UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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FORM 10-K

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≺	ANNUAL REPORT PURSUANT TO S	SECTION 13 OR 15(d) OF T	THE SECURITIES EXCHANGE ACT O	OF 1934
	1	For the fiscal year ended Dec OR	cember 31, 2019	
	TRANSITION REPORT PURSUANT	TO SECTION 13 OR 15(d)	OF THE SECURITIES EXCHANGE A	CT OF 1934
	For the transition period from	to		
		Commission file numbe	r: 000-21918	
		FLIR System (Exact name of registrant as spec		
	Oregon		93-0708501	
	(State or other jurisdiction of incorporation	or organization)	(I.R.S. Employer Identification	No.)
	27700 SW Parkway Aver	nue.		
	Wilsonville, Oregon		97070	
	(Address of principal executive of		(Zip code)	
	9	trant's telephone number, includin Securities registered pursuant to S	• , ,	
	Title of Each Class	Trading Symbols(s)	Name of Each Exchange on Which Regis	tered
	Common Stock, \$0.01 par value	FLIR	NASDAQ Global Select I	Market
	Secu	rities registered pursuant to Section	on 12(g) of the Act: None	
	Indicate by check mark if the registrant is a well-kn	own seasoned issuer, as defined in R	tule 405 of the Securities Act. Yes 🗵 No 🗆	
	Indicate by check mark if the registrant is not require			
	3 (7		filed by Section 13 or 15(d) of the Securities Excha	0
	eding 12 months (or for such shorter period that the . Yes $oxtimes$ No $oxtimes$	e registrant was required to file suc	n reports), and (2) has been subject to such filing i	requirements for the past 90
a y 0 .		submitted electronically every Intera	active Data File required to be submitted pursuant to	Rule 405 of Regulation S-T
232	2.405 of this chapter) during the preceding 12 months	•	•	
omp	Indicate by check mark whether the registrant is a learny. See the definitions of "large accelerated filer," "		filer, a non-accelerated filer or a smaller reporting company" and "emerging growth company" in Rule	
	Large accelerated filer	\boxtimes	Accelerated filer	
	Non-accelerated filer		Smaller reporting company	
			Emerging growth company	
nan	If an emerging growth company, indicate by check cical accounting standards provided pursuant to Section	_	not to use the extended transition period for comply	ing with any new or revised
	Indicate by check mark whether the registrant is a s		· · · · · · · · · · · · · · · · · · ·	
	As of June 30, 2019, the aggregate market value of As of February 25, 2020, there were 134,455,332 sl		stock of the registrant held by non-affiliates was \$7,2 ck, \$0.01 par value, outstanding.	286,034,534.
		DOCUMENTS INCORPORATE	D BY REFERENCE:	
	The registrant has incorporated by reference into Pa	art III of this Form 10-K, portions of	its Proxy Statement for its 2020 Annual Meeting of S	Shareholders.

FLIR Systems, Inc.

FORM 10-K

ANNUAL REPORT

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Forward-Looking Statements

This Annual Report on Form 10-K (the "Report"), including "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7, contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 regarding future events and the future results of FLIR Systems, Inc. and its consolidated subsidiaries ("FLIR" or the "Company") that are based on management's current expectations, estimates, projections and assumptions about the Company's business. Words such as "expects," "anticipates," "intends," "plans," "believes," "sees," "estimates" and variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in such forward-looking statements due to numerous factors including, but not limited to, those discussed in "Risk Factors" section in Part I, Item 1A of this Report, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7, and elsewhere in this Report as well as those discussed from time to time in the Company's other Securities and Exchange Commission filings and reports. In addition, such statements could be affected by general industry, economic and market conditions. Such forward-looking statements speak only as of the date of this Report or, in the case of any document incorporated by reference, the date of that document, and the Company does not undertake any obligation to update any forward-looking statement to reflect events or circumstances after the date of this Report, or for changes made to this document by wire services or Internet service providers. If the Company updates or corrects one or more forward-looking statements, investors and others should not conclude that the Company will make addition

PART I

ITEM 1. BUSINESS

GENERAL

FLIR Systems, Inc. ("FLIR," the "Company," "we," "us," or "our") is a world leader in developing technologies that enhance perception and awareness. We design, develop, market, and distribute solutions that detect people, objects and substances that may not be perceived by human senses and improve the way people interact with the world around them. We bring these innovative technologies into daily life in ways that help save lives and livelihoods. FLIR technologies include thermal imaging systems, visible-light imaging systems, locater systems, measurement and diagnostic systems, and advanced threat-detection solutions.

Founded in 1978 as an Oregon corporation, FLIR is a pioneer in advanced sensors and integrated sensor systems that enable the gathering, measurement, and analysis of critical information through a wide variety of applications in industrial, government, and commercial markets worldwide. We offer the broadest range of infrared, also known as thermal, imaging solutions in the world, with products that range from professional-use thermal camera smartphone accessories to highly advanced aircraft-mounted imaging systems for military and search and rescue applications, with products in between serving a multitude of markets, customers, and applications. As the cost of thermal imaging technology has declined, our opportunities to increase the adoption of thermal technology and create new markets for the technology have expanded. In order to better serve the customers in these markets, we have augmented our thermal product offerings with complementary sensing technologies, such as visible imaging, radar, laser, sonar, chemical sensing, and environmental sensing technologies.

Our goal is to both enable our customers to benefit from the valuable information produced by advanced sensing technologies and to deliver sustained superior financial performance for our shareholders. We create value for our customers by improving personal and public safety and security, providing advanced intelligence, surveillance, reconnaissance, and tactical defense capabilities, facilitating air, ground, and maritime-based situational awareness, detecting electrical, mechanical and building envelope problems, displaying process irregularities, detecting volatile organic gas emissions, and enhancing advanced driver-assistance systems ("ADAS") and autonomous driving solutions, as well as a variety of other uses of thermal and other sensing technologies.

Our business model and range of solutions allow FLIR to sell products to various end markets, including industrial, original equipment manufacturing ("OEM"), military, homeland security, enterprise, infrastructure, and environmental. We sell off-the-shelf products in configurations to suit specific customer requirements in an efficient, timely, and affordable manner, and support those customers with training and ongoing support and services. Centered on the design of products for low-cost manufacturing and high-volume distribution, our commercial operating model has been developed over time and provides us with a unique ability

to adapt to market changes and meet our customers' needs. Because we aggregate product demand and production across these markets, we can generate significant volume; this volume drives down cost, which then increases demand, enabling a virtuous cycle of lower prices and higher unit volumes. Our manufacturing and supply processes are vertically integrated, minimizing lead times, facilitating prompt delivery, controlling costs and ensuring that components satisfy our high quality standards.

We have evolved our product suite over time, expanding our reach into markets that are adjacent to thermal imaging, with the intent of expanding the adoption and channel development for thermal imaging technology. Examples of this evolution include our entrance into the visible-image security and surveillance market, the industrial machine vision market, and the traffic monitoring and signal control market. We intend to maintain this evolution as we continue to lower the cost of advanced sensing products. As the cost to own thermal technology continues to decline, the application of these sensors is expanding beyond imaging to areas such as data acquisition where thermal sensors can provide important data that can be used for a wide variety of applications.

We believe that the FLIR brand is known for *quality, innovation and trust* and that customers are drawn to us for products and solutions that are effective, innovative, easy to use, and sold at competitive market prices. We intend to: continue to reduce the cost of thermal technology through higher volumes and new product and process improvements; innovate new applications and form-factors for our technology based on customer feedback; improve the customer experience through improved user-interface, ease-of-use, and software; increase customer loyalty and trust by providing world-class product warranties and support; and improve operational processes to realign resources to be nimble in response to customers' needs and market trends.

Industrial: The Industrial business unit develops and manufactures thermal and visible-spectrum imaging camera cores and components that are utilized by third parties to create thermal, industrial, and other types of imaging systems. The Industrial business unit also develops and manufactures devices that image, measure, and assess thermal energy, gases, and other environmental elements for industrial, commercial, and scientific applications, imaging payloads for Unmanned Aerial Systems ("UAS"), ADAS, autonomous emergency braking ("AED"), machine vision cameras, people counting and tracking, and thermal imaging solutions for use by consumers in the smartphone and mobile devices markets. Products include thermal imaging cameras, gas detection cameras, firefighting cameras, process automation cameras, and environmental test and measurement devices. These tools are used by professionals in electrical and mechanical, building envelope, manufacturing plant facility maintenance, petrochemical, utilities, heating, ventilation, air conditioning, and refrigeration ("HVAC/R"), firefighting, safety and health, and a variety of other sectors. Revenue from the Industrial business unit was \$737.7 million in 2019, which represented approximately 39.1 percent of consolidated revenue.

Government and Defense: The Government and Defense business unit provides enhanced sensing and decision support solutions to a wide variety of military, law enforcement, public safety, and other government customers around the world for the protection of borders, troops, and public welfare. The Government and Defense business unit also develops and manufactures sensors, instruments and integrated platform solutions for the detection, identification, and suppression of chemical, biological, radiological, nuclear, and explosives ("CBRNE") threats for military force protection, homeland security, and commercial applications. The Government and Defense business unit, through its recent acquisition of Aeryon Labs and Endeavor Robotics, as well as its operations in Norway, produces advanced multi-mission unmanned air and unmanned ground systems. The Government and Defense business unit has strengths in understanding the nature of sophisticated security threats, the technological potential of advanced detection instruments and systems, and the complex procurement processes of United States and many international government customers. These products and solutions are sold off-the-shelf or can be customized for specific applications and range in price from under \$10,000 for certain hand-held and weapon-mounted systems to over \$1 million for our most advanced integrated sensing solutions platform. Revenue from the Government and Defense business unit was \$794.9 million in 2019, which represented approximately 42.1 percent of consolidated revenue.

Commercial: The Commercial business unit develops and manufactures a wide variety of fixed-mounted visible and thermal imaging cameras and related software for perimeter security in critical infrastructure, enterprise, and smart city vertical markets, electronics and imaging instruments for the recreational and commercial maritime market, automatic incident detection sensors and related data analytics for traffic monitoring and control, and handheld thermal imaging systems for use in a variety of first responder and recreational applications. Products include thermal and visible-spectrum security cameras, and related software and accessories, a full suite of networked marine electronic systems including multi-function helm displays, navigational instruments, autopilots, radars, sonar systems, thermal and visible imaging systems, and communications equipment for boats of all sizes, traffic cameras, sensors and associated traffic management software, and hand-held thermal imagers. The Commercial business unit sells products under the FLIR and Raymarine brands. On February 6, 2018, we completed the sale of LOREX, our consumer and small and medium-sized visible-spectrum security products business. This divestiture enables us to focus on critical infrastructure and

enterprise segments of the broader security market. See Note 20, "Business Acquisitions and Divestitures," to the Consolidated Financial Statements in Item 8 for additional information. Revenue from the Commercial business unit was \$354.4 million in 2019, which represented approximately 18.8 percent of consolidated revenue.

For additional information concerning the Company's business units, including revenues from external customers, segment operating income and operating segment assets, see Note 19, "Operating Segments and Related Information," to the Consolidated Financial Statements in Item 8.

Our headquarters are located at 27700 SW Parkway Avenue, Wilsonville, Oregon, 97070, and the telephone number at this location is (503) 498-3547. Information about the Company is available on our website at www.flir.com.

TECHNOLOGY AND CAPABILITIES

Infrared is a portion of the electromagnetic spectrum that is adjacent to the visible spectrum but is invisible to the human eye due to its longer wavelengths. Unlike visible light, infrared radiation (or heat) is emitted directly by all objects above absolute zero in temperature. Thermal imaging systems detect this infrared radiation and convert it into an electronic signal, which is then processed into a video signal and displayed on a video screen. Thermal sensors provide several benefits over ubiquitous visible light-based sensing technologies, including the ability to see in complete darkness, measure temperature remotely and without touching the surface of the object, image through obscurants such as smoke and fog, detect and discriminate living beings in an efficient and reliable way, see over long distances with minimal atmospheric interference, and image many types of otherwise invisible gases. For these reasons we feel the potential of our core technology to grow in prevalence and importance is significant, particularly as the cost to produce the technology continues to decline.

Thermal imaging systems are different than other types of "low light" night vision systems, such as visible light intensification systems used in green or gray sighted night vision goggles, because thermal imaging systems are not adversely affected by the presence of visible light, so they can be used day or night and are not susceptible to rapid changes in visible light levels. Thermal imaging systems are particularly well-suited for security applications involving the early detection of human activity due to the typically large temperature difference found between a human and the surrounding background. Since infrared systems are detecting emitted infrared radiation, they are passive - and thus more covert than certain "active" or "illuminated" infrared systems. Additionally, thermal imaging systems have the ability to measure absolute temperatures remotely, a critical feature for a variety of commercial, industrial, and scientific applications.

An infrared detector, which collects or absorbs infrared radiation and converts it into an electronic signal, is the primary component of thermal imaging systems. The two types of infrared detectors we manufacture and use in our systems are often referred to as "cooled" and "uncooled" detectors. Cooled detectors utilize a mechanical sterling cycle micro-cooler to reduce the operating temperature of the infrared sensor to approximately -200°C. These detectors offer very high sensitivity and spatial resolution for long-range applications or those applications requiring high measurement precision. Cooled detectors, while more sensitive and thus able to see farther, result in a product that is more expensive, heavier, more complex, and uses more power than those using uncooled detectors. Uncooled detectors operate at room temperature and do not require a micro-cooler, resulting in products that are lighter, use less power and are less expensive to produce than those using cooled detectors. The cost of both types of detectors is declining, and we expect to continue reducing costs as volumes rise and the technology advances.

We have expertise in the calibration and repair of our products, and maintain service facilities at many locations worldwide. Each of our service facilities have the capability to perform the complex calibrations required to service thermal imaging systems. We also maintain field service capabilities under the direction of our independent representatives or distributors in certain locations outside the United States.

As our customers have sought, and will continue to seek, new ways to address their needs and requirements in the most cost-effective and efficient manner, we have integrated thermal imaging with complementary technologies such as visible imaging, lasers, radar, and more. The following capabilities and disciplines are integrated into our business and processes:

System Design and Integration

We have developed extensive competencies in the design and integration of numerous capabilities and payloads into integrated systems or sub-systems. Competencies such as stabilization, packaging and systems integration allow us to effectively combine a wide variety of technologies and payloads to suit our customers' needs. We strive to minimize the size, weight, power consumption, and cost in each of our product designs.

Thermal Radiometry

Our ability to produce thermal imaging systems that can accurately measure temperature remotely is critical in many of our Industrial business unit markets. We have demonstrated know-how in designing and producing systems that can measure temperature to within very precise tolerances while maintaining accuracy and stability over time and over a wide range of ambient temperatures. We believe our skills in this area, known as thermal radiometry, offer an important competitive advantage over many of our competitors.

Mechanical Engineering

The design and production of thermal imaging systems involves highly sophisticated mechanical engineering techniques, particularly in the design and assembly of the supporting structures for system components such as detector arrays, micro-coolers, and optics. We also have expertise in designing stabilized assemblies used in our gimbal-mounted products utilizing precise electro-mechanical control, gyroscopes, electronic stabilization, and specialized optical control mechanisms. Also, through our 2016 acquisition of Prox Dynamics, we develop and manufacture nano-class UAS that are specifically designed to be man-portable and highly covert surveillance and reconnaissance sensors.

Infrared Detector Design Manufacturing

We design and manufacture both cooled and uncooled infrared detector arrays, in high volumes and at low costs. We believe our uncooled vanadium oxide microbolometers and cooled detectors using indium antimonide and indium gallium arsenide are among the highest performing infrared detectors of their type available in the world. We believe the internal design and manufacturing of these detectors provides significant cost and engineering advantages compared with the use of external sources.

Integrated Circuits and Electronic Design

We have significant electronic design capabilities across several specialized areas, including readout-integrated circuit design, signal processing, image processing, and electronics integration. Our design expertise lies in the areas of reliability, low power consumption, and extreme environmental survivability.

Software Development

Software is an increasingly important aspect of our overall engineering and design activity. We offer networking capabilities, video analytics, command and control, and advanced firmware in our camera and other sensing systems. Many of our products are supported by a software eco-system that includes dedicated desktop and mobile platform applications. Our products are typically developed with broad compatibility with common industry standards and protocols.

Optical Design, Fabrication and Coating

We design and manufacture sophisticated infrared optics using materials such as silicon, germanium, and zinc selenide that are required to produce a thermal imaging system. This capability allows us to rapidly develop optics optimized for use with our cameras and avoid costs and delays associated with reliance on third-party optics suppliers. We also have the capability to produce silicon wafer-level micro-optics at high volumes and the ability to apply custom multilayer, vapor-deposited coatings to improve the transmission of the lens materials that are used in infrared systems.

Micro-Coolers

We manufacture some of the industry's smallest, lightest, and lowest power micro-coolers for use in cooling infrared detectors. Our coolers are especially effective in hand-held applications, where light weight and long battery life are essential.

Lasers and Laser Components

Many of our more sophisticated systems are increasingly being offered with various types of laser payloads, including pointers, illuminators, rangefinders, and designators. We design and manufacture purpose-built laser rangefinders and designators for inclusion in some of our gimbaled multi-sensor systems. We also manufacture certain laser-related materials and components for external customers.

Tactical Platforms

We develop and manufacture comprehensive and integrated solutions for surveillance, assessment, and response. These platform solutions draw from our Government and Defense business unit products, as well as products sourced outside of the Company. These unmanned and manned networkable mobile and vehicle mounted systems can be deployed in nearly any environment and have provided security at borders, at theme parks, for police and military forces, at national monuments, and at high-profile events, both in the United States and internationally.

RESEARCH & DEVELOPMENT

Our success has been, and will continue to be, substantially affected by our ability to innovate new products and technologies that both augment our existing offerings and create new avenues for growth. We strive to differentiate ourselves from our competition with our research and development ("R&D") capabilities. We intend to continue to have significant internal R&D expenses in the future to provide a continuing flow of innovative and high-quality products to maintain and enhance our competitive position in each of our business segments. In addition to these internally funded activities, we engage in R&D projects that are reimbursed by government agencies or prime contractors pursuant to development contracts we undertook.

COMPETITIVE STRENGTHS

With our decades of experience in developing and marketing infrared sensor products, we have built several competitive advantages that are core to our success. We look to leverage these strengths to continue to increase the availability of and uses for advanced sensing technologies and to grow our revenue and profitability:

Commercial Operating Model

A key differentiator of our business model is our commercial approach to technology investment and product strategy. This is characterized by our commercial approach to R&D as described above, as well as our focus on global deployment, innovative marketing communications, superior customer service, rapid product development cycles, innovation of new technologies and unique products, ability to design for large-volume and low-cost production, and control of multiple production inputs through our vertically integrated operations.

Vertically Integrated Manufacturing and Supply

We have built a vertically integrated manufacturing operation that provides control over several key component technologies. Through acquisitions and internal development, we have created this internal supply network that allows for optimized manufacturing throughput, rapid response to changes in customer demand, increased product design flexibility, enhanced product reliability, and independence in designing key components. Further, this integrated approach enables us to lower costs and improve the functionality of critical components so that they work together most efficiently within our products. In comparison to competitors that do not possess a similar level of vertical integration, our model helps us deliver products in a more timely and cost-effective manner as we rely less on third-party suppliers for critical components.

Industry-Leading Market Position

We are a leading developer of advanced, proprietary sensor systems that are highly reliable, accurate, and effective. We strive to develop products that lead in the areas of Size, Weight, Power and Cost ("SWAP-c"). We believe we have achieved significant penetration into many markets, including the government, industrial, commercial, and consumer markets by pioneering new applications and being a "first-mover" in these markets. Having a leading position in the markets we serve allows us to secure new and continuing business while also achieving manufacturing economies of scale. Increased unit volumes work to reduce costs throughout our business, which allows us to create new products that feature lower price points. This creates a virtuous cycle whereby we are able to make advanced sensor technologies more affordable to a wide array of end-users while reducing costs. This established presence across multiple markets enhances our competitive position.

Broad Product Lines

We offer a wide array of sensor products, including infrared imaging cameras and systems, detector cores, visible-light cameras, CBRNE threat detectors, test and measurement instruments, radars, maritime electronics, and related products and solutions. Our customers can buy these products off the shelf or request a customized sensor solution. This ability to serve a variety of customers with disparate needs and specifications allows us to be successful in facilitating the use of advanced sensors in a broad range of applications. We have the ability to rapidly conceive, design, prototype, and manufacture new products to meet the evolving landscapes of the markets we serve. Our development process incorporates significant customer satisfaction and field-use data and results in the rapid creation of new features that are able to address the changing needs of the end-user. We believe this continual evolution of our products will positively contribute to customer satisfaction and have a long term impact through a high level of customer retention and revenue and income growth.

Internally Funded Innovation

We have expertise in developing sensing instruments that are both highly advanced from a technical standpoint and commercially viable and salable across multiple types of customers. Since the beginning of 2015, we have invested \$831.7 million in internally funded research and development of new technologies and products. Utilizing our own funds for R&D provides us with full ownership of the development process and the end product, and also focuses our R&D teams on projects that will result in products that are commercially viable, yield the highest expected financial return and can be marketed to multiple markets for multiple applications.

Diverse Customer Base

We sell our products to thousands of commercial and government customers for use in a variety of applications and markets worldwide. The buyers and users of our products include United States and foreign governments and government agencies, aerospace and defense contractors, electricians and tradesmen, commercial seaports, first responders, critical infrastructure operators, electrical generation and gas processing plants, heating and air conditioning technicians, building inspectors, food processors, automobile parts manufacturers, commercial and residential security providers, research and lab technicians, manufacturing companies, recreational boaters, and general commercial consumers. We believe that the diversity of our customers, end-user markets, and applications helps to mitigate fluctuations in demand from any particular customer or market. The diversity of our customers and of the end-users of sensor technologies provides us with multiple long-term growth opportunities.

Global Distribution Capabilities

Our core infrared imaging products have expanded from high-end products sold primarily to military customers and niche research firms to everyday tools providing valuable information-gathering and assessment capabilities for a multitude of industrial, government, and commercial entities and consumers. With the widening adoption of these technologies, distribution has become a key advantage to our business globally. We believe our sales and distribution organization is among the largest in the industry and effectively covers the world with a combination of direct sales, third-party representatives and distributors, independent dealers, retail outlets, application engineers, and service and training centers. Internationally, we have invested heavily to build a strong presence to sell and service our products, a key advantage in penetrating certain markets, such as foreign governments. Our sales representatives, including third-party distributors, undergo a comprehensive training program on each product's technical specifications, functions, and applications. We also routinely update our training programs to incorporate technological and competitive shifts and changes. We sell in many distinct markets and have established specific sales channels for each market. We intend to continue to expand this distribution platform through internal growth and external acquisitions.

Investment in Research and Development and Intellectual Property Platform

We have invested heavily in R&D, resulting in industry-leading innovations and a robust and growing patent portfolio that is focused on our core technologies as well as many of our emerging technologies and businesses. To complement our patent portfolio, we continue to strengthen our key brands by unifying critical design features across product lines, enhancing our worldwide trademark coverage, refining our domain portfolio, and growing brand awareness through social media outlets.

Consistent Generation and Distribution of Cash Flows

Our earnings, combined with our modest capital expenditure requirements, result in the generation of significant cash flows provided by operating activities. In the years ended December 31, 2019 and 2018, our net cash provided by operating activities was \$370.4 million and \$374.2 million, respectively. Our operating cash flows have exceeded our net earnings in each of the last five years. This ability to consistently convert revenues into net operating cash provides us significant flexibility in making growth and capital deployment decisions, such as consummating strategic acquisitions, undertaking new product and technology development initiatives, expanding our distribution and marketing presence, making capital investments, paying dividends, and repurchasing shares of our common stock in the open market. Since 2015, we have utilized approximately \$1,140.2 million of cash for acquisitions and strategic minority investments, \$558.0 million for share repurchases, \$389.7 million for dividends, and \$221.9 million for capital expenditures. Since we began paying dividends in 2011, we have annually increased our dividend at a compound annual growth rate of approximately 14 percent.

STRATEGY

Our task and purpose are to exceed our commitments with integrity and to innovate the World's Sixth Sense to save lives and livelihoods. Our vision is to do this while revolutionizing human perception. Our mission is to innovate technologies that increase awareness and insight so that professionals can make more informed decisions that save lives and livelihoods. To achieve these objectives, we centered our strategy on three key priorities: Fuel, Feed, Focus, with The FLIR Method as the foundation supporting these priorities.

Fuel

We strive to fuel our business by capturing significant near-term opportunities that help us gain scale and secure leading market positions in attractive markets. Success in these initiatives will give us the ability to make longer-term investments. Examples include winning key business opportunities, we identify as franchise programs, in each of our three business units over the next 12 to 36 months. We are strategically dedicating resources, and working aggressively, to capture these opportunities.

Feed

We seek to feed our business by investing in technologies and market opportunities that are part of our longer-term strategic roadmap. Examples include investments in differentiated technologies and moving to consolidate stronger positions in attractive markets. These efforts will enable longer-term, 3- to 5-year growth trajectories. In many cases, these technologies or markets are nascent or underdeveloped and it will take time, commitment, and investment to fully realize their potential. Our intent is to move from making the world's best sensors, to sensing, and ultimately to intelligent sensing solutions to help our customers make decisions that save lives and livelihoods.

Focus

We intend to focus our business on areas of strength where we can maximize competitiveness across the Company. Throughout the company, there are opportunities to focus or refocus parts of the business to fuel and feed other parts. Examples include, but are not limited to, divesting non-core assets, exiting unattractive end markets, and focusing capital structure for inorganic growth. We aim to continuously capture efficiencies across the company in order to leverage available resources to maximize portfolio return.

The FLIR Method

The FLIR Method ("TFM") forms the foundation of our strategic priorities to fuel, feed, and focus the business. TFM consists of six distinct elements: Talent Development, Lean Management, One FLIR, Acquisition and Integration Discipline, Continuous Improvement, and Customer-Driven Innovation. It is the method in which we will mature into a world-class operating company, and is intended to empower a creative, curious and constantly learning organization. By continuously improving our global

operations through TFM, we aim to self-fund many of the investments required over the strategic horizon and maximize the efficiency of our human capital.

BUSINESS SEGMENTS

Industrial Business Unit

The Industrial business unit develops hand-held, fixed mount, and desktop imaging and measurement products, and thermal and visible spectrum imaging camera cores and related components. Thermal imaging camera products detect and measure heat and surface temperature differences, offering high accuracy, sophisticated diagnostic functionality, and a product range that spans a wide price spectrum. These thermal cameras and related products are utilized by a growing number of industrial plant professionals, residential construction and contracting firms, energy production workers, manufacturing equipment and production line technicians, tradesmen, and homeowners.

The Industrial business unit offers a broad range of cooled and uncooled thermal products, with thermal cameras for laboratory and research and development applications; optical gas imagers for oil, power, and chemical production applications; highly ruggedized cameras for firefighters that are used for fire attack, overhaul, and search-and-rescue operations; fixed and pan-tilt thermal cameras for factory line automation and plant safety monitoring; and multiple lines of professional and mid-level thermal cameras for building analysis, predictive maintenance, and electrical systems analysis.

The Industrial business unit provides a comprehensive line of rugged and reliable test and measurement instruments, such as moisture meters, electrical test clamp meters, power analyzers, and multi-functional meters. These measurement instruments are used to evaluate electrical and environmental factors, including voltage, sound, light, heat index, and water quality. Leveraging our low-cost thermal sensors, we augment and enhance these familiar tools used in many industrial and commercial trades with Infrared Guided Measurement ("IGM"). IGM allows users to more efficiently address issues by first discovering via a thermal image the precise area of over-heating, moisture damage, or air ingress, allowing them to then apply the relevant sensor, such as voltage, current, spot temperature, or moisture probe, at the point of concern.

The Industrial business unit also offers thermal camera cores, an integrated, plug-and-play camera system that includes the infrared or visible spectrum sensor as well as the related image processing electronics and an optical lens. We offer cooled and uncooled thermal cores that are based on long wave infrared ("LWIR"), mid-wave infrared ("MWIR"), and short wave infrared ("SWIR") sensors. Our visible spectrum camera cores are utilized primarily for machine vision and people counting applications and are based on complementary metal-oxide semiconductors ("CMOS") and charged-coupled device ("CCD") sensors that are produced by third parties. We also sell to third parties thermal sensors and readout integrated circuit ("ROIC") products, which are used to convert pixel-level information into digital information, essential in the design of infrared, visible, ultra violet, and X-Ray sensors.

Our vertically integrated manufacturing capability, built over many years, enables us to provide thermal camera core and component products to other FLIR business units at low cost, as well as sell cores and components to third party customers. Our cores and components are designed for easy and efficient integration into higher levels of product assembly. Third party OEMs integrate these cores and components into their own branded products. We operate under this model so to aggregate the largest amount of volume possible, which lowers our total cost to produce camera cores and components.

The Industrial business unit also houses our emerging markets businesses, which are businesses that are identified as high-potential but do not yet have the scale to represent their own segment. Included in our emerging markets business is our mobile products business, makers of thermal imaging accessories for the smartphone market, and our commercial UAS business, which provides thermal cameras and cores for use on, or integration into, UAS systems, which are often referred to as "drones."

Markets

ОЕМ

We supply cooled and uncooled thermal and visible spectrum camera cores, sensors, and readout integrated circuits ("ROICs") on an OEM basis to an array of manufacturers of finished products in both the military and commercial spaces. These customers require a product at a lower level of integration than a fully developed thermal imaging system. Examples of major OEM applications in the Industrial business unit are military defense, automotive advanced driver assistance systems, industrial automation systems, UAS, firefighting, smartphones, medical devices, digital X-ray, and security.

Building and HVAC/R

Thermal imaging cameras are increasingly used by building and home inspectors, roofing specialists, plumbers, general contractors, and real estate firms to evaluate and measure the integrity of buildings by quickly revealing structural problems, such as air leaks and missing insulation, to help ensure efficient use of energy and other resources. HVAC/R and mechanical contractors use thermal cameras and test and measurement equipment to ensure comfort in residences and workplaces by discovering, monitoring, and documenting airflow, leaks, and temperatures in ductwork and other forms of heating/cooling distribution systems. Hand-held test and measurement tools are used to measure airflow, humidity, carbon monoxide levels, light, sound, and other environmental factors.

Electrical

Electricians and mechanical technicians utilize thermal cameras and test and measurement equipment to quickly conduct electrical diagnostics, such as identifying circuit overloads, finding loose wire connections, and measuring currents, all without having to touch dangerous components. From overheating electrical circuits to corroded connections, thermal cameras and test meters provide the diagnostic functions needed to verify correct installations, quickly trace the source of problems, and enable efficient electrical systems. Hand-held test and measurement tools are used to measure currents, voltage, resistance, continuity, and other electrical parameters.

Predictive Maintenance

Thermal imaging systems are used for monitoring the condition of mechanical and electrical equipment. Such monitoring enables factory and plant maintenance technicians to quickly reveal equipment faults, manifested as hot or cold spots, so they can be repaired before they fail. This increases equipment productivity and avoids catastrophic failures or major damage, which reduces operating expenses by lowering repair costs and reducing downtime. Improved functionality of image analysis software, smaller size and weight, and simplicity of system operation are critical factors for this well-established market segment. Hand-held test and measurement tools are used to measure airflow, humidity, carbon monoxide levels, sound, vibration and other environmental factors.

