and stock based compensation under incentive plans	19,881		6,450				6,450
Stock options exercised, net of shares withheld for employee taxes	86,994		3,284				3,284
Reissuance of treasury shares	9,218		281			29	310
Cumulative effect of the adoption of ASU 2016-09			438	(296)			142
BALANCE DECEMBER 31, 2017	<u>16,796,884</u>	<u>\$ 18</u>	<u>\$ 223,055</u>	<u>\$ 168,624</u>	<u>\$ (7,822)</u>	<u>\$ (31,809)</u>	<u>\$ 352,066</u>

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

FARO TECHNOLOGIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)	Years Ended December 31,		
	2017	2016	2015
CASH FLOWS FROM:			
OPERATING ACTIVITIES:			
Net (loss) income	\$ (14,516)	\$ 11,107	\$ 12,813
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation and amortization	16,588	13,868	11,217
Compensation for stock options and restricted stock units	6,450	5,374	4,306
Provision for bad debts (net recovery of)	370	898	346
Loss on disposal of assets	451	860	947
Write-down of inventories	1,734	4,134	10,878
Deferred income tax benefit	(1,740)	(2,002)	(655)
Income tax benefit from exercise of stock options	—	(357)	(313)
Change in operating assets and liabilities:			
Decrease (increase) in:			
Accounts receivable, net	(6,766)	6,727	9,584
Inventories, net	(10,926)	(6,729)	(18,021)
Prepaid expenses and other assets	(253)	3,588	(2,834)
(Decrease) increase in:			
Accounts payable and accrued liabilities	1,103	534	(6,401)
Income taxes payable	20,011	618	—
Customer deposits	(461)	(1,310)	1,114
Unearned service revenues	(1,690)	273	5,051
Net cash provided by operating activities	10,355	37,583	28,032
INVESTING ACTIVITIES:			
Proceeds from sale of investments	32,000	—	22,001
Purchases of property and equipment	(8,970)	(7,720)	(14,169)
Payments for intangible assets	(2,377)	(1,657)	(2,140)
Acquisition of business, net of cash received	(5,596)	(27,708)	(12,066)
Net cash provided by (used in) investing activities	15,057	(37,085)	(6,374)
FINANCING ACTIVITIES:			
Payments on capital leases	(108)	(8)	(8)
Payments of contingent consideration for acquisitions	(521)	(774)	—
Repurchase of common stock	—	—	(22,763)
Income tax benefit from exercise of stock options	—	357	313
Proceeds from issuance of stock, net	3,594	674	2,287
Net cash provided by (used in) financing activities	2,965	249	(20,171)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS			
	6,414	(1,934)	(3,420)
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	34,791	(1,187)	(1,933)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	106,169	107,356	109,289
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ 140,960	\$ 106,169	\$ 107,356

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

FARO TECHNOLOGIES, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2017, 2016 and 2015

(in thousands, except share and per share data or as otherwise noted)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Description of Business—FARO Technologies, Inc. and its subsidiaries (collectively “FARO,” the “Company,” “us,” “we” or “our”) design, develop, manufacture, market and support software driven, three-dimensional (“3D”) measurement, imaging and realization systems. This technology permits high-precision 3D measurement, imaging and comparison of parts and complex structures within production and quality assurance processes. Our devices are used for inspection of components and assemblies, rapid prototyping, reverse engineering, documenting large volume or structures in 3D, surveying and construction as well as for investigation and reconstruction of accident sites or crime scenes. We sell the majority of our products through a direct sales force across a broad number of customers in a range of manufacturing, industrial, architecture, surveying, building information modeling, construction, public safety forensics, cultural heritage and other applications. Our FaroArm®, FARO ScanArm®, FARO Gage®, FARO Laser Tracker™, FARO Cobalt Array Imager, FARO Laser Projector, and their companion CAM2®, BuildIT, and RayTracer™ software solutions, provide for Computer-Aided Design (“CAD”) based inspection, factory-level statistical process control, high-density surveying and laser-guided assembly and production. Together, these products integrate the measurement, quality inspection, and reverse engineering functions with CAD and 3D software to improve productivity, enhance product quality, and decrease rework and scrap in the manufacturing process, mainly supporting applications in our Factory Metrology vertical. Our FARO Focus and FARO Scanner Freestyle^{3DX} laser scanners, and their companion FARO SCENE, FARO PointSense, and FARO Zone public safety forensics software offerings, are utilized for a wide variety of 3D modeling, documentation and high-density surveying applications in our Construction Building Information Modeling-Construction Information Management (“Construction BIM-CIM”) and Public Safety Forensics verticals. Our FARO ScanArm®, FARO Cobalt Array Imager, FARO Scanner Freestyle^{3DX} laser scanners and their companion SCENE software also enable a fully digital workflow used to capture real world geometry for the purpose of empowering design, enabling innovation, and speeding up the design cycle, supporting our Product Design vertical. FARO Visual Inspect™ enables large, complex 3D CAD data to be transferred to a tablet device and then used for mobile visualization and comparison to real world conditions, facilitating in-process inspection, assembly, guidance and positioning for applications in our Factory Metrology and Construction BIM-CIM verticals. Our line of galvanometer-based scan heads and laser scan controllers are used in a variety of laser applications and are integrated into larger components and systems.

Reportable Segments—During fiscal 2016, we evaluated our reportable segment structure based on our new management organization and the changes implemented in connection with our initiatives to reorganize our business around certain vertical markets. As a result of this assessment, we report our activities in the following three reportable segments:

- The Factory Metrology segment provides solutions for manual and automated measurement and inspection in an industrial or manufacturing environment. Applications include alignment, part inspection, dimensional analysis, first article inspection, incoming and in-process inspection, machine calibration, non-contact inspection, robot calibration, tool building and set-up, and assembly guidance.
- The Construction BIM-CIM segment provides solutions for as-built data capturing and 3D visualization in building information modeling and construction information management applications, allowing our customers in our architecture, engineering and construction markets to quickly and accurately extract 2D and 3D measurement points. Applications include as-built documentation, construction monitoring, surveying, asset and facility management, and heritage preservation.
- The Other segment includes our Product Design, Public Safety Forensics and 3D Machine Vision operating segments. Our Product Design operating segment provides advanced 3D solutions to assist in the engineering or design of a movable object, enabling a full digital workflow for applications that include reverse engineering and virtual simulation. Our Public Safety Forensics operating segment provides solutions to public safety officials and professionals to capture environmental or situational scenes in 2D and 3D for crime, crash and fire scene investigations and environmental safety evaluations. Our 3D Machine Vision operating segment provides solutions to customers who require customized 3D measurement and realization solutions not otherwise addressed by our off-the-shelf product offerings.

All operating segments that do not meet the criteria to be reportable segments are aggregated in the Other category and have been combined based on the aggregation criteria and quantitative thresholds in accordance with the provisions of Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 280, “*Segment Reporting*” (“FASB ASC Topic 280”). Our reportable segments have been determined in accordance with our internal management structure, which is based on operating activities. We evaluate business performance based upon several metrics, using profitable revenue growth and segment profit as the primary financial measure.

We report our segment information in accordance with the provisions of FASB ASC Topic 280. See Note 16, “*Segment Reporting*” for further information.

Principles of Consolidation—Our consolidated financial statements include the accounts of FARO Technologies, Inc. and its subsidiaries, all of which are wholly owned. All intercompany transactions and balances have been eliminated. The financial statements of our foreign subsidiaries are translated into U.S. dollars using exchange rates in effect at period-end for assets and liabilities and average exchange rates during each reporting period for results of operations. Adjustments resulting from financial statement translations are reflected as a separate component of accumulated other comprehensive loss. Foreign currency transaction gains and losses are included in net (loss) income.

Revenue Recognition, Product Warranty and Extended Warranty Contracts—Revenue is recognized when the price is fixed, collectability is reasonably assured, the title and risks and rewards of ownership have passed to the customer, and the earnings process is complete. Revenue related to our measurement, imaging, and realization equipment and related software is generally recognized upon shipment, as we consider the earnings process complete as of the shipping date. The related software sold with our equipment function together and deliver the tangible product’s essential functionality. Fees billed to customers associated with the distribution of products are classified as revenue. We warrant our products against defects in design, materials and workmanship for one year. A provision for estimated future costs relating to warranty expense is recorded when products are shipped. We separately sell extended warranties. Extended warranty revenues are recognized on a straight-line basis over the term of the warranty. Costs relating to extended warranties are recognized as incurred. Revenue from sales of software only is recognized when no further significant production, modification or customization of the

software is required and when the following criteria are met: persuasive evidence of a sales agreement exists, delivery has occurred, and the sales price is fixed or determinable and deemed collectible. These software arrangements generally include short-term maintenance that is considered post-contract support (“PCS”). We generally establish vendor-specific objective evidence (VSOE) of fair value for this PCS component based on our maintenance renewal rate. Maintenance renewals, when sold, are recognized on a straight-line basis over the term of the maintenance agreement. Revenues resulting from sales of comprehensive support, training and technology consulting services are recognized as such services are performed and are deferred when billed in advance of the performance of services. Revenues are presented net of sales-related taxes.

Cash and Cash Equivalents—We consider cash on hand and amounts on deposit with financial institutions with maturities of three months or less when purchased to be cash and cash equivalents. We have deposits with foreign banks totaling \$98.8 million and \$87.3 million as of December 31, 2017 and 2016, respectively.

Accounts Receivable and Related Allowance for Doubtful Accounts—Credit is extended to customers based on an evaluation of a customer’s financial condition and, generally, collateral is not required. Accounts receivable are generally due within 30 to 90 days and are stated at amounts due from customers, net of an allowance for doubtful accounts. Accounts outstanding longer than the contractual payment terms are considered past due. We make judgments as to the collectability of accounts receivable based on historical trends and future expectations. Management estimates an allowance for doubtful accounts, which adjusts gross trade accounts receivable to its net realizable value. The allowance for doubtful accounts is based on an analysis of all receivables for possible impairment issues and historical write-off percentages. We write off accounts receivable when they become uncollectible, and payments subsequently received on such receivables are credited to the allowance for doubtful accounts. We do not generally charge interest on past due receivables.

Inventories—Inventories are stated at the lower of cost or net realizable value using the first-in first-out (“FIFO”) method. Shipping and handling costs are classified as a component of cost of sales in the consolidated statements of operations. Sales demonstration inventory is comprised of measuring, imaging and realization devices utilized by sales representatives to present our products to customers. Management expects sales demonstration inventory to be held by our sales representatives for up to three years, at which time it is refurbished and transferred to finished goods as used equipment, stated at the lower of cost or net realizable value. Management expects these refurbished units to remain in finished goods inventory and be sold within 12 months at prices that produce reduced gross margins. Sales demonstration inventory remains classified as inventory, as it is available for sale and any required refurbishment prior to sale is minimal.

Service inventory is typically used to provide a temporary replacement product to a customer covered by a premium warranty when the customer's unit requires service or repair and as training equipment. Service inventory is available for sale; however, management does not expect service inventory to be sold within 12 months and, as such, classifies this inventory as a long-term asset. Service inventory that we utilize for training or repairs which we deem as no longer available for sale is transferred to fixed assets at the lower of cost or net realizable value and depreciated over its remaining useful life, typically three years. See Note 5, "Inventories" for further information regarding inventories.

Reserve for Excess and Obsolete Inventory—Since the value of inventory that will ultimately be realized cannot be known with exact certainty, we rely upon both past sales history and future sales forecasts to provide a basis for the determination of the reserve. Inventory is considered potentially obsolete if we have withdrawn those products from the market or had no sales of the product for the past 12 months and have no sales forecasted for the next 12 months. Inventory is considered potentially excess if the quantity on hand exceeds 12 months of expected remaining usage. The resulting obsolete and excess parts are then reviewed to determine if a substitute usage or a future need exists. Items without an identified current or future usage are reserved in an amount equal to 100% of the FIFO cost of such inventory. Our products are subject to changes in technologies that may make certain of our products or their components obsolete or less competitive, which may increase our historical provisions to the reserve.

Property and Equipment—Property and equipment purchases exceeding a thousand dollars are capitalized and recorded at cost. Depreciation is computed beginning on the date that the asset is placed into service using the straight-line method over the estimated useful lives of the various classes of assets as follows:

Machinery, equipment and software	2 to 5 years
Furniture and fixtures	3 to 10 years

Leasehold improvements are amortized on a straight-line basis over the lesser of the life of the asset or the remaining term of the lease.

Depreciation expense was \$12.3 million, \$10.9 million and \$9.2 million in 2017, 2016 and 2015, respectively. Accelerated methods of depreciation are used for income tax purposes in contrast to book purposes, and as a result, appropriate provisions are made for the related deferred income taxes.

Business Combinations—We allocate the fair value of purchase consideration to the assets acquired and liabilities assumed based on their fair values at the acquisition date. The excess of the fair value of purchase consideration over the fair value of these assets acquired and liabilities assumed is recorded as goodwill. When determining the fair values of assets acquired and liabilities assumed, management makes significant estimates and assumptions, especially with respect to intangible assets. Critical estimates in valuing intangible assets include, but are not limited to, expected future cash flows, which includes consideration of future growth rates and margins, customer attrition rates, future changes in technology and brand awareness, loyalty and position, and discount rates. Fair value estimates are based on the assumptions management believes a market participant would use in pricing the asset or liability. Amounts recorded in a business combination may change during the measurement period, which is a period not to exceed one year from the date of acquisition, as additional information about conditions existing at the acquisition date becomes available.

Goodwill and Intangible Assets—Goodwill represents the excess cost of a business acquisition over the fair value of the net assets acquired. We do not amortize goodwill; however, we perform an annual review each year, or more frequently if indicators of potential impairment exist, to determine if the carrying value of the recorded goodwill or indefinite lived intangible assets is impaired. We have historically evaluated goodwill for impairment annually as of December 31, or when an indicator of impairment exists. During 2017, we changed the date of annual impairment assessment for our reporting units to October 1. This voluntary change in the annual goodwill testing date is a change in accounting policy, which we concluded is preferable as it better aligns the timing of the assessment with our annual budgeting process. This change in the date of the annual impairment assessment was applied prospectively and did not accelerate, delay or avoid a potential impairment charge. If an asset is impaired, the difference between the value of the asset reflected in the financial statements and its current fair value is recognized as an expense in the period in which the impairment occurs. See Note 6, "Goodwill" and Note 7, "Intangible Assets" for further information regarding goodwill and intangible assets, respectively.

Each period, and for any of our reporting units, we can elect to perform a qualitative assessment to determine whether it is necessary to perform the two-step quantitative goodwill impairment test. If we believe, as a result of our qualitative assessment, that it is not more likely than not that the fair value of a reporting unit containing goodwill is less than its carrying amount, then the first and second steps of the quantitative goodwill impairment test are unnecessary. If we elect to bypass the qualitative assessment option, or if the qualitative assessment was performed and resulted in the Company being unable to conclude that it is not more likely than not that the fair value of a reporting unit containing goodwill is greater than its carrying amount, we will perform the two-step quantitative goodwill impairment test. We perform the first step of the two-step quantitative goodwill impairment test by calculating the fair value of the reporting unit using a discounted cash flow method and market approach method, and then comparing the respective fair value with the carrying amount of the reporting unit. If the carrying amount of the reporting unit exceeds its fair value, we perform the second step of the quantitative goodwill impairment test to measure the amount of the impairment loss, if any. Management has concluded there was no goodwill impairment for the years ended December 31, 2017, 2016 and 2015.

Other intangible assets principally include patents, existing product technology and customer relationships that arose in connection with our acquisitions. Other intangible assets are recorded at fair value at the date of acquisition and are amortized over their estimated useful lives of 3 to 20 years. As of December 31, 2017 and 2016, there were no indefinite-lived intangible assets.

Product technology and patents are recorded at cost. Amortization is computed using the straight-line method over the lives of the product technology and patents of 7 to 20 years.

The remaining weighted-average amortization period for all our intangible assets is eight years.

Long-Lived Assets—Long-lived assets, other than goodwill, are evaluated for impairment when events or changes in business circumstances indicate that the carrying amount of an asset group may not be fully recoverable, comparing projected undiscounted future cash flows to the carrying value of the asset group. Management has concluded that there were no indicators of impairment of these assets during the years ended December 31, 2017, 2016 and 2015.

Research and Development—Research and development costs incurred in the discovery of new knowledge and the resulting translation of this new knowledge into plans and designs for new products, prior to the attainment of the related products' technological feasibility, are recorded as expenses in the period incurred. To date, the time incurred between the attainment of the related products' technological feasibility and general release to customers has been short.

Reserve for Warranties—We establish at the time of sale a liability for the one year warranty included with the initial purchase price of our products, based upon an estimate of the repair expenses likely to be incurred for the warranty period. The warranty period is measured in installation-months for each major product group. The warranty reserve is included in accrued liabilities in the accompanying consolidated balance sheets. The warranty expense is estimated by applying the actual total repair expenses for each product group in the prior period and determining a rate of repair expense per installation-month. This repair rate is multiplied by the number of installation-months of warranty for each product group to determine the provision for warranty expenses for the period. We evaluate our exposure to warranty costs at the end of each period using the estimated expense per installation-month for each major product group, the number of units remaining under warranty, and the remaining number of months each unit will be under warranty. We have a history of new product introductions and enhancements to existing products, which may result in unforeseen issues that increase our warranty costs. While such expenses have historically been within expectations, we cannot guarantee this will continue in the future.

Income Taxes—We review our deferred tax assets on a regular basis to evaluate their recoverability based upon expected future reversals of deferred tax assets and liabilities, projections of future taxable income, and tax planning strategies that we might employ to utilize such assets, including net operating loss carryforwards. Based on the positive and negative evidence for recoverability, we establish a valuation allowance against the net deferred tax assets of a taxing jurisdiction in which we operate unless it is "more likely than not" that we will recover such assets through the above means. In the future, our evaluation of the need for the valuation allowance will be significantly influenced by our ability to maintain profitability and our ability to predict and achieve future projections of taxable income over at least a two-year period.

We recognize tax benefits related to uncertain tax positions only if it is more likely than not that the tax position will be sustained upon examination by taxing authorities. For those positions where it is not more likely than not that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements. In the ordinary course of business, we are examined by various federal, state, and foreign tax authorities. We regularly assess the potential outcomes of these examinations and any future examinations for the current or prior years in determining the adequacy of our provision for income taxes. See Note 11, "Income Taxes" for further information regarding income taxes.

(Loss) Earnings Per Share (EPS)—Basic (loss) earnings per share is computed by dividing net (loss) income by the weighted average number of shares outstanding. Diluted earnings per share is computed by also considering the impact of potential common stock on both net income and the weighted average number of shares outstanding. Our potential common stock consists of employee stock options, restricted stock, restricted stock units and performance-based awards. Our potential common stock is excluded from the basic earnings per share calculation and is included in the diluted earnings per share calculation when doing so would not be anti-dilutive. Performance-based awards are included in the computation of diluted earnings per share only to the extent that the underlying performance conditions (and any applicable market condition) (i) are satisfied as of the end of the reporting period or (ii) would be considered satisfied if the end of the reporting period were the end of the related contingency period and the result would be dilutive under the treasury stock method. When we report a loss for the period presented, the diluted loss per share calculation does not include our potential common stock as the inclusion of these shares in the calculation would have an anti-dilutive effect. A reconciliation of the number of common shares used in the calculation of basic and diluted EPS is presented in Note 14, “(Loss) Earnings Per Share.”

Accounting for Stock-Based Compensation—We have two stock-based employee and director compensation plans, which are described more fully in Note 13, “Stock Compensation Plans.”

We measure and record compensation expense using the applicable accounting guidance for share-based payments related to stock options, restricted stock, and performance-based awards granted to our directors and employees. The fair value of stock options, including performance awards, without a market condition is estimated, at the date of grant, using the Black-Scholes option-pricing model. The fair value of restricted stock awards and stock options with a market condition is estimated, at the date of grant, using the Monte Carlo Simulation model. The Black-Scholes and Monte Carlo Simulation valuation models incorporate assumptions as to stock price volatility, the expected life of options or awards, a risk-free interest rate and dividend yield. In valuing our stock options, significant judgment is required in determining the expected volatility of our common stock and the expected life that individuals will hold their stock options prior to exercising. Expected volatility for stock options is based on the historical and implied volatility of our own common stock while the volatility for our restricted stock units with a market condition is based on the historical volatility of our own stock and the stock of companies within our defined peer group. The expected life of stock options is derived from the historical actual term of option grants and an estimate of future exercises during the remaining contractual period of the option. While volatility and estimated life are assumptions that do not bear the risk of change subsequent to the grant date of stock options, these assumptions may be difficult to measure as they represent future expectations based on historical experience. Further, our expected volatility and expected life may change in the future, which could substantially change the grant-date fair value of future awards of stock options and, ultimately, the expense we record. The fair value of restricted stock, including performance awards, without a market condition is estimated using the current market price of our common stock on the date of grant.

We expense stock-based compensation for stock options, restricted stock awards, and performance awards over the requisite service period. For awards with only a service condition, we expense stock-based compensation using the straight-line method over the requisite service period for the entire award. For awards with both performance and service conditions, we expense the stock-based compensation on a straight-line basis over the requisite service period for each separately vesting portion of the award, taking into account the probability that we will satisfy the performance conditions. Furthermore, we expense awards with a market condition over the three-year vesting period regardless of the value that the award recipients ultimately receive. Effective January 1, 2017, we adopted Accounting Standards Update (“ASU”) No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* (“ASU 2016-09”), simplifying several aspects of the accounting for share-based payment transactions, including the income tax consequences, classifications of awards as either equity or liabilities, and classification on the statement of cash flows. The impacts of adopting ASU 2016-09 are described more fully within the *Impact of Recently Adopted Accounting Standards* section below.

Concentration of Credit Risk—Financial instruments that expose us to concentrations of credit risk consist principally of short-term investments and operating demand deposit accounts. Our policy is to place our operating demand deposit accounts with high credit quality financial institutions, the balances of which at times may exceed federally insured limits. We continually monitor our banking relationships and believe we are not exposed to any significant credit risk on our operating demand deposit accounts.

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

Impact of Recently Adopted Accounting Standards — In January 2017, the FASB issued Accounting Standards Update ("ASU") No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business* ("ASU 2017-01") in order to clarify the definition of a business and provide additional guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. Currently, ASC Topic 805 recognizes three elements of a business: inputs, processes, and outputs. While an integrated set of assets and activities (collectively referred to as a "set") that is a business usually has outputs, outputs are not required to be present. Additionally, all the inputs and processes that a seller uses in operating a set are not required if market participants can acquire the set and continue to produce outputs. ASU 2017-01 provides a screen to determine when a set is not a business. The screen requires that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set is not a business. If the screen is not met, the new guidance (1) requires that to be considered a business, a set must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output and (2) removes the evaluation of whether a market participant could replace missing elements. The new guidance provides a framework to assist entities in evaluating whether both an input and a substantive process are present. This framework includes two sets of criteria to consider that depend on whether a set has outputs. Although outputs are not required for a set to be a business, outputs generally are a key element of a business. ASU 2017-01 provides more stringent criteria for sets without outputs and more narrowly defines the term output. ASU 2017-01 became effective for us on January 1, 2018 and was applied prospectively. Our adoption of the new guidance did not have a material impact on our consolidated financial statements.

In October 2016, the FASB issued ASU No. 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other than Inventory* ("ASU 2016-16"), which removes the prohibition in ASC 740 against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. This ASU requires the tax effects of intercompany transactions, other than sales of inventory, to be recognized when the transfer occurs, instead of deferred until the transferred asset is sold to a third party or otherwise recovered through use of the asset. The new guidance must be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption and is effective for annual periods beginning after December 15, 2017, and interim period therein. ASU 2016-16 became effective for us on January 1, 2018 and was applied on a modified retrospective basis. Our adoption of the new guidance did not have a material impact on our consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"), which clarifies how companies present and classify certain cash receipts and cash payments in the statement of cash flows. ASU 2016-15 became effective for us on January 1, 2018 and was applied on a modified retrospective basis. Our adoption of the new guidance did not have a material impact on our consolidated financial statements.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers: (Topic 606)* ("ASU 2014-09"), amending its accounting guidance related to revenue recognition. Under this ASU and subsequently issued amendments, revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Additional disclosures are required to provide the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract.

We have evaluated the effect that this guidance will have on our consolidated financial statements by analyzing both transactional and analytical data for each of our revenue streams. The following is a status of our evaluation of impacts by significant revenue stream:

- **Measurement equipment and related software:** Under the prior accounting guidance, sales of measurement, imaging and realization equipment and related software sales were generally recognized upon shipment, as we considered the earnings process complete as of the shipping date. The related software sold with our measurement, imaging and realization equipment functions together with such equipment to deliver the tangible product's essential functionality. Our adoption of the new guidance did not result in material changes to our accounting for revenue related to our measurement, imaging and realization equipment and related software.

- **Extended warranties:** Under the prior accounting guidance, extended warranty sales were recognized on a straight-line basis over the term of the warranty. Our adoption of the new guidance did not result in material changes to our accounting for revenue related to extended warranties.

- Software: Under the prior accounting guidance, software only sales were recognized when no further significant production, modification or customization of the software was required and when the following criteria were met: persuasive evidence of a sales agreement existed, delivery had occurred, and the sales price was fixed or determinable and deemed collectible. These software arrangements generally include short-term maintenance that is considered post-contract support. Maintenance renewals, when sold, were recognized on a straight-line basis over the term of the maintenance agreement. Our adoption of the new guidance did not result in material changes to our accounting for revenue related to software only sales and maintenance renewals.

Under the prior accounting guidance, we recognized sales commission expense as incurred. Under the new guidance, we will capitalize the commission expense for those sales arrangements that extend beyond one year and amortize such costs ratably over the term of the contract. As a result, we will recognize a deferred cost asset on our consolidated balance sheet upon the adoption of the new guidance; however, the impact of this change on our consolidated balance sheet is not material. The adoption of the new guidance did not have a material change to our results of operations or cash flows. We adopted this guidance utilizing the modified retrospective method but are applying it only to contracts that are not completed as of the date of initial adoption, an option that is available under ASC Topic 606.

In March 2016, the FASB issued ASU 2016-09, *Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* (“ASU 2016-09”), which is intended to simplify several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. ASU 2016-09 became effective for annual periods beginning after December 15, 2016, and interim periods therein (our fiscal year 2017). We adopted ASU 2016-09 effective January 1, 2017. Under the new guidance, excess tax benefits that were not previously recognized because the related tax deduction had not reduced current taxes payable are to be recorded on a modified retrospective basis. This is achieved through a cumulative-effect adjustment to retained earnings as of the beginning of the period in which the new guidance is adopted. Historically, we recognized all excess tax benefits when an option was exercised or a share vested since we did not have a U.S. net operating loss carryforward. Therefore, the tax benefit will be allowed under the current guidance and no adjustment to retained earnings is required.