Machine Vision

Advanced visible imaging cameras and solutions provide imaging-based automatic inspection and analysis for such applications as industrial automation systems, medical diagnostic equipment, people counting systems, intelligent traffic systems, military and defense products, security monitoring, vehicle guidance, and advanced mapping systems. These systems and solutions improve the efficiency, quality, analysis, and safety of a wide range of processes and products.

Oil and Gas Production

Thermal imaging cameras can visualize and pinpoint certain gas leaks. In industrial, utility, and oil and gas refinery settings, optical gas imagers visually reveal plumes of gases such as SF6 (Sulfur Hexafluoride), hydrocarbons, carbon monoxide and carbon dioxide from a safe distance. Optical gas imaging cameras can continuously scan installations in remote areas or in zones that are difficult to access. Continuous monitoring allows the user to be informed when a dangerous or costly gas leak appears. Typical examples are monitoring pipelines, petrochemical industry and offshore operations.

Research and Science

High-end thermal imaging systems provide the unique ability to detect very small differences in temperature. This capability is useful in industrial R&D, where developers study, see, and quantify the heat dissipation, stress tolerance, and thermal characteristics of their materials, components, and products. At colleges and universities, instructors use thermal imagery to help students visualize the theories of heat transfer and thermodynamics, improving student comprehension of key concepts, and for both fundamental and applied research. In the defense sector, cooled thermal imaging cameras are used in the development of firearms, ammunition, guided missiles, and aircraft.

Firefighting

Thermal imaging is a well-known technology in the firefighting market, with firefighters and first responders worldwide utilizing thermal imaging cameras for protecting their own life and saving the lives of others. Thermal imaging technology allows first responders to assess conditions of a space prior to and after entry by providing them the ability to see through most forms of smoke.

This also allows them to search for people and animals and identify fire hot spots in burning buildings or smoke filled environments. Providing the ability to measure temperatures in a non-contact mode from a safe distance helps firefighters to protect themselves against dangerous phenomena like roll-overs and flash-overs.

Manufacturing Process Control

Temperature consistency is critical to the quality of many manufactured components, materials, and products, including metals, plastics, paper, and glass. Thermal cameras, both fixed and mobile, help factories ensure product quality and identify other defects in both products and in the manufacturing process itself through the continuous monitoring of the production line, resulting in higher output and nearly perfect quality control. Other users of thermal cameras in the manufacturing sectors include worker safety and fire prevention, analysis of welding and fastening effectiveness, food inspection, packaging quality, and electronic and mechanical component manufacturing, ranging in size from small hybrid integrated circuits to jet engines.

Mobile

Leveraging our ability to produce thermal sensors at a low cost and with low size, weight, and power consumption, we created a line of personal thermal imaging cameras that attach to smartphones. The mass adoption of smartphones has driven significant growth in the development of tools that extend the utility of these devices, and our FLIR ONE® products do this by empowering consumers with thermal imaging on their smartphones. We believe that the potential of thermal imaging as a tool for consumers provides this segment with an emerging opportunity for growth.

Sales and Distribution

Our Industrial business unit has a direct sales staff and a network of distributors and retailers covering major markets worldwide, including technical and customer support staff in the United States and internationally who provide application development, technical training, and operational assistance to direct and indirect sales personnel as well as to customers. The majority of our Mobile market sales are generated through wholesale channels, which include national and regional consumer electronics chains, large online retailers, and specialty retailers. We also sell our Mobile products directly to consumers through our own network of e-commerce websites. In addition, we sell our products to independent distributors in various countries where we generally do not have direct sales operations, and through licensees.

At December 31, 2019, the Industrial business unit had a total backlog of \$189.0 million compared to \$164.5 million at December 31, 2018. Backlog represents orders that have been received for products, contract research and development, or other services for which a contractual agreement is in place and delivery or performance is expected to occur within 12 months.

Customers

Industrial business unit customers are found around the world in commercial, government, trades, educational, research, agricultural, and non-professional/consumer segments. They include utility companies, electrical contractors, building inspectors, damage restoration contractors, first responders, universities, numerous commercial enterprises, makers of military aircraft and vehicles, automotive safety equipment, firefighting equipment, manufacturing automation systems, security cameras, hunting equipment, smartphones, UAS, and maritime equipment. Our Industrial business unit sales personnel maintain direct relationships with many of our customers.

Given the high-value nature of many of our thermography-related instruments, our thermography products' revenues tend to be correlated with seasonal trends, in particular capital spending trends. In general, customers in markets like predictive maintenance and R&D are sensitive to the broad economy because our cameras are viewed as capital expenditure items. We expect revenue outside the United States to continue to account for more than half of our Industrial business unit revenue.

Competition

The Industrial business unit operates in highly competitive markets. The primary competitive factors include brand reputation, technical innovation, product breadth, functionality, quality, reliability, and price. We believe we compete successfully in these markets with our innovative products, multi-function capabilities, our high value-to-price ratio, and our service and support functions.

While we maintain substantial market share in the OEM cores and components markets based on independent industry research, we view the thermal OEM market as highly competitive. We believe the key drivers of success in these markets are: technological

proficiency in imaging sensors, product quality, product cost, and scalability of operations. We believe we are well positioned to operate in this competitive environment given our demonstrated ability to innovate high-quality sensors at low cost due to our vertically-integrated operating model, our advanced R&D capabilities, and our broad product offering.

Government and Defense Business Unit

The Government and Defense business unit develops and manufactures enhanced imaging and situational awareness solutions for a wide variety of military, law enforcement, public safety, and other government entities around the world. The Government and Defense business unit also develops and manufactures field-ready sensor instruments and integrated platform solutions for the accurate detection, identification, classification, and suppression of CBRNE threats for military force protection, homeland security, and commercial applications. The Government and Defense business unit also produces advanced multimission unmanned air and ground based systems serving US DoD and Federal government agencies, public safety, and governmental customers in international markets.

Our solutions are used to protect borders, surveil a scene, conduct search and rescue missions, gather intelligence, and protect critical infrastructure by providing the capability to see over long distances, day or night, through adverse weather conditions, through many obscurants, and from a wide variety of vehicle, man-portable, and fixed-installation platforms.

Infrared imaging systems used for surveillance typically employ cooled infrared detector and numerous other imaging technologies to identify and track objects from long distances and at high resolution. The Government and Defense business unit also utilizes uncooled thermal technology to enable markets where size, weight, power consumption, and cost are important considerations. Uncooled products include hand-held and tripod-mount monoculars and binoculars, weapon sights, man-portable UAS, and military-vehicle vision systems. We also design and manufacture lasers and laser components, such as rangefinders, illuminators, and target markers.

Our customers require systems that operate in demanding environments such as extreme climatic conditions, battlefield and military environments, or maritime conditions. Systems are often installed onto larger platforms and must be able to integrate with other systems such as aircraft avionics, radars, remote weapon systems, laser systems, command and control centers, and large, broad-based security networks.

Our solutions also can combine multi-threat detection and identification technologies into single hand-held or desktop instruments. Product lines include hand-held and fixed radiation detectors, hand-held and desktop explosives trace detectors, desktop and portable mass spectrometers, and continuous air monitoring devices for aerosolized biological threats and disclosure sprays. The segment also manufactures integrated systems of multiple pieces of equipment to create turn-key solutions used by first responders for the detection, identification, sample collection, decontamination, marking, and hazard reporting of CBRNE threats.

Our detection and identification products utilize mission-based user interfaces to expedite decision-making for field operators and advanced technicians. Our advanced CBRNE detection instruments provide lab-quality confidence in a field-proven, highly reliable, and ruggedized package. Customers around the world use our products for forensic analysis, military reconnaissance, force protection, public security, law enforcement, emergency response, environmental monitoring, building and event security, teaching, and research.

Our detection and identification products leverage an established technical R&D organization that enables us to offer smart, simple, and reliable products that meet the evolving needs of government and commercial security providers. With many years of experience working in collaboration with multiple government agencies, the Government and Defense business unit has developed relationships with various government decision-makers and has substantial knowledge of the governmental procurement process.

The unmanned systems and integrated solutions offerings are multi-mission systems designed to perform in complex operational environments. Manned and unmanned platforms, for both air and ground based operations, use a wide variety of sensing and decision support software including visual and infrared imaging sensors, radar, and advanced software processing algorithms to enhance mission utility and provide time critical decision support capabilities.

We offer a portfolio of small unmanned airborne systems ("sUAS") solutions along with a range of modular mission payloads designed to enhance mission effectiveness. These include nano size UAS systems for short range ISR missions as well as multi-rotor VTOL systems with longer range and duration that are capable of missions including ISR, target tracking, search & recovery, and logistics support. Our payload solutions are designed to optimize size, weight, and power and integrate a variety of electro-optic, both thermal and visual, sensors.

The unmanned ground systems encompass a family of robots that range from man portable systems under 5 lbs to large robots over 450lbs. Systems are designed to provide a wide range of mission utility in dangerous environments including situational awareness/ persistent observation, CBRN detection and HazMat handling operations, and standoff capabilities to detect, confirm, identify and dispose of hazards including I.E.D.'s.

Our integrated solutions span a set of fixed, deployable, and mobile systems designed to provide advanced surveillance and security capabilities, enhance timely decision making, and improve mission command and control. They support areas including border surveillance, perimeter security, and force protection.

Markets

Surveillance and Reconnaissance

High-definition thermal imaging systems are used in surveillance and reconnaissance applications for the precise positioning of objects or people from substantial distances and for enhanced situational awareness, particularly at night or in conditions of reduced or obscured visibility. We also offer high-resolution, frequency-modulated, continuous-wave radars that enable wide-area surveillance capable of detecting potential threats before they cross a perimeter. These systems can be installed on fixed platforms, manned-mobile platforms, and UAS. With our in year acquisitions of Aeryon Labs and Endeavor Robotics, and building off the acquisition of Prox Dynamics in 2016, we develop and sell a variety of sUAS and ground based robotic systems that are multi-mission, highly portable and rapidly deployable real-time solutions. These integrate a range of sensors including visual and thermal imaging systems.

Force Protection

In instances where military or other personnel are deployed in hostile areas, thermal imaging systems and radars mounted on towers or other platforms are deployed to detect, identify, and defeat potential threats at an early stage. Our unmanned systems coupled with our fixed, deployable, and mobile integrated solutions provide enhanced capabilities by using FLIR technology, sensors and command and controls software, in rapidly deployable multi-mission platforms. Our systems are deployed for this purpose by the United States Army, United States Marine Corps, and other allied nations worldwide.

Border and Maritime Patrol

Our systems and platforms are used in airborne, shipborne, land-based, hand-held and fixed-installation applications for border and maritime surveillance, particularly at night, to enforce borders and monitor coastal waters, to support national fishing boundaries and to prevent smuggling. Our integrated platforms and sensor solutions are currently deployed along numerous borders worldwide, including in the United States, Europe, and the Middle East.

Critical Infrastructure Protection

Government and Defense provide an extensive set of integrated solutions designed to provide advanced surveillance and security capabilities designed for critical infrastructure and perimeter protection applications. By coupling advanced imaging sensors, radar, and command and control software, FLIR solutions provide operators with persistent surveillance of fixed sites. Typical sites include military bases, government buildings, air and maritime ports, and power/petro-chemical facilities.

Search and rescue

Thermal imaging systems are used in airborne, shipborne, and land-based missions to rescue individuals in danger, distress, or who are wounded or lost in adverse conditions. These systems are in use today by organizations such as the United States Army, United States Air Force, United States Coast Guard, United States Marine Corps, United States Air National Guard, and many international customers.

Detection

Government and private sector entities continue to seek new ways to address increasingly sophisticated terrorist threats and to respond to other security risks, natural disasters, and unintentional incidents that threaten public safety. Our multi-purpose products meet the requirements for a broad range of end-users and end uses

We offer biological air monitors that are used by various governmental agencies for security at facilities and events. Our explosives detection products are used to identify military-grade explosives and homemade explosive devices in a wide array of military and

public safety applications, such as screening high-risk individuals at checkpoints and identifying improvised explosive device ("IED") makers, and our radiation products protect the public by warning of radionuclide exposure.

Targeting

We offer several products that provide precise target location and designation capabilities in applications ranging from man-portable devices to high-definition, multi-spectral, stabilized airborne laser designator systems.

Airborne Law Enforcement

We are a leader in the supply of stabilized airborne thermal imaging systems for federal, state, and local law enforcement agencies. This type of equipment gives those agencies the ability to track suspects, locate lost persons, and provide situational awareness to officers on the ground.

Drug Interdiction

Thermal imaging systems enable government agencies to expand their drug interdiction and support activities by allowing 24/7 wide-area surveillance and detection capabilities. Our systems are in use by the United States Customs Service, United States Drug Enforcement Agency and United States Federal Bureau of Investigation, as well as by similar foreign government agencies.

Sales and Distribution

Our Government and Defense business unit has a direct sales staff and a network of independent representatives and distributors covering major government markets worldwide. Included in this organization are technical and customer support staff in the United States, Europe, the Middle East, and Asia Pacific regions who provide application development, technical training, and operational assistance to direct and indirect sales personnel as well as to customers. We also utilize third-party sales representatives, value-added resellers, and systems integrators. With a centralized sales organization and specialized sales teams that serve specific detection markets, we have been successful at building and leveraging strong relationships with key decision-makers at various government agencies and commercial entities. Some detection market products are designed as components or sub-systems that are incorporated into third-party products or systems.

The Government and Defense business unit derives a portion of its revenue, approximately 5.0 percent in 2019, from agencies of the United States government pursuant to research projects. The revenue recognized under these contracts represents reimbursement by the customer for time periods ranging from several months to several years. Our participation in these and other development programs has culminated in the development of a number of commercial products. In general, our contracts with the United States government permit us to retain all rights to patents emerging from the funded R&D efforts.

The Government and Defense business unit typically has the highest backlog of our business units relative to revenue and in absolute terms. At December 31, 2019, the Government and Defense business unit had a total backlog of \$434.6 million compared to \$391.1 million at December 31, 2018. Backlog represents orders that have been received for products, contract research and development, or other services for which a contractual agreement is in place and delivery or performance is expected to occur within 12 months.

Customers

Government and Defense business unit customers generally consist of United States and foreign government agencies, including civilian, military, paramilitary, and police forces, as well as defense contractors, aircraft manufacturers and private sector businesses and commercial ports both in the United States and internationally. United States government customers include the Departments of Homeland Security, Defense, and Energy, the Transportation Security Administration, the Federal Bureau of Investigation, NASA, the Secret Service, and the Coast Guard. A substantial portion of Government and Defense business unit consolidated revenue is derived from sales to United States and foreign government agencies, and our business will continue to be substantially dependent upon such sales. We expect revenue outside the United States to continue to account for a significant portion of our Government and Defense business unit's revenue. The Government and Defense business unit is susceptible to some seasonality in its orders primarily based on the United States government budget year end. The result is that the third quarter tends to exhibit the largest amount of orders for our United States government customers. However, fiscal policy trends, increased revenue from outside the United States, budget delays, and general economic trends can overshadow this seasonality in any given year.

Competition

The Government and Defense business unit operates in highly competitive markets, and success in these markets depends on our ability to develop new technologies to meet rapidly evolving customer needs, reduce production and development costs, integrate with third-party devices and systems, establish and foster relationships with key government and commercial customers, and recruit highly technical personnel. Many of our competitors in the government sector are well-established contractors for various governments and have more financial and other resources than we possess. The principal competitive factors in the government markets include technical innovation, agency relationships, product quality and reliability, price, and ability to deliver. We believe we compete successfully in these markets with our best-in-class technologies, our products' abilities to outperform customer requirements and competitors' products, our lower-priced solutions, and our service and support functions that exist in the field and near the customer.

Commercial Business Unit

The Commercial business unit provides security solutions for a multitude of applications, including enterprise and infrastructure security. It also develops and manufactures a broad range of maritime thermal imaging and electronic products for recreational and commercial customers globally, develops and manufactures software-enabled automotive and pedestrian monitoring and control systems, and develops and sells hand-held and mounted scopes for law enforcement, first responders, and consumers in the outdoors market.

Security solutions include thermal and visible-spectrum cameras, digital and networked video recorders, and related video management systems ("VMS") software and video analytics software accessories that enable the efficient and effective safeguarding of assets at all hours of the day and night and during adverse weather conditions.

Maritime products for recreational and commercial customers include a full suite of electronic systems including multi-function helm displays, navigational instruments, autopilots, radars, sonar systems, thermal and visible imaging systems, and communications equipment for boats of all sizes. These products are utilized for general navigation, sport fishing, cruising, and sailing. Our primary product offering is multifunction navigation displays ("MFDs"). Our Axiom MFDs are designed to provide boaters visual navigation data from multiple sensors, including GPS, autopilot, sonar, and radar. We have several lines of MFD products, serving leisure and fishing boats of all sizes, in saltwater or freshwater environments. Our Element product line addresses the MFD needs of the small-boat recreational fishermen, including kayakers and freshwater bass anglers, while our larger MFDs serve large saltwater boat end-users. Through our Lighthouse operating system, we also integrate our MFDs to use and control thermal and visual cameras, onboard entertainment products, engine instruments, and data services like satellite weather. Recognizing the importance of mobile devices to boaters, we offer Wi-Fi enabled MFDs along with mobile apps that give boaters access to the MFD and sensors from anywhere on board the vessel. Our marine instrument products are dedicated displays and sensors for monitoring depth, boat speed, and wind information. Our sonar solutions are engineered to serve the needs of both the inland and saltwater fishing customers.

These sonars serve as fishermen's eyes below the water so they can detect fish, locate underwater structure, and identify the habitat of the fish they are trying to catch. We also offer autopilot solutions that provide precision steering control for open water passages. To keep boaters connected, we offer several communication products, such as VHF marine radios for ship-to-ship and ship-to-shore communications, and our automatic identification system ("AIS") solutions enable the wireless exchange of navigation status between vessels and vessel-monitoring centers. The Maritime segment's thermal camera solutions are designed to enhance a boater's overall situational awareness in limited visibility and are used primarily to identify other vessels, navigation aids, and hazards. Thermal maritime cameras are also utilized for search and rescue and local law enforcement surveillance operations.

We market our maritime products under both the FLIR and Raymarine brands. FLIR-branded maritime products consist of thermal cameras designed for recreational, commercial, and first-responder vessels. The Raymarine line of marine electronics is designed and marketed primarily to recreational boaters and light-commercial customers.

Markets

Recreational Boating

The recreational boating market is comprised of fresh and saltwater fishing, sport/cruising, and sailing. Our core MFD products are engineered to address the needs of all three markets. We also develop products specifically for strategic markets and customers, such as Element sonars for freshwater fishermen, wind instruments for sailors, and vessel automation for boat builders.

Utilities

Power plants, electrical substations, and water facilities utilize visible spectrum and thermal imaging cameras to provide continuous surveillance day or night. Our cameras are integrated with video analytics to provide automated alarm notification. At electrical substations, our thermal products provide protection against materials theft and acts of sabotage, and provide notifications when connections switchgear and transformers reach dangerous operating temperatures.

Nuclear Power

The United States Nuclear Regulatory Commission requires nuclear facilities to provide continuous 24-hour surveillance, observation, and monitoring of their perimeter and control areas. Our thermal security cameras are well suited for this requirement, providing true 24/7 monitoring capability even during most adverse weather conditions.

Petrochemical

Our thermal security cameras and advanced analytic capabilities help petrochemical facilities meet the United States Department of Homeland Security's Chemical Facility Anti-Terrorism Standards. Thermal security cameras are highly effective in meeting the standards' requirements for monitoring a facility's perimeter, securing applicable assets, and solidifying a deter, detect, and delay strategy.

Ports and Borders

Our long range thermal and visible security cameras as well as ground radar systems provide "beyond the fence" situational awareness and advanced warning capabilities. Airport and border authorities around the world utilize our thermal security cameras to help keep people and equipment safe, operating day and night, in nearly all weather or lighting conditions.

Commercial and Residential

FLIR's full-spectrum security solutions offer a comprehensive line of thermal and visible cameras to protect commercial facilities. Our products are also used in a wide range of home applications that may include the use of thermal, visible or image-intensified cameras as well as network video recorders and other peripheral equipment.

Commercial and First Responder Maritime

The commercial and first responder maritime market is comprised of light commercial, heavy commercial, and light-defense segments. We address these commercial markets with both our thermal maritime cameras and our marine electronics systems.

Intelligent Transportation

Visible and thermal imaging helps transportation departments all over the world monitor vehicles and pedestrians in urban environments, detect incidents on highways and in tunnels, collect and visualize traffic data, control traffic signals, and ensure the safety on public roads and railways. These systems are able to detect vehicles and use the information to control traffic lights in order to improve traffic flow. While road-embedded magnetic loops have historically been the primary technology for analyzing intersections and roadways, visible and thermal imaging are increasingly being used for this application. Thermal imaging technology has proven to be highly effective at detecting the presence of vehicles as it is not impeded by darkness, colors, shadows, direct sunlight, light from oncoming traffic, or weather effects. We believe that the value of these solutions in terms of improved traffic flow, fuel conservation, and public safety is significant.

Personal Vision

FLIR's premium lightweight personal vision thermal and image-intensified products, such as hand-held monoculars and mounted scopes provide professionals and consumers the ability to see during day and night and stay safe in various settings. They are used by law enforcement for surveillance and tactical operations and by outdoorsmen to track animals and to navigate during deteriorated weather conditions. We believe the personal vision systems market is very large and is becoming increasingly accessible as we reduce the price of advanced thermal imaging products.

Sales and Distribution

Our Commercial business unit sales organizations utilize direct sales, a network of independent reps, and a worldwide network of aftermarket distributors, technical dealers, boat builders/OEMs, and retailers. We have a dedicated business development team to address the unique requirements of our OEM boat-builder channel. With our OEM boat builders, we differentiate ourselves by providing full system solutions. We also add value to our boat-building partners through technical installation training of the OEM factory staff. In the United States, we devote special teams to the retail maritime channel so we can address this channel's dynamic and unique merchandising and promotional needs. Our sales team is supported by technical support teams and applications engineers. The technical teams provide customer support and conduct regular training sessions with our technical dealer and OEM customers. A dedicated staff of business development managers for the Intelligent Traffic products assists the distribution channel, made up of traffic control systems integrators and engineering consultants, with application development, technical training, and operational assistance.

At December 31, 2019, the Commercial business unit had a total backlog of \$48.9 million compared to \$46.7 million at December 31, 2018. Backlog represents orders that have been received for products or services for which a contractual agreement is in place and delivery or performance is expected to occur within 12 months.

Customers

Our Commercial business unit serves a broad customer base that is expanding every year. Our visible-spectrum security solutions are purchased by high-end critical infrastructure users, security hardware distributors, systems integrators, and contractors. Thermal security cameras are currently sold in all global regions, with most customers falling into the high-end critical infrastructure category. However, recent volume production of our thermal camera cores has allowed us to drop the cost of thermal security cameras to a point where it is an affordable option for many commercial security networks.

Our FLIR maritime thermal cameras are supplied to an array of commercial customers including tugboats, work boats, and passenger vessels. Both FLIR and Raymarine maritime-branded thermal cameras are supplied to recreational sport fishing and cruising powerboat customers. Raymarine's primary end consumers include freshwater and saltwater fishing boat owners, cruising power boats, and sailboat owners. In the fishing segment, Raymarine customers include kayakers, bass boat owners, bay boats, center consoles, and offshore sport fish boat owners. The cruising segment includes owners of sport boats, cruisers, and trawlers. Sailing customers include owners of day sailors, racers, cruising yachts and multi-hull sailboats.

Our Maritime segment also supplies thermal cameras to maritime first responders and maritime law enforcement organizations around the globe, including the United States Coast Guard. Our cameras are used by marine divisions of city fire and police departments along with local fish and wildlife enforcement organizations.

Customers for our Intelligent Traffic products are traffic and public transportation authorities in cities and municipalities all over the world who deploy visual and thermal imaging cameras and other equipment in urban areas, on highways, in tunnels, and on bridges.

Customers for our Outdoor Tactical Solutions products are premium outdoor enthusiasts and law enforcement professionals in cities and municipalities across the world who deploy thermal imaging handhelds and mounted sights in urban and rural settings.

Competition

The Commercial business unit operates in highly competitive markets. Many of our competitors in the security solutions business are well-established brands. Key competitive factors include technical innovation, analytics, video monitoring, system integration and compatibility, price, and ability to deliver. Our competitive advantages include our broad line of thermal camera offerings that offer both high- and low-end solutions to our customers.

Like consumer electronics, delivering innovative features and lower price points are critical to the success of our marine electronics products. Consumers typically purchase marine electronics as a system of products from one brand, so it is critical that we deliver a competitive offering in each of our product lines.

In the Intelligent Transportation market, we succeed by offering multi-spectrum imaging sensors including visible and thermal spectrums, coupled with reliable algorithms that automatically detect vehicles, bicycles, and pedestrians so that intersections, tunnels, and bridges are controlled more efficiently and safely.

In the Outdoor Tactical Solutions market, we succeed by offering thermal and high end night vision handheld and mounted sights to improve visibility and safety in multiple different urban and rural settings.

SALES, MARKETING, CUSTOMER SUPPORT, AND TRAINING

Our sales and distribution organization covers the world with a combination of direct sales, third-party representatives and distributors, system integrators, independent dealers, retail outlets, application engineers, and service and training centers. Internationally, we have invested heavily to build a strong presence to sell and service our products, a key advantage in penetrating certain markets, such as foreign governments. Our sales representatives, including third-party distributors, undergo a comprehensive training program on each product's technical specifications, functions, and applications. We also continuously update our training programs to incorporate technological and competitive shifts and changes. We sell in many distinct markets and have established specific sales channels for each market.

Our primary marketing activities include online advertising, participating in trade shows, partner sponsorships, optimizing our website for search keywords so that prospects searching for imaging and sensing solutions online find FLIR quickly, press releases about new products and company developments, social media outreach, and cooperative advertising.

We offer a strong product warranty coupled with responsive support accessible via phone, web, and e-mail, and our localized support locations for high-end systems helps us stand out in our markets.

Our Infrared Training Center ("ITC") offers training, certification, and re-certification in all aspects of thermography, including specialized instruction in building diagnostics, roofing, electrical, mechanical, research and science, and optical gas imaging. Online courses cover the basics of thermal camera operation and reporting software. The ITC is also the premier sponsor of InfraMation, a leading thermal imaging user conference which is typically held annually.

MANUFACTURING

We manufacture many of the critical components for our products, including but not limited to infrared detectors, gimbals, pan-tilts, optics and coatings, laser sub-systems, and micro-coolers, and develop much of the software and middleware for our systems. This vertical integration minimizes lead times, facilitates prompt delivery of our products, controls costs, and ensures that these components satisfy our quality standards. We purchase other parts pre-assembled, including certain detectors, coolers and optics, circuit boards, cables, and wire harnesses. These purchased and manufactured components are then assembled into finished systems and tested at one of our primary production facilities located in the United States, Sweden, Norway, Estonia, and Canada. Certain components and finished goods, including some of our visible-spectrum cameras, test and measurement products and maritime electronics, are produced by contract manufacturers.

Our manufacturing operations are, from time to time, audited by certain customers, which include several major aircraft manufacturers, and have been certified as meeting their quality standards. Substantially all of our manufacturing locations are either ISO 9001:2000 or :2008 certified with certain locations having higher certifications.

INTELLECTUAL PROPERTY

To support our focus on being an innovation leader in our key markets and protect our proprietary information, we rely on a combination of patent, trademark, copyright, and trade secret rights, a strong internet domain presence, confidentiality agreements, joint development agreements, and contractual provisions. Over the past several years we have intensified our efforts to protect our innovations through increased United States and international patent filings, and to strengthen our core brands through thoughtful trademark procurement and domain portfolio refinement. We will continue to actively develop our intellectual property and intend to emphasize initiatives that will further promote innovation and leadership in marketable technologies. We cannot, however, be certain or give any assurance that we can secure patent or trademark protection on all our innovations, maintain our competitive advantage or that competitors will not develop similar or superior capabilities.

GOVERNMENT REGULATION

Thermal technology is controlled for export, re-export and retransfer by the United States government. Depending on the technology, the export of infrared products may be controlled by the United States Department of State under the International Traffic and Arms Regulation ("ITAR") or the United States Department of Commerce Bureau of Industry and Security under the Export Administration Regulations ("EAR"). In general, the more sophisticated the technology and the higher the performance of the

product, the more restrictive are the licensing requirements. Licensing requirements differ from country to country, end user to end user and differ with product performance and field of intended use. The export of some of our products require a license from the United States Department of State under the ITAR and the export of some of our products require an export license from the United States Department of Commerce under EAR.

As a United States government supplier, we must comply with specific procurement regulations and other requirements and are subject to routine audits and investigations by United States government agencies. If we fail to comply with these rules and regulations, the results could include: reductions in the value of contracts; contract modifications or termination; the assessment of penalties and fines; and/or suspension or debarment from United States government contracting or subcontracting for a period of time or permanently.

EMPLOYEES

As of December 31, 2019, we had 4,265 employees of which 2,305 were located in the United States and 1,960 located outside of the United States. We have generally been successful in attracting highly skilled technical, marketing, and management personnel. None of our employees in the United States are represented by a union or other bargaining group. Certain employees in Europe are represented by unions and workers councils whose contracts are subject to periodic renegotiations. We believe our relationships with our employees, unions and workers councils are generally good.

ENVIRONMENTAL MATTERS

Our operations are subject to a variety of federal, state, local and foreign environmental laws and regulations relating to the discharge, treatment, storage, disposal and remediation of certain materials, substances, and wastes used in our operations. We continually assess our obligations and compliance with respect to these requirements. We have also assessed the risk for environmental contamination for our various manufacturing facilities, including our acquired businesses and facilities and, where appropriate, have obtained indemnification from the sellers of those businesses and facilities.

We believe that our current operations are in substantial compliance with all existing applicable environmental laws and permits. Operating and maintenance costs associated with environmental compliance are a normal, recurring part of our operations. Historically, these costs have not been material.

AVAILABLE INFORMATION

Our internet website address is www.flir.com. This Report, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 and other required filings are available through our internet website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission. Our internet website and the information contained therein or connected thereto are not intended to be incorporated into this Report. The Securities and Exchange Commission maintains a website (www.sec.gov) where our reports can be accessed.

ITEM 1A. RISK FACTORS

The following are important factors that could cause actual results or events to differ materially from those contained in any forward-looking statements made by or on behalf of the Company. If we are unable to adequately respond to these risks and uncertainties, our business, financial condition and results of operations could be materially adversely affected. Additionally, we cannot be certain or give any assurance that any actions taken to reduce known risks and uncertainties will be effective.

Risks, Uncertainties and Other Factors Related to Our Business

We depend on the United States government for a material portion of our business and changes in government spending could adversely affect our business

We derive significant revenue from contracts or subcontracts funded by United States government agencies. A significant reduction in the purchase of our products by these agencies or contractors for these agencies would have a material adverse effect on our business. For the fiscal years ended December 31, 2019, 2018 and 2017, approximately 32 percent, 29 percent and 26 percent, respectively, of our revenues were derived directly or indirectly from sales to the United States government and its agencies. The funding of contracts awarded to us depends on the overall United States government budget and appropriations process, which is beyond our control. A failure to pass budget appropriations, adopt continuing funding resolutions or other budgetary decisions limiting or delaying federal government spending, could reduce government spending on our products and services and have a material adverse effect on our business and our operating results.

In addition, at its discretion, the United States government may change its spending priorities and/or terminate, reduce or modify contracts.

Substantial uncertainty exists in the spending levels and priorities of the United States government, particularly with respect to military expenditures. Continued and further reductions in military spending could have a material adverse effect on our results from operations.

Considerable uncertainty exists regarding how future budget and program decisions will unfold, including the defense spending priorities of the United States government agencies. Any failure by the United States government to timely enact annual appropriations bills could restrict new contract or program starts, presenting resource allocation challenges and placing limitations on some planned program budgets. We may also face another United States government shutdown of unknown duration. If a prolonged government shutdown of the Department of Defense were to occur, it could result in program cancellations, disruptions and/or stop work orders and could limit the United States government's ability effectively to progress programs and to make timely payments, limit our ability to obtain necessary export licenses to ship internationally, and limit our ability to perform on our United States government contracts and successfully compete for new work. Consequently, significant delays or reductions in appropriations; long-term funding under a continuing resolution; an extended debt ceiling breach or government shutdown; and/or future budget and program decisions, among other items, may negatively impact our business and could have a material adverse effect on our financial condition and results of operations.

As a United States government supplier, we are subject to a number of procurement rules and regulations

As a government contractor, we must comply with specific procurement regulations and other requirements and we have been, and expect to continue to be, subject to routine and non-routine audits and investigations by United States government agencies. Government contract laws and regulations affect how we do business with our customers and impose certain risks and costs on our business. U.S. government agencies, including the Defense Contract Audit Agency, the Defense Contract Management Agency and others, routinely audit and review a contractor's performance on government contracts, indirect rates and pricing practices, and compliance with applicable contracting and procurement laws, regulations and standards. They also review the adequacy of the contractor's compliance with government standards for its business systems. Adverse findings in these investigations, audits, or reviews can lead to criminal, civil or administrative proceedings, and the Company could face disallowance of previously billed costs, penalties, fines, compensatory damages and suspension or debarment from doing business with governmental agencies. Due to the Company's reliance on government contracts, adverse findings could also have a material impact on the Company's business, including its financial position, results of operations and cash flows.

In addition, violations of these regulations or other unrelated laws and statutes can lead to debarment and other penalties as well as have a material adverse effect on our ability to compete for future contracts and orders. If we fail to comply with procurement rules and regulations and other laws and statutes, the results could include: reductions in the value of contracts; contract modifications or termination; the assessment of penalties and fines; and/or suspension or debarment from United States government contracting or subcontracting for a period of time or permanently. An adverse action by the United States government could also result in lost sales to non-governmental customers who might disqualify us as a result of such adverse action. The impairment or loss of our government contracts could have a material adverse effect on our business.

Operating margins may be negatively impacted by reduction in sales or by a change in the mix of products sold

Our expense levels are based, in part, on our expectations regarding future sales and these expenses are largely fixed in the short term. Some expenses, such as those related to research and development activities, would likely be maintained in the event of a sales downturn in order to maintain and enhance our long-term competitiveness. We maintain inventories of finished goods, components and raw materials at levels we believe are necessary to meet anticipated sales. Accordingly, we may not be able to reduce our costs in a timely manner to compensate for any unexpected shortfall between forecasted and actual sales. Any significant shortfall of sales may result in us carrying higher levels of inventories of finished goods, components and raw materials thereby increasing our risk of inventory obsolescence and corresponding inventory write-downs and write-offs. Our fixed costs, including facilities and information technology costs, compliance and public company costs, and depreciation and amortization related to previous acquisitions and capital expenditures, are significant and are difficult to reduce in the short term. Our operating margins vary by product and substantial changes in the mix of products sold could also have a negative impact on our operating margins.

We may experience impairment in the value of our tangible and intangible assets

Our industry is subject to rapid changes in technology, which may result in unexpected obsolescence or impairment of our assets. Our intangible assets, including goodwill, represent a significant portion of our total assets. Most of these intangibles are the result of acquisitions in which the purchase price exceeded the value of the tangible assets acquired. We amortize certain of these intangibles over their anticipated useful life and review goodwill and indefinite-lived intangible assets for impairment annually or more frequently if warranted by events. During the fourth quarter of fiscal year 2019, the Company recognized an intangible asset impairment charge of \$1.2 million associated with intangible assets that were determined not to be recoverable due to a change in their expected future economic benefit. There can be no assurance that we will not experience other such impairment in the future. In addition, certain of our tangible assets such as inventory and machinery and equipment may experience impairment in their value as a result of such events as the introduction of new products, changes in technology or changes in customer demand patterns. We depreciate our machinery and equipment at levels we believe are adequate; however, there can be no assurance that there will not be a future impairment that may have a material impact on our business, financial condition and results of operations.

Unfavorable results of legal proceedings could materially adversely affect us

We are subject to various legal proceedings and claims that have arisen out of the ordinary conduct of our business and are not yet resolved, and additional claims may arise in the future. Results of legal proceedings cannot be predicted with certainty. Regardless of merit, litigation may be both time-consuming and disruptive to our operations and could cause significant expense and diversion of management attention. From time to time, we are involved in lawsuits concerning intellectual property, torts, contracts, shareholder litigation, administrative and regulatory proceedings and other matters, as well as governmental inquiries and investigations, the outcomes of which may be significant to our results of operations and may limit our ability to engage in our business activities. In recognition of these considerations, we have and may in the future enter into material settlements to avoid ongoing costs and efforts in defending or pursuing a matter. Should we fail to prevail in certain matters, or should several of these matters be resolved against us in the same reporting period, we may be faced with significant monetary damages or injunctive relief against us that could adversely affect our business, financial condition, operating results and cash flows. While we have insurance related to our business operations, it may not apply to or fully cover liabilities we incur as a result of these lawsuits. We record accruals for liabilities where we believe a loss to be probable and reasonably estimable. However, our actual costs may differ materially from these estimated liabilities.

We face risks from international sales and business activities

We market and sell our products worldwide and international sales have accounted for, and are expected to continue to account for, a significant portion of our revenue. For the years ended December 31, 2019, 2018 and 2017, international sales accounted for 45 percent, 47 percent and 47 percent, respectively, of our total revenue. We also manufacture certain products and subassemblies in Europe and we have several contract manufacturing agreements with third parties in Europe and in Asia. Certain of these products, particularly our thermal and infrared products, are subject to substantial government regulation and licensing and end use restrictions throughout the world. Our international business activities are subject to a number of risks, including:

- the imposition of and changes to governmental licensing restrictions and controls impacting our technology and products;
- restrictions and prohibitions on the export of technology and products, including any applicable changes in regulation prohibiting the sale of certain of our products to certain end users without a license;
- international trade restrictions, such as imposition of bans on sales of goods or services to one or more of our significant foreign customers;
- difficulty in collecting receivables and governmental restrictions with respect to currency;
- inadequate protection of intellectual property;
- labor union activities;
- · changes in tariffs and taxes;
- · restrictions on repatriation of prior earnings;
- restriction on the importation and exportation of goods and services;
- risks, costs, impacts and obligations associated with the United States Foreign Corrupt Practices Act ("FCPA"), and other anti-bribery and anticorruption laws applicable to us, and laws applicable to global trade and United States exports and costs and penalties from violations of such laws and related regulations, including the costs associated with required remedial and other increased compliance activity;
- · difficulties in staffing and managing international operations;
- instability in economic or political conditions, inflation, recession, actual or anticipated military or political conflicts, and potential impact due to the exit of the United Kingdom (the "U.K.") from the European Union (the "EU"), colloquially referred to as "Brexit"; and
- complications due to natural, nuclear or other disasters, such as outbreak of coronavirus.

Some of these factors recently have had an adverse impact on our sales and operations and increased our cost of doing business and subjected the business to additional rules, policies and procedures that impacted the operation of the Company. No assurance can be given that these factors will not have a material adverse effect on our future international sales and operations and, consequently, on our business, financial condition and results of operations. For example, a strain of coronavirus was reported to have surfaced in Wuhan, China in late 2019. While we continue to monitor the rapidly evolving situation related to the coronavirus, the Chinese government's actions, particularly from quarantining individuals in and around major commercial hubs, such as Wuhan, and restricting the opening of factories and operations, will likely have an impact, possibly material, on our supply chain and operations in China and availability of certain products produced in China in the short-term. The extent to which the coronavirus impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of the coronavirus and the actions to contain the coronavirus or treat its impact, among others.

We are subject to numerous regulatory requirements for the export and sale of our products and operations worldwide that could adversely affect our business

Compliance with complex foreign and United States laws and regulations that apply to our international operations increases our cost of doing business both in the United States and in international jurisdictions. These regulations include import and export laws, anti-competition laws, anti-corruption laws, such as the FCPA and the U.K. Bribery Act, and other local laws prohibiting corrupt payments to governmental officials, data privacy requirements, tax laws, and accounting, internal control and disclosure requirements. For example, on April 8, 2015, the Company and the Securities and Exchange Commission ("SEC") entered into an agreement through entry of an Order Instituting Cease-and-Desist Proceedings Pursuant to Section 21C of the Securities and Exchange Act of 1934, Making Findings, and Imposing a Cease-and-Desist Order (the "SEC Order"). The SEC Order settled charges under the FCPA with respect to incidents of improper travel and gifts involving FLIR's Middle East operation. Pursuant to the SEC Order, we are obligated to "cease and desist" from committing any future violations of the Securities Exchange Act of

1934, as amended. Violations of these laws and regulations could result in civil and criminal fines, penalties and sanctions against us, our officers or our employees, prohibitions on the conduct of our business and on our ability to offer our products and services in one or more countries, and could also materially affect our reputation, business and results of operations. In certain foreign jurisdictions, there is a higher risk of fraud or corruption and greater difficulty in maintaining effective internal controls and compliance programs. Further, although we have implemented and continue to implement policies and procedures designed to promote compliance with applicable laws and regulations, there can be no assurance that our employees, contractors or agents will not violate our policies or applicable laws and regulations.

On April 24, 2018, we entered into a Consent Agreement with the United States Department of State's Directorate of Defense Trade Controls ("DDTC") to resolve allegations regarding the unauthorized export of technical data and defense services to dual and third country nationals in certain of our facilities, the failure to properly use and manage export licenses and export authorizations, and failures to report certain payments under 22 CFR Part 130 in potential violation of ITAR. The Consent Agreement has a four-year term and provides for: (i) a civil penalty of \$30 million with \$15 million of this amount suspended on the condition that the funds have or will be used for Department-approved Consent Agreement remedial compliance measures, (ii) the appointment of an external Special Compliance Official to oversee compliance with the Consent Agreement and the ITAR; (iii) two external audits of our ITAR compliance program; and (iv) continued implementation of ongoing remedial compliance measures and additional remedial compliance measures related to automated systems and ITAR compliance policies, procedures, and training. Adverse findings in the audits of our ITAR compliance program could materially affect our competitive position and cause incurrence of additional expenses in connection with implementation of remedial measures and result in a substantial adjustment to our revenue and net income. During the three-month period ended March 31, 2018, we recorded a \$15.0 million charge for the portion of the penalty that is not subject to suspension. As of December 31, 2019, the remaining amounts payable of \$3.5 million and \$7.0 million have been recorded in other current liabilities and other long-term liabilities, respectively. We expect recent and future investments in remedial compliance measures will be sufficient to cover the \$15.0 million suspension amount.

As part of the Consent Agreement, DDTC acknowledged that we voluntarily disclosed certain of the alleged Arms Export Control Act and ITAR violations (which were resolved pursuant to the Consent Agreement), cooperated in DDTC's review, and instituted a number of compliance program improvements.

In addition, our international contracts may include industrial cooperation agreements requiring specific in-country purchases, investments, manufacturing agreements or other financial obligations, known as offset obligations, and may provide for penalties if we fail to meet such requirements. The impact of these factors is difficult to predict, but one or more of them could have a material adverse effect on our financial position, results of operations, or cash flows.

We may not be successful in obtaining and maintaining the necessary export licenses to conduct operations abroad and the United States government may prevent proposed sales to foreign governments and customers

Export licenses and other authorizations may be required from United States government agencies under the ITAR, the EAR, the Office of Foreign Assets Control ("OFAC") Regulations, the Trading with the Enemy Act of 1917, the International Emergency Economic Powers Act ("IEEPA"), the Arms Export Control Act of 1976 ("AECA"), and other similar laws and regulations for the sale, use and export of many of our products and related data and services. Thermal and infrared products and technical data have been subject to the ITAR and EAR, historically under United States Munitions List ("USML") Category XII and Commerce Control List ("CCL") Category 6. The United States Government's export reform effort resulted in the transition of various Company products from the USML to the CCL, shifting the licensing requirements and restrictions for products regulated by the Department of Commerce under the EAR. This transition has increased the licensing requirements and restrictions on some products and reduced the requirements and restrictions on others. We can give no assurance that we will be successful in obtaining the necessary licenses from the United States Department of State or Department of Commerce required to conduct our business as presently or historically conducted.

The United States export licensing environment has been affected by a number of factors, including but not limited to, the aftermath of 9/11, the rise of terrorism and the changing geopolitical environment, heightened tensions with other countries (which shift and evolve over time), and the United States reliance on the tactical advantage of the night-time war fighter. Some of these factors have affected the thermal imaging and infrared technology industry overall while others have impacted us directly. In addition, the Consent Agreement and related submissions and other communications concerning our licensing posture overall have led to

heightened scrutiny of export licenses for products in our markets and, in some cases, highlight DDTC's focus on the manner in which we handle exports of our products, technical data and services subject to the ITAR.

In addition, concerns with respect to potential diversion of certain of our products to prohibited end users and countries subject to economic and other sanctions implemented by the United States government has caused the United States Department of Commerce Bureau of Industry and Security to restrict our ability to sell 9hz thermal products without a license to customers in China not identified on a list maintained by the United States Department of Commerce.

Although we have taken actions and continue to take additional actions necessary to implement policies and procedures to promote an improved compliance culture and programs, during the normal course of our business, we have experienced and we expect to continue to experience violations of ITAR and EAR, none of which has been material to the Company to date. Material violations of these legal requirements can be punishable by criminal fines and imprisonment, civil penalties, disgorgement of profits, injunctions, debarment from government contracts, seizure and forfeiture of unlawful attempted exports, and/or denial of export privileges, as well as other remedial measures. We have established policies and procedures designed to assist us, our personnel and our agents to comply with applicable U.S. and international laws and regulations. However, there can be no guarantee that our policies and procedures will effectively prevent us, our employees and our agents from violating these regulations in every transaction in which we may engage, and violations, allegations or investigations of such violations could materially adversely affect our reputation, business, financial condition and results of operations. There is also no guarantee that government agencies will not view our actions and programs with heightened scrutiny, including as a result of events outside of our control. As a result, we may receive more restrictive provisos or limitations on new license requests, wholesale denials of our license requests, suspensions or terminations of our existing licenses, or delays in receiving new licenses resulting from requests for follow-up information, due diligence requests or additional limitations on our sale to third parties. We can give no assurance that we will be successful in obtaining necessary licenses required to facilitate our international business. Failures to obtain or delays in obtaining licenses may prevent or limit our ability to market, sell, export, or transfer our products outside the United State

We face risks from Brexit

Brexit has created uncertainty about the future relationship between the U.K. and the EU. The U.K. formally exited the EU on January 31, 2020 and has entered a transition period to negotiate the future relation terms with the EU.

We have significant operations and a substantial workforce in Europe, a portion of which reside in the U.K. and therefore enjoyed certain benefits based on the U.K.'s membership in the EU. The lack of clarity about Brexit and the future U.K. laws and regulations creates uncertainty for us, as the outcome of these negotiations may affect our business and operations. For example, the imposition of tariffs following the Brexit may have a material adverse effect on our financial position or results of operations. Additionally, there also is a risk that other countries may decide to leave the EU. The uncertainty surrounding Brexit not only potentially affects our business in the U.K. and the EU, but may have a material adverse effect on global economic conditions and the stability of global financial markets, which in turn could have a material adverse effect on our business, financial condition, and results of operations. Additionally, any development that has the effect of devaluing the European euro or British pound sterling could meaningfully reduce the value of our assets and reduce the usefulness of liquidity alternatives denominated in that currency, such as our multicurrency credit facility. While we have adopted certain operational and financial measures to reduce the risks of doing business internationally, we cannot ensure that such measures will be adequate to allow us to operate without disruption or adverse impact to our business and financial results in the affected regions. The long-term effects of Brexit will depend on the agreements or arrangements with the EU for the U.K. to retain access to EU markets either during a transitional period or more permanently.

Our earnings and profitability depend, in part, on subcontractor and supplier performance and financial viability as well as raw material and component availability and pricing

We rely on other parties to provide raw materials, and components and subsystems for our products and to produce certain products or parts, provide information about the parts or products they supply to us, and perform some of the services we provide to our customers, and to do so in compliance with all applicable laws, regulations and contract terms. Disruptions or performance problems caused by our subcontractors and suppliers, or a misalignment between our contractual obligations to our customers and our agreement with our subcontractors and suppliers, could have various impacts on the company, including on our ability to meet our commitments to customers.

Our ability to perform our obligations on time could be adversely affected if one or more of our subcontractors or suppliers were unable to provide the agreed-upon products, materials or information, or perform the agreed-upon services in a timely, compliant and cost-effective manner or otherwise to meet the requirements of the contract. Changes in political or economic conditions, including changes in defense budgets or credit availability or sanctions, or other changes impacting a subcontractor or supplier (including changes in ownership or operations), as well as their ability to retain talent and other resources, and requirements or changes in requirements imposed on them by other customers, could adversely affect the financial stability of our subcontractors and suppliers and/or their ability to perform. The inability of our suppliers to perform, or their inability to perform adequately, could also result in the need for us to transition to alternate suppliers, which could result in significant incremental cost and delay or the need for us to provide other resources to support our existing suppliers. This risk may increase as the demands grow for our subcontractors and suppliers to meet extensive government-related cyber and other requirements.

In connection with our U.S. government contracts, we are required to procure certain materials, components and parts from supply sources approved by the customer. We also are facing increased and changing regulatory requirements, both domestically and internationally, many of which apply to our subcontractors and suppliers. In some cases, there may be only one supplier, or one domestic supplier, for certain components. For example, a single domestic source currently supplies us, as well as the U.S. domestic solid propellant industry, with a principal raw material used in the production of solid rocket motors. If a supplier cannot appropriately meet our needs, experiences disruptions to production or is otherwise unavailable or not fully available, we may be unable to find a suitable alternative.

Our procurement practices are intended to reduce the likelihood of our procurement of counterfeit, unauthorized or otherwise non-compliant parts or materials. We rely on our subcontractors and suppliers to comply with applicable laws, regulations and contract terms, including regarding the parts or materials we procure from them; in some circumstances, we rely on certifications provided by our subcontractors and suppliers regarding their compliance. We also rely on our subcontractors and suppliers effectively to mitigate the risk of cyber and security threats or other disruptions with respect to the products, components and services they deliver to us and the information entrusted to them by us or our customers and to comply with applicable contractual terms and laws and regulations, including cybersecurity requirements.

If our subcontractors or suppliers fail to perform or we are unable to procure, or experience significant delays in deliveries of, needed products, materials or services; or if they do not comply with all applicable laws, regulations, requirements and contract terms, including if what we receive is counterfeit or otherwise improper, our financial position, results of operations and/or cash flows could be materially adversely affected.

We face risks from currency fluctuations

Historically, currency fluctuations have affected our operating results. Changes in the value of foreign currencies in which our sales or costs incurred are denominated have in the past caused, and could in the future cause, fluctuations in our operating results. We seek to reduce our exposure to currency fluctuations by denominating, where possible, our international sales in United States dollars, by balancing expenses and revenues in various currencies and by undertaking limited hedging of forecasted currency exposures. With respect to international sales denominated in United States dollars, a decrease in the value of foreign currencies relative to the United States dollar could make our products less price competitive.

General economic conditions may adversely affect our business, operating results and financial condition

Our operations and performance depend significantly on worldwide economic conditions and their impact on levels of capital investment and consumer spending. Economic factors that could adversely influence demand for our products include uncertainty about global economic conditions leading to reduced levels of investment, changes in government spending levels and/or priorities, the size and availability of government budgets, customers' and suppliers' access to credit, consumer confidence and other macroeconomic factors affecting government, industrial or consumer spending behavior.

In recent years, our performance has been negatively impacted by reduced spending by United States government agencies, global economic weakness, and the Eurozone crisis. Continuation of the conditions that led to reduced spending and potential further reductions in spending globally by either consumers or government agencies could have a material adverse effect on our business, financial condition and results of operations.

Our primary markets are volatile and unpredictable

Our business depends on the demand for our products and solutions in a variety of commercial, industrial and government markets. In the past, the demand for our products in these markets has fluctuated due to a variety of factors, some of which are beyond our control, including:

- · the timing, number and size of orders from, and shipments to, our customers, as well as the relative mix of those orders;
- · variations in the volume of orders for a particular product or product line in a particular fiscal quarter;
- the size and timing of new contract awards;
- the timing of the release of government funds for procurement of our products; and
- the timing of orders and shipments within a given fiscal quarter.

Seasonal fluctuations in our operating results are an outcome of:

- the seasonal pattern of contracting by the United States government and certain foreign governments;
- the desire of customers to take delivery of equipment prior to fiscal year ends due to funding considerations; and
- the tendency of commercial enterprises to utilize fully annual capital budgets prior to expiration.

Competition in our markets is intense and our failure to compete effectively could adversely affect our business

Competition in the diverse markets for our products is intense. The speed with which companies can identify new applications for thermal imaging, develop products to meet those needs and supply commercial quantities at low prices to the market are important competitive factors. We believe the principal competitive factors in our markets are product performance, price, customer service and training, product reputation, and effective marketing and sales efforts. Many of our competitors have greater financial, technical, research and development, and marketing resources than we do. All of these factors, as well as the potential for increased competition from new market entrants, require us to continue to invest in, and focus on, research and development and new product innovation. No assurance can be given that we will be able to compete effectively in the future and a failure to do so could have a material adverse effect on our business, financial condition and results of operations.

Our products may suffer from defects or errors leading to substantial product liability, damage or warranty claims

We include complex system designs and components in our products that may contain errors or defects, particularly when we incorporate new technology into our products or release new versions. If any of our products are defective, we might be required to redesign or recall those products or pay substantial damages or warranty claims. Such an event could result in significant expenses including expenses arising from product liability and warranty claims. It also could disrupt sales and affect our reputation and that of our products, which could have a material adverse effect on our business, financial condition and results of operations. As we expand our presence into new markets, we may face increased exposure to product liability claims. We maintain product liability insurance but cannot be certain that it will be sufficient or will continue to be available on acceptable terms.

Amounts included in our backlog may not result in actual revenues or translate into profits

Many contracts are subject to cancellation or suspension on short notice at the discretion of the customer, and the contracts in our backlog are subject to changes in the scope of services to be provided as well as adjustments to the costs relating to the contract. We have historically experienced variances in the components of backlog related to delivery delays or cancellations resulting from customer-specific circumstances, external market factors and economic factors beyond our control, and we may experience more delays or cancellations in the future. Accordingly, there is no assurance that backlog will actually be realized. If our backlog fails to materialize, we could experience a reduction in revenues and a decline in profitability, which could result in a deterioration of our financial position and liquidity.

Significant tariffs, restrictions on imports or other trade barriers between the United States and various countries, most significantly China, may impact our revenue and results of operations

General trade tensions between the U.S. and China began escalating in 2018, with multiple rounds of U.S. tariffs on Chinese-made goods taking effect. These tariffs currently affect some of the components of our products we import from China, and we may

raise our prices on those products due to the tariffs or share the cost of such tariffs with our customers, which could harm our operating performance or cause our customers to seek alternative suppliers. While we continue to monitor and evaluate the potential impact of the effective and proposed tariffs as well as other recent changes in foreign trade policy on our supply chain, costs, sales and profitability and are considering strategies to mitigate such impact, including reviewing sourcing options and working with our vendors and merchants, it is possible that further tariffs may be imposed on our other imports, or that our business will be impacted by retaliatory trade measures taken by China or other countries in response to existing or future tariffs, causing us to raise prices or make changes to our operations, any of which could materially harm our revenue or operating results. In addition, we may seek to shift some of our manufacturing supply chain to other countries, which could result in disruption to our operations.

Risks, Uncertainties and Other Factors Related to Our Technology and Intellectual Property

Our inability to protect our intellectual property and proprietary rights and avoid infringing the rights of others could harm our competitive position and our business

Our ability to compete successfully and achieve future revenue growth depends, in part, on our ability to protect our proprietary technology and operate without infringing the rights of others. To accomplish this, we rely on a combination of patent, trademark, copyright and trade secret laws, confidentiality agreements and contractual provisions to protect our proprietary rights. Many of our proprietary rights are held in confidence as trade secrets and are not covered by patents, making them more difficult to protect. Although we currently hold worldwide patents covering certain aspects of our technologies and products, and we are actively pursuing additional patents, we cannot be certain that we will obtain additional patents or trademarks on our technology, products and trade names. Furthermore, we cannot be certain that our patents or trademarks will not be challenged or circumvented by our competitors or that measures taken by us to protect our proprietary rights will adequately deter their misappropriation or disclosure. Despite our efforts to protect our intellectual property, it is possible that competitors or other unauthorized third parties may obtain or disclose our confidential information, reverse engineer or copy our technologies, products or processes, or otherwise misappropriate our intellectual property. Any failure by us to protect our intellectual property could have a material adverse effect on our business, financial condition and results of operations. Moreover, because intellectual property does not necessarily prevent our competitors from entering the markets we serve, there can be no assurance that we will be able to maintain our competitive advantage or that our competitors will not develop capabilities equal or superior to ours.

Litigation over patents and other intellectual property is common in our industry. During the normal course of business, we engage in litigation related to our patents and other intellectual property and cannot be sure that we will not be subject to such litigation in the future. Similarly, we may assert claims in litigation to protect our intellectual property. Lawsuits defending or prosecuting intellectual property claims and related legal and administrative proceedings could result in substantial expense to us and significant diversion of effort of our personnel. An adverse determination in a patent suit or in any other proceeding in which we are a party could subject us to significant liabilities, result in the loss of intellectual property rights we claim or impact our competitive position. Additionally, an adverse determination could require us to seek licenses from third parties. If such licenses are not available on commercially reasonable terms or at all, our business, financial condition and results of operations could be adversely affected, leading to a potential reduction in client base.

Our business could be negatively impacted by cybersecurity threats and other security threats and technology disruptions

We face certain security threats and technology disruptions, including threats to our information technology infrastructure, attempts to gain access to our or our customers' proprietary or classified information, including intellectual property and technology, threats to the physical security of our facilities and employees, threats of terrorism events, and failures of our technology tools and systems. We are subject to laws and rules issued by various agencies concerning safeguarding and maintaining infrastructure and physical security and information confidentiality. Our information technology networks and related systems are critical to the operation of our business and essential to our ability to successfully perform day-to-day operations. We are also involved with information technology systems for certain customers and other third parties, for which we face similar security threats as for our own. In particular, cybersecurity threats-which include, but are not limited to, computer viruses, spyware and malware, attempts to access information, denial of service attacks and other electronic security breaches-are persistent and evolve quickly. Such threats have increased in frequency, scope and potential impact in recent years. Further, a variety of technological tools and systems, including both company-owned information technology and technological services provided by outside parties, support our critical functions. These technologies, as well as our products, are subject to failure and the user's inability to have such technologies properly supported, updated, expanded or integrated into other technologies and may contain open source and third party software which

unbeknownst to us may contain defects or viruses that pose unintended risks to our customers. These risks if not effectively mitigated or controlled could materially harm our business or reputation. While we believe that we have implemented appropriate measures, controls, and risk transfer mechanisms designed to protect customer information and prevent data breaches, there can be no assurance that such actions will be sufficient to prevent disruptions to critical systems, unauthorized release of confidential information, corruption of data, or financial loss.

We require user names and passwords in order to access our information technology systems. We use encryption and authentication technologies designed to secure the transmission and storage of data and prevent access to our data or accounts. These security measures are subject to third-party security breaches, employee error, malfeasance, faulty password management or other irregularities. For example, third parties may attempt to induce by fraud employees or customers into disclosing user names, passwords or other sensitive information, which may in turn be used to access our information technology systems. These security systems cannot provide absolute security. A material breach of our systems where we were unable to protect sensitive data could materially damage business partner and customer relationships, and curtail or otherwise impact the use of our information technology systems. Moreover, a security breach of our information technology system that affects our computer systems or results in the release of personally identifiable or other sensitive information of customers, business partners, employees and other third parties, could materially damage our reputation and brand, result in a decrease of the use of our products and services, and expose us to a risk of loss, litigation and potential liability.

Although we have in the past and continue to be subject to cybersecurity threats and other security threats and technology disruptions, to date none has had a material impact on our business, financial condition or results of operations. Nonetheless, in the future, these types of events could disrupt our operations and customer and other third party information technology systems. They also could require significant management attention and resources, negatively impact our reputation among our customers and the public and challenge our eligibility for future work on sensitive or classified systems, which could have a material adverse effect on our business, financial condition and results of operations.

Our future success will depend on our ability to respond to the rapid technological change in the markets in which we compete, our ability to introduce new or enhanced products and enter into new markets

The markets in which we compete are characterized by rapid technological developments and frequent new product introductions, enhancements and modifications. Our ability to develop new products and technologies that anticipate changing customer requirements, reduce costs and otherwise retain or enhance our competitive position in existing and new markets will be an important factor in our future results from operations. We will continue to make substantial capital expenditures and incur significant research and development costs to improve our manufacturing capability, reduce costs, and develop and introduce new products and enhancements. If we fail to develop and introduce new products and technologies in a timely manner, our business, financial condition and results of operations would be adversely affected. In addition, we cannot be certain that our new products and technologies will be successful or that customers will accept any of our new products.

Risks, Uncertainties and Other Factors Related to Our Corporate Structure and Organization

Our business strategy includes successfully managing acquisitions, investments and divestiture activities that complement our existing business. We may be unable to integrate successfully recent or future acquisitions into our operations, thereby disrupting our business and harming our financial condition and results of operations

Our ongoing business model includes a certain level of ongoing acquisition, investment and divestiture activities. We must be able to successfully manage the impacts of these activities, while at the same time delivering against our business objectives.

Our financial results could be adversely impacted by the dilutive impacts from the loss of earnings associated with divestitures, increased expenses associated with acquisitions or divestitures. Furthermore, our ability to achieve the benefits we anticipate from any acquisitions we make will depend in large part upon whether we are able to leverage the capabilities of the acquired companies to grow revenue across our combined organization, manage the acquired company's business, execute our strategy in an efficient and effective manner and realize anticipated cost synergies. In addition, private companies recently acquired which were previously not subject to Section 404 of the Sarbanes-Oxley Act of 2002 ("SOX"), may lack certain internal controls, which could ultimately affect our ability to ensure compliance with the requirements of SOX.

We have made twelve acquisitions of various sizes in the past five years. We have also made one divestiture in fiscal year 2018. The integration of businesses, personnel, product lines and technologies can be difficult, time consuming and subject to significant risks. For example, we could lose key personnel from companies that we acquire, incur unanticipated costs, lose major sources of revenue, fail to integrate critical technologies, suffer business disruptions, fail to capture anticipated synergies, fail to establish satisfactory internal controls, or incur unanticipated liabilities. Any of these difficulties could disrupt our ongoing business, distract our management and employees, increase our expenses and decrease our revenue.