Under the new guidance, all tax-related cash flows resulting from share-based payments are reported as operating activities in the statement of cash flows. Effective January 1, 2017, we adopted this portion of the guidance on a prospective basis. This approach incorporates the net of the inflow and outflow from all tax-related cash flows resulting from share-based payments in the deferred income tax (benefit) expense line item and presents it along with other income tax cash flows as operating activities in the statement of cash flows.

We also elected to account for forfeitures related to the service condition-based awards as they occur effective January 1, 2017, which is a change from our treatment of estimating forfeitures in previous years. However, we continue to assess performance condition-based awards quarterly as required. In adopting the new policy using a modified retrospective approach, we assessed the cumulative effect adjustment and recorded to retaining earnings the difference between the amount of compensation cost previously recorded and the amount that would have been recorded without assuming forfeitures. The cumulative effect adjustment recorded to retained earnings was not material. We will continue to assess the impact of the adopted guidance on a quarterly basis and do not expect the adoption of this guidance will have a material impact on our consolidated financial statements.

In July 2015, the FASB issued ASU 2015-11, *Inventory (Topic 330): Simplifying the Measurement of Inventory* (“ASU 2015-11”), which changes the measurement principle for inventory from the lower of cost or market to the lower of cost and net realizable value. ASU 2015-11 defines net realizable value as estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. The new guidance must be applied on a prospective basis. We adopted ASU 2015-11 effective January 1, 2017. The adoption of this guidance did not have a material impact on our consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes* (“ASU 2015-17”), which requires that deferred tax liabilities and assets be classified as non-current in a classified balance sheet. ASU 2015-17 became effective for us on January 1, 2017. We adopted this guidance on a retrospective basis, which resulted in the reclassification of current deferred tax assets totaling approximately \$7.6 million as of December 31, 2016 from current to non-current in our consolidated financial statements.

Impact of Recently Issued Accounting Standards—In January 2017, the FASB issued ASU No. 2017-04, *Intangible - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* (“ASU 2017-04”), which is intended to simplify the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. Under the current guidance, performance of Step 2 requires us to calculate the implied fair value of goodwill by following procedures that would be required to determine the fair value of assets acquired and liabilities assumed in a business combination. Under the new guidance, we will perform our goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An impairment charge will be recognized for the amount by which the carrying amount exceeds the reporting unit’s fair value up to the amount of the goodwill allocated to the reporting unit. The new guidance also eliminates the requirements for any reporting unit with a zero or negative carrying amount to perform Step 2 of the goodwill impairment test if it fails the qualitative assessment. As a result, all reporting units will be subject to the same impairment assessment. We will still have the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary. ASU 2017-04 becomes effective for annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019, with early adoption permitted for annual or any interim goodwill impairment tests after January 1, 2017. The amendments in this ASU will be applied on a prospective basis. Disclosure of the nature and reason for the change in accounting principle is required upon transition. This disclosure is required in the first annual period and in the interim period within the first annual period when we initially adopt the amendments in this ASU. We plan to adopt this guidance for our fiscal year ending December 31, 2020. We do not expect that the adoption of this guidance will have a material impact on our consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* (“ASU 2016-02”), which is intended to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements to enable users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. ASU 2016-02 must be applied on a modified retrospective basis and is effective for fiscal years beginning after December 15, 2018, and interim periods within those years, with early adoption permitted. We plan to adopt ASU 2016-02 in the first quarter of 2019. Although we are in the process of evaluating the impact of adoption of this ASU on our consolidated financial statements, we currently believe the most significant changes will be related to the recognition of new right-of-use assets and lease liabilities on our balance sheet for real estate operating leases.

Reclassifications—Certain prior year amounts have been reclassified in the accompanying consolidated financial statements to conform to the current period presentation. For example:

- Deferred income tax assets, net were reclassified from current to non-current in our consolidated balance sheet as of December 31, 2016 as a result of adopting ASU No. 2015-17.
- Certain reclassifications were made between reporting segments for segment profit during the year ended December 31, 2016 in Note 16, “Segment Reporting” as a result of changes to our methodology for allocating manufacturing variances to our segments. These reclassifications only impacted our segment reporting footnote disclosure.

2. SUPPLEMENTAL CASH FLOW INFORMATION

Selected cash payments and non-cash activities were as follows:

	Years ended December 31,		
	2017	2016	2015
Supplemental cash flow information:			
Cash paid for interest	\$ 9	\$ 28	\$ 55
Cash paid for income taxes	\$ 2,488	\$ 2,576	\$ 4,682
Supplemental noncash investing and financing activities:			
Transfer of service and sales demonstration inventory to fixed assets	\$ 2,844	\$ 511	\$ 2,979

3. ALLOWANCE FOR DOUBTFUL ACCOUNTS

Activity in the allowance for doubtful accounts was as follows:

	Years ended December 31,		
	2017	2016	2015
Balance, beginning of year	\$ 1,829	\$ 1,417	\$ 1,844
Provision (net of recovery)	370	898	346
Amounts written off, net of recoveries	(242)	(486)	(773)
Balance, end of year	<u>\$ 1,957</u>	<u>\$ 1,829</u>	<u>\$ 1,417</u>

4. SHORT-TERM INVESTMENTS

Short-term investments at December 31, 2017 consisted of U.S Treasury Bills totaling \$11.0 million that matured through January 11, 2018. Short-term investments at December 31, 2016 consisted of U.S. Treasury Bills totaling \$42.9 million that matured through June 15, 2017. The interest rate on the U.S. Treasury Bills is less than one percent. The investments are classified as held-to-maturity and recorded at cost plus accrued interest, which approximates fair value. We do not intend to sell our short-term investments and it is not more likely than not that we will be required to sell such investments before recovery of their amortized cost bases, which may be maturity. The fair value of the U.S. Treasury Bills at December 31, 2017 and December 31, 2016 were classed as Level 1 as they are traded with sufficient frequency and volume to enable us to obtain pricing information on an ongoing basis. For further discussion of fair value, refer to Note 9, "Fair Value Measurements."

5. INVENTORIES

Inventories are stated at the lower of cost or net realizable value using the first-in first-out (FIFO) method. We have three principal categories of inventory: 1) manufactured product to be sold; 2) sales demonstration inventory - completed product used to support our sales force and demonstrations; and 3) service inventory - completed product and parts used to support our service department. Shipping and handling costs are classified as a component of cost of sales in our consolidated statements of operations. Sales demonstration inventory is held by our sales representatives for up to three years, at which time it is refurbished and transferred to finished goods as used equipment, stated at the lower of cost or net realizable value. Management expects these refurbished units to remain in finished goods inventory and to be sold within 12 months at prices that produce reduced gross margins. Service inventory is used to provide a temporary replacement product to a customer covered by a premium warranty when the customer's unit requires service or repair and as training equipment. Service inventory is available for sale; however, management does not expect service inventory to be sold within 12 months and, as such, classifies this inventory as a long-term asset. Service inventory that we utilize for training or repairs and which we deem as no longer available for sale is transferred to fixed assets at the lower of cost or net realizable value and depreciated over the remaining life, typically three years.

Inventories consist of the following:

	December 31, 2017	December 31, 2016
Raw materials	\$ 36,328	\$ 36,760
Finished goods	17,458	15,126
Inventories, net	<u>\$ 53,786</u>	<u>\$ 51,886</u>
Service and sales demonstration inventory, net	<u>\$ 39,614</u>	<u>\$ 29,136</u>

6. GOODWILL

Our goodwill at December 31, 2017 and 2016 is related to our acquisitions. We evaluate each reporting unit's fair value as compared to its carrying value on October 1st of each year or more frequently if events or changes in circumstances indicate that the carrying value may exceed the fair value. Prior to 2017, we evaluated each reporting unit's fair value as compared to its carrying value on December 31, 2017. During Step 1 of the quantitative goodwill impairment test, the fair value of the reporting units is measured using a discounted cash flow model incorporating discount rates commensurate with the risks involved for each reporting unit and a market approach. The key assumptions used in the discounted cash flow model include discount rates, growth rates, cash flow projections and terminal value rates. These rates are susceptible to change and require significant management judgment. The market approach relies on an analysis of publicly-traded companies similar to us and derives a range of revenue and profit multiples. The publicly-traded companies used in the market approach are selected based on our defined peer group. The resulting multiples are then applied to each reporting unit to determine fair value. Impairments to goodwill are charged against earnings in the period the impairment is identified.

During 2016, we realigned our organizational structure to focus on five operating segments: Factory Metrology, Construction BIM-CIM, Product Design, Public Safety Forensics, and 3D Machine Vision. As a result of the change to our operating segments in 2016, we realigned our reporting units for which goodwill was tested as of December 31, 2016: Factory Metrology, Construction BIM-CIM and Public Safety Forensics as shown in the table below.

As of December 31, 2017 and 2016, we did not have any goodwill that was identified as impaired. The increase in goodwill during 2017 and 2016 reflected the acquisitions completed in those periods and changes in foreign exchange rates.

December 31, 2017	Beginning Balance	Additions	Foreign Currency Translation	Ending Balance
Factory Metrology	\$ 37,861	\$ 2,357	\$ 2,941	\$ 43,159
Construction BIM-CIM	6,078	—	443	6,521
Public Safety Forensics	\$ 2,805	\$ 55	\$ 210	\$ 3,070
Total	\$ 46,744	\$ 2,412	\$ 3,594	\$ 52,750

December 31, 2016	Beginning Balance	Additions	Foreign Currency Translation	Ending Balance
Factory Metrology	\$ 21,360	\$ 16,709	\$ (208)	\$ 37,861
Construction BIM-CIM	3,429	2,682	(33)	6,078
Public Safety Forensics	\$ 1,582	\$ 1,238	\$ (15)	\$ 2,805
Total	\$ 26,371	\$ 20,629	\$ (256)	\$ 46,744

7. INTANGIBLE ASSETS

Intangible assets consist of the following:

	As of December 31, 2017		
	Carrying Value	Accumulated Amortization	Net Intangible
Amortizable intangible assets:			
Product technology	\$ 19,459	\$ 10,885	\$ 8,574
Patents and trademarks	13,948	5,720	8,228
Customer relationships	5,889	1,685	4,204
Other	7,443	5,909	1,534
Total	\$ 46,739	\$ 24,199	\$ 22,540

	As of December 31, 2016		
	Carrying Value	Accumulated Amortization	Net Intangible
Amortizable intangible assets:			
Product technology	\$ 15,700	\$ 7,614	\$ 8,086
Patents and trademarks	13,328	4,927	8,401
Customer relationships	5,466	837	4,629
Other	8,013	6,850	1,163
Total	\$ 42,507	\$ 20,228	\$ 22,279

Amortization expense was \$4.5 million, \$2.9 million and \$2.0 million in 2017, 2016 and 2015, respectively. The estimated amortization expense for each of the years 2018 through 2022 and thereafter is as follows:

Years ending December 31,	Amount
2018	\$ 4,022
2019	3,770
2020	3,311
2021	2,880
2022	2,015
Thereafter	6,542
	\$ 22,540

8. ACCRUED LIABILITIES

Accrued liabilities consist of the following:

	As of December 31,	
	2017	2016
Accrued compensation and benefits	\$ 16,144	\$ 13,649
Accrued warranties	2,628	2,594
Professional and legal fees	1,541	1,775
Taxes other than income	3,787	4,026
Other accrued liabilities	3,262	2,528
	<u>\$ 27,362</u>	<u>\$ 24,572</u>

Activity related to accrued warranties was as follows:

	Years ended December 31,		
	2017	2016	2015
Balance, beginning of year	\$ 2,594	\$ 2,309	\$ 2,719
Provision for warranty expense	4,045	3,544	3,597
Fulfillment of warranty obligations	(4,011)	(3,259)	(4,007)
Balance, end of year	<u>\$ 2,628</u>	<u>\$ 2,594</u>	<u>\$ 2,309</u>

9. FAIR VALUE MEASUREMENTS

The guidance on fair value measurements and disclosures defines fair value, establishes a framework for measuring fair value, and requires enhanced disclosures about assets and liabilities measured at fair value. Fair value is defined as the price at which an asset could be exchanged in a current transaction between knowledgeable, willing parties. A liability's fair value is defined as the amount that would be paid to transfer the liability to a new obligor, not the amount that would be paid to settle the liability with the creditor. Where available, fair value is based on observable market prices or parameters or derived from such prices or parameters. Where observable prices or inputs are not available, valuation models are used to determine fair value. These models employ valuation techniques that involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market and the instruments' complexity.

Assets and liabilities recorded at fair value on a recurring basis in our consolidated balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels, defined by the guidance on fair value measurements, are directly related to the amount of subjectivity associated with the inputs to fair valuation of these assets and liabilities and are as follows:

Level 1 - Valuation is based upon quoted market price for identical instruments traded in active markets.

Level 2 - Valuation is based on quoted market prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant assumptions are observable in the market.

Level 3 - Valuation is generated from model-based techniques that use significant assumptions not observable in the market. Valuation techniques include use of discounted cash flow models and similar techniques.

Fair Value on a Recurring Basis

Assets and liabilities measured at fair value on a recurring basis are categorized in the tables below based upon the lowest level of significant input to the valuations:

	December 31, 2017		
	Level 1	Level 2	Level 3
Assets:			
Short-term investments (1)	\$ 10,997	\$ —	\$ —
Total	\$ 10,997	\$ —	\$ —
Liabilities:			
Contingent consideration (2)	\$ —	\$ —	\$ 412
Total	\$ —	\$ —	\$ 412
	December 31, 2016		
	Level 1	Level 2	Level 3
Assets:			
Short-term investments (1)	\$ 42,942	\$ —	\$ —
Total	\$ 42,942	\$ —	\$ —
Liabilities:			
Contingent consideration (2)	\$ —	\$ —	\$ 2,100
Total	\$ —	\$ —	\$ 2,100

- (1) Short-term investments in the accompanying consolidated balance sheets are six-month U.S. Treasury Bills. The fair values of these assets are based on Level 1 inputs in the fair value hierarchy.
- (2) Contingent consideration liability represents arrangements to pay the former owners of certain companies we acquired. For the year ended December 31, 2017, we paid \$0.5 million as part of these arrangements. For the year ended December 31, 2016, we paid \$0.8 million as part of these arrangements. The remaining change in the fair value of the contingent consideration from December 31, 2016 to December 31, 2017 was related to a \$1.3 million decrease due to the expiration of the contingent consideration period for one of our acquisitions and changes in foreign currency exchange rates.

10. OTHER (INCOME) EXPENSE, NET

Other (income) expense, net consists of the following:

	Years ended December 31,		
	2017	2016	2015
Foreign exchange transaction (gains) losses	\$ (162)	\$ 1,356	\$ 377
Other	(28)	(534)	(6)
Total other (income) expense, net	\$ (190)	\$ 822	\$ 371

11. INCOME TAXES

Income (loss) before income tax expense (benefit) consists of the following:

	Years ended December 31,		
	2017	2016	2015
Domestic	\$ 2,468	\$ (1,527)	\$ (144)
Foreign	3,359	14,153	12,950
Income before income taxes	\$ 5,827	\$ 12,626	\$ 12,806

The components of the income tax expense (benefit) for income taxes are as follows:

	Years ended December 31,		
	2017	2016	2015
Current:			
Federal	\$ 18,951	\$ 409	\$ 199
State	507	40	78
Foreign	2,072	3,482	562
Current income tax expense	21,530	3,931	839
Deferred:			
Federal	1,038	(2,357)	88
State	(580)	(229)	9
Foreign	(1,645)	174	(943)
Deferred income tax benefit	(1,187)	(2,412)	(846)
Income tax expense (benefit)	\$ 20,343	\$ 1,519	\$ (7)

Reconciliations of the income tax expense at the U.S. federal statutory income tax rate compared to our actual income tax expense (benefit) are summarized below:

	Years ended December 31,		
	2017	2016	2015
Tax expense at statutory rate of 34%	\$ 1,981	\$ 4,427	\$ 4,354
State income taxes, net of federal benefit	81	(50)	54
Foreign tax rate difference	(2,057)	(1,939)	(3,708)
Research and development credit	(1,037)	(917)	(853)
Change in valuation allowance	678	162	(28)
Equity based compensation	33	(255)	54
Manufacturing credit	(191)	(61)	11
Permanent impact of non-deductible cost	766	412	(14)
Provision to return adjustments	777	(61)	(59)
Impact of Tax Cuts and Jobs Act of 2017	19,355	—	—
Other	(43)	(199)	182
Income tax expense (benefit)	\$ 20,343	\$ 1,519	\$ (7)

The components of our net deferred income tax asset and liabilities are as follows:

	As of December 31,	
	2017	2016
Net deferred income tax asset - Non-current		
Warranty cost	\$ 695	\$ 1,121
Inventory reserve	419	456
Unearned service revenue	5,364	7,088
Employee stock options	4,366	4,501
Tax Credits	1,785	2,035
Loss carryforwards	8,782	8,005
Other, net	1,479	1,213
Total deferred tax assets	22,890	24,419
Valuation Allowance	(1,631)	(876)
Total deferred tax assets net of valuation allowance	21,259	23,543
Net deferred income tax liability - Non-current		
Bad debt reserve	(2)	(159)
Depreciation	(3,675)	(6,799)
Goodwill	(1,574)	(2,279)
Intangible assets	(1,097)	(1,409)
Total deferred tax liabilities	(6,348)	(10,646)
Net deferred tax assets	\$ 14,911	\$ 12,897

On December 22, 2017, the United States enacted the Tax Cuts Act, resulting in significant modifications to existing law. We follow the guidance in SEC Staff Accounting Bulletin 118 (“SAB 118”), which provides additional clarification regarding the application of ASC Topic 740 in situations where a company does not have the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting for certain income tax effects of the Tax Cuts Act for the reporting period in which the Tax Cuts Act was enacted. SAB 118 provides for a measurement period beginning in the reporting period that includes the Tax Cuts Act’s December 2017 enactment date and ending when we have obtained, prepared, and analyzed the information needed in order to complete the accounting for such income tax effects, but in no circumstances will the measurement period extend beyond one year from the enactment date.

Under the Tax Cuts Act, changes include lowering the statutory corporate tax rate from 35% to 21%, eliminating certain deductions, imposing a mandatory tax on accumulated earnings in foreign subsidiaries, introducing new tax regimes, and changing how foreign earnings are subject to United States taxation. The statutory corporate tax rate reduction is effective for tax years beginning on or after January 1, 2018. Based on our best estimate, we have calculated the impact of the Tax Cuts Act in our current year-end provision in accordance with our understanding of the Tax Cuts Act and available guidance. As a result, we recorded an amount of \$19.4 million as an additional income tax expense in the fourth quarter of 2017, the period in which the legislation was enacted. The portion of this provisional amount that related to the transition tax on the mandatory deemed repatriation of foreign earnings was \$17.4 million based on our best estimate and guidance available as of the date of this filing. Additional work is necessary to perform a more detailed analysis of historical foreign earnings. Upon gathering all necessary data, interpreting any additional guidance from tax authorities, and completing the analysis, our provisional amount will be adjusted in the measurement period allowable in accordance with SAB 118. Our provisional amount relating to the transition tax may materially differ upon completing the analysis compared to the amount accrued as of December 31, 2017. The portion of the amount that related to the remeasurement of certain deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future was \$2.0 million.

Our domestic entities had deferred income tax assets in the amount of \$7.7 million and \$7.8 million as of December 31, 2017 and December 31, 2016, respectively. At December 31, 2017 and 2016, our foreign subsidiaries had deferred tax assets primarily relating to net operating losses of \$7.9 million and \$6.4 million, respectively, some of which expire in the next 1 to 9 years and others which can be carried forward indefinitely. The valuation allowance for deferred tax assets as of December 31, 2017 and 2016 was \$1.6 million and \$0.9 million, respectively. The net change in the total valuation allowance for each of the years ended December 31, 2017, 2016 and 2015 was a \$0.7 million and a \$0.1 million increase, and \$1.0 million decrease, respectively.

The valuation allowance as of December 31, 2017 and 2016 was primarily related to foreign net operating loss carryforwards that, in the judgment of management, were not more likely than not to be realized. In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets depends on the generation of future taxable income during the periods in which those temporary differences are deductible. Management considers the scheduled reversal of deferred tax liabilities (including the impact of available carryback and carryforward periods), projected taxable income, and tax-planning strategies in making this assessment.

Significant judgment is required in determining our worldwide provision for income taxes. In the ordinary course of a global business, there are many transactions for which the ultimate tax outcome is uncertain. We review our tax contingencies on a regular basis and make appropriate accruals as necessary.

We file income tax returns in the U.S. federal jurisdiction and various state and foreign jurisdictions. The table below summarizes the open tax years and ongoing tax examinations in major jurisdictions as of December 31, 2017:

Jurisdiction	Open Years	Examination in Process
United States - Federal Income Tax	2014-2017	N/A
United States - various states	2013-2017	2014-2016
Germany	2013-2017	N/A
Switzerland	2017	N/A
Singapore	2013-2017	N/A

We recognize accrued interest and penalties related to unrecognized tax benefits in income tax expense. The total amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate is not material. We do not currently anticipate that the total amount of unrecognized tax benefits will result in material changes to our financial position. We are subject to income taxes at the federal, state and foreign country level. Our tax returns are subject to examination at the U.S. federal level from 2014 forward and at the state level are subject to a three to four year statute of limitations depending on the state.

12. COMMITMENTS AND CONTINGENCIES

Leases – We lease buildings and equipment under non-cancellable operating leases through 2026. Some of these leases include cost-escalation clauses. Such cost-escalation clauses are recognized on a straight-line basis over the lease term. The following is a schedule of future minimum lease payments required under non-cancelable operating leases with initial terms in excess of one year, in effect at December 31, 2017:

Years ending December 31,	Amount
2018	\$ 6,563
2019	4,925
2020	3,123
2021	1,251
2022	1,213
Thereafter	3,564
Total future minimum lease payments	\$ 20,639

Rent expense for 2017, 2016, and 2015 was \$7.5 million, \$7.7 million and \$6.9 million, respectively.

Purchase Commitments — We enter into purchase commitments for products and services in the ordinary course of business. These purchases generally cover production requirements for 60 to 120 days as well as materials necessary to service customer units through the product lifecycle and for warranty commitments. As of December 31, 2017, we had approximately \$53.3 million in purchase commitments that are expected to be delivered within the next 12 months. To ensure adequate component availability in preparation for new product introductions, as of December 31, 2017, we also had \$0.7 million in long-term commitments for purchases to be delivered after 12 months.

Legal Proceedings — We are not involved in any legal proceedings other than routine litigation arising in the normal course of business, none of which we believe will have a material adverse effect on our business, financial condition or results of operations.

13. STOCK COMPENSATION PLANS

We have two compensation plans that provide for the granting of stock options and other share-based awards to key employees and non-employee members of the Board of Directors. The 2009 Equity Incentive Plan ("2009 Plan"), and the 2014 Equity Incentive Plan ("2014 Plan") provide for granting options, restricted stock, restricted stock units or stock appreciation rights to employees and non-employee directors.

We were authorized to grant awards for up to 1,781,546 shares of common stock under the 2009 Plan, as well as any shares underlying awards outstanding under our 2004 Equity Incentive Plan (the "2004 Plan") as of the effective date of the 2009 Plan that thereafter terminated or expired unexercised or were canceled, forfeited or lapsed for any reason. There were 390,351 options outstanding at December 31, 2017 under the 2009 Plan at exercise prices between \$35.90 and \$57.54. The options outstanding under the 2009 Plan have a 10-year term (7 years on grants beginning in 2010) and vest over a 3-year period.

In May 2014, our shareholders approved the 2014 Plan authorizing us to grant awards for up to 1,974,543 shares of common stock, as well as any shares underlying awards outstanding under the 2004 Plan and 2009 Plan as of the effective date of the 2014 Plan that thereafter terminate or expire unexercised or are canceled, forfeited or lapse for any reason. There were 766,912 options outstanding at December 31, 2017 under the 2014 Plan at exercise prices between \$29.98 and \$59.97. The options outstanding under the 2014 Plan have a 7-year term and generally vest over a 3-year period. No awards were outstanding under the 2004 Plan as of December 31, 2017, and we will not make any further grants under the 2004 Plan or the 2009 Plan.

Upon election to the Board, each non-employee director receives an initial equity grant of shares of restricted common stock with a value equal to \$100,000, calculated using the closing share price on the date of the non-employee director's election to the Board. The initial restricted stock grant vests on the third anniversary of the grant date, subject to the non-employee director's continued membership on the Board. Annually, the non-employee directors are granted restricted shares equal to 50% of their compensation on the first business day following the annual meeting of shareholders, calculated using the closing price of our common stock on that day. The shares of restricted stock vest on the day prior to the following year's annual meeting date, subject to a non-employee director's continued membership on the Board. We record compensation cost associated with our restricted stock grants on a straight-line basis over the vesting term.

Annually, upon approval by our Compensation Committee, we grant stock options and restricted stock units to certain employees. We also grant stock options and restricted stock units to certain new employees throughout the year. Prior to 2016, these awards vested in three equal annual installments beginning one year after the grant date. The fair value of these stock-based awards is determined by using (a) the current market price of our common stock on the grant date in the case of restricted stock units or (b) the Black-Scholes option valuation model in the case of stock options.

In 2015, we granted performance-based stock options and restricted stock units to certain executives. These awards vest in three annual installments beginning one year after the grant date if the applicable performance measures or strategic objectives are achieved. The related stock-based compensation expense is recognized over the requisite service period, taking into account the probability that we will satisfy the performance measures or strategic objectives. In addition to certain strategic objectives, the performance-based stock options and restricted stock units granted in 2015 are earned and vest based on (1) our achievement of specified revenue and EPS targets, and (2) our total shareholder return ("TSR") relative to the TSR attained by companies within our defined peer group.

Due to the TSR presence in certain performance-based grants, the fair value of these awards is determined using the Monte Carlo Simulation valuation model. We expense these market condition awards over the three-year vesting period regardless of the value that the award recipients ultimately receive. In February 2017, our Compensation Committee determined the number of performance-based stock options and restricted stock units that were earned for the 2016 performance period. Based on the performance and strategic objectives achieved in 2016, 8,590 stock options and 300 restricted stock units were earned and vested and 20,388 stock options and 604 restricted stock units were determined to be unearned, as the required metrics were not achieved.