We frequently evaluate strategic opportunities available to us and it is likely that we will make additional acquisitions or divestitures in the future. Such acquisitions or divestitures may vary in size and complexity. Any future acquisitions and divestitures are subject to the risks described above. Furthermore, we might assume or incur additional debt or issue additional equity securities to pay for future acquisitions or divestitures. Additional debt may negatively impact our results and increase our financial risk, and the issuance of any additional equity securities could dilute our then existing shareholders' ownership. No assurance can be given that we will realize anticipated benefits of any future acquisitions or divestitures, or that any such acquisition or investment, or divestiture will not have a material adverse effect on our business, financial condition and results of operations.

Our strategic restructuring will consolidate our business units and further concentrate our product mix which could increase risks related to the financial conditions of a more concentrated customer base and may not result in all of the intended benefits

We have taken steps to implement a strategy-driven restructuring plan in order to simplify our product portfolio, improve operational efficiency, and drive long-term growth. Restructuring efforts include consolidation of our business units, targeted workforce reductions, and facility optimization initiatives. These shifts could expose the Company to a more concentrated customer base. The concentration of the Company's customer base could increase its risks related to the financial conditions of its customers. In addition, changes in the market demand for the Company's product mix could significantly affect our margins and could have an adverse effect on our profitability and future growth of the Company. There is also a risk that our restructuring plan will not capture all of the intended benefits or may not result in the expected cost savings. Further, the restructuring may yield unintended consequences such as attrition beyond our targeted workforce reduction. These risks may impact the Company's business, financial condition, results of operations and cash flows.

We have indebtedness as a result of the issuance of our 3.125 percent senior unsecured notes (the "Notes") and borrowings against our unsecured credit facility, and we are subject to certain restrictive covenants under our unsecured credit facility and the indenture governing the Notes, and changes in the rate at which we can obtain indebtedness, any of which may limit our operational and financial flexibility

Our ability to meet our debt service obligations and comply with the financial covenants under our credit facility will be dependent upon our future performance, which will be subject to financial, business and other factors affecting our operations, many of which are beyond our control. Our inability to meet our debt service obligations or comply with the required covenants could result in a default under the credit facility or indenture. In the event of any such default, under the credit facility, the lenders thereunder could elect to declare all outstanding debt, accrued interest and fees under the facility to be due and immediately payable. In the event of any such default under our indenture, either the trustee or the holders of at least 25 percent of the outstanding principal amount of the Notes could declare the principal amount of all of the Notes to be due and payable immediately. Certain of our indebtedness is intrinsically linked to benchmark rates that are the subject of global benchmark rate reform. The phasing out of rates, such as LIBOR, is expected to occur by 2021 and the market will transition to new benchmark rates. While we believe our exposure to market risk associated with the discontinuation of LIBOR is limited because our Notes carry a fixed-rate coupon and our unsecured credit facility agreement includes provisions for a successor rate, the consequences of these developments cannot be entirely predicted or reasonably estimated. If LIBOR is no longer available or if our lenders have increased costs due to changes in LIBOR, it could adversely impact our interest expense, results of operations and cash flows.

Our future success depends in part on attracting and retaining key senior management and qualified technical, sales and other personnel

Our future success depends in part on the efforts and continued services of our key executives and our ability to attract and retain qualified technical, sales and other personnel. Significant competition exists for such personnel and we cannot assure the retention of our key executives, technical and sales personnel or our ability to attract, integrate and retain other such personnel that may be

required in the future. We cannot assure that employees will not leave and subsequently compete against us. If we are unable to attract and retain key personnel, our business, financial condition and results of operations could be adversely affected.

We must successfully manage a complex global organization

As we have grown, the size and scope of our worldwide operations have also increased substantially. We currently design, manufacture and market numerous product lines in locations worldwide. Significant management time and effort is required to manage effectively the increased complexity of the business and our failure to successfully do so could have a material adverse effect on our business, financial condition and results of operations. Our inability to continue to manufacture our products at one or more of our facilities as a result of, for example, a prolonged power outage, earthquake, fire or other natural disaster, or labor or political unrest, could prevent us from supplying products to our customers and could have a material adverse effect on our business, financial condition and results of operations.

We may not be able to refinance our indebtedness on favorable terms, if at all, which could materially and adversely affect our liquidity and our ongoing results of operations

Our ability to refinance indebtedness, including the Notes, will depend in part on our operating and financial performance, which, in turn, is subject to prevailing economic conditions and to financial, business, legislative, regulatory and other factors beyond our control. In addition, prevailing interest rates or other factors at the time of refinancing could increase our interest expense. A refinancing of our indebtedness, including the Notes, could also require us to comply with more onerous covenants and further restrict our business operations. Our inability to refinance our indebtedness or to do so upon favorable terms could materially and adversely affect our business, results of operations, financial condition and cash flows, and make us vulnerable to adverse industry and general economic conditions.

We may not be adequately insured against many potential liabilities

Although we maintain insurance policies with respect to a broad range of risks, including automobile liability, general liability, workers' compensation and employee group health, these policies do not cover all possible claims and certain of the policies are subject to large deductibles. Accordingly, we are effectively self-insured for a substantial number of actual and potential claims. In addition, if any of our insurance carriers defaulted on its obligations to provide insurance coverage by reason of its insolvency or for other reasons, our exposure to claims would increase and our profits would be adversely affected. Our estimates for unpaid claims and expenses are based on known facts, historical trends and industry averages, utilizing the assistance of actuarial services. The determination of such estimated liabilities and their appropriateness are reviewed and updated at least quarterly. However, these liabilities are difficult to assess and estimate due to many relevant factors, the effects of which are often unknown, including the severity of an injury or damage, the determination of liability in proportion to other parties, the timeliness of reported claims, the effectiveness of our risk management and safety programs and the terms and conditions of our insurance policies. Our accruals are based upon known facts, historical trends and our reasonable estimate of future expenses, and we believe such accruals are adequate. However, unknown or changing trends, risks or circumstances, such as increases in claims, a weakening economy, increases in medical costs, changes in case law or legislation or changes in the nature of the work we perform, could render our current estimates and accruals inadequate. In such case, adjustments to our balance sheet may be required and these increased liabilities would be recorded in the period that the experience becomes known. Insurance carriers may be unwilling, in the future, to provide our current levels of coverage without a significant increase in insurance premiums and/or collateral requirements to cover our obligations to them. Increased collateral requirements may be in the form of additional letters of credit and/or cash, and an increase in collateral requirements could significantly reduce our liquidity. If insurance premiums increase, and/or if insurance claims are higher than our estimates, our profitability could be adversely affected.

Changes in our effective income tax rate may have an adverse effect on our results of operations

We are subject to taxes in the United States and numerous foreign jurisdictions, including Sweden and Belgium, where a number of our subsidiaries are organized. Due to economic and political conditions, tax rates in various jurisdictions may be subject to significant change. Our future effective tax rate could be affected by changes in the mix of earnings in countries with different statutory tax rates, changes in the valuation of deferred tax assets and liabilities, changes in the enforcement environment, and changes in tax laws or their interpretations, in the United States and in foreign jurisdictions.

Our future effective tax rate may be adversely affected by a number of additional factors including:

- the jurisdictions in which profits are determined to be earned and taxed;
- the resolution of issues arising from tax audits with various tax authorities;
- changes in the valuation of our deferred tax assets and liabilities;
- adjustments to estimated taxes upon finalization of various tax returns;
- increases in expenses not deductible for tax purposes;
- changes in available tax credits;
- changes in share-based compensation expense;
- · changes in tax laws or the interpretation of such tax laws and changes in generally accepted accounting principles;
- changes in foreign tax rates or agreed upon foreign taxable base; and/or
- the repatriation of earnings from outside the United States for which we have not previously provided for United States taxes.

Any significant increase in our future effective tax rates could adversely impact net income for future periods. In addition, the United States Internal Revenue Service ("IRS") and other tax authorities regularly examine our income tax returns. Our financial condition and results of operations could be adversely impacted if any assessments resulting from the examination of our income tax returns by the IRS or other taxing authorities are not resolved in our favor. For example, during the three-month period ending December 31, 2018, the Swedish Tax Authority ("STA") issued a reassessment of tax for the year ending December 31, 2012 to one of the Company's non-operating subsidiaries in Sweden. The reassessment concerns the use of tax credits applied against capital gains pursuant to European Union Council Directive 2009/133/EC, commonly referred to as the EU Merger Directive, and assesses taxes and penalties totaling approximately \$321.3 million (Swedish kroner 3.0 billion). While we believe the STA's assertions in the reassessment are not in accordance with Swedish tax regulations, if the STA is successful in its claim either in the short or long-term, the tax assessment could materially affect our results of operation, cash flow and financial position.

As well, during 2019, the European Commission announced the opening of a separate review to assess whether an excess profit tax ruling granted by Belgium to one of our international subsidiaries is in breach of European Union state aid rules. We believe we have paid all taxes assessed by Belgium, yet an adverse opinion from the European Commission regarding the applicability of state aid rules could be cause for material accrual of tax in a future period which could affect our results of operations, cash flow and financial position.

New tax legislation, commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"), was enacted on December 22, 2017. The Tax Act requires complex computations not previously required by U.S. tax law and is subject to rule-making and interpretation in a number of areas. As such, the application of certain accounting guidance is currently evolving. Further, compliance with the Tax Act and the accounting for certain provisions require accumulation of information not previously required or regularly produced. As additional interpretative guidance is issued by the applicable authorities, we will continue our analysis on the application of the Tax Act and may need to revise our current estimates in future periods. The revisions to our current estimates could materially affect our results of operations, cash flow and financial position.

State of Oregon law and our charter documents contain provisions that could discourage or prevent a potential takeover, even if the transaction would benefit our shareholders

Other companies may seek to acquire or merge with us. An acquisition or merger of our Company could result in benefits to our shareholders, including an increase in the value of our common stock. Some provisions of our Second Restated Articles of Incorporation, as amended ("Articles of Incorporation") and Fourth Restated Bylaws, as amended ("Bylaws"), including our ability to issue preferred stock without further action by our shareholders, as well as provisions of the State of Oregon law, may discourage, delay or prevent a merger or acquisition that a shareholder may consider favorable.

Our Bylaws designate a state court located within the State of Oregon (or, if no state court located within the State of Oregon has jurisdiction, the federal district court for the District of Oregon) as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our shareholders, which could limit our shareholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees

Our Bylaws provide that, unless we consent in writing to the selection of an alternative forum, a state court located within the State of Oregon (or, if no state court located within the State of Oregon has jurisdiction, the federal district court for the District of Oregon) will be the sole and exclusive forum for any shareholder (including any beneficial owner) to bring (i) any derivative

action or proceeding brought on behalf of the corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director or officer or other employee of the corporation to the corporation or the corporation's shareholders, (iii) any action asserting a claim against the corporation or any director or officer or other employee of the corporation arising pursuant to any provision of the OBCA, our Articles of Incorporation or our Bylaws (as either may be amended or restated from time to time), or (iv) any action asserting a claim against the corporation, any director, officer or other employee of the corporation governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock is deemed to have received notice of and consented to the foregoing provisions. This choice of forum provision may limit a shareholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and employees. Alternatively, if a court were to find this choice of forum provision inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition or results of operations.

Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. In addition, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Securities Act or any other claim for which the federal and state courts have concurrent jurisdiction.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

At December 31, 2019, our properties consist of Company-owned office buildings in Wilsonville (Portland), Oregon; North Billerica (Boston), Massachusetts; Täby (Stockholm), Sweden; Nashua, New Hampshire; Tallinn, Estonia; Goleta (Santa Barbara), California; Orlando, Florida; Freeport, Pennsylvania; Fareham (Portsmouth), United Kingdom; and leased office space in Elkridge (Baltimore), Maryland; Arlington, Virginia; Stillwater, Oklahoma; West Lafayette, Indiana; Bozeman, Montana; Meer (Antwerp), Belgium; Richmond (Vancouver) British Columbia, Canada; Waterloo (Ontario), Canada; Havlstad, Norway; Dubai, United Arab Emirates. We also own and lease smaller offices located in certain other United States locations as well as other countries, primarily in Europe.

We conduct manufacturing, research and development, and sales and administration in such facilities worldwide. The total amount of space used by us for all of our operations is approximately 1.9 million square feet, of which 1.0 million square feet is for owned facilities and 0.9 million square feet is for leased facilities.

We believe all of our properties are suitable for their intended use, adequate to meet our current and near-term business needs, and in good condition. We do not anticipate difficulty in renewing existing leases as they expire or in finding alternative facilities.

ITEM 3. LEGAL PROCEEDINGS

Matters Involving the United States Department of State and Department of Commerce

On April 24, 2018, the Company entered into a Consent Agreement with the United States Department of State's Directorate of Defense Trade Controls ("DDTC") to resolve allegations regarding the unauthorized export of technical data and defense services to dual and third country nationals from certain Company facilities, the failure to properly use and manage export licenses and export authorizations, and failures to report certain payments under 22 CFR Part 130 in potential violation of the International Traffic in Arms Regulation ("ITAR"). The Consent Agreement has a four-year term and provides for: (i) a civil penalty of \$30.0 million with \$15.0 million of this amount suspended on the condition that the funds have or will be used for Department-approved Consent Agreement remedial compliance measures, (ii) the appointment of an external Special Compliance Official to oversee compliance with the Consent Agreement and the ITAR; (iii) two external audits of the Company's ITAR compliance program; and (iv) continued implementation of ongoing remedial compliance measures and additional remedial compliance measures related to automated systems and ITAR compliance policies, procedures, and training. During the first quarter of fiscal 2018, the Company recorded a \$15.0 million charge for the portion of the penalty that is not subject to suspension. In April 2018, and 2019, the Company paid \$1.0 million and \$3.5 million of the \$15.0 million charge and as of December 31, 2019, the remaining amount payable of \$3.5 million has been recorded in other current liabilities and other long-term liabilities, respectively. The remaining \$10.5 million is payable in annual installments of \$3.5 million through April 2022. The Company expects recent and future investments in remedial compliance measures will be sufficient to cover the \$15.0 million suspension amount.

As part of the Consent Agreement, DDTC acknowledged that the Company voluntarily disclosed certain of the alleged Arms Export Control Act and ITAR violations, which were resolved pursuant to the Consent Agreement, cooperated in the DDTC's review, and instituted a number of compliance program improvements.

In May 2017, the Company submitted an initial notification to DDTC regarding potential violations related to certain export classifications obtained through the commodity jurisdiction process and a final voluntary disclosure in August 2017. The Company also submitted a voluntary self-disclosure regarding the same matter with the United States Department of Commerce Bureau of Industry and Security ("BIS"). DDTC and BIS both acknowledged the submissions and, at the request of the agencies, the Company executed tolling agreements for this matter. The DDTC tolling agreement has lapsed; the Company executed a tolling agreement with BIS, and has extended the agreement, suspending the statute of limitations through March 1, 2020. The Company also executed a tolling agreement with the Department of Justice ("DOJ"), and has extended the agreement, suspending the statute of limitations with the DOJ through March 1, 2020. This matter remains under review by DDTC, DOJ, and BIS.

In June 2017, BIS informed the Company of additional export licensing requirements that restrict the Company's ability to sell certain thermal products without a license to customers in China not identified on a list maintained by the United States Department of Commerce. This action was precipitated by concerns of sale without a license or potential diversion of some of the Company's products to prohibited end users and to countries subject to economic and other sanctions implemented by the United States. BIS subsequently favorably modified these restrictions to reduce the applicability of the restrictions to sales of FLIR's Tau camera cores (as opposed to finished products containing Tau camera cores) to customers in China not identified on a list maintained by the United States Department of Commerce and persons in a country other than those in EAR Country Group A:5 (Supplement No. 1 to Part 740 of the EAR). If the Company is found to have violated applicable rules and regulations with respect to customers and limitations on the export and end use of the Company's products, the Company could be subject to substantial fines and penalties, suspension of existing licenses or other authorizations and/or loss or suspension of export privileges.

At this time, based on available information regarding this proceeding, the Company is unable to reasonably estimate the time it may take to resolve these matters or the amount or range of potential loss, penalty or other government action, if any, that may be incurred in connection with these matters. However, an unfavorable outcome could result in substantial fines and penalties or loss or suspension of export privileges or of particular authorizations that could be material to the Company's financial position, results of operations or cash flows in and following the period in which such an outcome becomes estimable or known.

SkyWatch Product Quality Matters

In March 2016, the Company learned of potential quality concerns with respect to as many as 315 Level III and Level IV SkyWatch Surveillance Towers sold by FLIR and companies acquired by FLIR from 2002 through 2014. The Company notified customers who purchased the affected SkyWatch Towers of the potential concerns and, as a precautionary measure, also temporarily suspended production of all Level III and Level IV SkyWatch Towers pending the completion of its review and the implementation of any necessary remedial measures. The Company identified the cause of these quality issues, notified customers of their option to request repair and modification of their in-field units, and has begun in-field repairs of identified affected units. While there still remains uncertainty related to estimating the costs associated with a potential remedy and number of units which may require such remedy, the Company currently estimates the range of potential loss on remaining units to be between \$3.5 million and \$10.1 million. As no single amount within the range is a better estimate than any other amount within the range, the Company has recorded an accrual of \$3.5 million in other current liabilities as of December 31, 2019. Factors underlying this estimated range of loss may change from time to time, and actual results may vary significantly from this estimate.

Shareholder Derivative Lawsuit

In October 2018, a shareholder filed a derivative lawsuit in the Circuit Court of the State of Oregon for the County of Multnomah under the caption Stein v. Carter, et al., Case No. 18CV46824, against the Company, as a nominal defendant, and certain current and former directors of the Company. Pointing to the Company's 2015 settlement with the United States Securities and Exchange Commission of alleged United States Foreign Corrupt Practices Act violations and 2018 settlement with United States Department of State of alleged export control violations, the complaint alleges that the Company's directors breached their fiduciary duties by failing to ensure that the Company had internal controls in place that would have prevented the alleged underlying misconduct and these settlements. The complaint also asserts claims for corporate waste and unjust enrichment, and seeks unspecified monetary damages from the individual defendants, injunctive relief, disgorgement of director compensation, and attorneys' fees and costs. Because the complaint is derivative in nature, it does not seek monetary damages from the Company. However, the Company may be required to advance, and ultimately be responsible for, the legal fees and costs incurred by the individual defendants.

On January 16, 2019, the defendants moved to dismiss the complaint. On March 21, 2019, instead of opposing the defendants' motion, the plaintiff filed an amended complaint. On April 25, 2019, the defendants moved to dismiss the amended complaint. On July 22, 2019, after complete briefing and oral argument, the court granted the defendants' motion to dismiss the amended complaint without prejudice and with leave to amend. On July 29, 2019, the plaintiff informed the court that the plaintiff would not file a second amended complaint. On August 6, 2019, the court entered an order of judgment and dismissal without prejudice.

Other Matters

The Company is also subject to other legal and administrative proceedings, investigations, claims and litigation arising in the ordinary course of business not specifically identified above. In these identified matters and others not specifically identified, the Company records a liability with respect to a matter when management believes it is both probable that a liability has been incurred and the Company can reasonably estimate the amount of the loss. The Company believes it has recorded adequate provisions for any probable and estimable losses for matters in existence on the date hereof. The Company reviews these provisions to reflect the impact of negotiations, settlements, rulings, advice of legal counsel and other information and events pertaining to a particular matter. While the outcome of each of these matters cannot be predicted with certainty, the Company believes the probability is remote that the outcome of each of these matters will individually have a material adverse effect on the Company's financial position, results of operations or cash flows. The costs to resolve all such matters may in the aggregate have a material adverse effect on the Company's financial position, results of operations or cash flows.

ITEM 4. MINE SAFETY DISCLOSURES

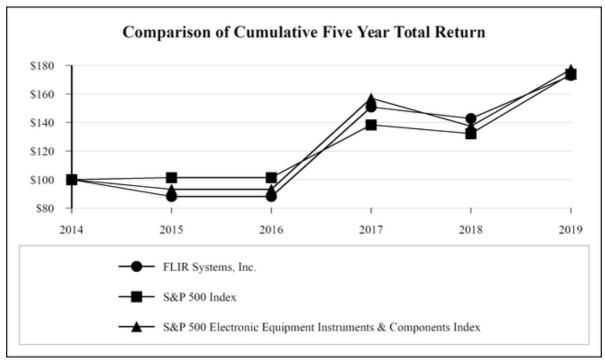
Not Applicable.

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

The common stock of the Company has been traded on the NASDAQ Global Market since June 22, 1993, under the symbol "FLIR." At December 31, 2019, there were approximately 106 holders of record of our common stock and 134,394,074 shares outstanding. We began paying cash dividends in 2011 and currently intend to continue to pay cash dividends to holders of our common stock for the foreseeable future, but such payment remains at the discretion of our Board of Directors and will depend upon many factors, including our financial condition, earnings, and other factors our Board of Directors deems relevant.

The graph below shows a comparison of the five-year cumulative total shareholder return for the Company's common stock with the cumulative total returns on the Standard & Poor's ("S&P") 500 Index and the S&P 500 Electronic Equipment & Instruments Index for the same five-year period. The data used for this graph assumes that \$100 was invested in the Company and in each index on December 31, 2014, and that all dividends were reinvested.

The information contained in this comparative performance graph section shall not be deemed to be filed as part of this Annual Report on Form 10-K and does not constitute soliciting material and should not be deemed filed or incorporated by reference into any other filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent we specifically incorporate the graph by reference.



The stock performance graph was plotted using the following data:

	2014	2015	2016	2017	2018	2019
FLIR Systems, Inc.	\$ 100.00	\$ 88.12	\$ 115.36	\$ 150.90	\$ 142.69	\$ 172.95
S&P 500 Index	100.00	101.38	113.51	138.29	132.23	173.86
S&P 500 Electronic Equipment Instruments &						
Components Index	100.00	93.20	115.92	156.95	137.34	177.18

During 2019, we repurchased approximately 2.5 million shares for a total of approximately \$125.0 million. The following table summarizes our 2019 common stock repurchase activities.

Period	Total Number of Shares Purchased	Av	erage Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs(1)	Maximum Number of Shares that May Yet Be Purchased at December 31, 2019 Under the Plans or Programs(1)
February 1 to February 28, 2019	95,581	\$	52.31	95,581	
March 1 to March 31, 2019	403,088	\$	49.61	403,088	
May 1 to May 31, 2019	488,445	\$	51.18	488,445	
July 1 to July 31, 2019	147,908	\$	50.71	147,908	
August 1 to August 31, 2019	1,413,415	\$	47.76	1,413,415	
November 1 to November 30, 2019	44	\$	44.20	44	
Total	2,548,481	\$	49.05	2,548,481	12,451,519

⁽¹⁾ All share repurchases are subject to applicable securities law, and are at times and in amounts as management deems appropriate. These repurchases were through open market transactions under the authorization by our Board of Directors. The authorization for the share repurchase program may be terminated, increased or decreased by the Company's Board of Directors in its discretion at any time. On February 8, 2017, our Board of Directors authorized the repurchase of up to 15.0 million shares of our outstanding common stock. This authorization expired on February 8, 2019. On February 7, 2019, our Board of Directors authorized the repurchase of up to 15.0 million shares of our outstanding common stock. This authorization will expire on February 7, 2021.

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data should be read in conjunction with Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Item 8 "Financial Statements and Supplementary Data."

	Year Ended December 31,									
		2019		2018		2017		2016		2015
				(in thousa	nds,	except per share amo	ounts))		
Statement of Income Data:										
Revenue	\$	1,887,026	\$	1,775,686	\$	1,800,434	\$	1,662,167	\$	1,557,067
Cost of goods sold		957,523 ₍₁₎		875,368		941,658		895,046		803,506
Gross profit		929,503		900,318		858,776		767,121		753,561
Operating expenses:										
Research and development		204,207		176,281		170,735		147,537		132,892
Selling, general and administrative		441,937 (2)		386,869 (3)		373,867		322,435		313,544
Restructuring expenses		10,099		4,854		625		1,431		1,361
Loss on sale of business		_		13,708		23,588		_		_
Total operating expenses		656,243		581,712		568,815		471,403		447,797
Earnings from operations		273,260		318,606		289,961		295,718		305,764
Interest expense		27,711		16,147		16,804		18,071		14,086
Interest income		(2,651)		(3,901)		(1,764)		(1,402)		(1,167)
Other expense (income), net		6,284		(743)		(4,144)		3,092		(12,601) (7)
Earnings before income taxes		241,916		307,103		279,065		275,957		305,446
Income tax provision		70,319		24,678 (4)		171,842 ₍₅₎		109,331 (6)		63,760
Net earnings	\$	171,597	\$	282,425	\$	107,223	\$	166,626	\$	241,686
										=
Net earnings per share:										
Basic earnings per share	\$	1.27	\$	2.05	\$	0.78	\$	1.22	\$	1.73
Diluted earnings per share	\$	1.26	\$	2.01	\$	0.77	\$	1.20	\$	1.72

- (1) The 2019 cost of goods sold include \$5.9 million inventory write downs associated with the OTS restructuring. See Note 6, "Inventories" and Note 22, "Restructuring" of the Notes to the Consolidated Financial Statements in Item 8 for additional information.
- (2) The 2019 selling, general and administrative expenses include \$17.0 million acquisition related expenses for acquisitions, \$22.3 million consent agreement related costs and \$7.8 million goodwill and intangible asset impairment charges associated with the OTS restructuring. See Note 9, "Goodwill," Note 10, "Intangible Assets" and Note 22, "Restructuring" of the Notes to the Consolidated Financial Statements in Item 8 for additional information.
- (3) The 2018 selling, general and administrative expenses include \$15.0 million for the costs of a regulatory settlement. See Note 15, "Contingencies," of the Notes to the Consolidated Financial Statements for additional information.
- (4) The 2018 tax provision includes a discrete tax benefit of \$33.1 million for the cancellation of Belgium tax assessments issued as part of the European Commission's decision regarding state aid. See Note 16, "Income Taxes," in the Notes to the Consolidated Financial Statements.
- (5) The 2017 tax provision includes an estimated tax expense of \$94.4 million resulting from the effects of new US tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act") and our subsequent decision to end permanent reinvestment of all previously unremitted foreign earnings. See Note 16, "Income Taxes," of the Notes to the Consolidated Financial Statements for additional information.
- (6) The 2016 tax provision includes a discrete tax charge for certain tax legislation in Belgium of \$39.6 million.
- (7) Other income in 2015 includes the gain of \$20.2 million on the sale of a cost-basis investment in a private technology company.

				December 31,			
	2019	2018		2017 2016			2015
		(in the	usands,	except per share a	mounts)		
Balance Sheet Data:							
Working capital	\$ 695,679	\$ 976,633	\$	992,286	\$	802,945	\$ 702,169
Total assets	3,137,541	2,781,242		2,810,026		2,619,706	2,406,400
Short-term debt	28,444	_		11		15,025	264,707
Long-term debt, excluding current portion	648,419	421,948		420,684		501,921	93,750
Total shareholders' equity	1,871,433	1,876,786		1,834,558		1,678,326	1,649,515
Other Financial Data:							
Cash dividends declared per common share	\$ 0.68	\$ 0.64	\$	0.60	\$	0.48	\$ 0.44

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

Overview

We are a world leader in sensor systems that enhance perception and awareness. We were founded in 1978 and have since become a premier designer, manufacturer, and marketer of thermal imaging and other sensing products and systems. Our advanced sensors and integrated sensor systems enable the gathering and analysis of critical information through a wide variety of applications in commercial, industrial, and government markets worldwide.

Our goal is to both enable our customers to benefit from the valuable information produced by advanced sensing technologies and to deliver sustained superior financial performance for our shareholders. We create value for our customers by improving personal and public safety and security, providing advanced intelligence, surveillance, reconnaissance, and tactical defense capabilities, facilitating air, ground, and maritime-based situational awareness, detecting electrical, mechanical and building envelope problems, displaying process irregularities, detecting volatile organic gas emissions, and enhancing advanced driver-assistance systems and autonomous driving solutions, as well as a variety of other uses of thermal and other sensing technologies. Our business model and range of solutions allow us to sell products to various end markets, including industrial, original equipment manufacturing, military, homeland security, enterprise, infrastructure, and environmental. We sell off-the-shelf products in configurations to suit specific customer requirements in an efficient, timely, and affordable manner, and support those customers with training and ongoing support and services. Centered on the design of products for low-cost manufacturing and high-volume distribution, our commercial operating model has been developed over time and provides us with a unique ability to adapt to market changes and meet our customers' needs.

International revenue accounted for approximately 45 percent, 47 percent and 47 percent of our revenue in 2019, 2018 and 2017, respectively. We anticipate that international sales will continue to account for a significant percentage of revenue in the future. We have exposure to foreign exchange fluctuations and changing dynamics of foreign competitiveness based on variations in the value of the United States dollar relative to other currencies. Factors contributing to this variability include significant manufacturing activity in Europe, significant sales denominated in currencies other than the United States dollar, and cross currency fluctuations between such currencies as the United States dollar, euro, Swedish kronor and British pound sterling. The impact of those fluctuations is reflected throughout our consolidated financial statements, but in the aggregate, did not have a material impact on our results of operations in 2019.

We experience fluctuations in orders and sales due to seasonal variations and customer sales cycles, such as the seasonal pattern of contracting by the United States and certain foreign governments, the desire of customers to take delivery of equipment prior to fiscal year ends due to funding considerations, and the tendency of commercial enterprises to fully utilize annual capital budgets prior to expiration. Such events have resulted and could continue to result in fluctuations in quarterly results in the future. As a result of such quarterly fluctuations in operating results, we believe that quarter-to-quarter comparisons of our results of operations are not necessarily meaningful and should not be relied upon as indicators of future performance.

We expect that macroeconomic factors, including fluctuations in spending by United States government agencies, rate of GDP growth in certain geographic markets, and fluctuations in foreign currency exchange rates, will continue to impact our financial results and may render predictions regarding future performance difficult to make. In addition, in 2019 we successfully wrapped up several large multi-year programs that provided solid revenue contributions over the past several years. While we have successfully won significant new programs, these new programs require investments in research and development and compliance to be successful, and investments in these programs will not directly translate into corresponding revenue until late 2021 and beyond.

We also selectively pursue the acquisition of businesses and investments at attractive valuations that will expand or complement our current portfolio and allow access to new customers or technologies. We also may explore the divestiture of businesses that no longer meet our needs or strategy or that could perform better outside of our organization. In pursuing our business strategy, we routinely conduct discussions, evaluate targets and enter into agreements regarding possible acquisitions, divestitures, ventures and equity investments.

We continue to build upon our strong market position, meeting the needs of our wide range of customers and are investing for long-term growth through the execution of our strategic priorities. To better position us to deliver long-term growth we launched a strategy-driven restructuring plan ("Project Be Ready") in February 2020. This initiative aims to simplify our product portfolio and better align resources with higher growth opportunities while reducing costs. We have discontinued certain non-core consumer centric product lines within the Outdoor and Tactical Systems business and, in February 2020, we committed to a plan to sell our Raymarine non-thermal maritime electronics business, subject to certain conditions of the proposed transaction and customary regulatory approvals. The business is being actively marketed and we intend to complete the sale within 2020. In addition, we will restructure our business units by consolidating from three business units to two by integrating the remaining businesses within the Commercial business unit into the Industrial business unit beginning in the first quarter of 2020.