We did not grant performance-based stock options and restricted stock units to our employees during 2017. Instead, our annual grant in March 2017 consisted of stock options and restricted stock units that are subject to only time-based vesting. The number of stock options and restricted stock units granted was based on the employee's individual objectives, performance against operational metrics assigned to the employee, and overall contribution over the last year. The restricted stock unit awards vest in full on the three-year anniversary of the grant date. The stock options vest in three equal annual installments beginning one year after the grant date. The fair value of these stock-based awards is determined by using (a) the current market price of our common stock on the grant date in the case of restricted stock units or (b) the Black-Scholes option valuation model in the case of stock options.

The Black-Scholes option valuation model incorporates assumptions as to stock price volatility, the expected life of options or awards, a risk-free interest rate and dividend yield. The weighted-average grant-date fair value of the stock options that were granted during the years ended December 31, 2017, 2016, and 2015 and valued using the Black-Scholes option valuation model was \$14.51, \$12.90 and \$15.08 per option, respectively. For stock options granted during the years ended December 31, 2017, 2016, and 2015 valued using the Black-Scholes option valuation model, we used the following assumptions:

	Years ended December 31,		
	2017	2016	2015
Risk-free interest rate	1.88% - 2.02%	1.06% - 1.57%	0.80% - 1.21%
Expected dividend yield	—%	—%	—%
Expected option life	5 years	4 years	3 years
Expected volatility	45.2%	45.0% - 47.0%	42.3% - 48.5%
Weighted-average expected volatility	45.2%	46.1%	43.5%

Historical information was the primary basis for the selection of the expected dividend yield, expected volatility and the expected lives of the options. The risk-free interest rate was based on the yields of U.S. zero coupon issues and U.S. Treasury issues, with a term equal to the expected life of the option being valued.

There were no market condition awards granted during the years ended December 31, 2017 and 2016 and, as such, the Monte Carlo Simulation valuation model was not used to determine the fair value of the stock options and restricted stock units granted during 2017. In 2015, we granted performance-based stock options and restricted stock units which included the presence of a market condition and were valued using the Monte Carlo Simulation model. This valuation model incorporates assumptions as to stock price volatility, the expected life of options or awards, a risk-free interest rate and dividend yield. The assumptions used to estimate the fair value of the performance-based stock options and restricted stock units granted during 2015 and valued under the Monte Carlo Simulation model were as follows:

	Years Ended December 31,		
	2017	2016	2015
Risk-free interest rate	—%	—%	0.95% - 1.48%
Expected dividend yield	—%	—%	—%
Expected option life	—	—	4 years
Expected volatility	—%	—%	44.5%
Weighted-average expected volatility	—%	—%	44.5%

A summary of stock option activity and weighted average exercise prices follows:

	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value as of December 31, 2017
Outstanding at January 1, 2017	1,090,160	\$ 48.02		
Granted	267,794	34.75		
Forfeited	(84,591)	44.39		
Exercised	(96,212)	37.05		
Unearned performance-based options	(20,388)	59.97		
Outstanding at December 31, 2017	1,156,763	\$ 45.93	4.3	\$ 7,082
Options exercisable at December 31, 2017	914,941	\$ 42.20	2.3	\$ 2,369

The aggregate intrinsic value of stock options exercised during the years ended December 31, 2017, 2016, and 2015 was \$1.2 million, \$1.7 million and \$1.7 million, respectively. The total fair value of stock options vested during the years ended December 31, 2017, 2016 and 2015 was \$4.1 million, \$3.8 million and \$3.9 million, respectively.

The following table summarizes the restricted stock and restricted stock unit activity and weighted average grant-date fair values for the year ended December 31, 2017:

	Shares	Weighted-Average Grant Date Fair Value
Non-vested at January 1, 2017	150,682	\$ 33.39
Granted	155,975	35.79
Forfeited	(26,855)	33.95
Vested	(21,706)	34.55
Unearned performance-based awards	(604)	52.83
Non-vested at December 31, 2017	257,492	\$ 34.75

We recorded total stock-based compensation expense associated with our stock incentive plans of \$6.5 million, \$5.4 million and \$4.3 million in 2017, 2016 and 2015, respectively.

As of December 31, 2017, there was \$9.4 million in total unrecognized stock-based compensation expense related to non-vested stock-based compensation arrangements. The expense is expected to be recognized over a weighted average period of 1.9 years.

14. (LOSS) EARNINGS PER SHARE

Basic (loss) earnings per share is computed by dividing net income by the weighted average number of shares outstanding. Diluted earnings per share is computed by also considering the impact of potential common stock on both net income and the weighted average number of shares outstanding. Our potential common stock consists of employee stock options, restricted stock, restricted stock units and performance-based awards. Our potential common stock is excluded from the basic earnings per share calculation and is included in the diluted earnings per share calculation when doing so would not be anti-dilutive. Performance-based awards are included in the computation of diluted earnings per share only to the extent that the underlying performance conditions (and any applicable market condition) (i) are satisfied as of the end of the reporting period or (ii) would be considered satisfied if the end of the reporting period were the end of the related contingency period and the result would be dilutive under the treasury stock method. When we report a loss for the period presented, the diluted loss per share calculation does not include our potential common stock as the inclusion of these shares in the calculation would have an anti-dilutive effect. A reconciliation of the number of common shares used in the calculation of basic and diluted (loss) earnings per share is presented below:

	Years Ended December 31,					
	2017		2016		2015	
	Shares	Per-Share Amount	Shares	Per-Share Amount	Shares	Per-Share Amount
Basic (loss) earnings per share	16,711,534	\$ (0.87)	16,654,786	\$ 0.67	17,288,665	\$ 0.74
Effect of dilutive securities	—	—	26,924	—	100,808	—
Diluted (loss) earnings per share	16,711,534	\$ (0.87)	16,681,710	\$ 0.67	17,389,473	\$ 0.74
Securities excluded from the determination of weighted average shares for the calculation of diluted (loss) earnings per share, as they were potentially antidilutive	1,049,563		1,046,947		870,421	

15. EMPLOYEE RETIREMENT BENEFIT PLAN

We maintain a 401(k) defined contribution retirement plan for our eligible U.S. employees. Costs charged to operations in connection with the 401(k) plan during 2017, 2016, and 2015 aggregated \$1.7 million, \$1.4 million, and \$1.3 million, respectively.

16. SEGMENT REPORTING

We have three reportable segments: Factory Metrology, Construction BIM-CIM, and Other. These segments are based upon the vertical markets that we currently serve. Business activities that do not meet the criteria to be reportable segments are aggregated in the Other category.

We develop, manufacture, market, support and sell CAD-based quality assurance products integrated with CAD-based inspection and statistical process control software, and three-dimensional documentation systems in each of these reportable segments. These activities represent more than 99% of consolidated sales.

Our Chief Operating Decision Maker (CODM), our Chief Executive Officer, evaluates segment performance and allocates resources based upon profitable growth. We use segment profit to evaluate the performance of our reportable segments. Segment profit is calculated as gross profit, net of selling and marketing expenses, for the reporting segment. Our definition of segment profit may not be comparable to similarly titled measures reported by other companies.

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The following tables present information about our reportable segments for the years ended December 31, 2017, 2016, and 2015:

	Factory Metrology	Construction BIM-CIM	Other	Total
2017				
Net sales to external customers	\$ 245,114	\$ 86,349	\$ 29,454	\$ 360,917
Segment profit	\$ 78,857	\$ 21,077	\$ 1,159	\$ 101,093
General and administrative				43,807
Depreciation and amortization				16,588
Research and development				35,376
Income from operations				\$ 5,322

	Factory Metrology	Construction BIM-CIM	Other	Total
2016				
Net sales to external customers	\$ 236,313	\$ 65,056	\$ 24,215	\$ 325,584
Segment profit	\$ 73,656	\$ 14,799	\$ 9,635	\$ 98,090
General and administrative				40,813
Depreciation and amortization				13,868
Research and development				30,125
Income from operations				\$ 13,284

	Factory Metrology	Construction BIM-CIM	Other	Total
2015				
Net sales to external customers	\$ 222,745	\$ 70,849	\$ 23,954	\$ 317,548
Segment profit	\$ 63,463	\$ 16,299	\$ 7,637	\$ 87,399
General and administrative				36,370
Depreciation and amortization				11,217
Research and development				26,690
Income from operations				\$ 13,122

Net sales to external customers is based upon the geographic location of the customer.

	For the Years Ended December 31,		
	2017	2016	2015
Net sales to external customers			
United States	\$ 141,595	\$ 133,924	\$ 131,670
Americas-Other	13,531	11,815	11,718
Germany	49,860	44,041	41,151
Europe-Other	65,201	57,710	62,032
Japan	35,270	32,530	24,018
Asia-Other	55,460	45,564	46,959
	<u>\$ 360,917</u>	<u>\$ 325,584</u>	<u>\$ 317,548</u>

Long-lived assets consist primarily of property, plant, and equipment, goodwill, and intangible assets, and are attributed to the geographic area in which they are located or originated, as applicable.

	As of December 31,		
	2017	2016	2015
Long-Lived Assets			
United States	\$ 54,703	\$ 54,157	\$ 39,973
Americas-Other	13,834	13,486	9,447
Germany	26,611	23,734	24,637
Europe-Other	9,124	6,949	1,146
Japan	558	460	517
Asia-Other	2,246	1,915	2,582
	<u>\$ 107,076</u>	<u>\$ 100,701</u>	<u>\$ 78,302</u>

17. BUSINESS COMBINATIONS

In April 2017, we completed the acquisition of substantially all of the assets of Instrument Associates, LLC d/b/a Nutfield Technology (“Nutfield”), a component technology business located in Hudson, New Hampshire, which specializes in the design and manufacture of advanced galvanometer-based optical scanners, scan heads and laser kits, for a total purchase price of approximately \$5.5 million. This acquisition supports our long-term strategy to expand our presence in key markets and improve our existing product lines with innovative technology. The results of the acquired business’ operations as of and after the date of acquisition have been included in our consolidated financial statements for the year ended December 31, 2017.

In December 2016, we acquired MWF-technology, GmbH (“MWF”) for a purchase price, net of cash acquired, of approximately \$6.6 million, paid with cash on hand. MWF, an innovator in mobile augmented reality solutions located near Frankfurt, Germany, provides technology that enables large, complex 3D CAD data to be transferred to a tablet device for use in mobile visualization and comparison to real world conditions. This enables real time, actionable manufacturing insight for in-process inspection, assembly, guidance and positioning.

In August 2016, we acquired Laser Projection Technologies, Inc. (“LPT”) for a purchase price, net of cash acquired, of approximately \$17.2 million, paid with cash on hand. LPT, located in Londonderry, New Hampshire, specializes in laser projection and measurement systems used throughout manufacturing environments around the globe to maximize productivity and efficiency. The acquisition enhances our portfolio of 3D measurement solutions and supports our long-term strategy to expand our presence in key markets.

In July 2016, we acquired BuildIT Software & Solutions Ltd. (“BuildIT”) for a purchase price, net of cash acquired, of approximately \$3.9 million, paid with cash on hand. BuildIT, a software solutions business located in Montreal, Canada, specializes in process-configurable 3D metrology software solutions with hardware agnostic interfaces. The addition of BuildIT enhances our metrology portfolio, providing customers greater software options to use in a variety of applications to reduce inspection and assembly times and increase productivity.

The acquisitions of Nutfield, MWF, LPT, and BuildIT constitute business combinations as defined by FASB ASC Topic 805, *Business Combinations*. Accordingly, the assets acquired and liabilities assumed were recorded at their fair values on the date of acquisition.

Following is a summary of our allocations of the purchase price to the fair values of the assets acquired and liabilities assumed as of the date of each acquisition:

	BuildIt	LPT	MWF	Nutfield
Accounts receivable	\$ 237	\$ 54	\$ 150	\$ 160
Inventory	—	322	—	539
Other assets	36	160	666	96
Deferred income tax assets	—	1,112	—	131
Intangible assets	1,015	5,474	1,816	2,329
Goodwill (1)	3,393	11,922	5,364	2,357
Accounts payable and accrued liabilities	(95)	(747)	(700)	(12)
Other liabilities	(471)	(1,086)	(345)	(104)
Deferred income tax liabilities	(205)	—	(364)	—
Total purchase price, net of cash acquired	\$ 3,910	\$ 17,211	\$ 6,587	\$ 5,496

- (1) The goodwill arising from the acquisitions consists largely of the expected synergies from combining operations as well as the value of the workforce. A portion of the goodwill is expected to be tax deductible for both the LPT and Nutfield acquisitions.

Following are the details of the purchase price allocated to the intangible assets acquired for the acquisitions noted above:

	BuildIt		LPT		MWF		Nutfield	
	Amount	Weighted Average Life	Amount	Weighted Average Life	Amount	Weighted Average Life	Amount	Weighted Average Life
Trade name	\$ 346	7	\$ 64	1	\$ 36	1	\$ 29	1
Non-competition agreement	31	5	—	0	3	2	144	5
Technology	361	7	4,260	7	951	5	1,970	10
Customer relationships	277	7	1,150	7	826	5	95	10
Favorable in-place lease	—	0	—	0	—	0	91	12
Fair value of intangible assets acquired	\$ 1,015	7	\$ 5,474	7	\$ 1,816	5	\$ 2,329	10

The goodwill for the Nutfield acquisition has been allocated to the Factory Metrology reporting segment. The goodwill for the BuildIT, LPT and MWF acquisitions was allocated to the appropriate operating segments using the relative fair value approach in 2016. Acquisition and integration costs are not included as components of consideration transferred, but are recorded as expense in the period in which such costs are incurred. To date, we have incurred approximately \$0.9 million in acquisition and integration costs for the BuildIT, LPT, MWF and Nutfield acquisitions. Pro forma financial results for BuildIT, LPT, MWF and Nutfield have not been presented because the effects of these transactions, individually and in the aggregate, were not material to our consolidated results of operations.

18. QUARTERLY RESULT OF OPERATIONS (UNAUDITED)

Quarter ended	March 31, 2017	June 30, 2017	September 30, 2017	December 31, 2017
Sales	\$ 81,562	\$ 82,682	\$ 90,250	\$ 106,423
Gross profit	43,749	46,760	52,034	62,094
Net (loss) income	(1,461)	(3,625)	1,628	(11,058)
Net (loss) income per share:				
Basic	\$ (0.09)	\$ (0.22)	\$ 0.10	\$ (0.66)
Diluted	\$ (0.09)	\$ (0.22)	\$ 0.10	\$ (0.66)

Quarter ended	March 31, 2016	June 30, 2016	September 30, 2016	December 31, 2016
Sales	\$ 75,748	\$ 78,538	\$ 79,600	\$ 91,698
Gross profit	42,671	43,934	42,678	48,677
Net income	3,080	3,392	1,090	3,545
Net income per share:				
Basic	\$ 0.19	\$ 0.20	\$ 0.07	\$ 0.21
Diluted	\$ 0.19	\$ 0.20	\$ 0.07	\$ 0.21

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

None.

ITEM 9A. CONTROLS AND PROCEDURES.

Evaluation of Disclosure Controls and Procedures

We conducted an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2017. Disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) are designed to provide reasonable assurance that information required to be disclosed in our reports filed under the Exchange Act, such as this Annual Report on Form 10-K, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures also include, without limitation, controls and procedures that are designed to provide reasonable assurance that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

The evaluation of our disclosure controls and procedures included a review of the control objectives and design, our implementation of the controls and the effect of the controls on the information generated for use in this Annual Report on Form 10-K. In conducting this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures, as defined by Rule 13a-15(e) under the Exchange Act, were effective as of December 31, 2017 to provide reasonable assurance that information required to be disclosed in this Annual Report on Form 10-K was recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and was accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting that occurred during the quarter ended December 31, 2017 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act). Internal control over financial reporting is the process designed under the Chief Executive Officer's and the Chief Financial Officer's supervision, and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States.

There are inherent limitations in the effectiveness of internal control over financial reporting, including the possibility that misstatements may not be prevented or detected. Accordingly, an effective control system, no matter how well designed and operated, can provide only reasonable assurance of achieving the designed control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2017, as required by Exchange Act Rule 13a-15(c). In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in the 2013 *Internal Control - Integrated Framework*. Based on our assessment under the framework in 2013 *Internal Control - Integrated Framework*, management concluded that our internal control over financial reporting was effective as of December 31, 2017.

Grant Thornton LLP, the independent registered public accounting firm that audited our consolidated financial statements and internal control over financial reporting, has issued an attestation report on our internal control over financial reporting as of December 31, 2017, which appears below.

FARO Technologies, Inc.
Lake Mary, Florida

February 21, 2018

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders
FARO Technologies, Inc. and Subsidiaries

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of FARO Technologies, Inc. (a Florida corporation) and subsidiaries (the “Company”) as of December 31, 2017, based on criteria established in the 2013 *Internal Control— Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in the 2013 *Internal Control— Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the consolidated financial statements of the Company as of and for the year ended December 31, 2017, and our report dated February 21, 2018 expressed an unqualified opinion on those financial statements.

Basis for opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and limitations of internal control over financial reporting

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

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ GRANT THORNTON LLP

Orlando, Florida
February 21, 2018

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

The information required by this Item with respect to directors and executive officers is incorporated herein by reference to the information under the headings "Election of Directors" and "Executive Officers" contained in our definitive proxy statement for our 2018 Annual Meeting of Shareholders, which we refer to as the Proxy Statement.

The information required by this Item regarding compliance with Section 16(a) of the Exchange Act appears under the heading "Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement and is incorporated herein by reference.

The information required by this Item with respect to corporate governance and our Code of Ethics is incorporated herein by reference to the information contained in the Proxy Statement under the heading "Corporate Governance and Board Matters."

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this Item regarding executive compensation is incorporated herein by reference to the information contained in the Proxy Statement under the headings "Executive Compensation" and "2017 Director Compensation."

The information required by this Item regarding Compensation Committee interlocks and insider participation is incorporated herein by reference to the information contained in the Proxy Statement under the heading "Corporate Governance and Board Matters."

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

The information required by this Item regarding security ownership of certain beneficial owners and management and related stockholder matters is incorporated herein by reference to the information contained in the Proxy Statement under the headings "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information."

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The information required by this Item about certain relationships and related transactions appears under the heading "Certain Relationships and Related Transactions" in the Proxy Statement and is incorporated herein by reference.

The information required by this Item regarding director independence is incorporated herein by reference to the information contained in the Proxy Statement under the heading "Corporate Governance and Board Matters."

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.

The information required by this Item about principal accounting fees and services as well as related pre-approval policies appears under the heading "Independent Public Accountants" in the Proxy Statement and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES.

(a) (1) Financial Statements.

The following consolidated financial statements required by this item are included in Part II, Item 8 of this Annual Report on Form 10-K under the caption “Financial Statement and Supplementary Data”:

Consolidated Balance Sheets

Consolidated Statements of Operations

Consolidated Statements of Comprehensive Income (Loss)

Consolidated Statements of Shareholders’ Equity

Consolidated Statements of Cash Flows

Notes to Consolidated Financial Statements

Reports of Independent Registered Public Accounting Firm

(2) Financial Statement Schedules.

All financial statement schedules have been omitted as they are either not required or not applicable, or the required information is otherwise included in our consolidated financial statements or the notes thereto.

(b) Exhibits. The exhibits listed in the accompanying Exhibit Index are filed or incorporated by reference as part of this Annual Report on Form 10-K.

EXHIBIT INDEX

Exhibit No.	Description
2.1	Stock Purchase Agreement, dated as of August 26, 2016, by and among FARO Technologies, Inc., Laser Projection Technologies, Inc., each of the shareholders of Laser Projection Technologies, Inc. and Steven P. Kaufman in the capacity of the Seller Representative (Filed as Exhibit 2.1 to Registrant's Current Report on Form 8-K filed August 30, 2016, and incorporated herein by reference)**
3.1	Amended and Restated Articles of Incorporation, as amended (Filed as Exhibit 3.1 to Registrant's Registration Statement on Form S-1/A filed September 10, 1997, No. 333-32983, and incorporated herein by reference)
3.2	Amended and Restated Bylaws (Filed as Exhibit 3.1 to Registrant's Current Report on Form 8-K, filed February 3, 2010, and incorporated herein by reference, SEC File No. 000-23081)
4.1	Specimen Stock Certificate (Filed as Exhibit 4.1 to Registrant's Registration Statement on Form S-1/A, filed September 10, 1997, No. 333-32983, and incorporated herein by reference)
10.1	Amended and Restated 2004 Equity Incentive Plan (Filed as Exhibit 10.1 to Registrant's Form 8-K filed November 24, 2008, and incorporated herein by reference, SEC File No. 000-23081)*
10.2	Amendment to Amended and Restated 2004 Equity Incentive Plan (Filed as Exhibit 10.3 to Registrant's Form 8-K, filed April 8, 2009, and incorporated herein by reference, SEC File No. 000-23081)*
10.3	2009 Equity Incentive Plan (Filed as Appendix A to Registrant's Definitive Proxy Statement on Schedule 14A filed April 15, 2009, and incorporated herein by reference, SEC File No. 000-23081)*
10.4	First Amendment to the 2009 Equity Incentive Plan (Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K, filed April 15, 2011, and incorporated herein by reference, SEC File No. 000-23081)*
10.5	2014 Incentive Plan (Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K, filed June 3, 2014, and incorporated herein by reference)*
10.6	Summary of Director Compensation Program (Filed as Exhibit 10.7 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2015, and incorporated herein by reference)*
10.7	Form of Intellectual Property and Confidentiality Agreement between FARO Technologies, Inc. and new employees (Filed as Exhibit 10.8 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2015, and incorporated herein by reference)
10.8	Form of Stock Option Award Agreement under the 2004 Equity Incentive Plan (Filed as Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 29, 2008, and incorporated herein by reference, SEC file No. 000-23801)*
10.9	Form of Stock Option Award Agreement under the 2009 Equity Incentive Plan (Filed as Exhibit 10.10 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2015, and incorporated herein by reference)*
10.10	Form of performance-based Stock Option Award Agreement under the 2014 Incentive Plan (Filed as Exhibit 10.12 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2015, and incorporated herein by reference)*
10.11	Form of performance-based Restricted Stock Unit Award Agreement under the 2014 Incentive Plan (Filed as Exhibit 10.13 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2015, and incorporated herein by reference)*
10.12	Form of Restricted Stock Unit Award Agreement under the 2014 Incentive Plan (Filed as Exhibit 10.4 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, and incorporated herein by reference)*

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10.13	<u>Form of time-based Stock Option Award Agreement under the 2014 Incentive Plan (Filed as Exhibit 10.15 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, and incorporated herein by reference)*</u>
10.14	<u>Form of Restricted Stock Award Agreement under the 2014 Incentive Plan*</u>
10.15	<u>Employment Agreement between FARO Technologies, Inc. and Joseph Arezone, dated as of April 27, 2016 (Filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K, filed April 29, 2016, and incorporated herein by reference)*</u>
10.16	<u>Amended and Restated Employment Agreement between FARO Technologies, Inc. and Kathleen J. Hall, dated as of April 27, 2016 (Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K filed April 29, 2016, and incorporated herein by reference)*</u>
10.17	<u>Amended and Restated Employment Agreement between FARO Technologies, Inc. and Jody S. Gale, dated as of April 27, 2016 (Filed as Exhibit 10.3 to Registrant's Current Report on Form 8-K filed April 29, 2016, and incorporated herein by reference)*</u>
10.18	<u>Employment Agreement between FARO Technologies, Inc. and Robert E. Seidel, dated December 21, 2016 (Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K filed December 21, 2016, and incorporated herein by reference)*</u>
10.19	<u>FARO Technologies, Inc. Amended and Restated Change in Control Severance Policy, dated as of April 9, 2015 (Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K, filed April 10, 2015 and incorporated herein by reference)*</u>
10.20	<u>Office Flex Lease, dated September 26, 2007, by and between FARO Technologies, Inc. and Sun Life Assurance Company of Canada (Filed as Exhibit 10.15 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2007, and incorporated herein by reference, SEC File No. 000-23801)</u>
10.21	<u>First Amendment to Lease Agreement, dated October 1, 2009, by and between FARO Technologies, Inc. and Sun Life Assurance Company of Canada (Filed as Exhibit 10.27 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2009 and incorporated herein by reference, SEC File No. 000-23801)</u>
10.22	<u>Amended and Restated Lease Agreement, dated October 1, 2009, by and between FARO Technologies, Inc. and Emma Investments, LLC (Filed as Exhibit 10.26 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2009 and incorporated herein by reference, SEC File No. 000-23801)</u>
10.23	<u>First Amendment to Amended and Restated Lease Agreement between Emma Investments, LLC and FARO Technologies, Inc., dated as of May 14, 2014 (Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K filed May 16, 2014 and incorporated herein by reference)</u>
10.24	<u>Agreement of Lease (Amendment and Restatement) between 290 National Road Limited Partnership and FARO Technologies, Inc., dated as of September 9, 2014 (Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K filed September 12, 2014 and incorporated herein by reference)</u>
10.25	<u>Employment Agreement between FARO Technologies, Inc. and Laura Murphy, dated as of July 29, 2015 (Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K, filed July 31, 2015 and incorporated herein by reference)*</u>
10.26	<u>Transition and Separation Agreement between FARO Technologies, Inc. and Laura A. Murphy-Wolf, dated as of March 10, 2016 (Filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K filed March 11, 2016, and incorporated by reference)*</u>
10.27	<u>Assignment and Assumption of Lease, dated April 21, 2017, by and between FARO Technologies, Inc., Instrument Associates, LLC and Century Park, L.L.C.</u>
21.1	<u>List of Subsidiaries</u>
23.1	<u>Consent of Grant Thornton LLP</u>
24.1	<u>Power of Attorney relating to subsequent amendments (included on the signature page(s) of this report).</u>
31-A	<u>Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>

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31-B	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32-A	Certification of the Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32-B	Certification of the Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.1	Properties
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Labels Linkbase Document
101.PRE	XBRL Taxonomy Presentation Linkbase Document

* Indicates management contracts or compensatory plans or arrangements

** Schedules and exhibits are omitted pursuant to Item 601(b)(2) of Regulation S-K. Registrant agrees to furnish supplementally a copy of any omitted schedules or exhibits to the Securities and Exchange Commission upon request.

ITEM 16. FORM 10-K SUMMARY.

None.

SIGNATURES

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

FARO TECHNOLOGIES, INC.

Date: February 21, 2018

By: /s/ Robert Seidel

Robert Seidel, Chief Financial Officer
(Duly Authorized Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated. Each person whose signature appears below constitutes and appoints each of SIMON RAAB, ROBERT SEIDEL AND JODY GALE his or her true and lawful attorney-in-fact and agent, with full power of substitution and revocation, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this report and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, may lawfully do or cause to be done by virtue hereof.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Simon Raab</u> Simon Raab	Chairman of the Board, Director, President and Chief Executive Officer (Principal Executive Officer)	February 21, 2018
<u>/s/ Robert Seidel</u> Robert Seidel	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 21, 2018
<u>/s/ John Caldwell</u> John Caldwell	Director	February 21, 2018
<u>/s/ Lynn Brubaker</u> Lynn Brubaker	Director	February 21, 2018
<u>/s/ Stephen R. Cole</u> Stephen R. Cole	Director	February 21, 2018
<u>/s/ Marvin Sambur</u> Marvin Sambur	Director	February 21, 2018
<u>/s/ John Donofrio</u> John Donofrio	Director	February 21, 2018
<u>/s/ Jeffrey A. Graves</u> Jeffrey A. Graves	Director	February 21, 2018
<u>/s/ Yuval Wasserman</u> Yuval Wasserman	Director	February 21, 2018

**FARO Technologies, Inc. 2014 Incentive Plan
Restricted Stock Award Agreement**

You have been selected to participate in the FARO Technologies, Inc. 2014 Incentive Plan (the "Plan"), as specified below:

Grantee: _____

Grant Date: _____

Number of Shares of Restricted Stock Granted: _____

THIS RESTRICTED STOCK AWARD AGREEMENT (this "Agreement") evidences the grant of shares of restricted stock (the "Restricted Stock") by FARO Technologies, Inc., a Florida corporation (the "Company"), to the Grantee named above, on the date indicated above, pursuant to the provisions of the Plan.

This Agreement and the Plan contain the terms and conditions governing the Restricted Stock. If there is any inconsistency between the terms of this Agreement and the terms of the Plan, the Plan's terms shall completely supersede and replace the conflicting terms of this Agreement. All capitalized terms shall have the meanings ascribed to them in the Plan, unless specifically set forth otherwise herein. The parties hereto agree as follows:

1. Grant of Restricted Stock. The Company hereby grants to the Grantee the number of Shares of Restricted Stock set forth above, subject to the terms and conditions of the Plan and this Agreement.

2. Vesting of Restricted Stock; Forfeiture. The Restricted Stock will vest in full on [the third anniversary of the Grant Date]/[the day prior to the Company's next annual meeting of shareholders]. If the Grantee's service as a director of the Company ceases for any reason prior to the date the Restricted Stock vests, the Restricted Stock that has not yet vested as of the date of such cessation of service will be immediately forfeited without further consideration or any act or action by the Grantee; provided, however, if, prior to the date the Restricted Stock has vested, the Grantee's service as a director of the Company ceases as a result of death or disability (as determined by the Committee), the Committee, in its sole discretion, shall have the right to immediately vest all or any portion of such Restricted Stock, subject to such terms as the Committee, in its sole discretion, deems appropriate.

3. Dividends Paid on Restricted Stock. Except as otherwise provided in this Agreement or the Plan, Grantee is entitled at all times on and after the Grant Date to all the rights of a shareholder with respect to the Restricted Stock, including the right to vote the Shares of Restricted Stock. Any dividends or distributions, including regular cash dividends, payable with respect to outstanding but unvested Restricted Stock, including any Shares or other property or securities distributable as the result of any changes in the Company's capital structure described in Article 15 of the Plan, shall be delivered to, retained and held by the Company subject to the same restrictions, vesting conditions and other terms of this Agreement to which the underlying unvested Restricted Stock is subject. At the time the underlying Restricted Stock vests, the Company shall deliver to the Grantee (without interest) such retained dividends and distributions that relate to the Restricted Stock that has vested. Grantee agrees to execute and deliver to the Company any instruments of assignment that may be necessary to permit transfer to the Company of all or any portion of any dividends or distributions subject to this Section 3 that may be forfeited.

4. Nontransferability of the Restricted Stock. The Shares of Restricted Stock may not be sold, transferred, assigned or otherwise alienated, encumbered or hypothecated by the Grantee, other than by will or the laws of descent and distribution or as otherwise expressly permitted pursuant to the Plan, until they are vested.

5. Escrow. The Shares of Restricted Stock will be held in escrow by the Company, as escrow agent. The Company will give the Grantee a receipt for the Shares held in escrow that will state that the Company holds such Shares in escrow for the Grantee's account, subject to the terms of this Agreement, and the Grantee will give the Company a stock power for such Shares of Restricted Stock duly endorsed in blank which will be used in the event such Shares are forfeited in whole or in part. As soon as practicable after the date a Share of Restricted Stock vests,

such Share will cease to be held in escrow, and the Company will deliver certificate(s) for such number of Shares to the Grantee or, in the case of the Grantee's death, to his or her designated beneficiary or, if no beneficiary has been designated by the Grantee or survives the Grantee, to his or her estate.

6. Powers of the Company Not Affected. The existence of this Award shall not affect in any way the right or power of the Company or its shareholders to make or authorize any or all adjustments, recapitalizations, reorganizations or other changes in the Company's capital structure or its business, or any merger or consolidation of the Company, or any issuance of bonds, debentures, preferred or prior preference stock senior to or affecting the Shares or the rights thereof, or dissolution or liquidation of the Company, or any sale or transfer of all or any part of the Company's assets or business or any other corporate act or proceeding, whether of a similar character or otherwise.

7. Interpretation by Committee. As a condition of the granting of the Restricted Stock, the Grantee agrees, for himself or herself and his or her legal representatives or guardians, that this Agreement shall be interpreted by the Committee and that any interpretation by the Committee of the terms of this Agreement and any determination made by the Committee pursuant to this Agreement shall be final, binding and conclusive.

8. Miscellaneous.

(a) This Agreement and the rights of the Grantee hereunder are subject to all the terms and conditions of the Plan, as the same may be amended from time to time, as well as to such rules and regulations as the Committee may adopt for administration of the Plan. In addition to the restrictions described herein, the Committee shall have the right to impose such restrictions on any Shares acquired pursuant to this Award as it may deem advisable, including, without limitation, restrictions under applicable federal securities laws, under applicable federal and state tax law, under the requirements of any stock exchange or market upon which such Shares are then listed and/or traded, and under any blue sky or state securities laws applicable to such Shares.

(b) It is expressly understood that the Committee is authorized to administer, construe, and make all determinations necessary or appropriate to the administration of the Plan and this Agreement, all of which shall be binding upon the Grantee.

(c) The Grantee agrees to take all steps necessary to comply with all applicable provisions of federal and state securities and tax laws in exercising his or her rights under this Agreement.

(d) This Agreement shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

(e) All obligations of the Company under the Plan and this Agreement shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase of all or substantially all of the business and/or assets of the Company, or the result of a merger, consolidation or otherwise.

(f) The Company may, in its sole discretion, decide to deliver any documents related to current or future participants in the Plan by electronic means. The Grantee hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

(g) To the extent not preempted by federal law, this Agreement shall be governed by, and construed in accordance with, the laws of the State of Florida.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the Grant Date.

FARO TECHNOLOGIES, INC.

By: _____
Name: _____
Title: _____

GRANTEE

Name: _____

ASSIGNMENT AND ASSUMPTION OF LEASE

THIS ASSIGNMENT AND ASSUMPTION OF LEASE (this "Assignment") is dated this 21st day of April, 2017, by and among INSTRUMENT ASSOCIATES, LLC, a New Hampshire limited liability company, d/b/a Nutfield Technology, with an address of One Wall Street, Hudson, New Hampshire 03051 (the "Assignor") and FARO TECHNOLOGIES INC., a Florida corporation, with an address of 250 Technology Park, Lake Mary, FL 32746 Attn: General Counsel (the "Assignee").

RECITALS:

A. Pursuant to a Lease, dated in June 18, 2014, by and between CENTURY PARK, L.L.C., ("Landlord") and Assignor, Landlord leased to Assignor a portion of the property located at One Wall Street, Hudson, Hillsborough County, New Hampshire (as more particularly described as the "Leased Premises" in the Lease). A true, correct and complete copy of the Lease is attached hereto as Exhibit A (the "Lease").

B. Assignor has agreed to assign, and Landlord has consented, to Assignee all of Assignor's rights and obligations as tenant under the Lease to Assignee, and Assignee has agreed to assume all such rights and obligations as of the date set forth below.

NOW, THEREFORE, for and in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

Section 1. Assignment and Transfer. Assignor hereby assigns and transfers to Assignee all of Assignor's right, title and interest in and to the Lease as Tenant effective as of 11:59 pm on the date hereof, including but not limited to the credit to the Assignee for all security deposits held by the Landlord, in a non-interest bearing account in the amount of \$11,956.

Section 2. Assignee Acceptance. Assignee hereby accepts the foregoing Assignment and transfer of the Lease upon the terms and conditions herein contained.

Section 3. Assignor's Indemnity. Assignor hereby indemnifies and holds harmless Assignee from and against any and all claims, losses, liabilities, obligations, damages, costs and expenses (including reasonable attorneys' fees and costs) arising or accruing under the Lease with respect to periods, events or circumstances occurring on or prior to 11:59 p.m. on the date hereof.

Section 4. Assignee's Indemnity. Assignee hereby indemnifies and holds Assignor harmless from and against any and all claims, losses, obligations, liabilities, costs, damages and expenses (including reasonable attorneys' fees and costs) arising or accruing under the Lease

and with respect to periods, events or circumstances occurring from and after 11:59 p.m. on the date of this Agreement.

Section 5. Assumption. Assignee hereby assumes, and agrees to make all payments to the Landlord and to perform and keep all promises, covenants, conditions, obligations and agreements of Assignor under the Lease commencing as of 11:59 p.m. on the date of this Agreement but only to the extent such relate to matters or circumstances arising or accruing after 11:59 p.m. on the date hereof.

Section 6. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

Section 7. Additional Rent. Assignor agrees to pay to Landlord, as Additional Rent under the Lease, the cost of its legal counsel in the preparation of this document and all other work performed by Landlord's legal counsel related thereto.

Section 8. Miscellaneous. This Agreement is governed by and shall be construed in accordance with the laws of the State of New Hampshire without regard to the conflict of laws principles thereof. This Agreement constitutes the entire agreement of the parties hereto with respect to the subject matter hereof. This Agreement may be executed in any number of counterparts, all of which when taken together shall constitute one and the same instrument.

[Remainder of Page Left Intentionally Blank]

Landlord: Centruy Park, L.L.C.
By: /s/ John M. Wolters, Jr.
Name: John M Wolters, Jr.
Title: Manager

Date: April 21, 2017

Assignor: Instrument Associates, LLC (DBA Nutfield Technology)
By: /s/ Roger Roach
Name: Roger Roach
Title: President

Date: April 21, 2017

Assignee: FARO Technologies, Inc.
By: /s/ Robert E. Seidel
Name: Robert E. Seidel
Title: Chief Financial Officer

Date: April 21, 2017

Final

LEASE AGREEMENT

(Multi-Tenant Building/Campus, Triple Net)

CENTURY PARK, L.L.C.

(Landlord)
To

INSTRUMENT ASSOCIATES, LLC
DBA NUTFIELD TECHNOLOGY

(Tenant)

Portion of Building located at One Wall Street

Hudson, New Hampshire

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Exhibit B-2	Tenant's Work
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THIS LEASE AGREEMENT dated as of the ___ day of June, 2014, by and between CENTURY PARK, L.L.C., a New Hampshire limited liability company with an address of c/o Chartwell Properties, LLC, One Wall Street, Hudson, New Hampshire 03051 ("Landlord") and INSTRUMENT ASSOCIATES, LLC, a New Hampshire limited liability company, d/b/a Nutfield Technology, with an address of One Wall Street, Hudson, New Hampshire 03051 ("Tenant").

WITNESSETH:

ARTICLE I - LEASED PREMISES; CONSTRUCTION; LANDLORD LOAN TO TENANT

1.1 Landlord hereby leases to Tenant and Tenant hereby leases from Landlord, upon and subject to the terms and provisions of this Lease, an area of approximately twenty-one thousand three hundred ninety-six 21,396 square feet in total, comprised of approximately nineteen thousand three hundred two 19,302 square feet of industrial space, which is a portion of Unit # S115 and two thousand ninety-four 2,094 square feet of the Building Common Area (defined below), as cross-hatched on the plan attached hereto as Exhibit A-1 (the "Leased Premises"), which area is a part of a building located upon a lot or parcel of land situated at One Wall Street, Hudson, Hillsborough County, New Hampshire, as more particularly described in Exhibit A-2 attached hereto (hereinafter referred to as the "Property"), together with such additions and extensions as Landlord may from time to time designate as included within the building or buildings (the "Building"), which Building is a part of a complex of buildings known as Century Park (the "Campus"). This is a "net, net, net lease" and Tenant shall pay Tenant's Proportionate Shares (defined below) of all expenses incurred in connection with the operation of the Building, the Property and the Campus so that the Base Rent described in Section 4.1 will be entirely "net" to Landlord, except for (a) interest and amortization on mortgages encumbering the fee title at any time and (b) any estate, inheritance, income or personal taxes of Landlord.

1.2 Prior to the Commencement Date (defined below), Tenant will, at Tenant's sole cost and expense, complete the work as provided for on Exhibit B-2 attached hereto and made a part hereof ("Tenant's Work"). Landlord shall provide a "Tenant Improvement Loan" of up to \$25,000.00 for Tenant improvements which shall be reimbursed by Tenant to Landlord, amortized over Tenant's initial five (5) year Lease Term at five percent (5%) per year. In order to pay the Tenant Improvement Loan, Tenant shall make monthly payments to Landlord in the amount of Four Hundred Seventy-one Dollars and Seventy-Eight Cents (\$471.78) per month for sixty (60) consecutive months beginning on September 15, 2014, with the Rent due for the month of October, 2014, and on each succeeding 15th day of the month thereafter until the Tenant Improvement Loan is paid in full.

1.3 All work performed by Tenant shall be performed at Tenant's sole risk and expense and in accordance with good construction practices, applicable legal requirements and insurance requirements. In connection such construction, Tenant agrees to comply with all of Landlord's construction and labor provisions of this Lease, including, but not limited to, the provisions of Article IX.

ARTICLE II- TERM OF LEASE

2.1 Tenant's occupancy of the Leased Premises shall commence on August 1, 2014 (the "Commencement Date") and shall continue for five (5) full Lease Years after the commencement of payment of Rent for the period beginning on October 1, 2014 (the "Rent Commencement Date"), as defined below, and the term shall expire five (5) years after the Rent Commencement Date (the "Original Term"). "Lease Year" means the one-year period beginning on the Rent Commencement Date and each anniversary of the Rent Commencement Date; however, if the Rent Commencement Date is a date other than the first day of the month, then each Lease Year will begin on the first day of the month following the Rent Commencement Date. Rent and any other sums provided in this Lease for which the Lease Year is a factor shall be adjusted and paid on pro rata basis for any partial month prior to the first Lease Year. "Lease Month" means a calendar month beginning on the Rent Commencement Date and at the beginning of each calendar month thereafter; however, if the Rent Commencement Date is a date other than the first day of the month, then the first Lease Month will begin on the first day of the month following the Rent Commencement Date.

2.2 In the event that Tenant fails to vacate the Leased Premises at the end of the Term of this Lease (defined below), or sooner in the event that this Lease is terminated earlier pursuant to the provisions hereof, Tenant acknowledges that such holdover as a month-to-month tenant is not desirable to Landlord and that the Base Rent should be reflective of that undesirability. Tenant further acknowledges that it is aware, and has been so advised by Landlord, in the event that reletting of the Leased Premises will take a period of at least six (6) months after the later of the date that Landlord is certain it will have possession or the date that Tenant actually vacates the Leased Premises. Therefore, if Tenant holds over after the expiration of the Term of this Lease or any exercised option term with or without objection from Landlord, then such holding over will not extend the Term of this Lease, but will create a month-to-month tenancy under the same conditions as this Lease except that Base Rent shall be paid in the amount of one hundred twenty-five percent (125%) of the Base Rent set forth in Section 4.1 hereof and the Additional Rent (defined below) then being paid by Tenant to Landlord for the month immediately prior to the holdover period. Tenant agrees that such increased Rent is not damages or a penalty, but is a negotiated amount of Rent for any month-to-month holdover period, but is compensation for the loss incurred by Landlord, such loss being difficult to actually determine in advance. The payment of such increased Rent shall not limit the damages to which Landlord is entitled hereunder.

ARTICLE III - OPTION TO RENEW

3.1 Tenant shall have the option to renew the Lease at the end of the Term for two (2) additional terms of five (5) years each. Tenant must exercise each renewal term by giving written notice to Landlord at least nine (9) months prior to the commencement of the renewal term. If Tenant fails to exercise an option to renew, then all further options to renew shall expire, and the Lease shall terminate at the end of the then-current Term. The Original Term

and Renewal Terms, if applicable, are collectively hereinafter referred to as either the "Term of this Lease", "Lease Term" or "Term."

ARTICLE IV – RENT

4.1 (a) Tenant shall pay Landlord (at the address specified in Section 27.1 hereof), as base rent ("Base Rent") for the Leased Premises during the Term of this Lease the following:

- (i) August 1, 2014 – September 30, 2014, there shall be no Base Rent payable;
- (ii) October 1, 2014 – March 31, 2015 – monthly Base Rent shall be paid in the amount of Three Thousand Two Hundred Ninety-One Dollars and Sixty-Seven Cents (\$3,291.67);
- (iii) April 1, 2015 – September 30, 2015 – monthly Base Rent shall be paid in the amount of Four Thousand One Hundred Fourteen Dollars and Fifty-Eight Cents (\$4,114.58);
- (iv) October 1, 2015 – March 31, 2016– monthly Base Rent shall be paid in the amount of Five Thousand Nine Hundred Thirty-Three Dollars and Twenty-Three Cents (\$5,933.23);
- (v) April 1, 2016 – September 30, 2016 – monthly Base Rent shall be paid in the amount of Seven Thousand Four Hundred Seventy-One Dollars and Seventy-Six Cents (\$7,471.76);
- (vi) October 1, 2016 – September 30, 2017 – monthly Base Rent shall be paid in the amount of Seven Thousand Six Hundred Ninety-Five Dollars and Ninety-One Cents (\$7,695.91); and
- (vii) For all Lease Years beginning with October 1, 2017, the monthly Base Rent shall be paid based upon the amount of the preceding year Base Rent, PLUS the greater of three percent (3%) or increase in the CPI (defined below) from the beginning of the previous Lease, whichever is greater.

(b) The Base Rent payable by Tenant during each Lease Year, beginning with the Lease year which commences on October 1, 2017, shall increase annually from the previous Lease Year's Base Rent based upon the increase in the CPI, defined below, or three percent (3%) above the Base Rent in the immediately preceding Lease Year, whichever is greater. The increases based on CPI shall be determined by the CPI for the previous Lease Year by a fraction, the numerator of which is the " Consumer Price Index Boston-Brockton-Nashua, MA-NH-ME-CT (1982-84 = 100)", published by the Bureau of Labor Statistics for the United States

Department of Labor (the "CPI") on the first day of the then current Lease Year, and the denominator of which is the CPI on the previous lease year. In no event shall the Base Rent go down in any Lease Year from the previous Lease Year.

4.2 All Rent is payable in advance, without demand, in fixed monthly installments of one twelfth (1/12th) of the then-current annual Base Rent on or before the fifteenth (15th) day of each and every month prior to the month for which the Rent is being paid during the Term hereof. If this Lease begins on any day other than the first (1st) of any calendar month, then the Rent for the first month will be prorated for the number of days in that month that this lease is effective. A similar proration will be made for the end of the Term.

4.3 The Base Rent and all other sums payable by Tenant hereunder shall be referred to as "Rent". For further sums payable by Tenant as Rent (sometimes called "Additional Rent") see the provisions of this Lease Agreement, including, but not limited to, Articles VII, VIII, XI, XV and XX.

4.4 It is understood that the Base Rent, Monthly Estimated Common Area Maintenance Charge, Tenant's Proportionate Share of Real Estate Taxes (hereinafter defined) and Insurance Premiums (hereinafter defined) is payable on or before the fifteenth (15th) day of each and every month prior to the month for which the Rent is being paid without offset or deduction of any nature. In the event such Rent is not received when due or any check tendered to Landlord is returned to Landlord as uncollectible, Tenant shall pay the applicable service charges set forth in this Section 4.4, which Landlord and Tenant agree are a fair and reasonable estimate of the costs to be incurred by Landlord by reason of such late payment. The service charge for a late payment shall be an amount equal to ten percent (10%) of any installment of Rent and other charges past due for more than five (5) business days; provided, however, interest on such past due installment and late payment charge shall accrue at the rate of eighteen percent (18%) per annum after the thirtieth (30th) day such installment is past due until paid. The service charge for a returned check shall be Five Hundred Dollars (\$500). In no event shall the aggregate of the interest to be paid by Tenant, plus any other amounts paid in connection with the transaction evidenced hereby which would under applicable law be deemed "interest", ever exceed the maximum amount of interest which, under applicable law, could be lawfully charged to Tenant hereunder (the "Maximum Rate"). Therefore, none of the terms of this Lease shall ever be construed to create a contract to pay interest at a rate in excess of the Maximum Rate, and Tenant shall not be liable for interest in excess of that determined at the Maximum Rate, and the provisions of this Section shall control all other provisions of this Lease. If any amount of interest taken or received by Landlord shall be in excess of the Maximum Rate, then the excess shall be deemed to have been the result of a mathematical error by Landlord and Tenant and shall be applied by Landlord to Tenant's next installment of Base Rent or other charges owed by Tenant to Landlord or, if this Lease Agreement has terminated and no amounts are due to Landlord, shall be refunded promptly to Tenant.

4.5 Under no circumstances may Tenant be entitled to withhold any Rent or other sums due hereunder, or set off against the same, on account of Landlord's purported failure to perform any of its obligations hereunder.

4.6 Any payment by Tenant or acceptance by Landlord of an amount less than that due under the terms hereof will be treated as a payment on account, regardless of any endorsement appearing on any such check or any statement made by Tenant to the contrary.

4.7 The annual financial statements heretofore delivered to Landlord by Tenant have been prepared in accordance with generally accepted accounting principles, consistently applied, are complete and correct, and fairly present the financial condition and results of the Tenant. There are no material liabilities, direct or indirect, fixed or contingent, of the Tenant which are not reflected therein or in the notes thereto which would be required to be disclosed therein and there has been no material adverse change in the financial condition or operations of the Tenant since the date of such financial statements. The Tenant's assets are free of encumbrances of any nature, except those disclosed in the aforementioned balance sheets and liens permitted under this Agreement.

4.8 (a) Tenant shall furnish Landlord within ninety (90) days after the close of each fiscal year (i) a statement of stockholders' equity and a statement of changes in financial position of Tenant for such fiscal year; (ii) an income statement of Tenant for such fiscal year; and (iii) balance sheets of Tenant as of the end of such fiscal year. All such annual statements shall be prepared in accordance with generally accepted accounting principles consistently applied and shall present fairly the financial position and result of operations of Tenant. The annual financial statements of Tenant shall be prepared on a reviewed basis, by an independent certified public accountant selected by Tenant and reasonably acceptable to Landlord. Landlord shall have the right, from time to time, to discuss the affairs of Tenant directly with Tenant's accountant after consent of Tenant, and opportunity of Tenant to be represented at any such discussions.

(b) Furnish Landlord with such other financial information or reports as Landlord may reasonably request.

ARTICLE V - SECURITY DEPOSIT

5.1 Landlord acknowledges that it is currently holding the sum of Five Thousand Nine Hundred Forty and 13/100 (\$5,940.13) Dollars to be applied as security for the full and faithful performance by Tenant of all the terms of this Lease required to be performed by Tenant. Upon the execution hereof, and prior to the commencement of the Lease Term under Article II hereof, Tenant shall pay an additional sum of Six Thousand Fifteen Dollars and Eighty-Seven Cents (\$6,015.87), for a total sum to be held by Landlord in the amount of Eleven Thousand Nine Hundred Fifty-Six Dollars (\$11,956.00) as security for the full and faithful performance by Tenant of all the terms of this Lease required to be performed by Tenant. Landlord may use,

apply, or retain the whole or any part of the money deposited as security hereunder to the extent required for the payment of any Base Rent and/or Additional Rent or other sum(s) as to which Tenant is in default or for any sum(s) which Landlord may expend or may be required to expend by reason of Tenant's default with respect to any of the conditions of this Lease, including, but not limited to, any damages or deficiency in reletting of the Leased Premises whether such damages or deficiency accrued before or after summary proceedings or other reentry by Landlord. In the event of Landlord's sale or lease of the Leased Premises of which the Leased Premises forms a part, Landlord shall have the right to transfer said security deposit to the purchaser or lessee, and Landlord shall thereupon be released from all liability for the return of such security deposit. In the event of such a transfer, Tenant shall look solely to said transferee for the return of said security deposit. The deposit may be commingled with other funds of Landlord. Tenant shall not assign or encumber the money deposited as security without the prior written consent of Landlord, and Tenant agrees that neither Landlord nor its successors and assigns shall be bound by any such assignment or encumbrance. Tenant agrees that the money deposited as security hereunder will not be used to pay the Rent for the last month of the term hereof without the prior written consent of Landlord. Tenant shall not be entitled to any interest on the money deposited as security hereunder. Subject to the terms of this Section, in the event that Tenant shall comply with all of the terms of this Lease, the money deposited as security hereunder will be returned to Tenant after the term hereof and after delivery of possession of the Leased Premises to Landlord with no sums due to Landlord.

ARTICLE VI - QUIET ENJOYMENT

6.1 Landlord shall put Tenant into possession of the Leased Premises on the Commencement Date, and Tenant, upon paying the Rent and observing the other covenants and conditions herein, upon its part to be observed, shall have peaceful and quiet enjoyment of the Leased Premises. Notwithstanding the provisions of the foregoing sentence, Tenant acknowledges that the Building and the surrounding site shall be under renovation at various times during the term of this Lease, and agrees that, to the fullest extent permitted by applicable law, any such renovation shall not be a violation of Tenant's right of quiet enjoyment, unless such work substantially interferes with the business of the Tenant.