Critical Accounting Policies and Estimates

This discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with United States generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We evaluate our critical estimates on an on-going basis and base our estimates on historical experience and on various other assumptions that are 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. Actual results may differ from these estimates under different assumptions or conditions and differences could be material to our consolidated financial statements. Senior management has discussed the development, selection and disclosure of these estimates with the Audit Committee of our Board of Directors. We believe the following critical accounting policies and the related judgments and estimates are the most significant to the presentation of our consolidated financial statements and require the most difficult, subjective and complex judgments:

Revenue recognition. Effective January 1, 2018, we adopted the requirements of Accounting Standards Update ("ASU") 2014-09 and all the related amendments, "Revenue from Contracts with Customers (ASC 606)," which superseded all prior revenue recognition methods and industry-specific guidance. We design, market and sell products primarily as commercial, off-the-shelf products. Certain customers request different system configurations, based on standard options or accessories that we offer. Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. We regularly enter into contracts that can include various combinations of products and services, which are generally capable of being distinct and accounted for as separate performance obligations. In such situations, contract values are allocated to each performance obligation based on its relative estimated standalone selling price. The vast majority of our revenues are recognized at a point in time when goods are transferred to a customer. However, for certain contracts that include highly customized components, if performance does not create an asset with an alternative use and termination for convenience clauses provide an enforceable right to payment for performance completed to date, revenue is recognized over time as the performance obligation is satisfied.

Revenue includes certain shipping and handling costs and is stated net of third-party agency fees. Shipping and handling costs associated with outbound freight after control over a product has transferred to a customer are accounted for as a fulfillment cost and are included in cost of goods sold. Revenue is recognized net of allowances for returns and net of taxes collected from customers which are subsequently remitted to governmental authorities.

Our products are sold with warranty provisions that require us to remedy deficiencies in quality or performance of our products over a specified period of time, generally twelve to twenty-four months, at no cost to our customers. Warranty liabilities are established at the time that revenue is recognized at levels that represent our estimate of the costs that will be incurred to fulfill those warranty requirements.

Provisions for estimated losses on sales or related receivables are recorded when identified. Service revenue is deferred and recognized over the contract period, as is the case for extended warranty contracts, or recognized as services are provided.

Inventory. Our policy is to record inventory write-downs when conditions exist that indicate that our inventories are likely to be in excess of anticipated demand or are obsolete based upon our assumptions about future demand for our products and market conditions. We regularly evaluate the ability to realize the value of our inventories based on a combination of factors including the following: historical usage rates, forecasted sales or usage, product end of life dates, estimated current and future market values and new product introductions. Purchasing requirements and alternative usages are evaluated within these processes to mitigate inventory exposure. When recorded, our write-downs are intended to reduce the carrying value of our inventories to their net realizable value and establish a new cost basis. As of December 31, 2019, our inventories of \$388.8 million are stated net of prior inventory write-downs. If actual demand for our products deteriorates or market conditions are less favorable than those that we project, additional inventory write-downs may be required in the future.

Intangible Assets. We allocate the purchase price of acquired businesses to the underlying tangible and intangible assets acquired and liabilities assumed based upon their respective fair values, with the excess recorded as goodwill. Such fair value assessments require judgments and estimates that can be affected by contract performance and other factors over time, which may cause final amounts to differ materially from original estimates. Adjustments to the fair value of purchased assets and liabilities after the initial measurement period are recognized in net earnings.

We recognize purchased intangible assets in connection with our business acquisitions at fair value on the acquisition date. The most significant purchased intangible assets recognized from our acquisitions are generally identifiable intangible assets. We

determine the fair value of those intangible assets based on estimates and judgments, including the amount and timing of expected future cash flows, growth rates and discount rates. The expected future cash flows analyses are based on estimates of revenues growth, earnings and gross margin after considering such factors as general market conditions, customer budgets, existing firm and future orders, changes in working capital, long term business plans and recent operating performance. Selecting the appropriate growth rates requires significant judgment and usually are based on expected long-term rate of inflation, real economic growth and the anticipated industry growth and trends. We also use discounted cash flow analyses, which are based on significant judgments related to risk adjusted discount rates, terminal growth rates, and the weighted average cost of capital ("WACC") and are developed by the management for planning purposes based on current known business and market conditions, macroeconomic indicators as well as future anticipated industry trends.

Intangible assets are amortized using the method that best reflects how their economic benefits are utilized, or, if a pattern of economic benefits cannot be reliably determined, are amortized using a straight-line methodology over their estimated useful lives. Intangible assets with indefinite useful lives are evaluated annually for impairment, or more frequently if required when circumstances indicate that the carrying amounts may not be recoverable. Impairment exists when the carrying value is greater than the expected undiscounted future cash flows expected to be provided by the asset group. If impairment exists, the asset group is written down to its fair value. See Note 10, "Intangibles Assets" of the Notes to the Consolidated Financial Statements in Item 8 for additional information and discussion on impairment charges of \$1.2 million recognized during the year ended December 31, 2019. The Company did not recognize any impairment charges on intangible assets during the years ended December 31, 2018 and 2017.

Goodwill. Effective January 1, 2019, we adopted the requirements of ASU 2017-04, "Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment." Goodwill represents the excess purchase price of an acquired enterprise over the estimated fair value of identifiable net assets acquired. We assess goodwill for potential impairment at the reporting unit level during the third quarter of each year, or whenever events or circumstances indicate that the carrying value of these assets may exceed their fair value. We may assess qualitative factors to make this determination, or bypass such a qualitative assessment and proceed directly to testing goodwill for impairment using a one-step process. As a result of the adoption of ASU 2017-04, if we determine that the goodwill is impaired, it is no longer required to compare the implied fair value of the reporting unit goodwill associated with the carrying amount of that goodwill, which is commonly referred to as Step 2.

We elect to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. When performing a qualitative assessment, we consider factors including, but not limited to, current macroeconomic conditions, industry and market conditions, the competitive environment, changes in the market for our products and services, regulatory and political developments and entity specific factors such as strategies and financial performance and other events relevant to the entity or reporting unit under evaluation. If, based on our review of qualitative factors, it is more likely than not that the fair value of a reporting unit is less than its carrying value, (of if we elected to bypass assessing the qualitative factors) we would perform a quantitative impairment test to identify goodwill impairment and measure the amount of goodwill impairment loss to be recognized (if any) by comparing the fair value of a reporting unit with its carrying amount. An impairment charge would be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit.

Our impairment tests performed in the current year did not indicate an impairment of goodwill in any of our reporting units with the exception of our Outdoor and Tactical Systems ("OTS") reporting unit which is part of our Commercial Business Unit ("CBU") operating segment. Based on the assessment of qualitative factors in the fourth quarter, it was determined that it was more likely than not that the fair value was less than the carrying value for our OTS reporting unit. As such, a quantitative impairment test was performed that resulted in a goodwill impairment of \$6.5 million recorded in the CBU operating segment during the fourth quarter. Refer to Note 9, "Goodwill" of the Notes to the Consolidated Financial Statements in Item 8 for further discussion.

Contingencies. We are subject to the possibility of loss contingencies arising in the normal course of business. We consider the likelihood of loss or impairment of an asset or the incurrence of a liability, as well as our ability to reasonably estimate the amount of loss in determining loss contingencies. An estimated loss is accrued when it is probable that an asset has been impaired or a liability has been incurred and the amount can be reasonably estimated. We regularly evaluate current information available to us to determine whether such accruals and disclosures should be adjusted.

Income taxes. We account for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax basis of the assets and liabilities measured using the enacted tax rates in effect in the years in which the differences are expected to reverse. Valuation allowances against deferred tax assets are recorded when a determination is made that the deferred tax assets

are not more likely than not to be realized in the future. In making that determination, on a jurisdiction by jurisdiction basis, we estimate our future taxable income based upon historical operating results and external market data. Future levels of taxable income are dependent upon, but not limited to, general economic conditions, competitive pressures and other factors beyond our control. As of December 31, 2019, we have determined that a valuation allowance against our deferred tax assets of \$2.8 million is required. If we should determine that we may be unable to realize our deferred tax assets to the extent reported, an adjustment to the deferred tax assets would be recorded in the period such determination is made.

We are subject to income taxes in the United States and in numerous foreign jurisdictions, and in the ordinary course of business, there are many transactions and calculations where the ultimate tax determination is uncertain. We record a benefit on a tax position when we determine that it is more likely than not that the position is sustainable upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. For tax positions that are more likely than not to be sustained, we measure the tax position at the largest amount of benefit that has a greater than 50 percent likelihood of being realized when it is effectively settled, using information that is available at the balance sheet date. We review our tax positions as circumstances warrant and update our liability for additional taxes as changes in available facts arise.

Consolidated Operating Results

The following table sets forth for the indicated periods certain items as a percentage of revenue:

	Year Ended December 31,(1)						
	2019	2018	2017				
Revenue	100.0 %	100.0 %	100.0 %				
Cost of goods sold	50.7	49.3	52.3				
Gross margin	49.3	50.7	47.7				
Operating expenses:							
Research and development	10.8	9.9	9.5				
Selling, general and administrative	23.4	21.8	20.8				
Restructuring expenses	0.5	0.3	_				
Loss on sale of business	_	0.8	1.3				
Total operating expenses	34.8	32.8	31.6				
Earnings from operations	14.5	17.9	16.1				
Interest expense	1.5	0.9	0.9				
Interest income	(0.1)	(0.2)	(0.1)				
Other expense (income), net	0.3	_	(0.2)				
Earnings before income taxes	12.8	17.3	15.5				
Income tax provision	3.7	1.4	9.5				
Net earnings	9.1 %	15.9 %	6.0 %				

⁽¹⁾ Totals may not recompute due to rounding.

The following discussion of operating results provides an overview of our operations by addressing key elements in our Consolidated Statements of Income. The "Segment Operating Results" section that follows describes the contributions of each of our business segments to our consolidated revenue and earnings from operations for 2019, 2018 and 2017. Given the nature of our business, we believe revenue and earnings from operations (including operating margin percentage) are most relevant to an understanding of our performance at a segment level. Additionally, at the segment level we disclose backlog, which represents orders received for products or services for which a sales agreement is in place and delivery is expected within twelve months. Backlog is not an absolute indicator of future revenue because a portion of the orders in backlog could be canceled at the customer's discretion.

Revenue. Consolidated revenue for 2019 totaled \$1,887.0 million, an increase of 6.3 percent from 2018 revenue of \$1,775.7 million. Year over year revenue increased primarily due to our Government and Defense business unit, which was partially offset by a decrease in our Commercial business unit. The increase in our Government and Defense business unit revenue was primarily driven by the acquisitions of Aeryon Labs, Inc. ("Aeryon") and Endeavor Robotics Holdings Inc. ("Endeavor") during the first

quarter of 2019, coupled with volume increases of unmanned solutions and surveillance systems. The decline in our Commercial business unit revenue was a result of volume declines in the Outdoor and Tactical Systems ("OTS") business and the Maritime product lines during fiscal 2019. Further contributing to this decline was our divestiture of the Consumer and Small and Medium-sized ("SMB") Security business announced during the first quarter of 2018.

Revenue for 2018 totaled \$1,775.7 million, a decrease of 1.4 percent over 2017 revenue of \$1,800.4 million. Year over year revenue increased for our Industrial and Government and Defense business units but was offset by a decrease in our Commercial business unit. The decline in our Commercial business unit was a result of our divestiture of the SMB Security business during the first quarter of 2018 as noted above.

International revenue in 2019 totaled \$849.8 million, representing 45.0 percent of revenue. This compares with international revenue in 2018 which totaled \$841.2 million, representing 47.4 percent of revenue, and \$844.0 million in 2017, representing 46.9 percent of revenue. While the sales mix between United States and international sales may fluctuate from year to year, we expect revenue from customers outside the United States to continue to comprise a significant portion of our total revenue on a long-term basis.

Cost of goods sold. Cost of goods sold for the years ended December 31, 2019 and 2018 was \$957.5 million and \$875.4 million, respectively. The increase was primarily driven by the Government and Defense business unit, mainly attributed to the acquisitions of Aeryon and Endeavor during the first quarter of 2019, coupled with volume increases of unmanned solutions and surveillance systems. These increases were partially offset by declines in our Commercial business unit as a result of volume declines in the OTS business (including \$5.9 million of inventory write downs associated with the OTS restructuring) and in the Maritime product lines during fiscal year 2019 as well as the divestiture of the Consumer and SMB Security businesses during the first quarter of 2018.

Cost of goods sold in 2018 was \$875.4 million, compared to cost of goods sold of \$941.7 million in 2017. The decrease was primarily due to the decline in our Commercial business unit as a result of the Consumer and SMB Security business divestiture during the first quarter of 2018 as noted above.

Cost of goods sold includes materials, labor and overhead costs incurred in the manufacturing of products and services sold in the period as well as warranty costs. Material costs include raw materials, purchased components and sub-assemblies, outside processing and inbound freight costs. Labor and overhead costs consist of direct and indirect manufacturing costs, including wages and fringe benefits, operating supplies, depreciation and amortization, occupancy costs, and purchasing, receiving and inspection costs.

Gross profit. Gross profit for the year ended December 31, 2019 was \$929.5 million compared to \$900.3 million in 2018. Gross margin, defined as gross profit divided by revenue, decreased slightly from 50.7 percent in 2018 to 49.3 percent in 2019 primarily associated with the volume declines in the OTS business (including \$5.9 million of inventory write downs associated with the OTS restructuring) as well as an increase in intangible asset amortization expense during fiscal year 2019.

Gross profit for the year ended December 31, 2018 was \$900.3 million compared to \$858.8 million in 2017. Gross margin increased from 47.7 percent in 2017 to 50.7 percent in 2018 primarily due to favorable product mix.

Research and development. Research and development expenses were \$204.2 million, or 10.8 percent of revenue, in 2019, compared to \$176.3 million, or 9.9 percent of revenue, in 2018, and \$170.7 million, or 9.5 percent of revenue, in 2017. The increase in research and development expenses year over year in 2019 was primarily related to the inclusion of companies acquired in 2019 and our commitment to research and development. We intend to continue to have significant research and development expenses in the future to provide a continuing flow of innovative and high-quality products that maintain and enhance our competitive position in each of our business segments. We believe that future cash flow generation will be sufficient to support the development of new products that fuel the growth of the business.

Selling, general and administrative expenses. Selling, general and administrative expenses were \$441.9 million, or 23.4 percent of revenue, in 2019 compared to \$386.9 million, or 21.8 percent of revenue, in 2018 and \$373.9 million, or 20.8 percent of revenue, in 2017. The increase in selling, general, and administrative expenses year over year in 2019 as compared to 2018 was primarily attributed to acquisition related expenses for acquisitions occurring in the first half of 2019, consent agreement related costs and goodwill and intangible asset impairment charges related to restructuring actions. The increase in selling, general, and administrative expenses year over year in 2018 as compared to 2017 was primarily attributed to the \$15.0 million recorded in the first quarter of 2018 for the costs of a regulatory settlement described in Note 15, "Contingencies" of the Notes to the Consolidated Financial Statements in Item 8.

Restructuring. We have various active restructuring programs focused on reorganization and discontinuation of certain businesses, targeted workforce reductions, and facility consolidation actions. During the years ended December 31, 2019, 2018 and 2017, we recorded net pre-tax restructuring charges for these programs totaling approximately \$10.1 million, \$4.9 million and \$0.6 million, respectively, which primarily represent employee termination benefits and costs to consolidate, relocate or discontinue operations. In addition, during the year ended December 31, 2019 we have incurred goodwill and intangible asset impairment charges totaling approximately \$6.5 million and \$1.2 million, respectively related to the restructuring actions. Inventory write-downs associated with the restructuring actions were also incurred and totaled \$5.9 million and \$3.3 million for the years ended December 31, 2019 and 2018, respectively. Refer to Note 9, "Goodwill," Note 10, "Intangibles Assets," Note 6, "Inventories," and Note 22, "Restructuring" of the Notes to the Consolidated Financial Statements in Item 8 for further discussion.

Loss on sale of business. During the fourth quarter of 2017, we recorded an estimated pre-tax loss on net assets reclassified as held for sale of \$23.6 million. The loss on net assets held for sale was related to the planned divestiture of our Consumer and SMB Security business. During the year ended December 31, 2018, as a result of the divestiture, net working capital adjustments, and subsequent negotiations with the buyer, we recognized an additional pre-tax loss of \$13.7 million. See Note 20, "Business Acquisitions and Divestitures," of the Notes to the Consolidated Financial Statements in Item 8 for additional information.

Interest expense. Interest expense totaled \$27.7 million, \$16.1 million and \$16.8 million for the years ended December 31, 2019, 2018 and 2017, respectively. Interest expense for fiscal 2019 was associated with the \$425.0 million aggregate principal amount of 3.125 percent senior unsecured notes that were issued in June 2016 and interest on amounts drawn under our credit facility. Interest expense for fiscal 2018 was primarily associated with the \$425.0 million aggregate principal amount of our 3.125 percent senior unsecured notes.

Other expense (income), net. Other expense totaled \$6.3 million for the year ended December 31, 2019 as compared to other income of \$0.7 million for the year ended December 31, 2017. The change in other (income) expense, net in 2019 over 2018 was primarily attributed to impairments of \$4.1 million associated with our equity investments as well as minority investments losses. The decrease in other income, net in 2018 over 2017 was primarily attributed to increased losses on currency exchange rate fluctuations.

Income taxes. Our income tax provision was \$70.3 million, \$24.7 million and \$171.8 million in 2019, 2018 and 2017, respectively. The effective tax rates for 2019, 2018 and 2017 were 29.1 percent, 8.0 percent and 61.6 percent, respectively. Our effective tax rate in 2019 was higher than the United States Federal tax rate of 21.0 percent mainly due to accruals for settlements with various taxing authorities, state taxes, additional withholding tax due on future distributions of foreign earnings included in the transition tax levied by the Tax Cuts and Jobs Act of 2017 (the "Tax Act"), and higher tax rates on income earned in foreign jurisdictions. These amounts were offset by tax credits generated in the United States and foreign jurisdictions as well as excess tax benefits from stock compensation. Our effective tax rate in 2018 was lower than the United States Federal tax rate of 21.0 percent mainly due to recognition of previously unrecognized tax benefits relating to the European Union state aid recovery, excess tax benefits from stock compensation and a reduction in the accrual for the United States transition tax, offset partially by state taxes, higher tax rates applied to income earned in certain foreign jurisdictions, and other discrete items. Our effective tax rate in 2017 was higher than the United States federal tax rate of 35.0 percent mainly due to the Company's estimate of the impact of the Tax Act. Unrecognized tax benefits for intercompany pricing increased in various jurisdictions in 2017, but this was partially offset by excess tax benefits for stock compensation and the mix of lower foreign tax rates.

At December 31, 2019, we had United States tax net operating loss carry-forwards totaling approximately \$9.4 million which expire between 2032 and 2039 and are subject to annual limitation under Section 382 of the US Internal Revenue Code. In addition, we have various foreign net operating loss carry-forwards totaling approximately \$62.8 million, a portion of which expire between 2019 and 2039 and a portion of which have an indefinite carry-forward period. Tax benefits as described above are recorded as assets when the benefits are more likely than not to be recognized. To the extent that we assess the realization of such assets to not be more likely than not, a valuation allowance is required to be recorded. As of December 31, 2019, we have determined that a valuation allowance against our deferred tax assets of \$2.8 million is required, primarily related to foreign net operating losses and capital losses carried forward. A review of all available positive and negative evidence is considered, including past and future performance, the market environment in which we operate, utilization of tax attributes in the past, length of carry-back and carry-forward periods, and evaluation of potential tax planning strategies, when evaluating whether the deferred tax assets will be realized.

During the three-month period ending December 31, 2018, the Swedish Tax Authority ("STA") issued a reassessment of tax for the year ending December 31, 2012 to one of the Company's non-operating subsidiaries in Sweden. The reassessment concerns the use of tax credits applied against capital gains pursuant to European Union Council Directive 2009/133/EC, commonly referred to as the EU Merger Directive, and assesses taxes and penalties totaling approximately \$321.3 million (Swedish kroner 3.0 billion).

The Company believes the STA's assertions in the reassessment are not in accordance with Swedish tax regulations and plans to defend the Company's positions through the Swedish court system, as necessary.

During the three-month period ended September 30, 2019, the European Commission announced the opening of a separate review to assess whether an excess profit tax ruling granted by Belgium to one of the Company's international subsidiaries is in breach of European Union state aid rules. The Company believes all taxes assessed by Belgium have been paid, and has not adjusted unrecognized tax benefits in relation to this matter.

Segment Operating Results

The three reportable operating segments are: Industrial business unit, Government and Defense business unit, and Commercial business unit. The following discusses the operating results of each of our segments for the three year periods ended December 31, 2019, 2018 and 2017, respectively.

Industrial

Industrial business unit operating results are as follows (in millions, except percentages):

		Year E	nded December 3	81,	
	2019		2018		2017
Revenue	\$ 737.7	\$	717.9	\$	672.1
Earnings from operations	240.8		216.9		199.9
Operating margin	32.7%		30.2%		29.7%
Backlog	\$ 189.0	\$	164.5	\$	191.5

Industrial business unit revenue increased by 2.8 percent in 2019 compared to 2018. Earnings from operations increased by 11.1 percent in 2019 compared to 2018. The increase in revenue was predominately attributable to strong growth across the cooled cores product lines partially offset by declines in the Integrated Imaging Systems ("IIS") businesses. The increases in earnings from operations and corresponding operating margin were predominately attributable to favorable product mix led by the OEM business and productivity initiatives to improve manufacturing efficiency and decrease product costs across all divisions. The increase in backlog in 2019 compared to 2018 was primarily attributed to a substantial award from a large aerospace and defense customer.

Industrial business unit revenue increased by 6.8 percent in 2018 compared to 2017. Earnings from operations increased by 8.5 percent in 2018 compared to 2017. The increase in both revenue and earnings from operations was predominately attributable to strong growth across the OEM automotive, cooled camera cores, and UAS product lines. The decline in backlog in 2018 compared to 2017 was primarily attributed to productivity initiatives executed during the year to reduce lead times for customer deliveries of our machine vision and volume hand-held product lines.

Government and Defense

Government and Defense business unit operating results are as follows (in millions, except percentages):

	 Year Ended December 31, 2019 2018 2017 \$ 794.9 \$ 663.4 \$ 629.1						
	2019	2018			2017		
Revenue	\$ 794.9	\$	663.4	\$	629.1		
Earnings from operations	207.4		199.7		179.2		
Operating margin	26.1%		30.1%		28.5%		
Backlog	\$ 434.6	\$	391.1	\$	394.5		

Government and Defense business unit revenue increased by 19.8 percent in 2019 compared to 2018. Earnings from operations increased 3.9 percent in 2019 compared to 2018. Operating margin decreased 4.0 percent in 2019 compared to 2018. The increase in revenue and earnings from operations was primarily driven by the Aeryon and Endeavor acquisitions during the first quarter of 2019 and increased volumes of unmanned solutions and surveillance systems. The decline in operating margin was primarily due to the inclusion of the operating losses from the same acquisitions noted above. The increase in backlog in 2019 compared to 2018

was primarily driven by the first quarter of 2019 acquisitions as noted above in addition to the timing of orders and subsequent timing of deployment of major programs.

Government and Defense business unit revenue increased by 5.5 percent in 2018 compared to 2017. Earnings from operations increased 11.5 percent in 2018 compared to 2017. The increase in revenue was predominately attributable to strong growth and favorable product mix primarily in the land vertical market. The increase in earnings from operations was primarily due to the revenue growth and favorable product mix changes along with controlled spending. Backlog was relatively flat year over year in 2018 compared to 2017.

Commercial

Commercial business unit operating results are as follows (in millions, except percentages):

	 Year Ended December 31,									
	2019		2018		2017					
Revenue	\$ 354.4	\$	394.4	\$	499.2					
Earnings from operations	45.7		57.4		56.1					
Operating margin	12.9%		14.6%		11.2%					
Backlog	\$ 48.9	\$	46.7	\$	65.8					

Commercial business unit revenue decreased by 10.1 percent in 2019 compared to 2018. Earnings from operations decreased by 20.4 percent in 2019 compared to 2018. The decrease in both revenue and earnings from operations was attributed to volume declines in the OTS business and Maritime product lines during fiscal 2019. Further contributing to this decline was the divestiture of our Consumer and SMB Security business during the first quarter of 2018. Backlog was relatively flat year over year in 2019 compared to 2018.

Commercial business unit revenue decreased by 21.0 percent in 2018 compared to 2017. Earnings from operations increased 2.4 percent in 2018 compared to 2017. The decrease in revenue was primarily due to the divestiture of our Consumer and SMB Security business during the first quarter of 2018, which contributed approximately \$140 million of revenue in 2017, partially offset by increased revenues in our Maritime and Intelligent Traffic product lines. The increase in earnings from operations was primarily due to reductions in spending partially offset by reductions in gross margins related to the divestiture of our Consumer and SMB Security business.

Liquidity and Capital Resources

At December 31, 2019, we had a total of \$284.6 million in cash and cash equivalents, \$77.8 million of which was in the United States and \$206.8 million at our foreign subsidiaries, compared to cash and cash equivalents at December 31, 2018 of \$512.1 million, of which \$327.0 million was in the United States and \$185.1 million at our foreign subsidiaries. The decrease in cash and cash equivalents in 2019 was primarily due to cash used for business acquisitions of \$601.9 million, common stock repurchases of \$125.0 million, dividend payments of \$91.7 million, and capital expenditures of \$44.8 million, partially offset by cash provided from operations of \$370.4 million, net proceeds of \$254.8 million from our revolving credit facility and long-term debt, and proceeds of \$28.4 million from shares issued under our stock compensation plans.

Cash provided by operating activities in 2019 totaled \$370.4 million compared to \$374.2 million in 2018 and \$308.3 million in 2017. The slight decrease in cash provided by operating activities in 2019 compared to 2018 was primarily due to lower net earnings after adding back non-cash adjustments, partially offset by favorable changes in working capital. The increase in cash provided by operations in 2018 compared to 2017 was due to higher net earnings after adding back non-cash adjustments and favorable changes in other current balances, partially offset by changes in accrued income taxes.

Cash used for investing activities for the year ended December 31, 2019 totaled \$651.4 million, which primarily consisted of business acquisitions and capital expenditures in the ordinary course of business. Cash used for investing activities for the year ended December 31, 2018 totaled \$44.1 million, which primarily consisted of business acquisitions and capital expenditures in the ordinary course of business, partially offset by \$25.9 million generated from the sale of our Consumer and SMB Security businesses. Cash used for investing activities for the year ended December 31, 2017 totaled \$38.4 million, which primarily consisted of capital expenditures in the ordinary course of business.

Cash provided by financing activities for the year ended December 31, 2019 totaled \$54.0 million, which primarily consisted of cash provided from net proceeds from our revolving credit facility and long-term debt, and net proceeds from shares issued under our stock-based compensation plans, partially offset by repurchases of shares of our common stock and the payment of quarterly dividends. Cash used by financing activities for the year ended December 31, 2018 totaled \$318.9 million, which primarily consisted of repurchases of common stock and payment of dividends, partially offset by proceeds from share issuances pursuant to our stock plans. Cash used by financing activities for the year ended December 31, 2017 totaled \$132.6 million, which primarily consisted of repayment of borrowings under our revolving credit facility and the payment of quarterly dividends, partially offset by proceeds from share issuances pursuant to our stock-based compensation plans.

On February 8, 2011, we entered into a Credit Agreement ("Original Credit Agreement") with Bank of America, N.A., U.S. Bank National Association, JPMorgan Chase Bank N.A. and other Lenders. The Original Credit Agreement provided for a \$200 million, five-year revolving line of credit. On April 5, 2013, the Original Credit Agreement was amended to extend the maturity of the revolving credit facility from April 8, 2016 to April 5, 2018, in addition to incorporating a \$150 million term loan facility maturing April 5, 2019. On May 31, 2016, the Original Credit Agreement was further amended to increase the borrowing capacity to \$500 million and to extend the maturity of the revolving credit facility from April 5, 2018 to May 31, 2021. The amendment also incorporated a revised schedule of fees and interest rates.

On March 29, 2019, we entered into a Second Amended and Restated Credit Agreement ("Restated Credit Agreement") with Bank of America, N.A., JPMorgan Chase Bank, N.A., U.S. Bank National Association, Citibank, N.A., MUFG Union Bank, N.A., and the other lenders party thereto. The Restated Credit Agreement amended and restated the Company's Original Credit Agreement, dated as of May 31, 2016. The Restated Credit Agreement provides for a \$650.0 million unsecured revolving credit facility, a \$100.0 million unsecured term loan facility available in U.S. dollars amortizing at 5.000 percent per annum, and a \$150.0 million unsecured term loan facility available in Swedish kronor amortizing at 5.000 percent per annum. The Restated Credit Agreement has a term of five years and matures on March 29, 2024. In connection with the closing of the Restated Credit Agreement, we made an initial borrowing of \$100.0 million in revolving loans, \$100.0 million in term loans in U.S. dollars, and the equivalent of \$150.0 million in term loans in Swedish kronor. Additionally, we repaid in full all outstanding amounts, consisting of revolving loans in an aggregate principal amount of \$375.0 million, under the Original Credit Agreement.

We have the right, subject to certain conditions, including approval of additional commitments by qualified lenders, to increase the availability under the revolving credit facility by an additional \$200.0 million until March 29, 2024. The Restated Credit Agreement allows us and certain designated subsidiaries to borrow in United States dollars, European euros, Swedish kronor, British pound sterling, Japanese yen, Canadian dollars, Australian dollars, and other agreed upon currencies. Interest rates under the Restated Credit Agreement are determined from the type and tenor of the borrowing and includes loans based on the published term Eurocurrency rate (e.g. LIBOR) in which the loan is denominated. The Eurocurrency rate loans have a floor of zero percent and an applicable margin that ranges from 1.0 percent to 1.375 percent depending on the Company's consolidated total leverage ratio. At December 31, 2019, the borrowing rate on the revolving loan was 3.049 percent per annum, the borrowing rate on the U.S. dollar term loan was 3.195 percent per annum and the borrowing rate on the Swedish kronor term loan was 1.348 percent per annum unadjusted for hedging. The Restated Credit Agreement requires us to pay a commitment fee on the amount of unused revolving commitments at a rate, based on our consolidated total leverage ratio, which ranges from 0.125 percent to 0.200 percent of unused revolving commitments. At December 31, 2019, the commitment fee on the amount of unused revolving credit was 0.175 percent per annum. The Restated Credit Agreement contains one financial covenant that requires maintenance of a consolidated total leverage ratio with which we were in compliance at December 31, 2019. The facilities available under the Restated Credit Agreement are unsecured. The Restated Credit Agreement also contains language providing for the adoption of a LIBOR successor rate consistent with market practice. We are engaged in regular dialogue with our lenders and derivatives counterparties to keep apprised of the prop

To manage the interest rate risk arising from the variability in interest expense attributable to amounts drawn under the Swedish kronor term loan facility, we entered into a floored interest rate swap with a Swedish kronor notional amount initially equivalent to \$150.0 million. The interest rate swap was designated, and effective, as a cash flow hedge.

We had \$10.8 million of letters of credit outstanding under the Restated Credit Agreement at December 31, 2019, which reduced the total availability under the revolving commitments under the Restated Credit Agreement.

In June 2016, we issued \$425.0 million aggregate principal amount of our 3.125 percent senior unsecured notes due June 15, 2021 (the "Notes"). The net proceeds from the issuance of the Notes were approximately \$421.0 million, after deducting

underwriting discounts and offering expenses, which are being amortized over a period of five years. Interest on the Notes is payable semiannually in arrears on December 15 and June 15. The proceeds from the Notes were used to repay our 3.75 percent senior unsecured notes that were due September 1, 2016, and are being used for general corporate purposes, which include working capital and capital expenditure needs, business acquisitions, and repurchases of our common stock.