ARTICLE VII - COMMON AREAS OF THE BUILDING AND CAMPUS; MAINTENANCE THEREOF

7.1 The term "Building Common Area" is defined for all purposes of this Lease as that part of the Building intended for the common use of all tenants, including among other facilities (as such may be applicable to the Building) loading areas, sidewalks, lobbies, hallways, lighting facilities, meeting rooms, public toilets, fire suppression system, security system, and the like but excluding space in buildings (now or hereafter existing) designed for rental for commercial purposes, as the same may exist from time to time. Landlord reserves the right to change from time to time the dimensions and location of the Building Common Area. Tenant, its employees and customers, and, when duly authorized pursuant to the provisions of this Lease, its

subtenants, licensees and concessionaires, shall have the nonexclusive right to use the Building Common Area as constituted from time to time. Such use shall be in common with Landlord, other tenants in the Building and other persons permitted by Landlord to use the same, and shall be subject to such reasonable rules and regulations governing use as Landlord may from time to time prescribe. Tenant shall not take any action which would interfere with the rights of other persons to use the Building Common Area. Landlord may temporarily close any part of the Building Common Area for such periods of times as may be necessary to make repairs or alterations or to prevent the public from obtaining prescriptive rights; provided, however, that such closure does not unreasonably interfere with Tenant's access to, or quiet enjoyment of, the Leased Premises. Landlord shall be responsible for the operation, management, and maintenance of the Building Common Area, the manner of maintenance and the expenditures therefor to be in the sole discretion of Landlord, the cost of which shall be a portion of the Common Area Maintenance Charges (defined below).

7.2 The term "Campus Common Area" is defined for all purposes of this Lease as that part of the Campus intended for the common use of all tenants, including among other facilities (as such may be applicable to the Campus) parking areas, private streets and alleys, utilities, landscaping, curbs, sidewalks, fire suppression system, lighting facilities, excluding streets and alleys maintained by a public authority. Landlord reserves the right to change from time to time the dimensions and location of the Campus Common Area, as well as the dimensions, identity and type of any areas in the Campus. Tenant, its employees and customers, and, when duly authorized pursuant to the provisions of this Lease, its subtenants, licensees and concessionaires, shall have the nonexclusive right to use the Campus Common Area as constituted from time to time. Such use shall be in common with Landlord, other tenants in the Campus and other persons permitted by Landlord to use the same, and shall be subject to such reasonable rules and regulations governing use as Landlord may from time to time prescribe, including the designation of specific areas within the Campus or in reasonable proximity to the Leased Premises, in which automobiles owned by Tenant, its employees, subtenants, licensees and concessionaires shall be parked. Tenant shall not take any action which would interfere with the rights of other persons to use the Campus Common Area. Landlord may temporarily close any part of the Campus Common Area for such periods of times as may be necessary to make repairs or alterations or to prevent the public from obtaining prescriptive rights, provided that such closure does not unreasonably interfere with Tenant's access to, or quiet enjoyment of, the Leased Premises. Landlord shall be responsible for the operation, management, and maintenance of the Campus Common Area, the manner of maintenance and the expenditures therefore are to be in the sole discretion of Landlord, the cost of which shall be a portion of the Common Area Maintenance Charges (defined below).

7.3 (a) In addition to Monthly Rent and any other charges prescribed in this Lease, Tenant shall pay to Landlord Tenant's Proportionate Share (defined below) of the cost of ownership, operation and maintenance of the Building Common Area (using Tenant's Building Proportionate Share, defined below), including the Building Common Area, and the Campus Common Area (using Tenant's Campus Proportionate Share, defined below) (including, among

other costs, those for lighting, painting, cleaning, policing, inspecting, repairing, replacing, and removing of snow and ice from the Campus Common Area, and the cost of heating, cooling, water, sewer, electricity, natural gas and other utilities for any lobbies and hallways, and, in the event that the Leased Premises and other areas of the Building which are leased are not separately metered for utilities, the costs of electricity, heating, cooling and other utilities servicing the Building) (collectively, the "Common Areas") which may be incurred by Landlord in its discretion, including the cost of maintaining and repairing all utility mains, lines, conduits and other facilities located on, above or under the Common Area, a reasonable allowance for Landlord's overhead costs, a management fee of five (5%) percent of the total gross rent (Base Rent and all Additional Rent) for all tenants in the Campus and for depreciation of maintenance equipment (collectively, the "Common Area Maintenance Charges").

(b) Excluded from Operating Expenses to the Building, Leased Premises, surrounding buildings and grounds (Premises) are: charges for depreciation of the Premises; or any mortgage debt service; costs of repairs due to total or partial destruction of the Leased Premises which such casualties are insured, unless caused by Tenant, or condemnation of the building; the cost of complying with applicable laws dealing with the handling, storage, and disposal of hazardous substance, including cleanup costs not used or caused by Tenant; compensation for principal of Landlord; attorneys' fees, costs, and disbursements and other expenses incurred in connection with negotiations or disputes with other tenants, other occupants, or prospective tenants and occupants; renovating or otherwise improving, decorating, painting, or redecorating space for other tenants or other occupants of the Premises, exclusive of common areas; expenses in connection with services or other benefits of the type which are not provided Tenant, but which are provided to another tenant or occupant; all items and services for which the Tenant is separately charged, reimburses Landlord or pays third parties; construction or other work performed by Landlord for other tenants, excluding common area, whether or not the Landlord is entitled to reimbursement for the cost of such work; the cost of any items for which Landlord is reimbursed by insurance, condemnation, refund, rebate, or otherwise; any expenses for repair or maintenance to the extent covered by warranties, guaranties and service contracts and for which the Landlord is reimbursed; costs related to maintaining Landlord's existence as a partnership or other entity.

(c) For all purposes in this Lease, the term "Tenant's Building Proportionate Share" shall mean fourteen percent (14%), which is the ratio that the gross square feet of the Leased Premises of nineteen thousand three hundred and two (19,302) square feet bears to the total rentable square feet of the Building, which is one hundred forty thousand eight hundred eighty-five (140,885) square feet. Landlord may adjust, at its option, the Tenant's Building Proportionate Share in the event that the rentable square feet in the Building changes. In the event of such adjustment, Landlord shall give Tenant notice in writing of the new Tenant's Building Proportionate Share which shall become effective on the first (1st) day of the month following the notice.

(d) For all purposes in this Lease, the term "Tenant's Campus Proportionate Share" shall mean five percent (5%), which is the ratio that the gross square feet of the Leased Premises of nineteen thousand three hundred and two (19,302) square feet bears to the total rentable square feet of the Campus of four hundred eleven thousand four hundred nine (411,409) square feet. Landlord shall adjust the Tenant's Campus Proportionate Share in the event that the rentable square feet in the Campus changes. In the event of such adjustment, Landlord shall give Tenant notice in writing of the new Tenant's Campus Proportionate Share which shall become effective on the first (1st) day of the month following the notice.

(e) During each Lease Year, Tenant will pay Landlord a "Monthly Estimated Common Area Maintenance Charge", which Landlord estimates to be, for the remainder of calendar year 2014, Two and 26/100 (\$2.26) Dollars per square foot, which is the monthly amount of Four Thousand Twenty-nine Dollars and Fifty-eight Cents (\$4029.58) Dollars, payable monthly in advance, payable at the same time and place as the Monthly Rent is payable, except, however, if the Lease Term does not begin on the first day of a calendar month, Tenant shall pay a pro rata portion of such sum for such partial month. Landlord shall have the right to adjust such monthly estimate on an annual basis, pursuant to the following paragraph.

(f) At the end of each calendar year occurring during the Term of this Lease (or subsequent to the expiration or other termination of this Lease, if such occurs on a date other than the last day of a calendar year), Landlord will give Tenant notice of the total amount paid by Tenant for the relevant calendar year together with the actual amount of Tenant's Building Proportionate Share and Tenant's Campus Proportionate Share (collectively, "Tenant's Proportionate Shares") of the Common Area Maintenance Charges (the "Total Cost") for such calendar year. If the actual amount of Tenant's Proportionate Shares of the Total Cost with respect to such period exceeds the aggregate amount previously paid by Tenant with respect thereto during such period, Tenant shall pay to Landlord the deficiency within fifteen (15) days following notice from Landlord; however, if the aggregate amount previously paid by Tenant with respect thereto exceeds Tenant's Proportionate Shares of the Total Cost for such period, then, at Landlord's election, such surplus (net of any amount then owing by Tenant to Landlord) shall be credited against the next ensuing installment of any such cost due hereunder by Tenant or against any other amount of Rent owing by Tenant to Landlord hereunder, or Landlord may refund such net surplus to Tenant. Periodically, during the Term of this Lease, Landlord shall have the right to estimate Tenant's Proportionate Shares of Common Area Maintenance Charges for the next fiscal period (determined by Landlord) of the Term of this Lease, whereupon, Tenant shall pay Landlord such amounts as may be so indicated by Landlord in the same manner as the Monthly Estimated Common Area Maintenance Charge. Any information provided to Tenant under this Article VII shall be held in strict confidence by Tenant and shall be returned to Landlord when this Lease terminates. Tenant shall have the right, at Tenant's cost and expense, to examine all Landlord's books and records, documentation and calculations prepared in the determination of Common Area Maintenance Charges. Landlord shall provide a breakdown to Tenant of Operating Expenses and Common Area Maintenance Charges annually.

ARTICLE VIII - CONDITION OF LEASED PREMISES; REPAIRS

8.1 Subject to the terms of Article I of this Lease, Tenant accepts the Building, improvements, and any equipment or fixtures on or in the Leased Premises "as is" and in their existing condition and agrees that no representation, statement or warranty, express or implied, has been made by or on behalf of Landlord as to such condition, or as to the use that may be made of such property.

8.2 If the Leased Premises is now, or at any time during the term of this Lease becomes, a "Public Accommodation" under the Americans with Disabilities Act of 1990 and 1992, as amended (the "ADA"), Tenant shall, at its sole expense, be responsible for (i) compliance with Title III of the ADA to the extent that the ADA imposes obligations on the procedure and design of any alterations to the Leased Premises made by Tenant, and (ii) making modifications in its policies, practices and procedures in connection with the operating of Tenant's business. If a failure to make such modifications constitutes a violation of the ADA, Tenant shall indemnify and hold harmless Landlord with respect to its failure to comply with the foregoing responsibilities. Any work to be performed by Tenant pursuant to this Section 8.2 shall be governed by all the provisions set forth in Section 9.1 below.

8.3 Landlord shall maintain in good repair the structural integrity of the roof, and exterior walls of the Leased Premises, and the structural beams, structural columns and other structural parts of the Leased Premises, and the cost of such amount shall be reimbursed to Landlord as part of the Building Common Area Maintenance Charges. Tenant shall keep, during the term hereof, at its own cost and expense, the interior of the Leased Premises, excluding the structural integrity of the roof and exterior walls, in as good condition as the same was at the commencement of the term hereof, reasonable wear and tear, taking by eminent domain and damage due to fire or casualty insured against excepted. Tenant shall replace, at its own cost and expense, window glass, if any, of the same kind and quality, reasonable wear and tear, taking by eminent domain and damage due to fire or other casualty insured against excepted. Tenant shall replace and/or repair, at its own cost and expense, all light bulbs and lighting fixtures which are damaged, broken or cease to function during the term hereof, with bulbs or fixtures of the same kind and quality. In addition, Tenant shall maintain and repair the HVAC, heat, plumbing and electrical repairs servicing the Leased Premises and shall maintain a quarterly preventative maintenance service contract for the servicing of the HVAC, a copy of which shall be furnished to Landlord; however, Landlord shall be responsible for replacement of the HVAC cost of the full replacement of the Leased Premises for the first five (5) years of this Lease. Thereafter, Tenant shall be responsible for the reimbursement of cost of full replacement of the HVAC servicing the Leased Premises, which shall be amortized over a period of seven (7) years.

8.4 Tenant shall take good care of the Leased Premises and keep the same free from waste at all times. Tenant shall keep the Leased Premises and sidewalks, service-ways and loading areas adjacent to the Leased Premises neat, clean and free from dirt or rubbish at all times, and shall store all trash and garbage within the Leased Premises, arranging for the regular

pick-up of such trash and garbage at Tenant's expense. Removal of garbage and trash shall be made only in the manner and areas prescribed by Landlord. Tenant shall arrange for the regular pick up of trash and refuse at Tenant's expense, unless Landlord provides other refuse service, in which case Tenant shall use such other refuse service and pay the cost of such service as specified by Landlord. Tenant shall not operate an incinerator or burn trash or garbage within the Building or on the Property.

ARTICLE IX - IMPROVEMENTS BY TENANT

9.1 Tenant shall not make or allow to be made any alterations, installations, additions or improvement in or to the Leased Premises, or place safes, vaults or any other heavy furniture or equipment within the Leased Premises, without Landlord prior written consent, which consent shall not be unreasonably withheld or delayed. Any such alterations, additions or improvements to the Leased Premises shall be governed by the following terms:

(a) No such alteration, addition or improvement lessens the fair market value of the Leased Premises or the Building and all such improvements are performed in class and quality at least equal to the original construction work;

(b) All work for any such alteration, addition or improvement shall be performed by a contractor approved by Landlord prior to the commencement of the work, and Landlord shall approve the construction contract which shall be between the Tenant and the approved contractor;

(c) Prior to the commencement of work on any such alteration, addition or improvement, Tenant shall procure, at its own cost and expense, all necessary permits; furthermore, the plans and specifications covering the same will have been submitted to and approved in writing by (i) Landlord, (ii) all municipal or other governmental departments or agencies having jurisdiction over the subject matter thereof, and (iii) any mortgagee having an interest in or lien upon the Leased Premises or the Building if required by the terms of the mortgage, it being understood that Landlord will not unreasonably refuse to join in any application to any such mortgagee or governmental agency to obtain such approval with respect to any reasonable alteration, addition or improvement;

(d) In carrying out all such alterations, additions and improvements, Tenant shall comply with the standards, guidelines and specifications imposed by all municipal or other governmental departments and agencies having jurisdiction over the same, including without limitation, all building codes;

(e) Prior to the commencement of work on any such alteration, addition or improvements, Tenant shall have procured and delivered to Landlord the policy of Builder's Risk insurance hereinafter referred to in Section 21.2 hereof or additional fire and extended coverage insurance as required by Section 21.3 hereof, whichever is applicable;

(f) All work shall be completed promptly and in a good and workman like manner and shall be performed in such a manner that no mechanics, materialmen's or other similar liens shall attach to Tenant's leasehold estate, and in no event shall Tenant permit, or be authorized to permit, any such liens or other claims to be asserted against Landlord or Landlord's rights, estate and interest with respect to the Leased Premises, the Building, or the Property; and at the completion of all work Tenant shall obtain waivers of mechanics and materialmens liens from all persons performing work on or on furnished material to the Leased Premises; and

(g) Any such alteration, addition or improvement made by Tenant pursuant to the terms hereof shall, at the expiration of the term hereof become and remain the property of Landlord, provided, however, that Landlord may, at its option and upon notice to Tenant not less than ninety (90) days prior to such expiration, require Tenant to remove any such alterations, additions, and improvements and to restore the Leased Premises to their condition as at the beginning of the term hereof, reasonable wear and tear, taking by eminent domain and damage due to fire or other casualty insured against excepted.

(h) Any review, approval, consent or supervision of any work done at the Leased Premises by Tenant, including, but not limited to, Tenant's Work, shall not be deemed to impose any liability on either Landlord or its lender.

(i) All work performed by Tenant shall be performed at Tenant's sole risk and expense and in accordance with good construction practices, applicable legal requirements and insurance requirements. In connection such construction, Tenant agrees to comply with all of Landlord's construction and labor provisions of this Lease, including, but not limited to, the provisions of Article IX.

ARTICLE X - MACHINERY AND EQUIPMENT - TRADE FIXTURES

10.1 All alterations, installations, additions or improvements, other than moveable furniture and moveable trade fixtures, made by Tenant to the Leased Premises shall remain upon and be surrendered with the Leased Premises and become the property of Landlord at the expiration or termination of this Lease or the termination of Tenant's right to possession of the Leased Premises; provided, however, that Landlord may require Tenant, at Tenants cost, to remove any and all of such items that are not building standard within ten (10) days following the expiration or termination of this Lease, or the termination of Tenant's right to possession of the Leased Premises. Tenant, at its sole cost and within ten (10) days following the expiration or termination of this Lease, shall remove all of Tenant's property from the Leased Premises. Any such property which may be removed pursuant to the preceding sentence and which is not so removed prior to the expiration or earlier termination of this Lease may be removed from the Leased Premises by Landlord and stored for the account of Tenant; and if Tenant fails to reclaim such property within thirty (30) days following such expiration or earlier termination of this Lease, then such property will be deemed to have been abandoned by Tenant, and may be appropriated, sold, destroyed or otherwise disposed of by Landlord without notice to Tenant and without obligation to account therefor. Tenant shall pay to Landlord the cost incurred by Landlord in removing, storing, selling, destroying or otherwise disposing of any such property.

ARTICLE XI - UTILITIES

11.1 If the utilities, including, but not limited to, gas, oil, electricity, water, light, heat, air conditioning, sewer, power, telephone, fiber and cable are separately provided to the Leased Premises, Tenant shall make arrangements for and pay directly when due all charges. In the event that some or all of said utilities are not separately provided to the Leased Premises, and to the extent it is feasible at a reasonable cost, if able, Landlord shall sub-meter and charge Tenant for the actual utility cost. If Landlord so elects not to sub-meter said utilities, Tenant shall pay to Landlord Tenant's Building Proportionate Share of utilities for the Building. Landlord reserves the right to bill Tenant, and Tenant agrees to pay, according to the utilities used by Tenant to the extent Tenant's usage is disproportionately higher than the usage of other occupants or unoccupied space of the building. Tenant's utility usage to be determined in the sole good faith discretion of the Landlord by check metering, historical data, Tenant's hours of operation, Tenant's use, Tenant's number of employees, or any other reasonable methods. Tenant shall pay promptly the utilities invoices with the next payment of Base Rent when due. Landlord shall not be liable for any failure of water supply or electric current or of any service by any utility; or injury to persons (including death) or damage to property resulting from steam, gas, electricity, water, rain or snow which may flow or leak from any part of the Leased Premises or from any pipes, appliances or plumbing works, on the street or subsurface, or from any other place, or for interference with light or other easements, except if caused by the gross negligence or intentional conduct of the Landlord or his agents, employees, guests, contractors or officers.

11.2 Tenant shall, at its sole cost and expense, maintain, repair, change and improve the water, sewer, electric and other utility systems which are located within the Leased Premises. Any work performed by Tenant under this Section 11.2 shall be governed by all of the terms contained in Section 9.1 of the Lease.

ARTICLE XII - USE OF LEASED PREMISES

12.1 Without the prior written consent of Landlord, which shall not be unreasonably withheld or delayed, Tenant may use the Leased Premises only for the purpose of manufacturing of optical components and subsystems, offices and for other services and purposes reasonably incident and similar thereto.

12.2 In its use of the Leased Premises, Tenant shall comply with all statutes, ordinances and regulations applicable to the use thereof, including, without limiting the generality of the foregoing, the Zoning Ordinances of the Town of Hudson, New Hampshire, as now in effect or as hereafter amended. Any changes in the Building which are required by any present or future laws, rules, requirements, orders, directions, ordinances or regulations of any governmental or lawful authority including Boards of Fire Underwriters due to Tenant's products or Tenant's use of Leased Premises shall be at Tenant's sole cost and expense, including, but not limited to any changes required in the sprinkler system required by Tenant's use.

12.3 Tenant shall not injure or deface, or commit waste with respect to the Leased Premises nor occupy or use the Leased Premises, or permit or suffer any part thereof to be occupied or used, for any unlawful or illegal business, use or purpose, nor for any business, use or purpose deemed to be disreputable or extra-hazardous, nor in such manner as to constitute a nuisance of any kind, nor for any purpose nor in any manner in violation of any present or future laws, rules, requirements, orders, directions, ordinances or regulations of any governmental or lawful authority including Boards of Fire Underwriters. Tenant shall, immediately upon the discovery of any such unlawful illegal, disreputable or extra-hazardous use, take, at its own cost and expense, all necessary steps, legal and equitable, to compel the discontinuance of such use and to oust and remove the subtenants, occupants or other persons guilty of such unlawful, illegal, disreputable or extra-hazardous use. Tenant's use of the Leased Premises shall not interfere with other tenants' quiet enjoyment of their premises. Tenant shall not cause excessive noise which interferes with the use by other tenants of their premises for office use. Tenant shall not use the Leased Premises in a manner which exceeds the maximum full load capacity of the structure of the Leased Premises.

12.4 Tenant shall procure at its sole expense all permits and licenses required for the transaction of business in the Leased Premises and otherwise comply with all applicable laws, ordinances, and governmental regulations affecting the Building, including those relating to Hazardous Waste or Substance (hereinafter defined) now in force or that may be hereafter enacted or promulgated. Any application to the State of New Hampshire and/or the Town of

Hudson, and/or any other governmental entity, agency or department, regarding the Leased Premises shall require the written consent of Landlord. Tenant shall copy Landlord on all correspondence with the State of New Hampshire and the Town of Hudson and any other governmental entity, agency or department,

12.5 Tenant has furnished to Landlord prior to execution of this Lease the Material Safety Data Sheets ("MSDS") for all materials to be used or stored by Tenant. No additional materials shall be used by Tenant until delivery to Landlord of a MSDS pertaining thereto, with the size, quantity, volume and description of specific safety storage and containment proposed and written approval by Landlord has been granted, in Landlord's sole and absolute discretion in each instance of Tenant's use in the Leased Premises of such material. Tenant acknowledges that it shall have no right to use any new materials until such MSDS sheets have been delivered to and approved by Landlord and Tenant has reported the new materials to the Town of Hudson, New Hampshire, for the purposes of its sewer permit. In the event that the Town of Hudson requires any modifications in the sewer permit, such materials shall not be used by Tenant until such sewer permit is modified.

ARTICLE XIII - HAZARDOUS WASTE, MATERIAL OR SUBSTANCES

13.1 Tenant shall not use the Leased Premises for the generation, storage or treatment of hazardous waste, and hereby certifies that its operations or other use of the Leased Premises will not involve same. For purposes of this lease, the term "Hazardous Materials" means (a) any chemical, compound, material, mixture or substance that is now or hereafter defined or listed in, or otherwise classified pursuant to, any Environmental Laws (hereafter defined) as a "hazardous substance", "hazardous material", "hazardous waste", "extremely hazardous waste", "acutely hazardous waste", "radioactive waste", "infectious waste", "biohazardous waste", "toxic substance", "pollutant", "toxic pollutant", "contaminant" as well as any formulation not mentioned herein intended to define, list, or classify substances by reason of deleterious properties such as ignitability, corrosivity, reactivity, carcinogenicity, toxicity, reproductive toxicity, "EP toxicity", or "TCLP toxicity"; (b) petroleum, natural gas, natural gas liquids, liquefied natural gas, synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas) and ash produced by a resource recovery facility utilizing a municipal solid waste stream, and drilling fluids, produced waters and other wastes associated with the exploration, development or production of crude oil, natural gas, or geothermal resources; (c) "hazardous substance" as defined in any Environmental Law; (d) "waste" as defined in any Environmental Law; (e) asbestos in any form; (f) urea formaldehyde foam insulation; (g) polychlorinated biphenyls (PCBs); (h) radon; and (i) any other chemical, material, or substance exposure to which is limited or regulated by any Governmental Agency (hereafter defined) because of its quantity, concentration, or physical or chemical characteristics, or which poses a significant present or potential hazard to human health or safety or to the environment if released into the workplace or the environment. Hazardous Materials" shall not include (y) ordinary office supplies and repair, maintenance and cleaning supplies maintained in reasonable and necessary quantities and used in accordance with all Environmental Laws, or (z) petroleum or fuel required

in the ordinary course for the operation of the Leased Premises maintained in reasonable and necessary quantities and used in accordance with all Environmental Laws. As used in this Article XIII, "Environmental Laws" means any and all present and future federal, state and local laws, ordinances, regulations, policies and any other requirements of any Governmental Agency relating to health, safety, the environment or to any Hazardous Materials, including without limitation, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), the Resource Conservation Recovery Act (RCRA), the Hazardous Materials Transportation Act, the Toxic Substance Control Act, the Endangered Species Act, the Clean Water Act, the Occupational Safety and Health Act, each as hereafter amended from time to time, and the present and future rules, regulations and guidance documents promulgated under any of the foregoing. As used in this Article XIII, "Governmental Agency" means any federal, state, municipal or other governmental or quasi-governmental court, agency, authority or district.

13.2 Tenant shall not (either with or without negligence) cause or permit the escape, disposal, release of any Hazardous Materials (as said term is defined) on, in, upon or under the Property of the Leased Premises. Tenant shall not generate, store, use or dispose of such Hazardous Materials in any manner not sanctioned by the foregoing cumulative references in compliance with all applicable laws, rules and regulations. If Landlord, any lender or any governmental agency shall ever require testing to ascertain whether or not there has been any release of Hazardous Materials, then all cost of such investigations there shall be borne by Tenant. In addition, Tenant shall execute estoppel certificates and the like, from time to time, at Landlord's reasonable request concerning Tenant's best knowledge and belief regarding the presence of Hazardous Materials on the Leased Premises introduced or brought onto the Leased Premises by Tenant other than ordinary cleaning fluids and/or fluids and other material commonly used for offices. Landlord expressly reserves the right to enter the Leased Premises to perform regular inspections upon reasonable notice to Tenant provided that same does not interfere with Tenant's use of the Leased Premises.

13.3 Tenant warrants and acknowledges that at no time have funds been expended from the State of New Hampshire's hazardous waste cleanup fund established under RSA 147-B with respect to any of Tenant's property located within New Hampshire which would entitle the State to a so-called superlien under RSA 147-B:10 III. Tenant also acknowledges same with respect to similar laws of any other state which liens might possibly affect the Leased Premises. The provisions of this Article XIII will survive the expiration or termination of this Lease.

ARTICLE XIV - ASSIGNMENT; SUBLEASING

14.1 Tenant shall not, voluntarily, by operation of law, or otherwise, assign, transfer, mortgage, pledge or encumber this Lease or sublease the Leased Premises or any part thereof, or grant a right to any person other than Tenant, its employees, agents, servants and invitees to occupy or use the Leased Premises or any portion thereof, without the express prior written consent of Landlord, which consent shall not be unreasonably withheld or delayed, . Any attempt to do any of the foregoing without such written consent shall be null and void and of no effect, and shall further constitute a material default under this Lease. If Tenant so requests Landlord's consent, said request shall be in writing specifying the duration of said desired sublease or assignment, the date same is to occur, the exact location of the space affected thereby and the proposed rentals on a square foot basis chargeable thereunder, and shall be submitted to Landlord at least sixty (60) days in advance of the date on which Tenant desires to make such assignment or sublease or allow such occupancy or use. Upon such request, Landlord may, in its reasonable discretion (i) grant such consent subject to Landlord's approval of the assignee, transferee, subtenant or mortgagee, or (ii) elect to terminate this Lease, or (iii) suspend this Lease as to the space to be affected by such assignment, sublease or other event specified above for the duration specified by Tenant in its notice, in which event Tenant will be relieved of all obligations hereunder as to such space during such suspension, including a suspension of the Rent hereunder in proportion to the portion of the Leased Premises affected thereby (but after said suspension, if the suspension is not for the full term hereof, Tenant shall once again become liable hereunder as to the applicable space). These provisions shall not include interfamily transfers or related company transfers.

14.2 Tenant shall, despite any permitted assignment or sublease, remain directly and primarily liable for the performance of all of the covenants, duties and obligations of Tenant hereunder, and Landlord shall be permitted to enforce the provisions of this Lease against Tenant or any assignee or sublessee without demand upon or proceeding in any way against any other person.

14.3 Consent by Landlord to a particular assignment or sublease shall not be deemed a consent to any other subsequent transaction. If this Lease is assigned or if the Leased Premises are subleased without the permission of Landlord, then Landlord may nevertheless collect rent from the assignee or sublessee and apply the net amount collected to the Rent payable hereunder, but no such transaction or collection of Rent or application thereof by Landlord shall be deemed a waiver of any provision hereof or a release of Tenant from the performance of the obligations of the Tenant hereunder.

14.4 All cash or other proceeds of any assignment, sale or sublease of Tenant's interest in this Lease, whether consented to by Landlord or not, shall be paid to Landlord notwithstanding the fact that such proceeds exceed the Rent called for hereunder, and Tenant hereby assigns to Landlord all rights it might have or ever acquire in such proceeds.

ARTICLE XV - TAXES AND ASSESSMENTS

15.1 Tenant shall pay, in addition to Base Rent and other charges, an amount equal to Tenant's Building Proportionate Share of "Real Estate Taxes" (hereinafter defined) assessed against the Building and the Property and Tenant's Campus Proportionate Share of the Real Estate Taxes assessed on the common area of the Campus and levies and charges and governmental impositions, duties and charges of like kind and nature which are or may during the term of this Lease be charged, laid, levied or imposed upon or become a lien or liens upon the Campus, the Building and the Property or any part thereof, or upon any buildings or appurtenances thereto or any parts thereof, or which may become due and payable with respect thereto and any and all taxes charged, laid or levied in addition to the foregoing under or by virtue of any present or future laws, requirements, rules, orders, directions, ordinances or regulations of the United States of America, the State of New Hampshire, County of Hillsborough or Town of Hudson, government, or of any other municipal government or lawful authority whatsoever. All such duties and charges, including Real Estate Taxes, are referred to herein as "Taxes".

15.2 "Real Estate Taxes" means all real estate taxes, sewer taxes, and any other charges made by a public authority which upon assessment or failure of payment become a lien or liens upon the Campus, the Building and the Property or any part thereof, or upon any buildings or appurtenances thereto, or any parts thereof, or which may become due and payable with respect thereto. If any betterment assessments are payable by law in installments, said betterment assessments are deemed payable not for the period in which the same are assessed but in installments for the periods in which the installments thereof are payable. Real Estate Taxes shall not include any franchise, estate, inheritance, succession, capital levy or transfer tax of Landlord or any income tax of Landlord.

15.3 Tenant shall pay to Landlord along with each installment of Rent, an amount equal to one-twelfth (1/12th) of Tenant's Proportionate Share of the Taxes for the current tax year, if the amount thereof is known, or of such taxes for the prior tax year, if the amount thereof for the current tax year is not known. Upon receipt by Landlord of the final tax bill for any tax year during the term of this Lease, Landlord shall give Tenant notice of the total amount of Taxes paid by Landlord for such tax year. If the actual amount of Tenant's Proportionate Share of the Taxes with respect to such tax year exceeds the aggregate amount previously paid by Tenant, Tenant shall pay to Landlord the deficiency within fifteen (15) days following notice from Landlord. If the aggregate amount previously paid by Tenant with respect thereto exceeds Tenant's Proportionate Share of the Taxes for such tax year, then, at Landlord's election, such surplus (net of any amounts then owing by Tenant to Landlord) shall be credited against the next ensuing installment of any such cost due hereunder by Tenant. Periodically, during the Term of this Lease, Landlord shall have the right to estimate Tenant's Proportionate Share of Taxes for the next tax year (determined by Landlord) of the term of this Lease, whereupon Tenant shall pay Landlord such revised amount as set forth in the first sentence of this Section 15.3.

15.4 Tenant shall also punctually pay and discharge all taxes which are or may during the term of this Lease be charged, laid, levied or imposed upon or become a lien upon any personal property of Tenant attached to or used in connection with Tenant's business conducted on the Leased Premises which personal property constitutes a fixture. Nothing herein contained requires Tenant to pay any taxes on the Rent reserved to Landlord hereunder.

15.5 Landlord, at its option, may, but shall not be obligated to, contest or review by any appropriate proceedings, and at Landlord's expense, any tax, charge or other governmental imposition aforementioned which shall not be contested or reviewed as aforesaid by Tenant, and Tenant shall promptly join with Landlord in such contest or review if Landlord so requests. Any abatement in such taxes, less the cost to obtain such abatement, shall be reflected in the amount of taxes to be paid by Tenant the following year pursuant to this Article XV.

ARTICLE XVI - MECHANIC'S LIEN

16.1 In the event of the filing in the Hillsborough County Registry of Deeds of any notice of a builder's, supplier's or mechanic's lien on the Leased Premises or the Building arising out of any work performed by or on behalf of Tenant, Tenant shall cause without delay proper proceedings to be instituted to test the validity of the lien claimed, and within thirty (30) days after the filing of any such lien to discharge the same by the posting of bond or otherwise; and during the pendency of any such proceeding, Tenant shall completely defend and indemnify Landlord against any such claim or lien and all costs of such proceedings wherein the validity of such lien is contested by Tenant, and during the pendency of such proceeding such lien may continue until disposition of such proceeding, and after disposition thereof, Tenant shall cause said lien to be released and discharged.

ARTICLE XVII - EMINENT DOMAIN

17.1 If the Leased Premises is lawfully condemned or taken by any public authority either in its entirety or in such proportion that it is no longer suitable for the intended use by Tenant, then this Lease will automatically terminate without further act of either party hereto on the date when possession of the Leased Premises is taken by such public authority, and each party hereto will be relieved of any further obligation to the other except that Tenant shall be liable for and shall promptly pay to Landlord any Rent or other payments due hereunder then in arrears or Landlord shall promptly rebate to Tenant a pro rata portion of any Rent or other such payments paid in advance. In the event the proportion of the Leased Premises so condemned or taken is such that the Leased Premises is still suitable for its intended use by Tenant, this Lease will continue in effect in accordance with its terms and a portion of the Rent and other payments due hereunder will abate equal to the proportion of the rental value of the Leased Premises so condemned or taken. In either of the above events, the award for the property so condemned or taken will be payable solely to Landlord without apportionment to Tenant.

ARTICLE XVIII - LIABILITY

18.1 Except for injury or damage caused by the gross negligence or willful misconduct of Landlord, its servants or agents, Landlord shall not be liable for any injury or damage to any person happening on or about the Leased Premises, the Building, the Property or the Campus, or for any injury or damage to the Leased Premises, the Building, the Property or the Campus, or to any property of Tenant or to any property of any third person, firm, association, or corporation on or about the Leased Premises, the Building, the Property or the Campus. Tenant shall, except for injury or damage caused as aforesaid, defend (with counsel reasonably acceptable to Landlord), indemnify and hold Landlord harmless from and against any and all liability and damages, costs and expenses, including reasonable attorneys' fees, and from and against any and all suits, claims and demands of any kind or nature whatsoever, by and on behalf of any person, firm, association or corporation arising out of or based upon any incident, occurrence, injury or damage which happens or may happen on or about the Leased Premises, the Building, the Property or the Campus, and from and against any matter or thing growing out of the condition, maintenance, repair, alteration, use, occupation or operation of the Leased Premises or the installation of any property therein or the removal of any property therefrom. This indemnity and hold harmless agreement shall include indemnity against all reasonable costs, expenses and liabilities incurred in or in connection with any such claim or proceeding brought thereon, in the defense thereof, including attorneys' fees. Tenant shall not settle or compromise any claim without the prior written consent of Landlord.

18.2 In addition, Tenant agrees to defend with counsel acceptable to Landlord and indemnify Landlord and hold Landlord harmless from and against all claims arising from the discharge or other release by Tenant onto the Leased Premises, the Building, the Property or the Campus of any Hazardous Material, excluding any discharge of Hazardous Material to the extent caused by Landlord, its officers, directors, agents, employees, invitees, licensees or contractors. Tenant shall not settle or compromise any claim without the consent of Landlord, which consent shall not be unreasonably withheld or delayed.

18.3 The obligations and liabilities of Tenant hereunder with respect to the indemnities pursuant to this Article XVIII or under any other provisions of this Lease, resulting from any claim or other assertion of liability by third parties (hereinafter "Claim" or collectively, "Claims"), shall be subject to the following terms and conditions:

(a) The party seeking indemnification (the "Indemnified Party") must give the other party (the "Indemnifying Party"), notice of any such Claim promptly after the Indemnified Party receives notice thereof.

(b) The Indemnifying Party shall have the right to undertake, by counsel or other representatives approved by the Indemnified Party, the defense of such Claim.

(c) In the event that the Indemnifying Party shall elect not to undertake such defense, or within a reasonable time after notice of any such Claim from the Indemnified Party shall fail to defend, the Indemnified Party (upon further written notice to the Indemnifying Party) shall have the right to undertake the defense, compromise or settlement of such Claim, by counsel or other representatives of its own choosing, on behalf of and for the account and risk of the Indemnifying Party (subject to the right of the Indemnifying Party, upon payment of all reasonable fees and costs incurred by the Indemnified Party for defense of such Claims to assume defense of such Claim at any time prior to settlement, compromise or final determination thereof).

(d) Anything in this Section 18.3 to the contrary notwithstanding, (i) if there is a reasonable probability that a Claim may materially and adversely affect the Indemnified Party other than as a result of money damages or other money payments, the Indemnified Party shall have the right, at his own cost and expense, to participate in the defense, compromise or settlement of the Claim, (ii) the Indemnifying Party shall not, without the Indemnified Party's written consent, settle or compromise any Claim or consent to entry of any judgment which does not include as an unconditional term thereof the giving by the claimant or the plaintiff to the Indemnified Party of a release from all liability in respect of such Claim, and (iii) in the event that the Indemnifying Party undertakes defense of any Claim, the Indemnified Party, by counsel or other representative of its own choosing and at its sole cost and expense, shall have the right to consult with the Indemnifying Party and its counsel or other representatives concerning such Claim and the Indemnifying Party and the Indemnified Party and their respective counsel or other representatives shall cooperate with respect to such Claim.

(e) Notwithstanding any provision herein to the contrary, in the event that a response is required to a condition, occurrence or other happening which may impose liability on Landlord within a time period which does not allow notice to Tenant, Landlord shall have no obligation to notify Tenant prior to taking any action, and despite the lack of prior notice to Tenant, Tenant shall remain fully responsible to Landlord under the terms of this Article XVIII and any other provisions of this Lease.

18.4 The provisions of this Article XVIII will survive the expiration or termination of this Lease.

ARTICLE XIX -RULES AND REGULATIONS

19.1 Tenant, its servants, employees, agents, visitors, invitees, and licensees, shall observe faithfully and comply with the Rules and Regulations set forth in Exhibit C hereto, and shall abide by and conform to such further rules and regulations as Landlord may from time to time reasonably make, amend or adopt, after Tenant receives a copy thereof.

ARTICLE XX - LANDLORD'S INSURANCE

20.1 Landlord shall maintain property insurance for the Property. The term "Insurance Premiums" shall mean the total annual insurance premiums which accrue on all property insurance, boiler insurance, public liability and property damage insurance, rent insurance, and any other insurance which, from time to time, may, at Landlord's election, be carried by Landlord with respect to the Building, the Property and/or the Campus during any applicable calendar year (or portion thereof) occurring during the term of this Lease; provided, however, in the event, during any such calendar year, all or any part of such coverage is written under a "blanket policy" or otherwise in such manner that Landlord was not charged a specific insurance premium applicable solely to the Building, the Property and/or the Campus then in such event, the amount considered to be the Insurance Premium with respect to such coverage for such calendar year, shall be that amount which would have been the annual Insurance Premium payable under the rates in effect on the first day of such applicable calendar year for a separate New Hampshire Standard Form insurance policy generally providing such type and amount of coverage (without any deductible amount) with respect to the Building, the Property and/or the Campus (considering the type of construction and other relevant matters), irrespective of the fact that Landlord did not actually carry such type policy. In the event that Tenant's activities in the Leased Premises cause an increase in Landlord's Insurance Premiums, then such increase due to Tenant's use shall be paid by Tenant upon demand from Landlord. In addition, Tenant shall pay for the cost of any repairs or modification to the Building in order to make the Building insurable.

20.2 Monthly, during the first year of the term of this Lease, Tenant will pay to Landlord the Tenant's Building Proportionate Share of the Insurance Premiums (which may be estimated by Landlord) on the Building and the Property and Tenant's Campus Proportionate Share of the insurance Premiums on the Campus, monthly in advance, payable at the same time and place as the Base Rent is payable, except, however, if the Lease Term does not begin on the first date of a calendar month, Tenant shall pay a pro rata portion of such sum for such partial month. Landlord shall have the right to adjust such monthly estimate on an annual basis, pursuant to the following paragraph hereof.

20.3 At the end of each calendar year occurring during the term of this Lease (subsequent to the expiration or other termination of this Lease, if such occurs on a date other than the last day of the calendar year), Landlord shall give Tenant notice of the total amount paid by Tenant for the relevant calendar year together with the actual amount of Tenant's Building Proportionate Share and Campus Proportionate Share of Insurance Premiums for such calendar year. If the actual amount of Tenant's Proportionate Share of the Insurance Premiums with respect to such period exceeds the aggregate amount previously paid by Tenant with respect thereto during such period, Tenant shall pay to Landlord the deficiency within fifteen (15) days following notice from Landlord; however, if the aggregate amount previously paid by Tenant with respect thereto exceeds Tenant's Building Proportionate Share of the Insurance Premiums Cost for such period, then, at Landlord's election, such surplus (net of any other amounts then

owing by Tenant to Landlord) shall be credited against the next ensuing installment of any such cost due hereunder by Tenant. Periodically, during the term of this Lease, Landlord shall have the right to estimate Tenant's Building Proportionate Share of Insurance Premiums for the next fiscal period (as reasonably determined by Landlord) of the term of this Lease, whereupon, Tenant shall pay Landlord such amount as may be so indicated by Landlord. Except, if any increase in Insurance Premiums are the result of the actions, claims, or other actions of another tenant in the building, Tenant shall not be required to pay for said increase.

20.4 In the event of loss, Landlord shall promptly initiate action to effect a settlement with the insurer. Tenant shall reasonably cooperate with Landlord and any mortgagee in connection with the proceeding and collection of claims, and shall execute and deliver to Landlord such proofs of loss, releases and other instruments as may be necessary to settle any such claims and obtain the proceeds thereof, and in the event Tenant fails or neglects to so cooperate or to execute and deliver any such instrument, Landlord may, as the agent or attorney in fact of Tenant, execute and deliver any such instrument, and Tenant hereby nominates and appoints Landlord the proper and legal attorney in fact of Tenant for such purpose, hereby ratifying all that Landlord may lawfully do as such attorney in fact.

ARTICLE XXI - TENANT'S INSURANCE

21.1 Tenant shall, from the Delivery of Possession of the Leased Premises, even if such date precedes the commencement of the term hereof, and throughout the term hereof procure and carry at its own expense commercial general liability insurance with an insurance company authorized to do business in New Hampshire and acceptable to Landlord will be the so-called "occurrence" form, including bodily injury, death and property damage liability, insurance against any and all claims, including all legal liability to the extent insurable and imposed upon Landlord and all court costs and attorneys' fees and expenses, arising out of or connected with the possession, use, leasing, operation, maintenance or condition of the Leased Premises or use of the Building Common Area or Campus Common Area. Such insurance will be carried in the name of and for the benefit of Tenant and Landlord and Landlord shall be named as an additional named insured; and shall provide coverage of at least Two Million Dollars (\$2,000,000) in case of death of or injury to single person and Five Million Dollars (\$5,000,000) in the aggregate, and Two Million Dollars (\$2,000,000) in case of loss, destruction or damage to property. If applicable, Tenant shall comply with the requirements of the Boilers and Unfired Pressure Vessels Law (NH RSA 157-A), and in such event the policy or policies referred to above shall contain an endorsement providing pressure vessels insurance coverage and naming Landlord as an additional named insured. All such insurance shall comply with the provisions of this Article XXI.

21.2 During any period or periods of construction by Tenant on the Leased Premises, the construction of which is (a) of a type to which Builder's Risk Insurance is applicable and (b) requires the advance written approval of Landlord pursuant to Article IX hereof, Tenant shall obtain and maintain in effect standard Builder's Risk Insurance written on a completed value

basis, including extended coverage, and utilizing a maximum value at date of completion not less than the greater of (y) the aggregate contract price or prices for the construction of such facilities or (z) the amount which may be required by a mortgagee which is financing such construction. If such construction by Tenant is of a type to which Builder's Risk Insurance is not applicable, Tenant shall provide the additional coverage under the policies as required by Landlord. All such insurance shall comply with the provisions of this Article XXI.

21.3 Tenant shall procure and continue in force during the term hereof, all-risk insurance which contains fire and extended coverage on a full value, repair or replacement basis upon facilities, machinery, equipment and appurtenances constructed, erected or installed on or in the Leased Premises by Tenant and which have or may become the property of Landlord pursuant hereto. The policies evidencing such insurance must provide that loss, if any, payable thereunder will be payable to Landlord and/or Tenant and/or mortgagee of the Leased Premises as their respective interests may appear, and all such policies together with evidence of payment of the premiums thereon will be delivered to Landlord and/or any such mortgagee.

21.4 Tenant shall also maintain the following insurance: (a) Statutory workers' compensation insurance with respect to any work on or about the Leased Premises;

(b) Broad form boiler and machinery insurance (without exclusion for explosion) covering all boilers or other pressure vessels, machinery, and equipment located in, on or about the Leased Premises and insurance against loss of occupancy or use arising from any breakdown in such amounts as are generally required by landlords for properties comparable to the Leased Premises;

(c) Such other insurance with respect to the Leased Premises as reasonably required by Landlord against loss or damage of the kinds from time to time customarily insured against and in such amounts as required by landlords for properties comparable to the Leased Premises; and

(d) All such insurance shall comply with the provisions of this Article XXI.

21.5 All insurance provided for herein from Tenant shall be obtained under valid and enforceable policies (the "Policies" or in the singular, the "Policy"), and shall be issued by one or more other domestic primary insurer(s) having a general policy rating of A or better and a financial class of VIII or better by A.M. Best Company, Inc. (or if a rating of A.M. Best Company Inc. is no longer available, a similar rating from a similar or successor service) (each such insurer shall be referred to below as a "Qualified Insurer"). All insurers providing insurance required by this Lease shall be authorized and admitted to issue insurance in the state in which the Leased Premises is located. The Policies shall name Landlord as an additional named insured. The Policies shall also contain: (i) a standard "non-contributory landlord" endorsement or its equivalent relating, *inter alia*, to recovery by Landlord notwithstanding the negligent or willful acts or omission of Tenant; (ii) to the extent available at commercially

reasonable rates, a waiver of subrogation endorsement as to Landlord; and (iii) an endorsement providing for a deductible per loss of an amount not more than that which is customarily maintained by tenants of similar properties in the general vicinity of the Leased Premises, but in no event in excess of Five Thousand Dollars (\$5,000). All Policies shall contain (i) a provision that such Policies shall not be denied renewal, materially changed (other than to increase the coverage provided), canceled or terminated, nor shall they expire, without at least thirty (30) days' prior written notice to Landlord in each instance; and (ii) include effective waivers by the insurer of all claims for applicable premiums against any loss payees, additional insureds and named insureds (other than Tenant). Certificates of insurance for such Policies shall be delivered by Tenant to Landlord prior to Tenant's entry upon the Leased Premises. Copies of such Policies shall be delivered by Tenant to Landlord within twenty (20) days of entry by Tenant on the Leased Premises. Certificates of insurance with respect to all renewal and replacement Policies shall be delivered to Landlord not less than thirty (30) days prior to the expiration date of any of the Policies required to be maintained hereunder which certificates shall bear notations evidencing payment of Insurance Premiums. Originals or certificates of such replacement Policies and copies of such replacement Policies shall be delivered to Landlord promptly after Tenant's receipt thereof but in any case within thirty (30) days after the effective date thereof. Tenant shall neither violate, nor allow its agents or employees to violate any of the terms, conditions and provisions of such Policies.

21.6 If Tenant fails to maintain and deliver to Landlord the original Policies or certificates of insurance required by this Lease or if Landlord receives a copy of a notice of cancellation of any insurance which is the responsibility of Tenant to maintain, upon ten (10) days prior notice to Tenant, Landlord may procure such insurance at Tenant's sole cost and expense. Upon receipt of a copy of notice of cancellation of any insurance which is the responsibility of Tenant hereunder, Landlord may pay the premiums necessary to reinstate the same. The amount so paid will constitute Additional Rent payable by Tenant at the next rental payment date. Payment of premiums by Landlord will not be deemed a waiver or release by Landlord of the default by Tenant in failing to pay the same or of any action which Landlord may take hereunder as a result of such default.

21.7 Tenant shall comply with all insurance requirements and shall not bring or keep or permit to be brought or kept any article upon any of the Leased Premises or cause or permit any condition to exist thereon which would be prohibited by an insurance requirement, or would invalidate the insurance coverage required hereunder to be maintained by Tenant on or with respect to any part of the Leased Premises.

21.8 In the event of an uncured default under this Lease, all right, title and interest of Tenant in and to the Policies then in force concerning the Leased Premises and all proceeds payable thereunder shall thereupon vest in Landlord.

21.9 If and to the extent permitted without prejudice to any rights of Tenant under the applicable insurance policies, Landlord shall be held free and harmless from liability for loss or

damage to personal property of Tenant in the Leased Premises by fire, the extended coverage perils, sprinkler leakage, vandalism and malicious mischief if and to the extent actually insured against, whether or not such loss or damage is the result of the negligence of Landlord, its employees or agents. This section does not impose any added obligation or expense upon Tenant nor require that it carry any insurance of any kind and is to be construed only as a limitation upon the rights of the insurance carriers to subrogation.

ARTICLE XXII - DESTRUCTION OR DAMAGE

22.1 In the event that the Leased Premises, as it exists at the beginning of the term hereof, is totally destroyed by fire or other casualty insured against, or is so damaged that repairs and restoration cannot, in the opinion of Landlord in its sole discretion, be accomplished within a period of one hundred eighty (180) days from the date of such destruction or damage, this Lease will automatically terminate without further act of either party hereto, and each party shall be relieved of any further obligation to the other except for the rights and obligations of the parties which survives a termination of this Lease, and except that Tenant shall be liable for and shall promptly pay Landlord any Rent then in arrears or Landlord shall promptly rebate to Tenant a pro rata portion of any Rent paid in advance. In the event that the Leased Premises is so damaged that repairs and restoration can be accomplished within a period of one hundred eighty (180) days from the date of such destruction or damage, this Lease will continue in effect in accordance with its terms; such repairs and restoration will, unless otherwise agreed by Landlord and Tenant, be performed as closely as practicable to the original specifications (utilizing therefor the proceeds of the insurance applicable thereto without any apportionment thereof for damages to the leasehold interest created by this Lease), and until such repairs and restoration have been accomplished, a portion of the Rent will abate equal to the proportion of the Leased Premises rendered unusable by the damage. Landlord's obligation to restore, replace or rebuild such facilities will not exceed in amount the sum of the insurance proceeds paid to it and/or released to it by any mortgagee with which settlement was made. In the event the Leased Premises may be repaired and/or restored within the aforementioned one hundred eighty (180) day period, but the cost of such repair or restoration exceeds the available insurance proceeds, at Landlord's discretion, this Lease will be terminated in which event the rights and duties of the parties shall be governed by the first sentence of this Section 22.1. Tenant shall execute and deliver to Landlord all instruments and documents necessary to evidence the fact that the right to such insurance proceeds is vested in Landlord. Landlord shall not be responsible for damage or destruction, partial or total, to or of machinery, equipment and appurtenances constructed or installed on or in the Leased Premises by Tenant unless caused by the gross negligence or intentional conduct of the Landlord, its agents, or invitees. Notwithstanding anything contained herein to the contrary, in the event that the damage to the Leased Premises results from the fault or negligence of Tenant, its agents, employees, licensees or invitees, Tenant shall not be entitled to any abatement or reduction of any Rent or other sums due hereunder, and such damage shall be repaired by Tenant, or at Landlord's option by Landlord at Tenant's expense.

ARTICLE XXIII - REPOSSESSION BY LANDLORD

23.1 At the expiration of this Lease or upon the earlier termination of this Lease for any cause herein provided for, Tenant shall peaceably and quietly quit the Leased Premises and deliver possession of the same to Landlord together with the improvements thereon at the beginning of the term hereof and all improvements constructed thereon by Tenant which are not removed pursuant to the terms hereof, and all machinery, equipment and appurtenances installed therein which have become part of the Leased Premises, or which are not to be removed pursuant to ARTICLE X hereof. At the time of delivery of possession to Landlord at the expiration of this Lease any and all machinery, equipment and appurtenances constructed or installed on or in the Leased Premises by Tenant at its expense after the beginning of the term hereof, which constitute fixtures and which have become the property of Landlord pursuant to ARTICLE X hereof will be free and clear of any mortgage, lien, pledge or other encumbrance or charge.