On February 8, 2017, our Board of Directors authorized the repurchase of up to 15.0 million shares of our outstanding common stock in the open market or through privately negotiated transactions. This authorization expired on February 8, 2019. On February 7, 2019, our Board of Directors authorized the repurchase of up to 15.0 million shares of our outstanding common stock in the open market or through privately negotiated transactions. This authorization will expire on February 7, 2021. During the year ended December 31, 2019, approximately 2.5 million shares have been repurchased under the February 7, 2019 authorization.

As of December 31, 2019 and 2018, we have accrued income tax liabilities of \$37.1 million and \$44.4 million, respectively, related to the transition tax, which was enacted in 2017 as part of tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The amounts accrued are paid in installments over an eight-year period and will not accrue interest. Due to prior year over payments, no amounts are due within the next twelve months.

As of December 31, 2019, we have undistributed earnings generated after January 1, 2018 by certain foreign subsidiaries of approximately \$183.0 million that we intend to indefinitely invest outside the United States and on which we have not recognized deferred tax. Estimating the amount of potential tax is not practicable due to the complexity and variety of assumptions required.

During the three-month period ending December 31, 2018, the Swedish Tax Authority ("STA") issued a reassessment of tax for the year ending December 31, 2012 to one of the Company's non-operating subsidiaries in Sweden. The reassessment concerns the use of tax credits applied against capital gains pursuant to European Union Council Directive 2009/133/EC, commonly referred to as the EU Merger Directive, and assesses taxes and penalties totaling approximately \$321.3 million (Swedish kroner 3.0 billion). The Company believes the STA's assertions in the reassessment are not in accordance with Swedish tax regulations and plans to defend the Company's positions through the Swedish court system, as necessary. Consequently, no adjustment to the Company's unrecognized tax benefits has been recorded in relation to this matter. Management believes that the Company's recorded tax liabilities are adequate in the aggregate for its income tax exposures.

During the three-month period ended September 30, 2019, the European Commission announced the opening of a separate review to assess whether an excess profit tax ruling granted by Belgium to one of the Company's international subsidiaries is in breach of European Union state aid rules. The Company believes all taxes assessed by Belgium have been paid and has not adjusted unrecognized tax benefits in relation to this matter.

We believe that our existing cash combined with the cash we anticipate generating from operating activities, and our available credit facilities and financing available from other sources will be sufficient to meet our cash requirements for the next twelve months. We do not have any significant commitments nor are we aware of any significant events or conditions that are likely to have a material impact on our liquidity or capital resources.

Off-Balance Sheet Arrangements

As of December 31, 2019, we do not have any significant off-balance sheet arrangements that have or are likely to have a material current or future effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

Contractual Obligations

As of December 31, 2019, our contractual obligations were as follows (in thousands):

	Payments Due by Period										
	Less than Total 1 Year				1 – 3 Years		3 – 5 Years		More than 5 Years		
Long-term debt, including interest	\$	713,794	\$	33,338	\$	469,448	\$	211,008	\$	_	
Operating leases		43,539		11,812		17,629		6,526		7,572	
Post-retirement obligations		2,377		280		532		504		1,061	
Other obligations		1,125		130		260		260		475	
	\$	760,835	\$	45,560	\$	487,869	\$	218,298	\$	9,108	

Principal and interest on long-term debt, operating leases and licensing rights obligations are based upon contractual terms. Actual payments may differ in terms of both timing and amounts. We did not include approximately \$254.5 million of standby letters of credit and performance bonds due to the unlikely event of payment, if any, of amounts under those arrangements.

The Company cannot make a reasonably reliable estimate of the period of potential cash settlement of its remaining unrecognized tax benefits of \$20.8 million and, therefore, has not included the related unrecognized tax benefits in the table of contractual obligations as of December 31, 2019. For further detail on unrecognized tax benefits, see Note 16, "Income Taxes," to the Consolidated Financial Statements in Item 8.

Recent Accounting Pronouncements

See Note 1, "Nature of Business and Significant Accounting Policies," to the Consolidated Financial Statements in Item 8 for a discussion of recent accounting pronouncements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Currency Exchange Rate Risk

We have assets and liabilities outside the United States that are subject to fluctuations in foreign currency exchange rates. Similarly, certain revenues from products sold in countries outside the United States and costs associated with non-United States operations are denominated in foreign currencies. For more information on our foreign currency translation, see Note 1, "Nature of Business and Significant Accounting Policies," to the Consolidated Financial Statements in Item 8. Assets and liabilities located outside the United States are primarily located in Europe. Our investments in subsidiaries outside the United States with functional currencies other than the United States dollar are considered long-term. We currently engage in forward currency exchange contracts and other similar hedging activities to reduce our economic exposure to changes in exchange rates. At December 31, 2019 and 2018, exchange contracts with a notional amount of approximately \$444.8 million and \$95.9 million, respectively, were outstanding. Because we market, sell and license our products throughout the world, we could be adversely affected by weak economic conditions in international markets that could reduce demand for our products.

Our net investment in subsidiaries outside the United States, translated into United States dollars using the period-end exchange rates, was approximately \$805.3 million at December 31, 2019. The potential loss in fair value resulting from a hypothetical 10 percent adverse change in foreign exchange rates would be approximately \$80.5 million at December 31, 2019. The potential loss in fair value is primarily due to the increase in the net investment of subsidiaries outside the United States. We have no plans to liquidate any of our subsidiaries outside the United States, and therefore, foreign exchange rate gains or losses on our international investments are reflected as a cumulative translation adjustment and do not increase or reduce our reported net earnings.

Interest Rate Risk

Our exposure to changes in market interest rates relate primarily to interest paid on future hypothetical drawings against the Credit Agreement. Amounts borrowed under our revolving loan facility bears interest at the one-month LIBOR rate plus a scheduled spread. Fluctuations in market interest rates will cause interest expense increases or decreases on such long-term debt.

To mitigate the risk of changes in cash flows attributable to changes in the one-month LIBOR rate for hypothetical drawings against the revolving loan facility, the Company could consider interest rate swaps as effective cash flow hedges.

See Liquidity and Capital Resources in Item 7 and Note 4, "Derivative Financial Instruments," Note 11, "Credit Agreement," and Note 13, "Long-Term Debt," to the Consolidated Financial Statements in Item 8, for additional information on the Company's interest rate risk.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

This item includes the following financial information:

Statement	Page
Report of Independent Registered Public Accounting Firm	<u>5</u> 1
Consolidated Statements of Income for the Years Ended December 31, 2019, 2018 and 2017	<u>5</u> 4
Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2019, 2018 and 2017	<u>55</u>
Consolidated Balance Sheets as of December 31, 2019 and 2018	<u>56</u>
Consolidated Statements of Shareholders' Equity for the Years Ended December 31, 2019, 2018 and 2017	<u>57</u>
Consolidated Statements of Cash Flows for the Years Ended December 31, 2019, 2018 and 2017	<u>58</u>
Notes to the Consolidated Financial Statements	<u>59</u>
Quarterly Financial Data (Unaudited)	<u>96</u>

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors FLIR Systems, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of FLIR Systems, Inc. and subsidiaries (the Company) as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

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, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 27, 2020 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Change in Accounting Principles

As discussed in Note 1 to the consolidated financial statements, the Company has changed its method of accounting for leases in 2019 due to the adoption of Accounting Standards Codification Topic 842, *Leases*. Also, as discussed in Note 1 to the consolidated financial statements, the Company has changed its method of accounting for revenue and the income tax impact of intra-entity transfers of assets in 2018 due to the adoption of Accounting Standards Codification Topic 606, *Revenue from Contracts with Customers* and Accounting Standards Update 2016-16, *Intra-entity Transfers of Assets Other Than Inventory*, respectively.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We 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 consolidated 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 consolidated 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 regarding the amounts and disclosures in the consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Contingencies associated with Compliance Matters

As discussed in Note 15 to the consolidated financial statements, the Company is involved in various ongoing compliance matters, including compliance with International Traffic in Arms Regulations and export laws and regulations. Such matters required judgment to determine the likelihood of potential loss in consideration of whether a contingent liability and/or disclosure was necessary.

We identified the evaluation of contingencies associated with compliance matters as a critical audit matter. Evaluation of the Company's judgments regarding a compliance matter, including any required recognition of a liability and/or

associated disclosure involved a high degree of subjective auditor judgment. In particular, subjective auditor judgments were required related to consideration of communication with relevant government agencies and precedent in similar matters which impact the expected outcome.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's evaluation of contingencies and related disclosures, including controls over uncertainties impacting the assessment of the expected outcome of a compliance matter. In addition, we assessed the amounts recorded and disclosures made by inquiring of the Company, including members of the Company's legal department. We obtained and read letters directly from the Company's internal and external legal counsel that described the nature of outstanding compliance matters. We inspected relevant correspondence between the Company and the governmental agencies related to compliance matters. We considered relevant publicly available information about the Company, its competitors, and the industry in regard to compliance matters of a similar nature to identify precedence in the evaluation of the expected outcome. We evaluated the Company's disclosures for consistency with our knowledge of its ongoing compliance matters.

Identification and evaluation of uncertain tax positions in certain foreign taxing jurisdictions

As discussed in Notes 1 and 16 of the consolidated financial statements, the Company operates in multiple foreign tax jurisdictions. A tax position is recorded when a determination is made that it is more likely than not the position is sustainable upon examination based on the technical merits of the position.

We identified the Company's identification and evaluation of uncertain tax positions in certain foreign taxing jurisdictions as a critical audit matter. This critical audit matter required challenging auditor judgment due to the nature and subjectivity of the applicable tax rules and/or their interpretation in each foreign jurisdiction.

The primary procedures performed to address this critical audit matter included the following. We tested certain internal controls over the Company's tax process, including controls related to the identification of uncertain tax positions and determination of meeting the more likely than not threshold. We inspected external information and correspondence from foreign tax authorities on open tax examinations and tax assessments issued. We inquired with external counsel through confirmations to understand matters, status, and facts relevant to tax positions. We also involved International tax professionals with specialized skills and knowledge in foreign tax law, who assisted in:

- Inspecting management prepared tax positions and external tax opinion documentation and comparing it to interpretation of tax law;
- Inspecting other relevant cases and evaluating impact to the Company's positions;
- Performing independent evaluation of tax positions and assumptions and comparing the results to the Company's position, which includes assessing the need for an uncertain tax position liability and disclosure; and
- Inquiring with external counsel through meetings on the current status and facts of matters which may impact the probability of the outcome of uncertain tax positions.

Evaluation of fair value of certain intangible assets acquired

As discussed in Note 20 to the consolidated financial statements, on January 28, 2019 the Company acquired Aeryon Labs Inc. (Aeryon) and on March 4, 2019 the Company acquired Endeavor Robotics Holdings, Inc. (Endeavor). Both of these transactions were accounted for as business combinations. As a result of the transactions, the Company acquired acquisition date fair value intangible assets of \$147.0 million, including \$92.7 million for developed technology intangible assets and \$28.0 million for Endeavor's in-process research and development (IPR&D) intangible asset.

We identified the evaluation of fair value of developed technology intangible assets for both acquisitions and Endeavor's IPR&D intangible asset as a critical audit matter. There was a high degree of subjectivity in evaluating the projected financial information due to the significant estimation in the assumptions about future performance of the acquired businesses. Specifically, the fair value was sensitive to changes to certain assumptions, such as the discrete period projected cash flows, projected revenue attributable to specific technology and IPR&D, technology obsolescence curve, royalty rate, and weighted-average cost of capital (WACC), including the discount rates.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's acquisition-date valuation process to develop the relevant assumptions, as listed above, including controls related to the review of assumptions. We evaluated the Company's projected revenue by analyzing actual results and industry data, including market spend expectations. We evaluated the forecasted expenses by comparing to historic actual results. We compared the revenue attributable to intangibles and obsolescence curve to historic lives of the Company's technology products and compared to other industry data. In addition, we involved valuation professionals with specialized skills and knowledge who assisted in:

- Evaluating the royalty rate by comparing to a set of comparable licensing agreements and implying what royalty rate could be supported based on a projected margin of the acquired companies;
- Evaluating the WACC by developing an independent calculation using publicly available market data and comparing the result to the Company's WACC; and
- Evaluating the discount rates by independently developing an internal rate of return (IRR) and weighted average cost of capital (WACC), and reconciling the results to the weighted average return on assets (WARA) calculation.

/s/ KPMG LLP

We have served as the Company's auditor since 2002.

Portland, Oregon February 27, 2020

CONSOLIDATED STATEMENTS OF INCOME

(in thousands, except per share amounts)

	Year Ended December 31,									
		2019		2018	2018					
Revenue	\$	1,887,026	\$	1,775,686	\$	1,800,434				
Cost of goods sold		957,523		875,368		941,658				
Gross profit		929,503		900,318		858,776				
Operating expenses:										
Research and development		204,207		176,281		170,735				
Selling, general and administrative		441,937		386,869		373,867				
Restructuring expenses		10,099		4,854		625				
Loss on sale of business		_		13,708		23,588				
Total operating expenses		656,243		581,712		568,815				
Earnings from operations		273,260		318,606		289,961				
Interest expense		27,711		16,147		16,804				
Interest income		(2,651)		(3,901)		(1,764)				
Other expense (income), net		6,284		(743)		(4,144)				
Earnings before income taxes		241,916		307,103		279,065				
Income tax provision		70,319		24,678		171,842				
Net earnings	\$	171,597	\$	282,425	\$	107,223				
Net earnings per share:										
Basic earnings per share	\$	1.27	\$	2.05	\$	0.78				
Diluted earnings per share	\$	1.26	\$	2.01	\$	0.77				

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (In thousands)

	Year Ended December 31,					
		2019		2018		2017
Net earnings	\$	171,597	\$	282,425	\$	107,223
Other comprehensive (loss) income, net of tax:						
Change in minimum liability for pension plans, net of tax effects of (\$24), (\$138) and \$477, respectively		(58)		(338)		1,271
Fair value adjustment in interest rate swap contracts, net of tax effects of \$265, \$0 and \$1, respectively		(796)		_		187
Realized gain on interest rate swap contracts reclassified to earnings, net of tax effect of (\$121)		_		_		(494)
Unrealized gain (loss) on available-for-sale investments		4		_		(4)
Foreign currency translation adjustments		(16,003)		(35,394)		51,631
Total other comprehensive (loss) income		(16,853)		(35,732)		52,591
Comprehensive income	\$	154,744	\$	246,693	\$	159,814

CONSOLIDATED BALANCE SHEETS (in thousands, except for par value)

		Decen	ıber 3	l,
		2019		2018
<u>ASSETS</u>				
Current assets:				
Cash and cash equivalents	\$	284,592	\$	512,144
Accounts receivable, net		318,652		323,746
Inventories		388,762		352,107
Prepaid expenses and other current assets		116,728		104,650
Total current assets		1,108,734		1,292,647
Property and equipment, net		255,905		247,407
Deferred income taxes, net		39,983		100,620
Goodwill		1,364,596		904,571
Intangible assets, net		247,514		146,845
Other assets		120,809		89,152
Total assets	\$	3,137,541	\$	2,781,242
LIABILITIES AND SHAREHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$	158,033	\$	95,496
Deferred revenue		28,587		32,703
Accrued payroll and related liabilities		72,476		81,118
Accrued product warranties		14,611		15,204
Advance payments from customers		28,005		19,691
Accrued expenses		40,815		41,761
Accrued income taxes		14,735		13,855
Other current liabilities		27,349		16,186
Credit facility		16,000		_
Long-term debt, current portion		12,444		_
Total current liabilities		413,055		316,014
Long-term debt, net of current portion		648,419		421,948
Deferred income taxes		53,544		22,927
Accrued income taxes		55,514		76,435
Other long-term liabilities		95,576		67,132
Commitments and contingencies (Notes 14 and 15)				
Shareholders' equity:				
Preferred stock, \$0.01 par value, 10,000 shares authorized; no shares issued at December 31, 2019 or 2018		_		_
Common stock, \$0.01 par value, 500,000 shares authorized, 134,394 and 135,516 shares issued at December 31, 2019 and 2018, respectively, and additional paid-in capital		16,692		1,355
Retained earnings		2,020,686		2,024,523
Accumulated other comprehensive loss		(165,945)		(149,092)
Total shareholders' equity		1,871,433		1,876,786
Total liabilities and shareholders' equity	\$	3,137,541	\$	2,781,242
	_	• •		

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (in thousands)

	Add	Common Stock and Additional Paid-in Capital Retained				Otl Compre						Other Comprehensive			Total
	Shares		Amount		Earnings		Earnings (Loss)		Shareholders' Equity						
Balance, December 31, 2016	136,334	\$	12,139	\$	1,832,138	\$	(165,951)	\$	1,678,326						
Net earnings	_		_		107,223		_		107,223						
Common stock issued pursuant to stock-based compensation plans, net of shares withheld for taxes	2,535		47,510		_		_		47,510						
Stock-based compensation	_		31,513		_		_		31,513						
Dividends paid	_		_		(82,605)		_		(82,605)						
Other comprehensive earnings	_		_		_		52,591		52,591						
Balance, December 31, 2017	138,869		91,162		1,856,756		(113,360)		1,834,558						
Adoption of ASC 606 and ASU 2016-16 ⁽¹⁾	_		<u>—</u>		80,280		<u>—</u>		80,280						
Net earnings	_		_		282,425		_		282,425						
Repurchase of common stock	(4,986)		(136,891)		(106,815)		_		(243,706)						
Common stock issued pursuant to stock-based compensation plans, net of shares withheld for taxes	1,633		12,896		_		_		12,896						
Stock-based compensation	_		34,188		_		_		34,188						
Dividends paid	_		_		(88,123)		_		(88,123)						
Other comprehensive loss	_		_		_		(35,732)		(35,732)						
Balance, December 31, 2018	135,516	-	1,355		2,024,523		(149,092)		1,876,786						
Adjustment of DTA under ASU 2016-16 ⁽²⁾	_		_		3,439		_		3,439						
Net earnings	_		_		171,597		_		171,597						
Repurchase of common stock	(2,549)		(37,819)		(87,179)		_		(124,998)						
Common stock issued pursuant to stock-based compensation plans, net of shares withheld for taxes	1,427		16,425		_		_		16,425						
Stock-based compensation	_		36,731		_		_		36,731						
Dividends paid	_		_		(91,694)		_		(91,694)						
Other comprehensive loss	_		_		_		(16,853)		(16,853)						
Balance, December 31, 2019	134,394	\$	16,692	\$	2,020,686	\$	(165,945)	\$	1,871,433						

⁽¹⁾ See Note 1, "Nature of Business and Significant Accounting Policies - Recently Adopted Accounting Pronouncements" for additional information on the adoption impacts of Accounting Standards Update 2014-09 "Revenue - Revenue from Contracts with Customers" ("ASC 606") and 2016-16 "Intra-Entity Transfers of Assets Other Than Inventory" ("ASU 2016-16").

(2) The Company recorded an immaterial correction which increased both retained earnings and deferred income taxes related to the Company's adoption of ASU 2016-16.

CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands)