ARTICLE XXIV - MORTGAGE LIEN

24.1 This Lease and all rights of Tenant hereunder are and will remain subject and subordinate, without any further documentation, to the lien of (a) any mortgage(s) constituting a lien on the Building, or any part thereof, at the date hereof, and (b) the lien of any mortgage(s) hereafter executed to provide financing or refinancing of the facilities on the Building, and (c) any renewal, modification, consolidation or extension of any mortgage referred to in clause (a) or (b). Tenant shall, upon demand at any time or times, execute, acknowledge and deliver to Landlord, any and all instruments that may be necessary or proper to subordinate this Lease and all rights of Tenant here under to the lien of any mortgage, deed of trust or other instrument referred to in clause (b) or clause (c) of the preceding sentence, and, in the event that Tenant shall fail or neglect, within ten (10) days after receipt from Landlord or the lender, to execute, acknowledge and deliver any such subordination instrument provided and conditioned upon its receipt of a reasonable subordination, nondisturbance and attornment agreement (see below) from said mortgagee, Landlord, in addition to any other remedies, may, as the agent or attorney-in-fact of Tenant, execute acknowledge and deliver the same. Landlord agrees to request from its lender an agreement (i) that so long as Tenant is not in default under the terms of this Lease the mortgagee or trustee, or any person succeeding to the rights of the mortgagee or trustee, or any purchaser at a foreclosure sale under said mortgage or deed of trust, shall not disturb the peaceful possession of Tenant hereunder, and (ii) that the proceeds of insurance policies received by it in settlement of losses under insurance policies held by it will be applied to the cost of repairs and restoration in those instances in which Landlord is obligated to repair and restore pursuant to the provisions hereof.

24.2 Tenant shall execute and acknowledge a certificate containing such information as may be reasonably requested for the benefit of Landlord, any prospective purchaser or any current or prospective mortgagee of the Building within ten (10)days of receipt of same, subject to Tenant receiving prior hereto a non-disturbance and atonement agreement.

ARTICLE XXV - DEFAULT; JURISDICTION

25.1 In the event of any of the following (“Default” or “Defaults”), Landlord shall have the rights set forth in this Article XXV:

- (a) Any installment of Rent, Additional Rent or utilities is not paid within five (5) days after the same is due and payable; or
- (b) Tenant defaults in the performance or observance of any other covenant or condition in this Lease and such default remains unremedied for twenty (20) days after written notice thereof has been given or sent to Tenant by Landlord; or
- (c) Any warranty or representation made by Tenant herein proves to be false or misleading; or
- (d) Tenant makes an assignment for the benefit of creditors, is generally not paying its debts as such debts become due, a custodian is appointed or takes possession of its assets other than a trustee, receiver or agent appointed or authorized to take charge of less than substantially all of the property of Tenant for the purpose of enforcing a lien against such property, commences any proceeding relating to Tenant or any substantial part of its property arrangement, readjustment of debt, dissolution or liquidation law or statute of any jurisdiction whether now or hereafter in effect, or there is commenced against Tenant any such proceeding which remains undismissed for a period of sixty (60) days, or any order approving the petition in any such proceeding is entered, or Tenant by any act indicates its consent to, or acquiescence in, any such proceeding or the appointment of any receiver or trustee for Tenant or any substantial part of its property, or suffers any such receivership or trusteeship to continue undischarged for a period of sixty (60) days, or any party holding a security interest in any of Tenant’s fixtures or personal property of any nature whatsoever that are located on the Leased Premises institutes or gives notice of foreclosure against any such property; or
- (e) Tenant shall have assigned or sublet the Leased Premises without the prior written consent of Landlord; or
- (f) Tenant shall abandon or vacate or shall commence to abandon or vacate the Leased Premises or any substantial portion of the Leased Premises or shall remove or attempt to remove, without the prior written consent of Landlord, all or a substantial portion of Tenant’s goods, wares, equipment, fixtures, furniture, or other personal property.
- (g) the dissolution of any corporate Tenant or the termination of any limited liability company or partnership Tenant.

25.2 In the event of any of such Defaults, Landlord may immediately or at any time thereafter and without demand or notice enter upon the Leased Premises or any part thereof in

the name of the whole and repossess the same as of Landlord's former estate and expel Tenant and those claiming through or under Tenant and remove their effects forcibly if necessary, without being deemed guilty in any manner of trespass and without prejudice to any remedies which might otherwise be used for arrears of Rent or preceding breach of covenant, and upon such entry this Lease will terminate, and in case of such termination or in case of termination under the provisions of statute by reason of the default of Tenant, Tenant shall remain and continue liable to Landlord in an amount equal to the total Base Rent reserved for the balance of the term plus all Additional Rent reserved for the balance of such term less the net amounts (after deducting the expenses of repair, renovation or demolition) which Landlord realizes, or with due diligence should have realized, from the reletting of the Leased Premises, plus all costs associated with the termination of the Lease, including Landlord's reasonable attorneys' fees. As used in this Section, the term "Additional Rent" means the value of all considerations other than Base Rent agreed to be paid or performed by Tenant hereunder, including, without limiting the generality of the foregoing, taxes, assessments, maintenance charges, and insurance premiums. Landlord will have the right from time to time to relet the Leased Premises upon such terms as it deems fit, and if a sufficient sum is not thus realized to yield the net Rent required under this Lease, Tenant shall satisfy and pay all deficiencies immediately upon determination of such deficiency for the remaining term of this Lease. At Landlord's option, upon any uncured default of Tenant hereunder, all Base Rent and Additional Rent due from Tenant under this Lease may be accelerated and Landlord should be entitled to a judgment therefor immediately. Nothing herein contained will be deemed to require Landlord to await the date on which this Lease, or the term hereof, would have expired had there been no default by Tenant, or no such termination or cancellation. Landlord's rights and remedies under this Lease are distinct, separate and cumulative remedies, and no one of them, whether or not exercised by Landlord, will be deemed to be in exclusion of any of the others herein or by law or equity provided. Nothing contained in this Section will limit or prejudice the right of Landlord to prove and obtain, in proceedings involving the bankruptcy or insolvency of, or a composition with creditors by, Tenant the maximum allowed by any statute or rule of law at the time in effect.

25.3 The Tenant, to the extent it may legally do so, hereby consent to the exclusive jurisdiction of the Business Court of the Superior Court of the State of New Hampshire, as well as to the jurisdiction of all courts from which an appeal may be taken from such courts for the purpose of any suit, action or other proceeding arising out of any of their obligations hereunder or with respect to the transactions contemplated hereby, and expressly waive any and all objections they may have to venue in any such courts. If this Lease is terminated hereunder, Tenant shall pay to Landlord on the first day of each calendar month remaining in the original lease term or any agreed extension hereof one-twelfth (1/12) of the annual base rent and Additional Rent due, but Landlord shall use reasonable efforts to relet the Leased Premises and the net proceeds of such reletting (after deducting reasonable expenses) shall be credited to the amounts payable by the Tenant hereunder.

25.4 Tenant shall pay all Landlord's reasonable expenses including, but not limited to, reasonable attorneys' fees incurred by Landlord under any circumstances relating to this Lease

(except for the preparation of this Lease), including, but not limited to, in enforcing any obligation of Tenant or remedies of Landlord under this Lease, or in recovering possession of the Leased Premises upon any termination thereof if Landlord is successful in the action.

25.5 Any dispute or controversy between the parties arising out of or relating to this Lease Agreement including, without limitation, a dispute or controversy relating to the construction of any provision or the validity or enforceability of any term or condition (including this Section), or of the entire Lease Agreement, or any claim that all or any part of this Lease Agreement (including this provision) is void or voidable, which dispute or controversy or claim is in an amount which does not exceed Fifty Thousand Dollars (\$50,000), may, at the option of the parties which asserts any such dispute, controversy or claim, be submitted to arbitration before a single arbitrator in accordance with the Commercial Rules of the American Arbitration Association then in effect at in Manchester, New Hampshire. Each party shall bear its own costs and expenses in any such proceeding. The decision of the arbitrator shall be final and binding upon the parties and may be enforced in any court of competent jurisdiction. To the fullest extent permitted by law, the parties irrevocably submit to the jurisdiction of such forum and waive any objection it may have to either the jurisdiction or the venue of such forum.

ARTICLE XXVI - ACCESS TO LEASED PREMISES

26.1 Landlord or its representatives shall have free access to the Leased Premises at all times in cases of emergency and at reasonable intervals during normal business hours for the purpose of inspection, or for the purpose of showing the Leased Premises to prospective purchasers or tenants or to Landlord's lenders as requested by the lenders, or for the purpose of making repairs which Tenant is obligated to make hereunder but has failed or refused to make; provided, that (with the exception of emergency situations), Landlord shall not unreasonably interfere with Tenant's business. The preceding sentence does not impose upon Landlord any obligation to make repairs. During the twelve (12) month period preceding the expiration of this Lease, Landlord may keep affixed to any suitable part of the outside of the building on the Leased Premises a notice that the Leased Premises is for sale or Rent.

ARTICLE XXVII - NOTICES

27.1 Any written notice, request or demand required or permitted by this Lease shall , until either party notifies the other in writing of a different address, be properly given if hand delivered or sent by a nationally recognized overnight delivery service and addressed as follows:

If to Landlord:	John M. Wolters, Jr., Manager Century Park, L.L.C. c/o Chartwell Properties, LLC One Wall Street Hudson, NH 03051 Telephone: 603/578-1705
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Telecopy: 603/578-1713
Email: jwolters@chartwellproperties.com

With a copy to:

Karen S. McGinley, Esq.
Devine, Millimet & Branch
Professional Association
111 Amherst Street, P.O. Box 719
Manchester, NH 03105-0719
Telephone: 603/695-8569
Telecopy: 603/669-8547
Email: kmcginley@devinemillimet.com

If to Tenant:

Roger Roach, Manager
Instrument Associates, LLC
c/o Nutfield Technology, Inc.
One Wall Street
Hudson, NH 03051
Telephone: 603-893-6200
Telecopy: (603) 893-6214
Email: rroach@nutfieldtech.com

With a copy to:

Peter J. Caruso, Esq.
Caruso & Caruso
68 Main Street
Andover, MA 01801
Telephone: 978/475-2200
Telecopy: 978/475-1001
Email: pcaruso@carusoandcaruos.com

ARTICLE XXVIII - SIGNS; EXTERIOR APPEARANCE; PYLON

28.1 Tenant shall not, without Landlord's prior written consent, which consent shall not be unreasonably withheld or delayed, install any interior or exterior lighting, decorations, paintings, awning, canopies or the like; or erect or install any signs, banners, window or door lettering, placards, decorations or advertising media of any type that can be viewed from the exterior of the Leased Premises or within common areas or exterior of the Building or on the Campus. All signs, banners, lettering, placards, decorations and advertising media shall conform in all respects to the requirements, if any, of all applicable laws, codes and ordinances and to the sign criteria established by Landlord for the Building and the Campus from time to time in the exercise of its sole discretion, and shall be subject to the prior written approval of Landlord as to construction, method of attachment, size, shape, height, lighting, color and general appearance. All signs shall be kept in good condition and in proper operating order at all times. Upon the expiration or earlier termination of this Lease, Tenant shall remove the sign and restore the

surface to which the sign was attached to its original condition at Tenant's expense. In the event Tenant fails to remove the sign within three (3) days from expiration or earlier termination of this Lease, the sign shall become the property of Landlord without any credit or compensation to Tenant, and Landlord may, but is not obligated to, remove and store or dispose of the sign and Tenant shall be liable to Landlord for all costs incurred by Landlord in connection therewith. Tenant shall indemnify and hold Landlord harmless from all loss, damage, cost, expense and liability in connection with such removal, storage or disposal.

28.2 In the event that the Building or the Campus has a pylon sign, Tenant, at Tenant's cost and expense shall have the right, subject however to the written consent of Landlord, to locate a sign advertising Tenant upon the pylon structure, if Landlord elects to erect any such pylon structure. Notwithstanding anything herein to the contrary, Landlord shall in all cases retain the right and power to relocate Tenant's sign located upon such pylon structure, if any, to another location on such pylon structure, to be determined by Landlord, in the sole and absolute discretion of Landlord. The cost of installation, the cost of bringing electrical service to Tenant's sign located upon the pylon structure, the sign itself and any cost incurred by Landlord in repairing or maintaining such sign shall all be the sole cost and expense of Tenant, and Tenant shall indemnify, defend, and hold Landlord harmless with respect to any claim, charge, expense, or liability for same. Under no circumstances whatsoever will Tenant be allowed to remove such sign from the pylon structure without the prior written consent of Landlord. The placement of any such sign upon the pylon structure, and the design and construction criteria therefor shall be governed by such requirements of Landlord. Upon expiration or earlier termination of this Lease, any sign advertising Tenant upon the pylon structure (if Landlord elects to erect any such structure) shall remain upon the pylon structure and be surrendered with the Leased Premises and become the property of Landlord without credit or compensation to Tenant, unless Landlord requires removal of such sign, in which event Landlord shall remove the same at Tenant's expense, and Tenant shall pay to Landlord upon demand, the cost of removing Tenant's sign from the pylon structure.

ARTICLE XXIX - SHORT FORM RECORDING

29.1 If required by the applicable statute and if requested by Tenant, there shall be recorded in the Hillsborough County Registry of Deeds a Notice of this Lease that complies in content and form with New Hampshire RSA Section 477:7-a. Landlord and Tenant shall execute and deliver a Notice of Lease in such form for such purpose. If Tenant makes such a request, Tenant shall also execute, in recordable form, an instrument setting forth the termination of such Notice of Lease, which shall be held in escrow by the New Hampshire attorney for Landlord, Devine, Millimet & Branch, Professional Association (the Landlord's Attorney"). In the event of termination, cancellation or assignment of this Lease prior to the expiration of the term or terms hereof as certified by Landlord to Landlord's Attorney and to Tenant, or if requested in writing by Landlord's lender, the Landlord's Attorney shall be authorized to record such termination.

ARTICLE XXX - NO BROKER

30.1 The parties covenant that no broker was involved in any capacity in bringing about the relationship evidenced by this Lease; and further agree that if any claim on behalf of any broker or agent is made or upheld, then the party against or through whom such claim is made shall defend (with counsel reasonably acceptable to the other party), indemnify and hold the other harmless against any damages, costs or expenses in any way attributable to such claim, including without limitation reasonable attorney's fees.

ARTICLE XXXI - WARRANTIES AND REPRESENTATIONS OF TENANT

31.1 Tenant warrants and represents to Landlord that Tenant's entrance into this Lease does not violate any other contracts, agreements, Leases or any other arrangements of any nature whatsoever that Tenant has with any third parties.

31.2 Tenant represents and warrants to Landlord that Tenant (i) is a limited liability company duly organized, validly existing under the laws of the state of its formation and is in good standing under the laws of the state of its formation and the laws of the State of New Hampshire, (ii) has paid all franchise and other taxes, if any, required to maintain the existence of Tenant and tax good standing, and (iii) is not the subject of voluntary or involuntary proceedings for its dissolution.

ARTICLE XXXII - SUCCESSION

32.1 This Lease is binding upon and will inure to the benefit of the heirs, executors, administrators, successors and permitted assigns of the parties hereto.

ARTICLE XXXIII - WAIVER

33.1 Any consent, express or implied, by Landlord to any breach by Tenant of any covenant or condition of this Lease will not constitute a waiver by Landlord of any prior or succeeding breach by Tenant of the same or any other covenant or condition of this Lease. Acceptance by Landlord of Rent or other payment with knowledge of a breach of or default under any condition hereof by Tenant will not constitute a waiver by Landlord of such breach or default.

ARTICLE XXXIV - GOVERNING LAW

34.1 This Lease will be construed and interpreted exclusively in accordance with the laws of the State of New Hampshire.

34.2 Landlord shall be entitled to recover from Tenant its reasonable attorney fees for any claim whether or not a lawsuit is filed, whether in law or equity, arising out of, under, or in connection with this Lease, or of Tenant's occupancy of the Leased Premises, or any course of dealing between the parties.

ARTICLE XXXV - COUNTERPARTS

35.1 This Lease may be executed in two (2) or more counter-parts, each of which will be deemed an original and all collectively but one and the same agreement.

ARTICLE XXXVI - MODIFICATION; ENTIRE AGREEMENT; INFORMED EXECUTION

36.1 This Lease contains and embraces the entire agreement between the parties hereto and no part of it may be changed, altered, amended, modified, limited or extended orally or by agreement between the parties unless such agreement is expressed in writing and signed by Landlord and Tenant or their respective successors in interest. Tenant has, as of this day: (a) had ample opportunity to consult with counsel if their choice regarding this transaction; (b) had ample opportunity to review with counsel the terms and provision so this Lease and related documents; (c) understood and assented to the obligations imposed by this Lease and related documents and (d) knowingly and willingly entered into this Lease and related documents.

ARTICLE XXXVII - SECTION HEADINGS

37.1 The headings at the beginning of each of the Sections in this Lease are solely for purposes of convenience and identification and are not to be deemed or construed to be part of this Lease.

ARTICLE XXXVIII - SEVERABILITY

38.1 If any term, clause or provision of this Lease is judged by a court of competent jurisdiction to be invalid and/or unenforceable, the validity and/or enforceability of any other term, clause or provision in this Lease will not be affected thereby.

ARTICLE XXXIX - PARKING

39.1 Tenant, its employees, agents and invitees, shall be entitled to park in thirty-six (36) undesignated parking spaces in the paved parking lot surrounding the Building.

39.2 Tenant, its employees, agents and invitees, or any other party related to Tenant, shall not park or store cars, trucks, trailers or other vehicles overnight in any of the parking areas surrounding the Building or anywhere else on the Property.

39.3 Tenant acknowledges that Landlord will be reconstructing and repaving the parking lot surrounding the Building and that its' right to specific parking spaces may be altered by Landlord at Landlord's sole option during such work.

39.4 Tenant shall furnish to Landlord upon request a complete list of license numbers of all automobiles operated by Tenant, its employees, subtenants, licensees or concessionaires. Tenant agrees that if any automobile or other vehicle owned by Tenant or any of its employees, subtenants, licensees or concessionaires, or any of their respective employees, shall at any time be parked in any part of the Building, other than the specific areas designated by Landlord from time to time for employee parking, Landlord shall be and is hereby authorized to cause such automobile or other vehicle to be removed to such other location, either within or beyond the Building. Tenant agrees to indemnify Landlord, its employees, and agents and holds each of them harmless from any and all claims of whatsoever nature which may arise by reason of such removal. Landlord may from time to time substitute for any parking area other areas reasonably accessible to the tenants of the Building, which areas may be elevated, surface or underground.

ARTICLE XL – GUARANTY

40.1 This Lease is to be guaranteed by Ultimate Parent Entity of Tenant (the "Guarantor"). The "Ultimate Parent Entity" is the party to which the funds flow from the sale of the products of Tenant and/or its ultimate parent, as it exists now or in the future, shall guarantee the obligations of Tenant under this Lease and shall execute the Guaranty in the form of Exhibit D attached hereto.

40.2 In the event of a change in the Tenant or the Ultimate Parent Entity, then Tenant's obligations under this Lease shall be guaranteed by the new Ultimate Parent Entity, which shall execute the Guaranty attached hereto as Exhibit D.

40.3 The obligation of the Guarantor is governed by such Guaranty executed for the benefit of the Landlord. If there is more than one (1) Guarantor, the obligations are joint and several. In the event that there is a party to which the funds flow from the sale of the products of Tenant and/or its parent, such party shall be liable for the obligations hereunder whether or not the Guaranty has been executed.

ARTICLE XLI - LIMITATION OF LIABILITY; NON-RECOURSE TO LANDLORD

41.1 Notwithstanding anything to the contrary contained in this Lease, Tenant shall look only to Landlord's ownership in the Building for satisfaction of Tenant's remedies for the collection of a judgment (or other judicial process) requiring the payment of money by Landlord

in the event of any default by Landlord hereunder, and no other property or assets of the partners, affiliates or principals of Landlord, disclosed or undisclosed, shall be subject to levy, execution or the enforcement procedure for the satisfaction of Tenant's remedies under or with respect to this Lease, the relationship of Landlord and Tenant hereunder or Tenant's use or occupancy of the Leased Premises. No personal liability or personal responsibility is assured by, nor shall at any time be asserted or enforceable against Landlord, its partners, affiliates or its-principals, or their respective heirs, legal representatives, successors and assigns on account of this Lease or any covenant, undertaking, or agreement to Landlord contained herein. If any provision of this Lease either expressed or implied obligates Landlord not to unreasonably withhold its consent or approval, an action for declaratory judgment or specific performance shall be Tenant's sole right and remedy in any dispute as to whether Landlord has breached such obligation.

ARTICLE XLII - INTERPRETATION

42.1 The captions of the Articles or Sections of this lease are to assist the parties in reading this Lease and are not a part of the terms or provisions of this Lease. Whenever required by the context of this Lease, the singular shall include the plural and the plural shall include the singular. The masculine, feminine and neuter genders shall each include the other. In any provision relating to the conduct, acts or omissions of Tenant, the term "Tenant" shall include Tenant's agents, employees, contractors, customers, agents, invitees or successors. In addition, in any provision relating to the conduct, acts or omissions of Tenant, the term "Tenant" shall also include others using the Leased Premises with Tenant's permission. This Lease shall not be construed more strictly against one party than against the other merely by virtue of the fact that it may have been prepared by counsel for one of the parties, it being recognized that Landlord and Tenant have contributed with the advice of counsel to the preparation of this Lease.

ARTICLE XLIII - RIGHT OF FIRST OFFER TO LEASE

43.1 Landlord grants to Tenant a Right of First Offer to lease any and all space which is adjacent to the Leased Premises (collectively, the "Adjacent Spaces") as it becomes available for lease. Landlord shall notify Tenant in writing of its intention to offer the Adjacent Spaces for lease (the "Offered Space") and the lease price at which it will be offered which shall be the same amount that Landlord shall offer the Adjacent Spaces to any third party. Such offer shall (a) be in writing, (b) specify the part of the Offer Space being offered to Tenant hereunder (the "Designated Offer Space"), and (c) specify the lease terms for the Designated Offer Space, including the rent to be paid for the Designated Offer Space and the date on which the Designated Offer Space shall be included in the Leased Premises (the "Offer Notice"). Tenant shall notify Landlord in writing whether Tenant elects to lease the entire Designated Offer Space on the terms set forth in the Offer Notice, within ten (10) days after Landlord delivers to Tenant the Offer Notice. If Tenant timely elects to lease the Designated Offer Space, then Landlord and Tenant shall execute an amendment to this Lease, within ten (10) days, effective as of the date the Designated Offer Space is to be included in the Leased Premises, on the terms set forth in the Offer Notice and, to the extent not inconsistent with the Offer Notice terms, the terms of this Lease.

43.2 This Right of First Offer to lease shall only apply to any Adjacent Spaces within the Building as it becomes available, and shall not apply to any other property owned by Landlord, whether such property is offered separately or in combination with any Adjacent Spaces within the Building. Tenant's rights under this Article shall terminate if (a) this Lease or Tenant's right to possession of any of the Leased Premises is terminated, or (b) Tenant assigns any of its interest in this Lease or sublets any portion of the Leased Premises.

43.3 Evidence of Landlord's satisfaction of its obligations under this Right of First Offer for Adjacent Spaces and the failure of the parties to reach an agreeable lease agreement shall be evidenced by an affidavit executed by Landlord, and third parties may rely upon such affidavit without further investigation.

IN WITNESS WHEREOF, the parties caused this Lease to be executed as of the day and year first above written.

Landlord: Centruy Park, L.L.C.

By: /s/ John M. Wolters, Jr.
Name: John M Wolters, Jr.
Title: Manager

Date: June 17, 2014

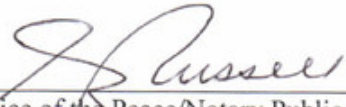
Tenant: Instrument Associates, LLC (DBA Nutfield Technology)

By: /s/ Roger Roach
Name: Roger Roach
Title: President

Date: June 17, 2014

STATE OF NEW HAMPSHIRE
COUNTY OF HILLSBOROUGH

The foregoing instrument was acknowledged before me this 17th day of June, 2014, by John M. Wolters, Jr., Manager of Century Park, L.L.C., a New Hampshire limited liability company, on behalf of said limited liability company.



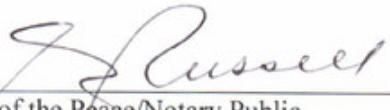
Justice of the Peace/Notary Public
My Commission Expires: _____
Notary Seal or Stamp:

[Sign in Black Ink]


SANDRA RUSSELL, Notary Public
My Commission Expires April 18, 2017

STATE OF NEW HAMPSHIRE
COUNTY OF HILLSBOROUGH

The foregoing instrument was acknowledged before me this 18th day of June, 2014, by Roger Roach (name), Manager (title), of Instrument Associates LLC, a limited liability company organized under the laws of the State of New Hampshire on behalf of said corporation.