CASH PROVIDED BY OPERATING ACTIVITIES: 5 171,597 \$ 282,455 \$ 107,223 Adjustments to reconcile net earnings to net cash provided by operating activities: 80,132,20 66,6482 71,010 Stock based compensation 10,013,22 66,6482 71,010 Asset impairment changes 11,666 34,17 31,018 Asset impairment changes 44,934 14,604 25,988 Deferred income taxes 44,934 14,604 25,988 Other, net 41,933 14,604 25,988 Increase (decrease) in cash, net of acquisitions, resulting from changes in: 19,372 26,957 (7,788) Inventories 24,030 17,425 32,691 17,425 32,691 Prepaid expenses and other current assets 1,014 3,047 1,217 1,017 0,012 2,663 1,207 Accounts payable 1,022 2,663 1,207 2,643 1,207 1,215 2,602 1,202 1,202 1,202 1,202 1,202 1,202 1,202 1,202 1,202 1,202 1,							
Net earnings			2019		2018		2017
Adjustments to reconcile net earnings to net cash provided by operating activities: Depreciation and amortization 103,132 66,462 71,010 105 10	CASH PROVIDED BY OPERATING ACTIVITIES:						
Depreciation and amortization 103,132 66,662 71,010 Stock-based compensation 36,689 34,70 31,018 Asset impairment charges 13,666 3,349 — Loss on net assets held for sale — — 23,588 Deferred income taxes 44,934 14,604 25,968 Other, net 41,23 36,832 36,255 Increase (decrease) in cash, net of acquisitions, resulting from changes in: — 29,057 7,758 Inventories (24,360) 17,425 (32,941) Inventories (24,360) 17,425 (32,941) Prepaid expenses and other current assets 1,099 2,663 12,027 Accounts payable 51,752 (22,449) 21,558 Deferred revenue (6,187) 8,081 (9,229) Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued income taxes (24,723) 374,137 308,252 CASH FLOWS FROM INNESTING ACTIVITIES 44,179 3,073 4,529	Net earnings	\$	171,597	\$	282,425	\$	107,223
Stock-based compensation 36,688 34,170 31,018 Asset impairment charges 13,666 3,349 — Loss on net assets held for sale — — 23,688 Deferred income taxes 44,934 14,604 25,968 Other, net — 4,123 (3,832) (31,256) Increase (decrease) in cash, net of acquisitions, resulting from changes in: 19,372 29,057 (7,758) Inventories (24,360) 17,425 (32,961) Inventories (24,360) 17,425 (32,961) Prepaid expenses and other current assets 1,099 2,663 12,027 Accounts payable 5,1752 (22,449) 21,558 Deferred revene (6,187) 6,081 9,0220 Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued income taxes (24,723) (74,888) 84,332 Other long-term liabilities (8,33) 6,599 17,076 Accaused income taxes (24,723) (74,224) 4,259	Adjustments to reconcile net earnings to net cash provided by operating activities:						
Asset impairment charges 13,666 3,349 — Loss on net assets held for sale — — 23,588 Deferred income taxes 44,93 14,604 25,968 Other, net 4,123 (3,832) (31,256) Increase (decrease) in cash, net of acquisitions, resulting from changes in: — 4,230 17,425 (32,661) Inventories (24,360) 17,425 (32,661) 17,425 (32,661) Prepaid expenses and other current assets (1,744) (3,427) 12,127 Other assets 1,099 2,663 12,027 Accounts payable 1,552 (22,449) 21,558 Deferred revenue (6,187) 8,881 (9,220) Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued payroll and other liabilities (8,139) 6,599 17,076 Accrued payroll and other liabilities (8,139) 3,012 30,252 CASH ELOWS FROM INVASTRICK AC	Depreciation and amortization		103,132		66,462		71,010
Loss on net assets held for sale 4,934 14,604 25,968 Defered income taxes 44,934 14,604 25,968 Other, net 4,123 3,832 35,256 Increase (decrease) in cash, net of acquisitions, resulting from changes in: 4,128 29,057 (7,758) Inventories (24,360) 17,425 30,2061 Prepaid expenses and other current assets (1,044) 3,427 1,217 Other assets 1,099 2,663 12,027 Accounts payable 5,752 (22,449) 21,558 Deferred evenue (6,187) 8,818 49,220 Accrued income taxes (24,723) (74,888) 84,352 Other long-term liabilities 30,302 37,157 308,252 CXACTURED Interpretaring activities 40,639 3,042 4,520 Other long-term liabilities 40,639 3,047 3,652 CXSH FLOWS FROM INVESTING ACTIVITIES 44,794 30,773 3,615 Business acquisitions, net of cash acquired 60,525 3,017 3,686	Stock-based compensation		36,689		34,170		31,018
Deferred income taxes 44,934 14,604 25,968 Other, net 4,123 3,832 3,1250 Increase (decrease) in cash, net of acquisitions, resulting from changes in: 3,932 29,057 (7,758) Inventories (24,300) 17,425 32,901 Prepaid expenses and other current assets (1,094) 3,627 1,207 Other assets 1,099 2,633 1,027 Accought payable 51,752 (22,449) 2,158 Deferred revenue (6,187) 8,081 0,9220 Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued payroll and other liabilities (3,332) 374,172 30,252 Other long-term liabilities (3,332) 374,172 30,252 CASH FLOWS FROM INVESTING ACTIVITIES 44,794 30,773 42,109 Business acquisitions, net of cash acquired (601,22) (6,64) 3,017 3,686 Proceeds from sale of assets (3,65)	Asset impairment charges		13,666		3,349		_
Officer, net 4,123 (3,832) (31,256) Increase (decrease) in cash, net of acquisitions, resulting from changes in: 19,372 29,057 (7,788) Accounts receivable 19,372 29,057 (7,788) Inventories (24,360) 17,425 (32,961) Prepaid expenses and other current assets 1,099 2,663 12,027 Other assets 1,099 2,663 12,027 Accounts payable 6,1875 2(2,449) 21,558 Deferred revenue (6,187) 8,081 (9,220) Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued income taxes (24,723) (74,88) 84,522 Other long-term liabilities (10,639) 13,918 (5590) Net cash provided by operating activities 370,372 374,157 300,252 CASH FLOWS FROM INVESTING ACTIVITIES: 44,794 (30,773) 4(2,109) Business acquisitions, net of assets 6,365 3,017 36,66 Proceeds from sale of business 6,365 3,017 <td>Loss on net assets held for sale</td> <td></td> <td>_</td> <td></td> <td>_</td> <td></td> <td>23,588</td>	Loss on net assets held for sale		_		_		23,588
Increase (decrease) in cash, net of acquisitions, resulting from changes in: Accounts receivable 19,372 29,057 (7,758) Inventories (24,360) 17,425 (32,261) Prepaid expenses and other current assets (1,744) (3,427) 1,217 Other assets 1,099 2,663 12,027 Accounts payable 51,752 (22,449) 21,558 Deferred revenue (6,187) 8,081 (9,229) Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued income taxes (24,723 (74,888) 84,352 Other long-term liabilities (10,33) 37,372 374,157 308,252 Other long-term liabilities (30,30) 37,372 374,157 308,252 Other long-term liabilities (10,30) 37,372 374,157 308,252 Other long-term liabilities (44,794) (30,773 42,109) Business acquisitions, net of cash acquired (44,794) (30,773 4,209) Business acquisitions, net of cash acquired (60,1927) (26,764) — Proceeds from sale of assets (3,365) (3,301 3,686 Proceeds from sale of busines (44,794) (11,030 (15,500 — 10,1000 1,000 (15,500 — 10,1000 1,000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 — 10,1000 (15,500 — 10,1000 (15,500 — 10,1000 — 10,1000 (15,500 — 10,1000 — 10,1000 (15,500 — 10,1000 — 10,1000 (15,500 — 10,1000 — 10,1000 — 10,1000 (15,500 — 10,10	Deferred income taxes		44,934		14,604		25,968
Accounts receivable 19,372 29,057 (7,758) Inventories (24,360) 17,425 (32,961) Prepaid expenses and other current assets (1,744) (3,427) 1,217 Other assets 1,099 2,633 12,027 Accounts payable 51,752 (22,49) 21,558 Deferred revenue (6,187) 8,081 (9,220) Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued income taxes (24,723) (74,888) 84,532 Other long-term liabilities (10,639) 13,918 (5,590) Net cash provided by operating activities 370,372 374,157 308,252 CASH FLOWS FROM INVESTING ACTIVITIES: 44,794 (30,773) 4(2,109) Business acquisitions, net of cash acquired (601,927) (26,764) — Proceeds from sale of business — 25,920 — Minority interest and other investments (11,030) (15,500) — Net cash used by investing activities (55,386) (44,100)	Other, net		4,123		(3,832)		(31,256)
Inventories (2,360) 17,425 (32,961) Prepaid expenses and other current assets (1,744) (3,427) 1,217 Other assets (1,099) 2,663 12,027 Accounts payable 51,752 (22,449) 21,558 Deferred revenue (6,187) 8,081 (9,220) Accrued income taxes (24,723) (74,888) 84,352 Other long-term liabilities (16,639) 13,918 55,590 Net cash provided by operating activities 370,372 374,157 308,252 CASH FLOWS FROM INVESTING ACTIVITIES: 44,794 (30,773) 42,109 Business acquisitions, net of cash acquired (601,927) (26,764) — Proceeds from sale of assets 6,365 3,017 3,686 Proceeds from sale of business — 25,920 — Minority interest and other investments (11,030) (15,500) — Net cash used by investing activities (651,386) (44,100) (38,425) CASH FLOWS FROM FINANCING ACTIVITIES: (81,200) —	Increase (decrease) in cash, net of acquisitions, resulting from changes in:						
Prepaid expenses and other current assets (1,744) (3,427) 1,107 Other assets 1,099 2,663 12,027 Accounts payable 51,752 (22,449) 21,558 Defered revenue (6,187) 8,081 (9,220) Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued income taxes (24,723) (74,888) 84,352 Other long-term liabilities 370,372 374,157 308,252 Other long-term liabilities 370,372 374,157 308,252 CASH FLOWS FROM INVESTING ACTIVITIES: 370,372 374,157 308,252 CASH FLOWS FROM INVESTING ACTIVITIES: 444,794 (30,773) 421,099 Proceeds from sale of business 6,1927 6,25,00 - Proceeds from sale of business - 25,90 - Proceeds from sale of business - 25,90 - Net cash used by investing activities 663,36 (44,109) (38,423 VEX. FLOWS FROM FINANCING ACTIVITIES: 8 - -	Accounts receivable		19,372		29,057		(7,758)
Other assets 1,099 2,663 12,027 Accounts payable 51,752 (22,449) 21,558 Deferred revenue (6,187) 8,081 (9,220) Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued income taxes (24,722) (74,888) 84,352 Other long-term liabilities (10,639) 13,918 (5,590) Net cash provided by operating activities 370,372 374,157 308,252 CASH FLOWS FROM INVESTING ACTIVITIES: Additions to property and equipment, net (44,794) (30,773) (42,109) Business acquisitions, net of cash acquired (601,927) (66,764) — Proceeds from sale of assets 6,365 3,017 3,666 Proceeds from sale of business - 25,920 — Minority interest and other investments (11,030) (15,500) — Net cash used by investing activities (55,386) (44,700) (38,423) CASH FLOWS FROM FINANCING ACTIVITIES: 2 — —	Inventories		(24,360)		17,425		(32,961)
Accounts payable 51,752 (22,449) 21,588 Deferred revenue (6,187) 8,081 (9,200) Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued income taxes (24,723) (74,888) 84,352 Other long-term liabilities (10,639) 13,918 (5,590) Net cash provided by operating activities 370,372 374,157 308,252 CASH FLOWS FROM INVESTING ACTIVITIES: 44,794 (30,773) (42,109) Business acquisitions, net of cash acquired (601,927) (26,764) — Proceeds from sale of business — 59,200 — Proceeds from sale of business — 59,200 — Minority interest and other investments (11,030) (15,500) — Net cash used by investing activities (551,386) (44,100) 38,423 CASH FLOWS FROM FINANCING ACTIVITIES: Text — — — 97,500 — Repayment of credit facility and long-term debt (468,224) — — — <td>Prepaid expenses and other current assets</td> <td></td> <td>(1,744)</td> <td></td> <td>(3,427)</td> <td></td> <td>1,217</td>	Prepaid expenses and other current assets		(1,744)		(3,427)		1,217
Deferred revenue (6,187) 8,081 (9,20) Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued income taxes (24,723) (74,888) 84,352 Other long-term liabilities (10,639) 13,918 (5,590) Net cash provided by operating activities 370,372 374,157 308,252 CASH FLOWS FROM INVESTING ACTIVITIES: 44,794 (30,773) (42,109) Business acquisitions, net of cash acquired (601,927) (26,764) — Proceeds from sale of business 6,365 3,017 3,686 Proceeds from sale of business 6,365 3,017 3,686 Proceeds from sale of business 6,365 3,017 3,686 Proceeds from sale of business (11,030) (15,500) — Minority interest and other investments (11,030) (15,500) — Proceeds from sale of business (46,100) (38,423) — Repair masses of business of business (46,200) — — — — — — <th< td=""><td>Other assets</td><td></td><td>1,099</td><td></td><td>2,663</td><td></td><td>12,027</td></th<>	Other assets		1,099		2,663		12,027
Accrued payroll and other liabilities (8,339) 6,599 17,076 Accrued income taxes (24,723) (74,888) 84,352 Other long-term liabilities (10,639) 13,918 (5,590) Net cash provided by operating activities 370,372 374,157 308,252 CASH FLOWS FROM INVESTING ACTIVITIES: *** *** 44,794 (30,773) (42,109) Business acquisitions, net of cash acquired (601,927) (26,764) — Proceeds from sale of assets 6,365 3,017 3,686 Proceeds from sale of business — 25,920 — Minority interest and other investments (11,030) (15,500) — Net cash used by investing activities (651,386) (44,100) (38,423) CASH FLOWS FROM FINANCING ACTIVITIES: ** ** ** Net proceeds from credit facility and long-term debt, including current portion 723,054 — — Repayment of credit facility and long-term debt, including current portion 723,054 — — Repayment of credit facility and long-term debt, including	Accounts payable		51,752		(22,449)		21,558
Accrued income taxes (24,723) (74,888) 84,352 Other long-term liabilities (10,639) 13,918 (5,590) Net cash provided by operating activities 370,372 374,157 308,252 CASH FLOWS FROM INVESTING ACTIVITIES: Additions to property and equipment, net (44,794) (30,773) (42,109) Business acquisitions, net of cash acquired (601,927) (26,764) — Proceeds from sale of business — 25,920 — Proceeds from sale of business — 25,920 — Minority interest and other investments (111,030) (15,500) — Net cash used by investing activities (651,366) (44,100) (38,423) CASH FLOWS FROM FINANCING ACTIVITIES: Stream of the credit facility and long-term debt (468,224) — — Net proceeds from credit facility and long-term debt (468,224) — — Repayment of credit facility and long-term debt (97,500) — Repayment of proceeds from slare issued pursuant to stock-based compensation plans 28,418 29,124 <t< td=""><td>Deferred revenue</td><td></td><td>(6,187)</td><td></td><td>8,081</td><td></td><td>(9,220)</td></t<>	Deferred revenue		(6,187)		8,081		(9,220)
Other long-term liabilities (10,639) 13,918 (5,590) Net cash provided by operating activities 370,372 374,157 308,252 CASH FLOWS FROM INVESTING ACTIVITIES:	Accrued payroll and other liabilities		(8,339)		6,599		17,076
Net cash provided by operating activities 370,372 374,157 308,252 CASH FLOWS FROM INVESTING ACTIVITIES: 4 (44,794) 30,773 (42,109) Business acquisitions, net of cash acquired (601,927) (26,764) — Proceeds from sale of assets 6,365 3,017 3,686 Proceeds from sale of business — 25,920 — Minority interest and other investments (11,030) (15,500) — Net cash used by investing activities (651,386) (44,100) (38,423) CASH FLOWS FROM FINANCING ACTIVITIES: Net proceeds from credit facility and long-term debt, including current portion 723,054 — — — Repayment of credit facility and long-term debt, including current portion 723,054 —	Accrued income taxes		(24,723)		(74,888)		84,352
CASH FLOWS FROM INVESTING ACTIVITIES: Additions to property and equipment, net (44,794) (30,773) (42,109) Business acquisitions, net of cash acquired (601,927) (26,764) — Proceeds from sale of assets 6,365 3,017 3,686 Proceeds from sale of business — 25,920 — Minority interest and other investments (11,030) (15,500) — Net cash used by investing activities (651,386) (44,100) (38,423) CASH FLOWS FROM FINANCING ACTIVITIES: *** — — Net proceeds from credit facility and long-term debt, including current portion 723,054 — — Repayment of credit facility and long-term debt (468,224) — (97,500) Repurchase of common stock (124,998) (243,706) — Dividends paid (91,694) (88,123) (82,605) Proceeds from shares issued pursuant to stock-based compensation plans 28,418 29,124 58,241 Tax paid for net share exercises and issuance of vested restricted stock units (11,993) (16,228) (10,731) Other financing activities 54,040	Other long-term liabilities		(10,639)		13,918		(5,590)
Additions to property and equipment, net (44,794) (30,773) (42,109) Business acquisitions, net of cash acquired (601,927) (26,764) — Proceeds from sale of assets 6,365 3,017 3,686 Proceeds from sale of business — 25,920 — Minority interest and other investments (11,030) (15,500) — Net cash used by investing activities (651,386) (44,100) (38,423) CASH FLOWS FROM FINANCING ACTIVITIES: Text of the proceeds from credit facility and long-term debt, including current portion 723,054 — — Repayment of credit facility and long-term debt (468,224) — (97,500) Repurchase of common stock (124,998) (243,706) — Dividends paid (91,694) (88,123) (82,605) Proceeds from shares issued pursuant to stock-based compensation plans 28,418 29,124 58,241 Tax paid for net share exercises and issuance of vested restricted stock units (11,993) (16,228) (10,731) Other financing activities 52,040 (318,944) (132,612) Effect of exchange rate changes on cash and cash equivalents <td< td=""><td>Net cash provided by operating activities</td><td></td><td>370,372</td><td></td><td>374,157</td><td></td><td>308,252</td></td<>	Net cash provided by operating activities		370,372		374,157		308,252
Business acquisitions, net of cash acquired (601,927) (26,764) — Proceeds from sale of assets 6,365 3,017 3,686 Proceeds from sale of business — 25,920 — Minority interest and other investments (11,030) (15,500) — Net cash used by investing activities (651,386) (44,100) (38,423) CASH FLOWS FROM FINANCING ACTIVITIES: — — — Net proceeds from credit facility and long-term debt, including current portion 723,054 — — — Repayment of credit facility and long-term debt (468,224) — (97,500) Repurchase of common stock (124,998) (243,706) — Dividends paid (91,694) (88,123) (82,605) Proceeds from shares issued pursuant to stock-based compensation plans 28,418 29,124 58,241 Tax paid for net share exercises and issuance of vested restricted stock units (11,993) (16,228) (10,731) Other financing activities 54,040 (318,944) (132,612) Effect of exchange rate changes on cash and c	CASH FLOWS FROM INVESTING ACTIVITIES:						
Proceeds from sale of assets 6,365 3,017 3,686 Proceeds from sale of business — 25,920 — Minority interest and other investments (11,030) (15,500) — Net cash used by investing activities (651,386) (44,100) (38,423) CASH FLOWS FROM FINANCING ACTIVITIES: *** — Net proceeds from credit facility and long-term debt, including current portion 723,054 — — Repayment of credit facility and long-term debt (468,224) — (97,500) Repurchase of common stock (124,998) (243,706) — Dividends paid (91,694) (88,123) (82,605) Proceeds from shares issued pursuant to stock-based compensation plans 28,418 29,124 58,241 Tax paid for net share exercises and issuance of vested restricted stock units (11,993) (16,228) (10,731) Other financing activities (523) (11) (17 Net cash provided (used) by financing activities 54,040 (318,944) (132,612) Effect of exchange rate changes on cash and cash equivalents (578	Additions to property and equipment, net		(44,794)		(30,773)		(42,109)
Proceeds from sale of business — 25,920 — Minority interest and other investments (11,030) (15,500) — Net cash used by investing activities (651,386) (44,100) (38,423) CASH FLOWS FROM FINANCING ACTIVITIES: Net proceeds from credit facility and long-term debt, including current portion 723,054 — — Repayment of credit facility and long-term debt (468,224) — (97,500) Repurchase of common stock (124,998) (243,706) — Dividends paid (91,694) (88,123) (82,605) Proceeds from shares issued pursuant to stock-based compensation plans 28,418 29,124 58,241 Tax paid for net share exercises and issuance of vested restricted stock units (11,993) (16,228) (10,731) Other financing activities (523) (11) (17 Net cash provided (used) by financing activities 54,040 (318,944) (132,612) Effect of exchange rate changes on cash and cash equivalents (578) (18,059) 20,524 Net (decrease) increase in cash and cash equivalents (527,552)	Business acquisitions, net of cash acquired		(601,927)		(26,764)		_
Minority interest and other investments (11,030) (15,500) — Net cash used by investing activities (651,386) (44,100) (38,423) CASH FLOWS FROM FINANCING ACTIVITIES: Net proceeds from credit facility and long-term debt, including current portion 723,054 — — Repayment of credit facility and long-term debt (468,224) — (97,500) Repurchase of common stock (124,998) (243,706) — Dividends paid (91,694) (88,123) (82,605) Proceeds from shares issued pursuant to stock-based compensation plans 28,418 29,124 58,241 Tax paid for net share exercises and issuance of vested restricted stock units (11,993) (16,228) (10,731) Other financing activities (523) (11) (17 Net cash provided (used) by financing activities 54,040 (318,944) (132,612) Effect of exchange rate changes on cash and cash equivalents (578) (18,059) 20,524 Net (decrease) increase in cash and cash equivalents (227,552) (6,946) 157,741 Cash and cash equivalents, beginning of year	Proceeds from sale of assets		6,365		3,017		3,686
Net cash used by investing activities (651,386) (44,100) (38,423) CASH FLOWS FROM FINANCING ACTIVITIES: Net proceeds from credit facility and long-term debt, including current portion 723,054 — — Repayment of credit facility and long-term debt (468,224) — (97,500) Repurchase of common stock (124,998) (243,706) — Dividends paid (91,694) (88,123) (82,605) Proceeds from shares issued pursuant to stock-based compensation plans 28,418 29,124 58,241 Tax paid for net share exercises and issuance of vested restricted stock units (11,993) (16,228) (10,731) Other financing activities (523) (11) (17 Net cash provided (used) by financing activities 54,040 (318,944) (132,612) Effect of exchange rate changes on cash and cash equivalents (578) (18,059) 20,524 Net (decrease) increase in cash and cash equivalents (227,552) (6,946) 157,741 Cash and cash equivalents, beginning of year 512,144 519,090 361,349	Proceeds from sale of business		_		25,920		_
CASH FLOWS FROM FINANCING ACTIVITIES: Net proceeds from credit facility and long-term debt, including current portion Repayment of credit facility and long-term debt Repurchase of common stock Repurchase of common stock (124,998) (243,706) Proceeds from shares issued pursuant to stock-based compensation plans Proceeds from share exercises and issuance of vested restricted stock units (11,993) (16,228) (10,731) Other financing activities (523) (11) (17) Net cash provided (used) by financing activities (578) Effect of exchange rate changes on cash and cash equivalents (578) (18,059) (18,059) (18,054) (227,552) (6,946) (157,741) Cash and cash equivalents, beginning of year	Minority interest and other investments		(11,030)		(15,500)		_
CASH FLOWS FROM FINANCING ACTIVITIES: Net proceeds from credit facility and long-term debt, including current portion Repayment of credit facility and long-term debt (468,224) — (97,500) Repurchase of common stock (124,998) (243,706) — Dividends paid (91,694) (88,123) (82,605) Proceeds from shares issued pursuant to stock-based compensation plans Tax paid for net share exercises and issuance of vested restricted stock units (11,993) (16,228) (10,731) Other financing activities (523) (11) (17) Net cash provided (used) by financing activities (54,040) (318,944) (132,612) Effect of exchange rate changes on cash and cash equivalents (578) (18,059) 20,524 Net (decrease) increase in cash and cash equivalents (227,552) (6,946) 157,741 Cash and cash equivalents, beginning of year	Net cash used by investing activities		(651,386)		(44,100)		(38,423)
Repayment of credit facility and long-term debt (468,224) — (97,500) Repurchase of common stock (124,998) (243,706) — Dividends paid (91,694) (88,123) (82,605) Proceeds from shares issued pursuant to stock-based compensation plans 28,418 29,124 58,241 Tax paid for net share exercises and issuance of vested restricted stock units (11,993) (16,228) (10,731) Other financing activities (523) (11) (17) Net cash provided (used) by financing activities 54,040 (318,944) (132,612) Effect of exchange rate changes on cash and cash equivalents (578) (18,059) 20,524 Net (decrease) increase in cash and cash equivalents (227,552) (6,946) 157,741 Cash and cash equivalents, beginning of year 512,144 519,090 361,349	CASH FLOWS FROM FINANCING ACTIVITIES:			_			
Repayment of credit facility and long-term debt (468,224) — (97,500) Repurchase of common stock (124,998) (243,706) — Dividends paid (91,694) (88,123) (82,605) Proceeds from shares issued pursuant to stock-based compensation plans 28,418 29,124 58,241 Tax paid for net share exercises and issuance of vested restricted stock units (11,993) (16,228) (10,731) Other financing activities (523) (11) (17) Net cash provided (used) by financing activities 54,040 (318,944) (132,612) Effect of exchange rate changes on cash and cash equivalents (578) (18,059) 20,524 Net (decrease) increase in cash and cash equivalents (227,552) (6,946) 157,741 Cash and cash equivalents, beginning of year 512,144 519,090 361,349	Net proceeds from credit facility and long-term debt, including current portion		723,054		_		_
Repurchase of common stock (124,998) (243,706) — Dividends paid (91,694) (88,123) (82,605) Proceeds from shares issued pursuant to stock-based compensation plans 28,418 29,124 58,241 Tax paid for net share exercises and issuance of vested restricted stock units (11,993) (16,228) (10,731) Other financing activities (523) (11) (17) Net cash provided (used) by financing activities 54,040 (318,944) (132,612) Effect of exchange rate changes on cash and cash equivalents (578) (18,059) 20,524 Net (decrease) increase in cash and cash equivalents (227,552) (6,946) 157,741 Cash and cash equivalents, beginning of year 512,144 519,090 361,349			(468,224)		_		(97,500)
Dividends paid (91,694) (88,123) (82,605) Proceeds from shares issued pursuant to stock-based compensation plans 28,418 29,124 58,241 Tax paid for net share exercises and issuance of vested restricted stock units (11,993) (16,228) (10,731) Other financing activities (523) (11) (17) Net cash provided (used) by financing activities 54,040 (318,944) (132,612) Effect of exchange rate changes on cash and cash equivalents (578) (18,059) 20,524 Net (decrease) increase in cash and cash equivalents (227,552) (6,946) 157,741 Cash and cash equivalents, beginning of year 512,144 519,090 361,349			(124,998)		(243,706)		_
Proceeds from shares issued pursuant to stock-based compensation plans28,41829,12458,241Tax paid for net share exercises and issuance of vested restricted stock units(11,993)(16,228)(10,731)Other financing activities(523)(11)(17)Net cash provided (used) by financing activities54,040(318,944)(132,612)Effect of exchange rate changes on cash and cash equivalents(578)(18,059)20,524Net (decrease) increase in cash and cash equivalents(227,552)(6,946)157,741Cash and cash equivalents, beginning of year512,144519,090361,349	Dividends paid				(88,123)		(82,605)
Tax paid for net share exercises and issuance of vested restricted stock units(11,993)(16,228)(10,731)Other financing activities(523)(11)(17)Net cash provided (used) by financing activities54,040(318,944)(132,612)Effect of exchange rate changes on cash and cash equivalents(578)(18,059)20,524Net (decrease) increase in cash and cash equivalents(227,552)(6,946)157,741Cash and cash equivalents, beginning of year512,144519,090361,349							58,241
Other financing activities (523) (11) (17) Net cash provided (used) by financing activities 54,040 (318,944) (132,612) Effect of exchange rate changes on cash and cash equivalents (578) (18,059) 20,524 Net (decrease) increase in cash and cash equivalents (227,552) (6,946) 157,741 Cash and cash equivalents, beginning of year 512,144 519,090 361,349							
Net cash provided (used) by financing activities54,040(318,944)(132,612)Effect of exchange rate changes on cash and cash equivalents(578)(18,059)20,524Net (decrease) increase in cash and cash equivalents(227,552)(6,946)157,741Cash and cash equivalents, beginning of year512,144519,090361,349	•						
Effect of exchange rate changes on cash and cash equivalents(578)(18,059)20,524Net (decrease) increase in cash and cash equivalents(227,552)(6,946)157,741Cash and cash equivalents, beginning of year512,144519,090361,349							
Net (decrease) increase in cash and cash equivalents(227,552)(6,946)157,741Cash and cash equivalents, beginning of year512,144519,090361,349			<u> </u>				
Cash and cash equivalents, beginning of year 512,144 519,090 361,349				_		_	
Cash and cash equivalents, end of year \$\qquad \qquad \qquad \qquad \qquad \qquad \qqqqq \qqqqqqqqqqqqqqqqqqqqqqqqqqqqq	Cash and cash equivalents, ocganising of year	\$	284,592	\$	512,144	\$	519,090

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Nature of Business and Significant Accounting Policies

FLIR Systems, Inc. (the "Company") is a world leader in sensor systems that enhance perception and awareness. The Company was founded in 1978 and has since become a premier designer, manufacturer, and marketer of thermal imaging and other sensing products and systems. The Company's advanced sensors and integrated sensor systems enable the gathering and analysis of critical information through a wide variety of applications in commercial, industrial, and government markets worldwide.

The Company's goal is to both enable its customers to benefit from the valuable information produced by advanced sensing technologies and to deliver sustained superior financial performance for its shareholders. The Company creates value for its customers by improving personal and public safety and security, providing advanced intelligence, surveillance, reconnaissance, and tactical defense capabilities, facilitating air, ground, and maritime-based situational awareness, detecting electrical, mechanical and building envelope problems, displaying process irregularities, detecting volatile organic gas emissions, and enhancing advanced driver-assistance systems and autonomous driving solutions, as well as a variety of other uses of thermal and other sensing technologies. The Company's business model and range of solutions allow it to sell products to various end markets, including industrial, original equipment manufacturing, military, homeland security, enterprise, infrastructure, and environmental. The Company sells off-the-shelf products in configurations to suit specific customer requirements in an efficient, timely, and affordable manner, and support those customers with training and ongoing support and services. Centered on the design of products for low-cost manufacturing and high-volume distribution, the Company's commercial operating model has been developed over time and provides it with a unique ability to adapt to market changes and meet its customers' needs.

Principles of consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant intercompany accounts and transactions have been eliminated.

Reclassification

The Company made certain reclassifications to the prior years' financial statements to conform them to the presentation as of and for the year ended December 31, 2019. These reclassifications had no effect on consolidated financial position, net earnings, shareholders' equity, or net cash flows for any of the periods presented.

Foreign currency translation

The assets and liabilities of the Company's subsidiaries outside the United States are translated into United States dollars at current exchange rates in effect at the balance sheet date. Revenues and expenses are translated at monthly average exchange rates. Resulting translation adjustments are reflected in accumulated other comprehensive earnings (loss) within shareholders' equity. Transaction gains and losses that arise from exchange rate fluctuations on transactions denominated in currencies other than the functional currency are reflected as other (income) expense, net, in the Consolidated Statements of Income as incurred.

The cumulative translation adjustment included in accumulated other comprehensive earnings (loss) is a loss of \$164.4 million and \$148.4 million at December 31, 2019 and 2018, respectively. Transaction gains and losses included in other expense (income), net, are net losses of \$0.8 million, \$1.3 million, and \$0.2 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Revenue recognition

Effective January 1, 2018, the Company adopted the requirements of Accounting Standards Update ("ASU") 2014-09 and all the related amendments, "Revenue from Contracts with Customers (ASC 606)", which superseded all prior revenue recognition methods and industry-specific guidance.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 1. Nature of Business and Significant Accounting Policies - (Continued)

Revenue recognition - (Continued)

The Company designs, markets and sells products primarily as commercial, off-the-shelf products. Certain customers request different system configurations, based on standard options or accessories that the Company offers. Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration the Company expects to receive in exchange for those products or services. The Company regularly enters into contracts that can include various combinations of products and services, which are generally capable of being distinct and accounted for as separate performance obligations. In such situations, contract values are allocated to each performance obligation based on its relative estimated standalone selling price. The vast majority of the Company's revenues are recognized at a point in time when goods are transferred to a customer. However, for certain contracts that include highly customized components, if performance does not create an asset with an alternative use and termination for convenience clauses provide an enforceable right to payment for performance completed to date, revenue is recognized over time as the performance obligation is satisfied.

Revenue includes certain shipping and handling costs and is stated net of third-party agency fees. Shipping and handling costs associated with outbound freight after control over a product has transferred to a customer are accounted for as a fulfillment cost and are included in cost of goods sold. Revenue is recognized net of allowances for returns and net of taxes collected from customers which are subsequently remitted to governmental authorities.

The Company's products are sold with warranty provisions that require it to remedy deficiencies in quality or performance of the Company's products over a specified period of time, generally twelve to twenty-four months, at no cost to its customers. Warranty liabilities are established at the time that revenue is recognized at levels that represent the Company's estimate of the costs that will be incurred to fulfill those warranty requirements.

Provisions for estimated losses on sales or related receivables are recorded when identified. Service revenue is deferred and recognized over the contract period, as is the case for extended warranty contracts, or recognized as services are provided.

See Note 19, "Operating Segments and Related Information - Revenue and Long-Lived Assets by Geographic Area" for information related to the Company's revenues disaggregated by significant geographical region and operating segment.

Cost of goods sold

Cost of goods sold includes materials, labor and overhead costs incurred in the manufacturing of products and services sold in the period as well as warranty costs. Material costs include raw materials, purchased components and sub-assemblies, outside processing and inbound freight costs. Labor and overhead costs consist of direct and indirect manufacturing costs, including wages and fringe benefits, operating supplies, depreciation, occupancy costs, and purchasing, receiving and inspection costs.

Research and development

Expenditures for research and development activities are expensed as incurred.

Cash equivalents and restricted cash

The Company considers short-term investments that are highly liquid, readily convertible into cash and have maturities of less than three months when purchased to be cash equivalents. Cash equivalents at December 31, 2019 and 2018 were \$0.7 million and \$200.0 million, respectively, which were primarily investments in money market funds and overnight deposits. Restricted cash includes cash that is subject to a legal or contractual restriction by a third party and restricted as to withdrawal or use, including restrictions that require the funds to be used for a specified purpose and restrictions that limit the purpose for which the funds can be used. The Company did not have any restricted cash balances at December 31, 2019 and 2018, respectively.

Accounts receivable and allowance for doubtful accounts

Accounts receivable are stated at the amounts the Company expects to collect. Credit limits are established through a process of reviewing the financial history and stability of each customer. The Company regularly evaluates the collectability of its trade receivables balances based on a combination of factors. If it is determined that a customer will be unable to fully meet its financial obligation, the Company records a specific allowance to reduce the related receivable to the amount expected to be recovered. In addition, in certain instances, the Company also records an allowance based on certain other factors including the length of time the receivables are past due and historical collection experience with individual customers.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 1. Nature of Business and Significant Accounting Policies - (Continued)

Fair Value of Financial Instruments

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In determining fair value, the Company considers the principal or most advantageous market in which the asset or liability would transact, and if necessary, considers assumptions that market participants would use when pricing the asset or liability.

The accounting guidance for fair value measurements establishes a three-level fair value hierarchy that prioritizes the inputs used in measuring fair value as follows: observable inputs such as quoted prices in active markets (Level 1); inputs other than quoted prices in active markets that are observable either directly or indirectly (Level 2); and unobservable inputs in which there is little or no market data, which requires the Company to develop its own assumptions (Level 3). Assets and liabilities are classified in their entirety within the fair value hierarchy based on the lowest level input that is significant to the fair value measurement.

Inventories

Inventories are stated at the lower of cost or net realizable value and include materials, labor, and manufacturing overhead. Cost is determined based on a currently adjusted standard cost basis that approximates actual manufacturing cost on a first-in, first-out basis.

Inventory write-downs are recorded when conditions exist to indicate that inventories are likely to be in excess of anticipated demand or are obsolete based upon the Company's assumptions about future demand for its products and market conditions. The Company regularly evaluates its ability to realize the value of inventories based on a combination of factors including the following: historical usage rates, forecasted sales or usage, product end of life dates, estimated current and future market values and new product introductions. When recorded, write-downs reduce the carrying value of the Company's inventories to their net realizable value and create a new cost-basis in the inventories. Write-downs are reflected in cost of goods sold in the Consolidated Statements of Income. See Note 6, "Inventories" for additional information and discussion on inventory write-downs associated with the Outdoor and Tactical Systems ("OTS") restructuring within the Commercial business unit ("CBU") operating segment recorded during the year ended December 31, 2019 as well as inventory write-downs associated with restructuring actions during the year ended December 31, 2018.

Demonstration units

The Company's products which are being used as demonstration units are stated at the lower of cost or net realizable value and are included in prepaid expenses and other current assets in the Consolidated Balance Sheets. Demonstration units are available for sale and the Company periodically evaluates them as to marketability and realizable values. The carrying value of demonstration units was \$30.4 million and \$35.2 million at December 31, 2019 and 2018, respectively.

Property and equipment

Property and equipment are stated at cost and are depreciated using a straight-line methodology over their estimated useful lives. Repairs and maintenance are charged to expense as incurred.

Goodwill

Effective January 1, 2019, the Company adopted the requirements of ASU 2017-04, "Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment". Goodwill represents the excess purchase price of an acquired enterprise over the estimated fair value of identifiable net assets acquired. The Company assesses goodwill for potential impairment at the reporting unit level during the third quarter of each year, or whenever events or circumstances indicate that the carrying value of these assets may exceed their fair value. The Company may assess qualitative factors to make this determination, or bypass such a qualitative assessment and proceed directly to testing goodwill for impairment using a two-step process. As a result of the adoption of ASU 2017-04, if it is determined that the goodwill is impaired, it is no longer required to compare the implied fair value of the reporting unit goodwill associated with the carrying amount of that goodwill, which is commonly referred to as Step 2.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 1. Nature of Business and Significant Accounting Policies - (Continued)

Goodwill - (Continued)

The Company elects to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. When performing a qualitative assessment, the Company considers factors including, but not limited to, current macroeconomic conditions, industry and market conditions, the competitive environment, changes in the market for our products and services, regulatory and political developments and entity specific factors such as strategies and financial performance and other events relevant to the entity or reporting unit under evaluation. If, based on the review of qualitative factors, it is more likely than not that the fair value of a reporting unit is less than its carrying value, (of if the Company elected to bypass assessing the qualitative factors) the Company would perform a quantitative impairment test to identify goodwill impairment and measure the amount of goodwill impairment loss to be recognized (if any) by comparing the fair value of a reporting unit with its carrying amount. An impairment charge would be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit.

The impairment tests performed in the current year did not indicate an impairment of goodwill in any of the reporting units with the exception of the OTS reporting unit which is part of the CBU operating segment. Based on the assessment of qualitative factors in the fourth quarter, it was determined that it was more likely than not that the fair value was less than the carrying value for the OTS reporting unit. As such, a quantitative impairment test was performed which determined that the fair value of the OTS reporting unit was approximately 63% of its carrying value. As a result, the Company recorded goodwill impairment charges in CBU operating segment during the fourth quarter of fiscal year 2019, which represents the difference between the carrying value and the fair value of the OTS reporting unit. The Company did not recognize any impairment charges on goodwill during the years ended December 31, 2018 and 2017. See Note 9, "Goodwill" for additional information and discussion on goodwill impairments associated with the OTS restructuring within CBU operating segment recorded during the year ended December 31, 2019.

Intangible assets

Intangible assets are amortized using the method that best reflects how their economic benefits are utilized, or, if a pattern of economic benefits cannot be reliably determined, are amortized using a straight-line methodology over their estimated useful lives. Intangible assets with indefinite useful lives are evaluated annually for impairment, or more frequently if required. See Note 10, "Intangibles Assets" for additional information and discussion on impairment charges associated with the OTS restructuring within CBU operating segment recognized during the year ended December 31, 2019. The Company did not recognize any impairment charges on intangible assets with indefinite lives during the years ended December 31, 2018 and 2017.

Impairment of long-lived assets

Long-lived asset groups are reviewed for impairment when circumstances indicate that the carrying amounts may not be recoverable. Impairment exists when the carrying value is greater than the expected undiscounted future cash flows expected to be provided by the asset group. If impairment exists, the asset group is written down to its fair value.

Advertising costs

Advertising costs, including social media, which are included in selling, general and administrative expenses, are expensed as incurred. Advertising costs for the years ended December 31, 2019, 2018 and 2017 were \$10.7 million, \$13.0 million and \$19.5 million, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 1. Nature of Business and Significant Accounting Policies - (Continued)

Minority interest equity investments

The Company holds certain investments in equity instruments of non-publicly traded companies. Equity investments in which the Company does not have control, but has the ability to exercise significant influence over operating and financial policies, are accounted for using the equity method. The Company's proportionate share of income or loss is recorded in other expense (income), net in the Consolidated Statement of Income. All other non-marketable equity investments are measured at cost less impairment, if any, adjusted for changes resulting from qualifying observable price changes. Prior to 2018, all other non-marketable equity investments were accounted for using the cost method. The Company periodically reviews its equity investments for impairment. During the year ended December 31, 2019, the Company recognized impairments of \$4.1 million associated with its equity investments which is included in other expense (income), net in the Consolidated Statement of Income. During the years ended December 31, 2018 and 2017, the Company did not recognize any impairments on its minority interest equity investments. The carrying values of the minority interest equity investments were \$19.9 million and \$17.1 million at December 31, 2019 and 2018, respectively, and are included in other assets in the Consolidated Balance Sheets.

Contingencies

The Company is subject to the possibility of loss contingencies arising in the normal course of business. An estimated loss is accrued when the Company determines that it is probable that an asset has been impaired or a liability has been incurred and the amount can be reasonably estimated. The Company regularly evaluates current available information to determine whether such accruals and disclosures should be adjusted.

Income Taxes

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax basis of the assets and liabilities measured using the enacted tax rates in effect in the years in which the differences are expected to reverse. Valuation allowances against deferred tax assets are recorded when a determination is made that the deferred tax assets are not more likely than not to be realized in the future. In making that determination, on a jurisdiction by jurisdiction basis, the Company estimates the future taxable income based upon historical operating results and external market data. Future levels of taxable income are dependent upon, but not limited to, general economic conditions, competitive pressures and other factors beyond our control.

The Company is subject to income taxes in the United States and in numerous foreign jurisdictions, and in the ordinary course of business, there are many transactions and calculations where the ultimate tax determination is uncertain. The Company records a benefit on a tax position when it is more likely than not that the position is sustainable upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. For tax positions that are more likely than not to be sustained, the Company measures the tax position at the largest amount of benefit that has a greater than 50 percent likelihood of being realized when it is effectively settled, using information that is available at the reporting date. The Company reviews its tax positions as circumstances warrant, and update its liability for additional taxes as changes in available facts arise.