Justice of the Peace/Notary Public
My Commission Expires: _____
Notary Seal or Stamp:

[Sign in Black Ink]


SANDRA RUSSELL, Notary Public
My Commission Expires April 18, 2017

EXHIBIT A-1

Floor Plans

[Attached]

Exhibit A-1

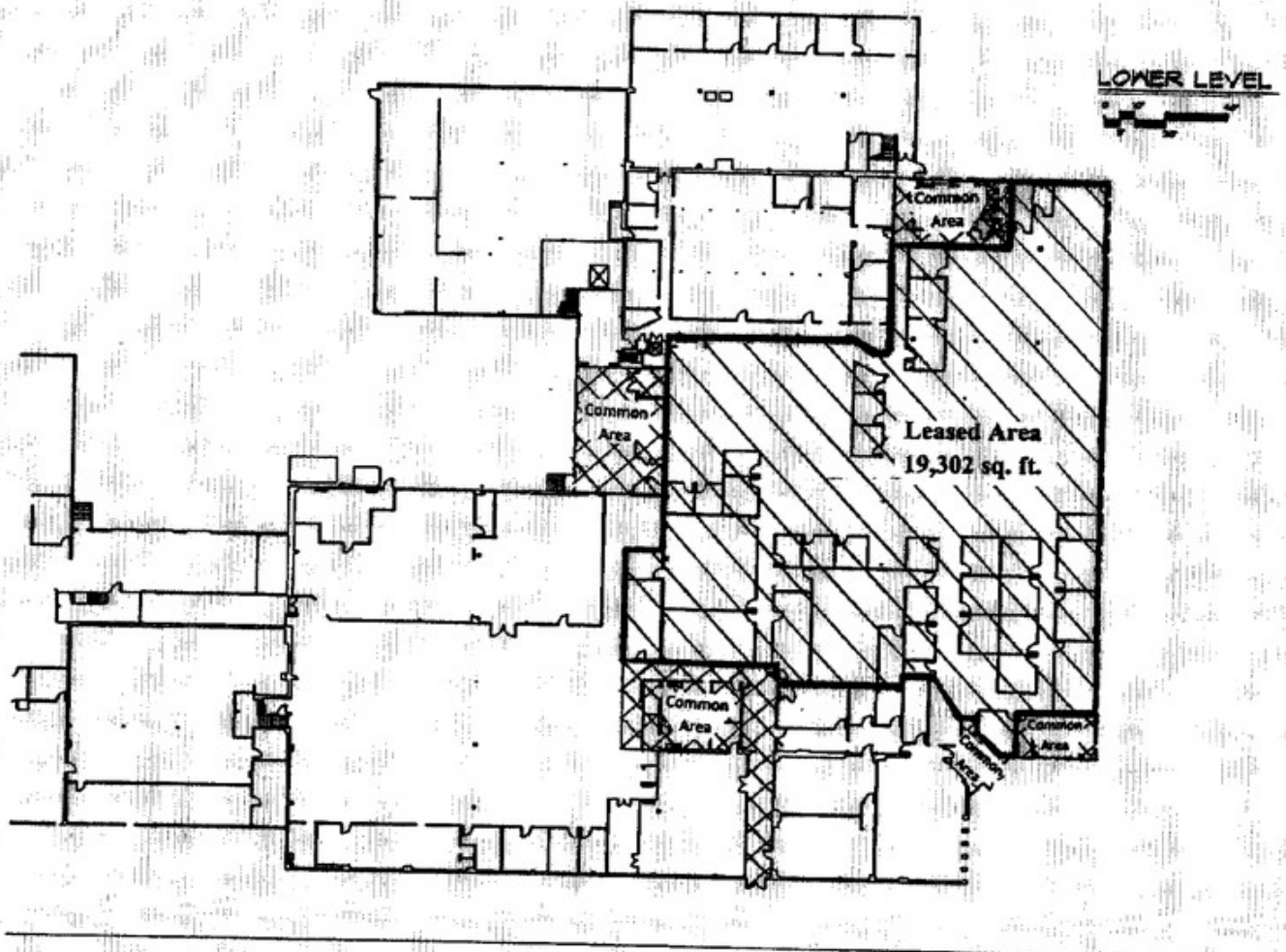


EXHIBIT A-2

Legal Description

Certain real property, with the buildings and improvements located thereon, situate in the Town of Hudson, Hillsborough County, New Hampshire, more particularly bounded and described as follows:

Lot 28 on a plan entitled "Howard Research & Industrial Park, Plan of Land in Hudson, New Hampshire", dated November 17, 1975, revised January 26, 1976 and March 17, 1976, by BSC of New Hampshire, recorded with Hillsborough County Registry of Deeds as Plan No. 9062 and described as follows:

Beginning on the southerly side of Windham Road-Route 111 at the northeast corner of Lot 27 on a circular curve with a radius of 11,384.19 feet being the northwest corner of the herein described Lot; thence easterly along the southerly side of Windham Road-Route 111 and said circular curve 100.98 feet to a point; thence continuing along the southerly side of Windham Road-Route 111 N 81° 30' 30" E 159.09 feet to the westerly end of a circular curve with a radius of 32.40 feet at the southwesterly corner of the intersection of Windham Road-Route 111 and Wall Street; thence southerly along said circular curve and the southwesterly corner of the intersection of Windham Road-Route 111 and Wall Street 42.54 feet to a point on the westerly side of Wall Street; thence along the westerly side of Wall Street S 23° 15' 30" E 211.30 feet to the northerly end of a circular curve with a radius of 108.10 feet; thence southeasterly along said circular curve and the westerly side of Wall Street 85.94 feet to a point; thence along the southerly side of Wall Street S 68° 48' 30" E 76.60 feet to the westerly end of a circular curve with a radius of 31.60 feet; thence southerly along said circular curve and the southwesterly side of Wall Street 41.80 feet; thence along the westerly side of Wall Street S 06° 58' 30" W 385.00 feet to the northerly end of a circular curve with a radius of 25.00 feet at the northwesterly corner of the intersection of Wall Street and Hudson Park Drive; thence westerly along said circular curve and the northwesterly corner of the intersection of Wall Street and Hudson Park Drive 39.27 feet to a point; thence along the northerly side of Hudson Park Drive N 83° 01' 30" W 292.40 feet to the easterly end of a circular curve with a radius of 175.00 feet; thence southwesterly along said circular curve and the northwesterly side of Hudson Park Drive 120.17 feet to a point; thence along the northwesterly side of Hudson Park Drive S 57° 37' 54" W 77.39 feet to Lot 20-C; thence along said Lot 20-C S 79° 21' 12" W 119.86 feet to Lot 23; thence along said Lot 23 N 10° 45' 26" W 50.00 feet to the southerly end of a circular curve with a radius of 812.30 feet on the easterly side of Lot 23; thence northerly along said circular curve and the easterly side of Lot 23 123.48 feet; thence along said Lot 23 N 54° 59' 46" E 115.94 feet to Lot 24; thence along said Lot 24 N 07° 00' 12" W 281.68 feet to Lot 25; thence along said Lot 25 and Lot 27 N 83° 50' 43" E 340.76 feet; thence along said Lot 27 N 9° 00' 02" W 203.19 feet to the point of beginning.

EXHIBIT B

Landlord's Work

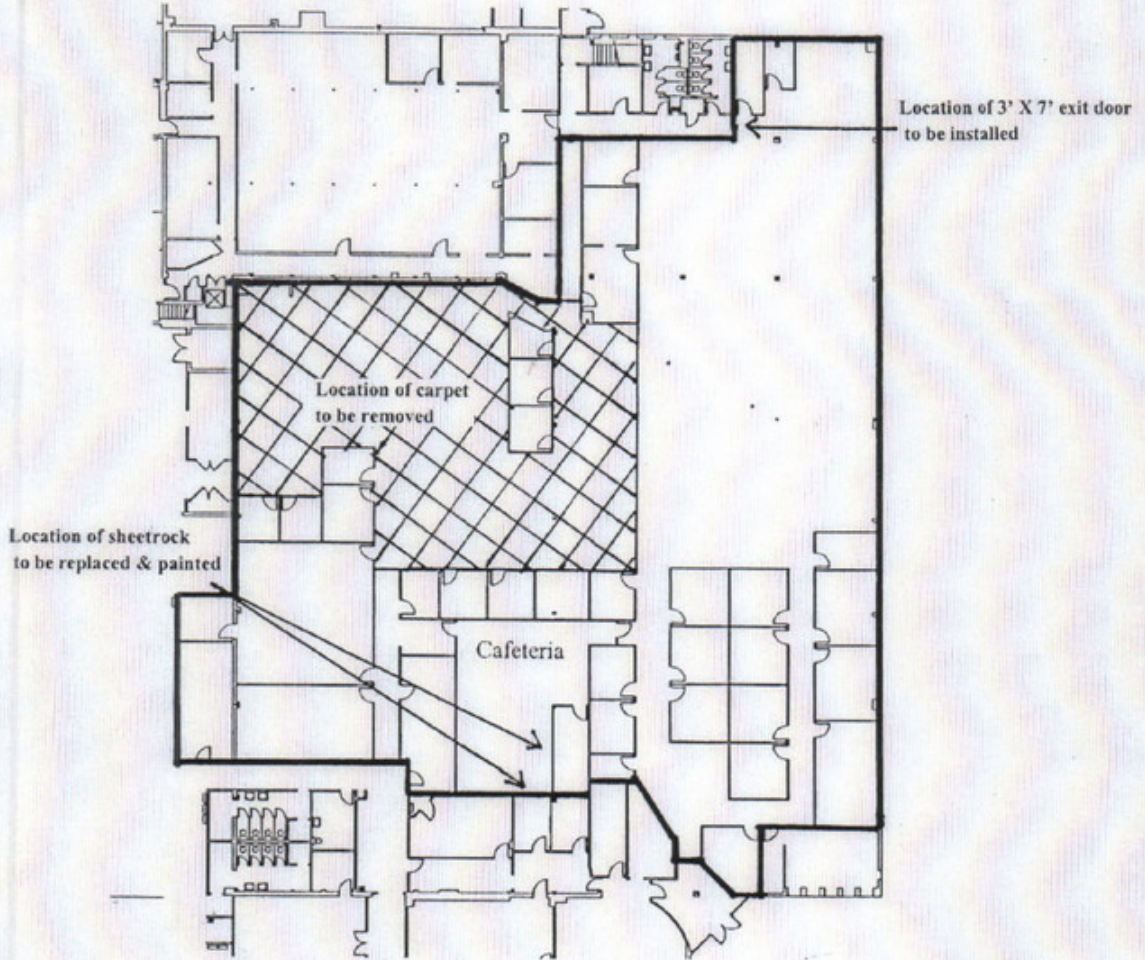
1. Landlord to replace and paint missing sheetrock in cafeteria.
2. Landlord to remove existing carpet in area shown on Exhibit B-1 attached.
3. Landlord to steam clean and deodorize remaining carpet in Leased Premises.
4. Landlord to install one (1) 3' X 7' exit door (with crash bar, if required by code) for emergency exit and access to common area restrooms in rear of Leased Premises as shown on Exhibit B-1 attached.

EXHIBIT B-1

Floor Plan

See attached

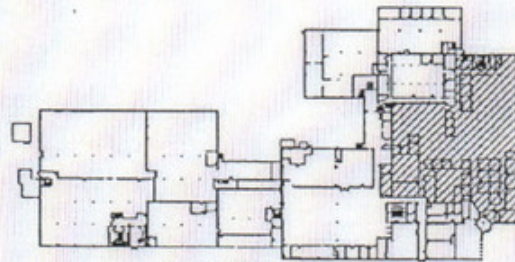
Exhibit B-1



AREA (S-115)



LEASE AREA	
AREA S-115	20,130 SQFT



MAIN LEVEL
LOCUS PLAN

6/27/2009 10:00 AM 10/27/09 11:00 AM

EXHIBIT B-2

Tenant's Work

The following has been completed at a cost of \$20,000 from Tenant Improvement Loan:

1. Installation of approximately Five Thousand (5,000) square feet of VCT tiles;
2. Miscellaneous electrical wiring and repairs;
3. Sealed and waxed tile floors; and
4. Miscellaneous repairs, labor and material disposal.

The amount of \$5,000 from the Tenant Improvement Loan remains for some of the following:

1. Preparing of walls for painting and painting of interior premises;
2. Purchase and installation of interior doors;
3. Certain electrical upgrades and life safety; and
4. Floor finishing.

EXHIBIT C

RULES AND REGULATIONS

1. Tenant will refer all contractors, contractor's representatives and installation technicians rendering any service to Tenant to Landlord for Landlord's supervision, approval and control before performance of any contractual service. This provision shall apply to all work performed in the Landlord's Building and/or Property, including without limitation, installations of telephones, telegraph equipment, electrical devices and attachments, and other installations of any nature affecting floors, walls, woodwork, trim, windows, ceilings, equipment or any other physical portion of the Landlord's Building and/or Property.
2. Without limiting the provisions of Article XXVIII of the Lease no signs, advertisements or notices shall be painted or affixed on or to any windows or doors, or other parts of the Landlord's Building and/or Property, except of such color and size and style and in such places, as shall be first approved in writing by Landlord. All signs will be contracted for by Landlord for Tenant at the rate fixed by Landlord from time to time, and Tenant will be billed and pay for such services accordingly.
3. No portion of the Leased Premises or any part of the Landlord's Building and/or Property shall at any time be used or occupied as sleeping or lodging quarters.
4. Tenant shall not place, install or operate in the Leased Premises or in any part of the Landlord's Building and/or Property, an engine or machinery, or maintain, use or keep any inflammable, explosive, or hazardous material without prior written consent of Landlord.
5. Landlord shall not be responsible for lost or stolen personal property, equipment, money or jewelry from the Leased Premises or common area regardless of whether such loss occurs when the Leased Premises is locked against entry or not.
6. No birds or animals shall be brought into or kept in or about the Landlord's Building and/or Property.
7. Employees of Landlord shall not receive or carry messages for or to Tenant or other persons, nor contract with or render free or paid services to Tenant or Tenant's agents, employees, or invitees.
8. The common areas, driveways, walkways, loading areas, entries, passages, doors, and hallways shall not be blocked or obstructed; no rubbish, litter, trash, or material of any nature shall be placed, emptied or thrown into these areas; and such areas shall not be used at any time except for ingress or egress by Tenant, Tenant's agents, employees, or invitees to or from the Leased Premises.
9. Plumbing fixtures and appliances shall be used only for purposes for which constructed, and no sweepings, rubbish, rags or other unsuitable material shall be thrown or placed therein. Damage resulting to any such fixtures or appliances from misuse by Tenant shall be paid by Tenant, and Landlord shall not in any case be responsible thereof.
10. Tenant shall not do, or permit anything to be done in or about the Landlord's Building and/or Property or bring or keep anything therein, that will in any way increase the rate of fire or other insurance on the Landlord's Building and/or Property, or on property kept therein, or obstruct or

interfere with the rights of, or otherwise injure or annoy, other tenants, licensees or occupants, or do anything in conflict with the valid pertinent laws, rules or regulations or any governmental authority.

11. Landlord desires to maintain the highest standards of environmental comfort and convenience for the tenants and licensees. It will be appreciated if any undesirable conditions or lack of courtesy or attention are reported directly to the management.
12. In the event of any conflict between these rules and regulations and the provisions of a lease; between the Landlord and the Tenant affected thereby, the terms of such lease shall govern.
13. Landlord reserves the right to update these Rules and Regulations from time to time.

EXHIBIT D

GUARANTY

1. FOR VALUE RECEIVED, and in consideration for, and as an inducement to _____, (“Landlord”) to enter into the Lease Agreement (with all Exhibits and Riders thereto, the “Lease”) dated _____, _____ with _____ (“Tenant”), the undersigned, _____ (“Guarantor”, whether one or more), hereby absolutely and unconditionally guarantees the full performance and observance of all the covenants, duties and obligations (including, without limitation, the obligation to pay all Rent and other sums) therein provided to be performed and observed by Tenant, Tenant’s heirs, executors, administrators, successors and assigns (the phrase “heirs, executors, administrators, successors and assigns” not altering any of the provisions of the Lease relating to assignment or subletting); and Guarantor hereby makes himself fully liable for such performance.

2. Guarantor expressly agrees that the validity of this Guaranty and its obligations hereunder shall not be terminated, affected or impaired by reason of the assertion by Landlord against Tenant of any of the rights or remedies reserved under the Lease. Guarantor further covenants and agrees that this Guaranty and the full liability of Guarantor hereunder shall remain and continue in full force and effect notwithstanding the occurrence of any one or more of the following types of transactions: (i) any renewal, extension, modification or amendment of the Lease; (ii) any assignment or transfer by Landlord; (iii) any assignment or transfer or subletting by Tenant; (iv) death of any party Tenant (who may be a natural person); (v) any dissolution of Tenant (if Tenant is a corporation); or (vi) the fact that Tenant (if Tenant is a corporation) may be a party to any merger, consolidation or reorganization; provided however, if Tenant is a disappearing party in any such merger, consolidation or reorganization, then Guarantor shall thereupon automatically become primarily liable for the performance of all the covenants, duties and obligations (including, without limitation, the obligation to pay all Rent and other sums) of Tenant under the Lease. Landlord shall not be obligated to give notice to Guarantor of the occurrence of any of the foregoing events.

3. Failure of Landlord to insist upon strict performance or observance of any of the terms, provisions or covenants of the Lease or to exercise of any right therein contained shall not be construed as a waiver or relinquishment for the future of any such term, provision, covenant or right, but the same shall continue and remain in full force and effect. Receipt by Landlord of Rent (or any other monetary sum or acceptance of performance of any obligation of Tenant under the Lease) with knowledge of the breach of any provision of the Lease shall not be deemed a waiver

of such breach. Waiver by Landlord of any right of Landlord against Tenant under the Lease shall not constitute a waiver as against Guarantor or in any other way inure to the benefit of Guarantor (unless Landlord agrees in writing that the liability of Guarantor under this Guaranty is thereby affected).

4. Guarantor further agrees that in any right of action which shall accrue to Landlord under the Lease, Landlord may, at its option, proceed against Tenant alone (without having made any prior demand upon Guarantor or having commenced any action against Guarantor of having obtained or having attempted to satisfy any judgment against Guarantor) or may proceed against Guarantor and Tenant, jointly or severally, or may proceed against Guarantor alone (without having made any prior demand upon Tenant or having commenced any action against Tenant or having obtained or having attempted to satisfy any judgment against Tenant) or, in the case of there being more than one Guarantor, may proceed against one or more Guarantors (without having made any prior demand upon any other Guarantor or having commenced any action against any other Guarantor or having obtained or attempted to satisfy any judgment against any other Guarantor).
5. Guarantor further covenants and agrees that if the Lease terminates and Landlord has any rights it can enforce against Tenant after termination, Landlord may enforce those rights against Guarantor prior previous notice to or demand upon Tenant.
6. THIS GUARANTY SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW HAMPSHIRE AND THE UNITED STATES OF AMERICA.
7. Guarantor specifically waives any notice of acceptance of this Guaranty by Landlord.
8. If any obligation of Tenant under the Lease is secured, in whole or in part, by collateral of any type Landlord may, from time to time, at its discretion and with or without valuable consideration, allow substitution or withdrawal of all or any part of such collateral or subordinate or waive any of its lien rights with respect to all or any part of such collateral or release all or any part of such collateral, without notice to or consent of Guarantor and without in any way impairing, diminishing or releasing the liability of Guarantor under this Guaranty. Under no circumstances shall Landlord be required to first resort to any collateral for any obligation of Tenant as any nature of prerequisite or precondition to invoking or enforcing the liability of Guarantor under this Guaranty.

9. Guarantor acknowledges and represents to Landlord that Tenant executed the Lease and Guarantor executed this Guaranty prior to the time that Landlord executed the Lease. Guarantor acknowledges and agrees that the execution and delivery of this Guaranty by Guarantor to Landlord has served as a material inducement to Landlord to execute and deliver the Lease. Guarantor further acknowledges and agrees that but for the execution and delivery of this Guaranty by Guarantor, Landlord would not have executed and delivered the Lease.
10. Guarantor agrees that in the event that Tenant shall become insolvent or shall be adjudicated a bankrupt, or shall file petition for reorganization, rearrangement or other relief under any present or future provisions of the federal Bankruptcy Code, or if such a petition be filed by creditors of Tenant, or if Tenant shall seek a judicial readjustment of the rights of its creditors under any present or future federal or state law or if a receiver of all or part of its property and assets is appointed by any State or Federal court, no such proceeding or action taken therein shall modify, diminish or in any way affect the liability of Guarantor under this Guaranty and the liability of Guarantor with respect to the Lease shall be of the same scope as if Guarantor had executed the Lease as the named tenant thereunder. No rejection or termination of the Lease in any of the proceedings referred to in this paragraph shall be effective to release or terminate the continuing liability of Guarantor to Landlord under this Guaranty with respect to the Lease for the remainder of the Lease Term stated therein unaffected by any such rejection or termination in said proceedings; and if, in connection with any of the circumstances referred to in this paragraph, Landlord should request that Guarantor execute a new Lease for the balance of the term of the Lease, but in all other aspects identical with the Lease, Guarantor shall do so as the named "Tenant" under such new Lease (irrespective of the fact that the existing Lease may have been "rejected" or "terminated" in connection with any proceedings referred to in this paragraph). In the event of failure or refusal of Guarantor to execute such new Lease as herein provided, without limiting any of the legal or equitable remedies of Landlord on account of such failure or refusal, Guarantor agrees that Landlord shall have the right to obtain a decree of specific performance against Guarantor.
11. All rights of Guarantor against Tenant arising by way of subrogation on account of Guarantor's having performed some covenant, duty or obligation of Tenant under the Lease shall be subject and subordinate to all of the rights of Landlord against Tenant with respect to the Lease. Guarantor shall not exercise any such right of Guarantor against Tenant until all of the covenants, duties and obligations of Tenant under the Lease shall have been fully performed.
12. The stated rights of Landlord under this Guaranty shall be understood as not excluding any other legal or equitable rights of Landlord against Guarantor not expressly set forth herein, but shall be understood as being cumulative to all such other legal and equitable rights of Landlord not expressly stated herein.

13. Whenever this Guaranty is executed by more than one party as Guarantor, all references herein to Guarantor shall refer to each and all of the undersigned parties signing this Guaranty as Guarantor, and the liability of said parties for the performance of the covenants, duties and obligations of Guarantor hereunder shall be joint and several.
14. Should any portion of this Guaranty ever be held legally invalid or unenforceable, the balance of this Guaranty shall not thereby be affected, but shall remain in full force and effect in accordance with its terms and provisions.
15. All terms and provisions hereof shall inure to the benefit of the assigns and successors of Landlord and shall be binding upon the heirs, executors, administrators, successors and assigns of Guarantor.
16. In any action by Landlord seeking enforcement or interpretation of this Guaranty or the Lease, Landlord shall be awarded, in addition to damages, injunctive or other relief, its reasonable cost and expenses, and a reasonable attorney's fee as may be fixed by the court having jurisdiction over the matter.
17. This Guaranty was renewed by Guarantor and Guarantor acknowledges and agrees that Guarantor (a) understands fully all of the terms of this Guaranty and the consequences and implications of Guarantor's acceptance of this Guaranty, and (b) has been afforded an opportunity to have this Guaranty renewed by and to discuss the terms, consequences and implications with, an attorney or such other persons as Guarantor may have desired.

EXECUTED in multiple counterparts, each of which shall have the force and effect of an original, on this the ___ day of _____, _____.

GUARANTOR

Address: _____

FARO TECHNOLOGIES, INC. LIST OF SUBSIDIARIES

Name	Jurisdiction of Organization
Antares-Desenvolvimento de Software, Lda.	Portugal
Cam2 SRL	Italy
Cam2 Sweden AB	Sweden
FARO Benelux BV	Netherlands
FARO Business Technologies India Pvt. Ltd	India
FARO Cayman LP	Cayman Islands
FARO Cayman Ltd	Cayman Islands
FARO Delaware LLC	Delaware
FARO Deutschland Holding GmbH	Germany
FARO Europe GmbH & Co. KG	Germany
FARO FHN Netherlands Holdings BV	Netherlands
FARO Japan Inc.	Japan
FARO Scanning GmbH	Germany
FARO Scanner Production GmbH	Germany
FARO 3D Software GmbH	Germany
FARO International (Shanghai) Co., Ltd	China
FARO Singapore Pte Ltd	Singapore
FARO Spain SL	Spain
FARO Swiss Holding GmbH	Switzerland
FARO Swiss Manufacturing GmbH	Switzerland
FARO Technology Polska sp.zo.o	Poland
FARO Turkey Olcu Sistemleri Ltd. Sti	Turkey
FARO Verwaltungs GmbH	Germany
FARO Technologies (Thailand) Ltd	Thailand
Faro Laser Trackers, LLC	Delaware
3D Measurement Technologies, S de RL de CV	Mexico
OOO FARO RUS	Russia
FARO Technologies UK Ltd.	United Kingdom
FARO Technologies do Brasil Ltda	Brazil
FARO Technologies Canada, Inc.	Canada
MWF-Technology GmbH	Germany
Moldware GmbH	Germany

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated February 21, 2018, with respect to the consolidated financial statements and internal control over financial reporting included in the Annual Report of FARO Technologies, Inc. and subsidiaries on Form 10-K for the year ended December 31, 2017. We consent to the incorporation by reference of said reports in the Registration Statements of FARO Technologies, Inc. and subsidiaries on Form S-3 (File No. 333-185654) and on Form S-8 (File No. 333-197762 and File No. 333-160660).

/s/ GRANT THORNTON LLP

Orlando, Florida
February 21, 2018

FARO Technologies, Inc.
Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Simon Raab, certify that:

1. I have reviewed this Annual Report on Form 10-K of FARO Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 21, 2018

/s/ Simon Raab

Name: Simon Raab

Title: President and Chief Executive Officer (Principal Executive Officer)

FARO Technologies, Inc.
Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Robert Seidel, certify that:

1. I have reviewed this Annual Report on Form 10-K of FARO Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 21, 2018

/s/ Robert Seidel

Name: Robert Seidel

Title: Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

FARO Technologies, Inc.
Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Solely for the purposes of complying with 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, the undersigned President and Chief Executive Officer of FARO Technologies, Inc., (the Company), hereby certify that the Annual Report on Form 10-K for the year ended December 31, 2017 (the Report) fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 21, 2018

/s/ Simon Raab

Name: Simon Raab

Title: President and Chief Executive Officer (Principal Executive Officer)

FARO Technologies, Inc.
Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Solely for the purposes of complying with 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, the undersigned Chief Financial Officer of FARO Technologies, Inc., (the Company), hereby certify that the Annual Report on Form 10-K for the year ended December 31, 2017 (the Report) fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 21, 2018

/s/ Robert Seidel

Name: Robert Seidel

Title: Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

FARO TECHNOLOGIES INC. PROPERTIES

No.	Location	Sq. Ft.	Owned/ Leased	Purposes
1	125 Technology Park, Lake Mary, Florida	35,000	Leased	Manufacturing, research and development, service
2	250 Technology Park, Lake Mary, Florida	46,500	Leased	Headquarters, sales, marketing, administration
3	290 National Road Exton, Pennsylvania	90,400	Leased	Manufacturing, research and development, service
4	One Wall Street Suite 115, Hudson, NH 03051	21,400	Leased	Manufacturing, research and development, service, sales
5	Lingwiesenstrasse 11/2 70825 Korntal-Muenchingen BW, Germany	105,300	Leased	European headquarters, manufacturing, sales, research and development, service
6	Wiesengasse 20 CH-8222 Beringen Switzerland	15,900	Leased	Manufacturing
7	Unit 1° Great Central Way Butlers Leap Rugby Warwickshire CV21 3Xh, Great Britain	12,700	Leased	Sales, service
8	716 Kumada Nagakute-shi, Aichi 480-1144, Japan	15,900	Leased	Sales, service
9	188 Pingfu Road, Shanghai, China	24,700	Leased	Sales, service
10	No. 3 Changi South St 2 #01-01 Xilin Districentre Building B, Singapore	22,000	Leased	Asia headquarters, manufacturing, sales, service
11	215 Avenida Centuria, Parque Industrial, Apodaca, Nuevo Leon 66600 - Mexico	36,000	Leased	Sales, service