Earnings per share

Basic earnings per share is based on the weighted average number of shares of common stock outstanding during the period. Diluted earnings per share is computed similar to basic earnings per share except that the weighted shares outstanding are increased to include additional shares from the assumed exercise of stock options, if dilutive, and the assumed issuance of shares upon vesting of restricted stock awards.

The following table sets forth the reconciliation of the numerator and denominator utilized in the computation of basic and diluted earnings per share (in thousands):

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 1. Nature of Business and Significant Accounting Policies - (Continued)

Earnings per share - (Continued)

	Year Ended December 31,							
		2019		2018		2017		
Numerator for earnings per share:								
Net earnings for basic and diluted earnings per share	\$	171,597	\$	282,425	\$	107,223		
Denominator for earnings per share:								
Weighted average number of common shares outstanding		135,016		137,815		137,456		
Assumed exercise of stock options and vesting of restricted stock awards, net of shares assumed								
reacquired under the treasury stock method		1,621		2,394		2,190		
Diluted shares outstanding		136,637		140,209		139,646		

The effect of stock-based compensation awards for the years ended December 31, 2019, 2018 and 2017 that aggregated 33,000, 10,000 and 39,000 shares, respectively, have been excluded for purposes of diluted earnings per share since the effect of their inclusion would have been anti-dilutive.

Supplemental cash flow disclosure (in thousands)

	_	Year Ended December 31,										
		2019 2018				2017						
Cash paid for:	_											
Interest	\$	5	21,544	\$	14,183	\$	15,394					
Taxes	\$	5	52,146	\$	83,259	\$	72,340					

Stock-based compensation

The Company uses the Black-Scholes option pricing model to estimate the fair value of stock option awards and shares expected to be issued under the Company's employee stock purchase plan. Non-vested stock awards (referred to as restricted stock unit awards) are valued based on the fair market value of the Company's stock, discounted for expected dividends, on the date of grant. Restricted stock units containing performance-based vesting criteria are valued on the date of grant based on the fair value of the Company's stock, discounted for expected dividends and an estimate for illiquidity. The estimated discount for illiquidity is relevant for share based awards that require the plan participant to hold the shares for a specified period of time after the award vests and is estimated using the protective put method. The Company recognizes the compensation expense for all stock-based compensation awards on a straight-line basis over the requisite service period of each award.

The following table sets forth the stock-based compensation expense recognized in the Consolidated Statements of Income for the years ended December 31, 2019, 2018 and 2017 (in thousands):

	Year Ended December 31,										
	2019					2017					
Cost of goods sold	\$	3,704	\$	3,157	\$	2,665					
Research and development		6,595		6,697		5,068					
Selling, general and administrative		26,390		24,316		23,285					
Stock-based compensation expense before income taxes	\$	36,689	\$	34,170	\$	31,018					

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 1. Nature of Business and Significant Accounting Policies - (Continued)

Stock-based compensation - (Continued)

Stock-based compensation expense capitalized in the Consolidated Balance Sheets as of December 31, 2019, 2018 and 2017 is as follows (in thousands):

		December 31,						
	:	2019		2018		2017		
ory	\$	1,122	\$	1,080	\$	1,062		

As of December 31, 2019, the Company had approximately \$59.5 million of total unrecognized stock-based compensation costs, net of estimated forfeitures, to be recognized over a weighted average period of approximately two years.

The fair value of the stock-based awards granted in the years ended December 31, 2019, 2018 and 2017 was estimated with the following weighted-average assumptions:

	2019	2018	2017
Stock option awards:			
Risk-free interest rate	_	_	1.8%
Expected dividend yield	_	_	1.6%
Expected term	_	_	6.0 years
Expected volatility	_	_	26.6%
Performance-based restricted stock awards:			
Expected dividend yield	1.3%	1.2%	1.6%
Employee stock purchase plan:			
Risk-free interest rate	2.0%	2.3%	1.0%
Expected dividend yield	1.3%	1.3%	1.6%
Expected term	6 months	6 months	6 months
Expected volatility	25.0%	26.4%	20.9%
Discount for illiquidity	_	10.5%	10.5%

The Company uses the United States Treasury (constant maturity) interest rate on the date of grant as the risk-free interest rate and uses historical volatility as the expected volatility. The Company's determination of expected term is based on an analysis of historical and expected exercise patterns. In 2017 and 2016, all stock options granted were time-based options. The Company uses an estimated forfeiture rate of 5 percent of the stock-compensation expense of non-executive employees based on an analysis of historical and expected forfeitures.

During the years ended December 31, 2019, 2018 and 2017, the Company granted approximately 867,000, 594,000 and 773,000 time-vested restricted stock units, respectively. The fair value of time-vested restricted stock units is fixed and determined on the date of grant based upon the Company's stock price on the date of grant. The weighted average fair values of the time-vested restricted stock units granted during the years ended December 31, 2019, 2018 and 2017 were \$50.45, \$52.93 and \$36.20 per share, respectively.

During the years ended December 31, 2019, 2018 and 2017, the Company granted approximately 158,000, 177,000 and 283,000 performance-based restricted stock units, respectively. These units are earned based upon the Company's return on invested capital over a three year period. The fair value of the performance-based restricted units granted during the years ended December 31, 2019, 2018 and 2017 was \$49.57, \$52.32 and \$35.08 per share, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 1. Nature of Business and Significant Accounting Policies - (Continued)

Stock-based compensation - (Continued)

The total fair value of the restricted stock unit awards granted during the year ended December 31, 2019 in the table below of \$51.6 million includes \$7.8 million of grant date fair value associated with the performance-based restricted stock units. The total fair value of the restricted stock unit awards granted during the year ended December 31, 2018 in the table below of \$40.7 million includes \$9.2 million of grant date fair value associated with the performance-based restricted stock units. The total fair value of the restricted stock unit awards granted during the year ended December 31, 2017 in the table below of \$37.9 million includes \$9.9 million of grant date fair value associated with the performance-based restricted stock units.

The weighted-average fair value of stock-based compensation awards granted and vested, and the intrinsic value of options exercised during the period were (in thousands, except per share amounts):

	Years Ended December 31,							
		2019		2018		2017		
Stock option awards:								
Weighted average grant date fair value per share		_	\$	_	\$	8.55		
Total fair value of awards granted		_	\$	_	\$	2,824		
Total fair value of awards vested	\$	1,340	\$	2,529	\$	4,203		
Total intrinsic value of options exercised	\$	16,124	\$	24,652	\$	20,631		
Restricted stock unit awards:								
Weighted average grant date fair value per share	\$	50.31	\$	52.79	\$	35.90		
Total fair value of awards granted	\$	51,578	\$	40,675	\$	37,906		
Total fair value of awards vested	\$	39,287	\$	48,705	\$	27,489		
Employee stock purchase plan:								
Weighted average grant date fair value per share	\$	11.72	\$	10.01	\$	7.66		
Total fair value of shares estimated to be issued	\$	2,399	\$	1,330	\$	1,087		

The total amount of cash received from the exercise of stock options in the years ended December 31, 2019, 2018 and 2017 was \$21.2 million, \$23.7 million and \$53.5 million, respectively, and the related tax benefits realized from the exercise of the stock options in the years ended December 31, 2019, 2018 and 2017 was \$4.8 million, \$8.7 million and \$3.0 million, respectively.

Concentration of risk

Financial instruments that potentially subject the Company to concentration of credit risk consist primarily of accounts receivable. Concentration of credit risk with respect to accounts receivable is limited because a relatively large number of geographically diverse customers make up the Company's customer base, thus diversifying the trade credit risk. The Company controls credit risk through credit approvals, credit limits and monitoring procedures. The Company performs credit evaluations for all new customers and requires letters of credit, bank guarantees and advanced payments, if deemed necessary.

A substantial portion of the Company's revenue is derived from sales to United States and foreign government agencies (see Note 19, "Operating Segments and Related Information"). The Company also purchases certain key components from sole or limited source suppliers.

The Company maintains cash deposits with major banks that from time to time may exceed federally insured limits. The Company periodically assesses the financial condition of the institutions and instruments in which it invests and adjusts its investment balances to mitigate the risk of principal loss.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 1. Nature of Business and Significant Accounting Policies - (Continued)

Use of estimates

The preparation of financial statements in conformity with United States generally accepted accounting principles requires management to make estimates and judgments 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 revenue and expenses during the reporting period. Significant estimates and judgments made by management of the Company include matters such as collectability of accounts receivable, realizability of inventories, recoverability of deferred tax assets, impairment tests of goodwill, intangible assets and other long-lived assets, recognition and measurement of loss contingencies and adequacy of warranty accruals. Actual results could differ from those estimates. The Company believes that the estimates used are reasonable.

Accumulated other comprehensive earnings (loss)

Accumulated other comprehensive earnings (loss) includes cumulative translation adjustments, fair value adjustments on interest rate swap contracts, unrealized gains and losses on available-for-sale securities and changes in minimum liability for pension plans. Foreign currency translation adjustments included in comprehensive income were not tax affected as investments in international affiliates are deemed to be indefinite in duration.

The following table sets forth the changes in the balances of each component of accumulated other comprehensive earnings (loss) for the year ended December 31, 2019:

	on Plans ems	S	est Rate wap ntracts	Available- For-Sale Items	Foreign Currency Items	Total
Balance, December 31, 2018	\$ (682)	\$		\$ (4)	\$ (148,406)	\$ (149,092)
Other comprehensive loss before reclassifications, net of tax	(58)		(796)	4	(16,003)	(16,853)
Balance, December 31, 2019	\$ (740)	\$	(796)	\$ _	\$ (164,409)	\$ (165,945)

Recently Adopted Accounting Pronouncements

Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") No. 2016-02, "Leases ("ASC 842"). Effective January 1, 2019, the Company adopted ASC 842 and all the related amendments using the modified retrospective method, using the permitted practical expedients, to those contracts still outstanding as of January 1, 2019. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. The most significant impact was the recognition, on a discounted basis, of right-of-use (ROU) assets totaling approximately \$31.9 million and lease liabilities totaling approximately \$34.2 million under non-cancelable operating leases as of January 1, 2019 and the related new required disclosures. The standard did not have an impact on the Company's consolidated income statements or consolidated statements of cash flows. For additional disclosures required under the new standard, see Note 7, "Leases."

FASB ASU No. 2017-04, "Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment" ("ASU 2017-04"). Effective January 1, 2019, the Company adopted ASU 2017-04. The amendments in this update simplify the subsequent measurement of goodwill by removing the second step of the two-step impairment test. The amendment also requires an entity to perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An impairment charge should be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. An entity still has the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary. The standard did not have a material impact on the Company's consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 1. Nature of Business and Significant Accounting Policies - (Continued)

Recently Adopted Accounting Pronouncements - (Continued)

FASB ASU No. 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income" ("ASU 2018-02"). Effective January 1, 2019, the Company adopted ASU 2018-02. The standard allows companies to reclassify stranded tax effects in accumulated other comprehensive earnings (loss) that have been caused by the Tax Cuts and Jobs Act of 2017 (the Act) to retained earnings for each period in which the effect of the change in the U.S. federal corporate income tax rate is recorded. However, the FASB made the reclassification optional. As a result, the Company assessed the impact of the ASU on its financial statements and did not exercise the option to reclassify the stranded tax effects caused by the Act.

FASB ASU No. 2018-07, "Improvements to Nonemployee Share-Based Payment Accounting" ("ASU 2018-07"). Effective January 1, 2019, the Company adopted ASU 2018-07. The standard more closely aligns the accounting for employee and nonemployee share-based payments. The standard did not have a material impact on the Company's consolidated financial statements or disclosures.

FASB ASU No. 2018-15, "Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That is a Service Contract" ("ASU 2018-15"). Effective January 1, 2019, the Company adopted ASU 2018-15. The amendments in this update align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by the amendments in this update. The standard did not have a material impact on the Company's consolidated financial statements.

FASB ASU No. 2014-09, "Revenue - Revenue from Contracts with Customers". Effective January 1, 2018, the Company adopted ASU 2014-09 and all the related amendments ("new revenue standard" or "ASC 606") using the modified retrospective method to those contracts not yet completed as of January 1, 2018. As a result, the Company recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the opening balance of retained earnings in the amount of approximately \$1.0 million as of January 1, 2018. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. The Company expects the impact of the adoption of the new standard to be immaterial to net income on an ongoing basis. See Note 2, "Revenue" for additional disclosures required by the new revenue standard.

FASB ASU No. 2016-16, "Intra-Entity Transfers of Assets Other Than Inventory" ("ASU 2016-16"). Effective January 1, 2018, the Company adopted ASU 2016-16, which eliminates the exception of recognizing, at the time of transfer, current and deferred income taxes for intra-entity asset transfers other than inventory. This new standard has been applied on a modified retrospective transition basis with an adjustment to the opening balance of retained earnings in the amount of approximately \$79.3 million and \$3.4 million as of January 1, 2018 and 2019, respectively.

Recently Issued Accounting Pronouncements

In June 2016, the FASB issued ASU No. 2016-13, "Measurement of Credit Losses on Financial Instruments ("ASU 2016-13" or "Topic 326"), which significantly changes the way entities recognize impairment of many financial assets by requiring immediate recognition of estimated credit losses expected to occur over their remaining life. Subsequently, the FASB has issued several amendments to the new standard to clarify the implementation. ASU 2016-13 and all related amendments are effective for interim and annual reporting periods beginning after December 15, 2019 using a modified-retrospective approach. The Company has adopted the standard as of January 1, 2020 and it did not have a material impact to the consolidated financial statements.

In November 2018, the FASB issued ASU No. 2018-18, "Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606" ("ASU 2018-18"). The standard clarifies that certain transactions between collaborative arrangement participants should be accounted for under ASC 606, when one participant is a customer, and specifies that a distinct good or service is the unit of account for evaluating whether the transaction is with a customer. The standard also provides some guidance on presentation of transactions not in the scope of ASC 606. The standard is effective for fiscal years beginning after December 15, 2019. The Company has adopted the standard as of January 1, 2020 and it did not have a material impact to the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 1. Nature of Business and Significant Accounting Policies - (Continued)

Recently Issued Accounting Pronouncements - (Continued)

In December 2019, the FASB issued ASU No. 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes". The standard simplifies the accounting for income taxes by removing certain exceptions to the general principles in Topic 740 for: recognizing deferred taxes for investments, performing intra-period allocations and calculating taxes in interim periods. The ASU 2019-12 also improves consistent application of and simplifies GAAP for other areas of Topic 740 by clarifying and amending existing guidance to reduce complexity in certain areas, including recognizing deferred taxes for tax goodwill and allocating taxes to members of a consolidated group. The standard is effective for fiscal years beginning after December 15, 2020. Early adoption is permitted. The Company plans to adopt the standard as of January 1, 2021 and is currently evaluating this guidance to determine the impact it may have on its consolidated financial statements.

Note 2. Revenue

Contract Balances

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables and deferred revenue and advance payments from customers on the Consolidated Balance Sheets. Contract assets and liabilities are reported on a contract-by-contract basis. The Company had no material deferred contract costs recorded on the Consolidated Balance Sheet as of December 31, 2019.

<u>Contract assets</u>: The Company recognizes unbilled receivables as contract assets when the Company has rights to consideration for work completed but has not yet billed at the reporting date. Unbilled receivables are included within accounts receivable, net on the Consolidated Balance Sheets. The balance of unbilled receivables as of December 31, 2019 and 2018 were \$9.4 million and \$10.5 million, respectively.

<u>Contract Liabilities</u>: The Company records contract liabilities when cash payments are received or due in advance of the Company's performance. Contract liabilities include deferred revenue and advance payments from customers. Contract liabilities are classified as either current or long-term in the Consolidated Balance Sheets based on the timing of when the Company expects to recognize revenue. As of December 31, 2019 and 2018, the contract liability balances totaled \$69.1 million and \$66.4 million, respectively. These balances included amounts classified as long-term as of December 31, 2019 and 2018 which were of \$12.5 million and of \$14.0 million, respectively, and are included within other long-term liabilities in the accompanying Consolidated Balance Sheets. Approximately \$66.6 million of revenue recognized during the twelve month period ended December 31, 2019 was included in the combined contract liability balances as of December 31, 2018.

Remaining Performance Obligations

Remaining performance obligations represent the aggregate transaction price allocated to performance obligations with an original contract term greater than one year which are fully or partially unsatisfied at the end of the period. While the remaining performance obligation disclosure is similar in concept to backlog, the definition of remaining performance obligations excludes contracts that provide the customer with the right to cancel or terminate for convenience with no substantial penalty, even if historical experience indicates the likelihood of cancellation or termination is remote. The Company has elected to exclude contracts with customers with an original term of one year or less from remaining performance obligations while these contracts are included within backlog.

As of December 31, 2019, the aggregate amount of the transaction price allocated to remaining performance obligations was approximately \$235.2 million. The Company expects to recognize revenue on approximately 74 percent of the remaining performance obligations over the next twelve months, and the remainder recognized thereafter.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 3. Fair Value of Financial Instruments

Factors used in determining the fair value of financial assets and liabilities are summarized into three broad categories in accordance with FASB ASC Topic 820, "Fair Value Measurements":

- Level 1 quoted prices in active markets for identical securities as of the reporting date;
- Level 2 other significant directly or indirectly observable inputs, including quoted prices for similar securities, interest rates, prepayment speeds, credit risk and observable market prices for identical instruments that are traded in less active markets; and
- Level 3 significant inputs that are generally less observable than objective sources, including our own assumptions in determining fair value.

The factors or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities.

The Company had \$0.7 million and \$200.0 million of cash equivalents at December 31, 2019 and 2018, respectively, which were primarily investments in money market funds and overnight deposits. The Company has categorized its cash equivalents as a Level 1 financial asset, measured at fair value based on quoted prices in active markets of identical assets. All cash equivalents are in instruments that are convertible to cash daily. The fair value of the Company's derivative contracts as of December 31, 2019 and 2018 are disclosed in Note 4, "Derivative Financial Instruments," and are based on Level 2 inputs. The fair value of the Company's borrowings under the Credit Agreement as described in Note 11, "Credit Agreement," as of December 31, 2019 approximates the carrying value. The fair value of the Company's senior unsecured notes as described in Note 13, "Long-Term Debt," is approximately \$430.1 million and \$418.8 million based upon Level 2 inputs at December 31, 2019 and 2018, respectively. The fair value of qualifying observable price changes related to the Company's minority interest equity investments, as discussed in Note 1, "Nature of Business and Significant Accounting Policies," are based on Level 3 inputs. The Company does not have any other significant financial assets or liabilities that are measured at fair value.

Note 4. Derivative Financial Instruments

The Company's financial position and results of operations are subject to certain financial market risks. The Company regularly assesses these risks and has established risk management practices designed to mitigate the impact of certain foreign currency exchange rate and interest rate risk exposures. The Company does not engage in speculative trading in any financial market.

Foreign Currency Contracts

The Company uses currency forward contracts, not formally designated as hedges, to manage the consolidated exchange rate risk associated with the remeasurement of certain non-functional currency denominated monetary assets and liabilities primarily by subsidiaries that use U.S. dollars, European euros, Canadian dollars, Swedish kronor, Norwegian kroner, Brazilian real and British pound sterling as their functional currency. Changes in fair value of foreign currency forward contracts are recognized in other expense (income), net at the end of each reporting period. In general, these gains and losses are offset in the Consolidated Statements of Income by the reciprocal gains and losses from the underlying assets or liabilities which originally gave rise to the exposure. At December 31, 2019, the Company's foreign currency forward contracts, not formally designated as hedges, had maturities of three months or less.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 4. Derivative Financial Instruments - (Continued)

Foreign Currency Contracts - (Continued)

In addition, the Company manages the risk of changes in the fair value of certain monetary liabilities attributable to changes in exchange rates. The Company manages these risks by using currency forward contracts formally designated and effective as fair value hedges. Hedge effectiveness is generally determined by evaluating the alignment of the hedging instrument's critical terms with the critical terms of the hedged item. The forward points attributable to the hedging instruments are excluded from the assessment of effectiveness and amortized to other expense (income), net using a systematic and rational methodology. Differences between the change in fair value of the excluded component and amounts recognized under the systematic and rational method are recognized in other comprehensive income. The change in fair value of the hedged risk is reported in other expense (income), net. The change in fair value of the hedged item attributable to the hedged risk is reported as an adjustment to its carrying value and also included in other expense (income), net. At December 31, 2019, the Company's foreign currency forward contracts formally designated as fair value hedges, had maturities of three years or less.

Interest Rate Swap

The Company's outstanding debt at December 31, 2019 consists of fixed rate notes and an unsecured credit facility consisting of an unsecured revolving loan facility, an unsecured U.S. dollar term loan and an unsecured Swedish kronor term loan, all of which accrue interest at a floating rate. As discussed in Note 11, "Credit Agreement," interest expense on the Company's floating rate debt is calculated based on a fixed spread over the applicable Eurocurrency rate (e.g. LIBOR) subject to a floor of zero percent. Therefore, fluctuations in market interest rates will cause interest expense increases or decreases on a given amount of floating rate debt.

The Company is managing its interest rate risk related to certain floating rate debt through an interest rate swap ("swap") in which the Company receives floating rate payments subject to a floor of zero percent and makes fixed rate payments. The impact of the swap is to fix the floating rate basis for the calculation of interest on the unsecured Swedish kronor term loan at 0.590 percent. The swap is designated and effective as a cash flow hedge with individual swap cash flows recorded as an asset or liability in the Company's Consolidated Balance Sheets at fair value. Hedge effectiveness is generally determined by evaluating the alignment of the hedging instrument's critical terms with the critical terms of the hedged item. Fair value adjustments are recorded as an adjustment to accumulated other comprehensive income (loss).

All the Company's derivative counterparties have investment grade credit ratings. The Company is a party to master netting arrangements that contain features that allow counterparties to net settle amounts arising from multiple separate derivative transactions or net settle in the case of certain triggering events such as a bankruptcy or major default of one of the counterparties to the transaction. The Company has not pledged assets or posted collateral as a requirement for entering or maintaining derivative positions.

The following table presents the gross notional amounts of outstanding derivative instruments (in thousands):

	Dece	mber 31, 2019	December 31, 2018		
Derivative instruments designated as cash flow hedges:					
Interest Rate Swap	\$	143,302	\$	_	
Derivative instruments designated as fair value hedges:					
Currency Forward Contracts		340,000		_	
Derivative instruments not formally designated as hedges:					
Currency Forward Contracts		104,835		95,896	

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 4. Derivative Financial Instruments - (Continued)

Interest Rate Swap - (Continued)

The following table presents the balance sheet classification and fair value of derivative instruments (in thousands):

	Dec		Decembe		1,
	Classification	2019)		2018
Derivative instruments designated as cash flow hedges:					
Derivative instruments in asset positions:					
Interest Rate Swap	Prepaid expense and other current assets	\$	404	\$	_
Derivative instruments in liability positions:					
Interest Rate Swap	Other current liabilities		453		_
Interest Rate Swap	Other long-term liabilities		1,012		_
Derivative instruments designated as fair value hedges: Derivative instruments in liability positions:					
Currency forward contracts	Other current liabilities		454		_
Currency forward contracts	Other long-term liabilities		1,189		_
Derivative instruments not formally designated as hedges:					
Derivative instruments in asset positions:					
Currency forward contracts	Prepaid expenses and other current assets		3,010		431
Derivative instruments in liability positions:					
Currency forward contracts	Other current liabilities		391		951

The following table presents the statement of income classification of derivative instruments (in thousands):

		December 31,				
	Classification		2019	2018		2017
Derivative instruments designated as cash flow hedges:						
Loss recognized in other comprehensive income, net of tax	Accumulated other comprehensive loss	\$	796	\$ —	\$	_
Loss reclassified from other comprehensive income to earnings for the effective portion	Interest expense		656	_		_
Derivative instruments designated as fair value hedges:						
Loss recognized in earnings for effective portion	Other expense, net		927	_		_
Loss recognized in other comprehensive income, net of tax	Accumulated other comprehensive loss		716	_		_
Derivative instruments not formally designated as hedges:						
Gain (loss) recognized in earnings	Other expense (income), net		1,309	(9,111))	(9,376)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 4. Derivative Financial Instruments - (Continued)

Interest Rate Swap - (Continued)

The carrying amounts of the foreign exchange contracts included in the Consolidated Balance Sheets are as follows (in thousands):

		December 31, 2019			December 31, 2018				
	Prepaid Expenses and Other Current Assets		Other Current Liabilities		Prepaid Expenses and Other Current Assets		Other Current Liabilities		
Foreign exchange contracts	\$	3,010	\$	391	\$	431	\$	951	

Note 5. Accounts Receivable

Accounts receivable are net of an allowance for doubtful accounts. The following table summarizes the Company's allowance for doubtful accounts and the activity for 2019, 2018 and 2017 (in thousands):

	Year Ended December 31,							
		2019		2018		2018		2017
Allowance for doubtful accounts, beginning of year	\$	4,284	\$	7,630	\$	6,457		
Charges to costs and expenses		3,136		879		2,303		
Write-offs of uncollectible accounts, net of recoveries		(1,293)		(3,985)		(1,505)		
Business disposals		_		(593)		_		
Currency translation adjustments		(15)		353		375		
Allowance for doubtful accounts, end of year	\$	6,112	\$	4,284	\$	7,630		

Note 6. Inventories

Inventories consist of the following (in thousands):

	December 31,				
	2019			2018	
Raw material and subassemblies	\$	224,239	\$	214,164	
Work-in-progress		44,344		43,096	
Finished goods		120,179		94,847	
	\$	388,762	\$	352,107	

During the years ended December 31, 2019 and 2018, the Company recognized inventory write-downs of \$5.9 million and \$3.3 million, respectively associated with the restructuring activities further discussed in Note 22, "Restructuring." The inventory write-downs are included in "Cost of goods sold" on the Consolidated Statements of Income.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 7. Leases

Operating lease liabilities

The Company determines if an arrangement is a lease at inception. Operating leases are included in other assets, other current liabilities and other long-term liabilities on the Consolidated Balance Sheets. The Company did not have any finance leases at December 31, 2019.

Operating lease right-of-use assets ("ROU assets") represent the Company's right to use an underlying asset for the lease term and operating lease liabilities represent the obligation to make lease payments arising from the lease. ROU assets and liabilities are recognized at the commencement date of the lease based on the present value of minimum fixed lease payments over the lease term. As most of the leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. ROU assets also include prepaid lease payments made prior to commencement of the lease plus initial capitalized direct costs and exclude tenant improvement allowances. The lease terms may include options to extend or terminate the lease when it is reasonably certain that the option will be exercised. Lease expense for minimum fixed lease payments is recognized on a straight-line basis over the lease term.

The Company has elected to apply the short-term lease exemption in accordance with guidance, and therefore, short-term leases (leases with a term of twelve months or less) are not recorded on the balance sheet. The Company has only a small number of leases that qualify for the exemption and the amount of its remaining short-term lease commitments is not significant.

Most of the Company's operating leases are for buildings, warehouses and office space. These leases have remaining lease terms of approximately one year to ten years.

Year Ended

39,291

\$

The components of lease expense were as follows (in thousands):

	Dece	mber 31, 2019
Operating lease expense	\$	11,925
Short-term lease expense		963
Variable lease expense		1,586
Total lease expense	\$	14,474
Supplemental cash flow information related to operating leases (in thousands):		
	Ye	ear Ended
	Decer	nber 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$	11,244
Right-of-use assets obtained in exchange for lease obligations:		
Operating leases	\$	12,210
Supplemental balance sheet information related to operating leases (in thousands):		
	Decer	nber 31, 2019
Operating lease right-of-use assets	\$	35,479

As of December 31, 2019, the weighted average remaining lease term for operating leases was 5.0 years and the weighted average discount rate was

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 7. Leases - (Continued)

Maturities of lease liabilities as of December 31, 2019 were as follows (in thousands):

2020	\$ 11,812
2021	10,606
2022	7,023
2023	4,132
2024	2,394
Thereafter	7,572
Total lease payments	43,539
Less: imputed interest	(4,248)
Present value of lease liabilities	\$ 39,291

The Company's future minimum lease commitments, net of sub-lease rental income, as of December 31, 2018, under Accounting Standard Codification Topic 840, the predecessor to Topic 842, were as follows (in thousands):

	 Net Operating Leases
2019	\$ 10,561
2020	8,270
2021	7,283
2022	4,894
2023	2,934
Thereafter	5,911
Total minimum payments	\$ 39,853

Note 8. Property and Equipment

Property and equipment are summarized as follows (in thousands):

	n e . i		Decen	ıber 31	,		
	Estimated Useful Life		2019		2019		2018
Land	_	\$	21,511	\$	21,595		
Buildings	30 years		167,852		171,406		
Machinery and equipment	3 to 7 years		307,530		287,596		
Office equipment and other	3 to 10 years		129,127		100,210		
			626,020		580,807		
Less accumulated depreciation			(370,115)		(333,400)		
		\$	255,905	\$	247,407		

Depreciation expense for the years ended December 31, 2019, 2018 and 2017 was \$44.2 million, \$40.6 million and \$42.3 million, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 9. Goodwill

The carrying value of goodwill and the activity for the two year period ending December 31, 2019 are as follows (in thousands):

Balance, December 31, 2017	\$ 909,811
Goodwill from acquisitions	9,228
Currency translation adjustments	(14,468)
Balance, December 31, 2018	904,571
Goodwill from acquisitions	469,446
Goodwill impairment	(6,543)
Currency translation adjustments	(2,878)
Balance, December 31, 2019	\$ 1,364,596

During the year ended December 31, 2019, the Company recorded \$469.4 million of goodwill in connection with the purchase price allocation associated with Acyclica, Inc. ("Acylica"), SeaPilot AB ("SeaPilot"), Aeryon, Endeavor and New England Optical Systems, Inc. During the year ended December 31, 2018, the Company recorded \$9.2 million of goodwill primarily in connection with the purchase price allocation associated with Fishing Hot Spots and Fishidy. See Note 20, "Business Acquisitions and Divestitures" for additional information on goodwill from acquisitions.

The Company reviews its goodwill for impairment annually during the third quarter, or more frequently, if events or circumstances indicate that the carrying value of a reporting unit exceeds its fair value. During the third quarter of 2019, the Company completed its annual review of goodwill and determined that no impairment of its recorded goodwill was necessary.

During the fourth quarter of fiscal year 2019, the Company approved a plan to restructure the OTS reporting unit within the Commercial Business Unit ("CBU") operating segment. The restructuring will discontinue operations of the thermal and night vision business and refocus strategy on the Personal Vision System ("PVS") product line in the law enforcement and public safety markets. As a result, the Company revised its outlook and lowered its financial forecast for the OTS business. The Company determined that the above factors are more likely than not to have a significant adverse impact on the OTS reporting unit and therefore an interim goodwill impairment quantitative analysis was performed utilizing both an income and market approach to determine the reporting units' fair value.

The income approach, discounted cash flow method, was performed by calculating the fair value based on future forecasted cash flows discounted back to the present value, including significant judgments related to risk adjusted discount rates, terminal growth rates, and the weighted average cost of capital ("WACC"). The projected cash flows were developed by the Company for planning purposes based on current known business and market conditions as well as future anticipated industry trends. A terminal value growth rate of 2.5% and WACC of 16% were utilized based on industry and macroeconomic indicators as well as estimated risk premiums.

The market approach, guideline public company method, was performed to calculate the fair value of the OTS reporting unit by applying pricing multiples derived from selected publicly traded guideline companies. The Company utilized enterprise/earnings before interest, taxes, depreciation, and amortization ("EBITDA") multiples and enterprise/revenue multiples which ranged from low 5.0 to high 20.6, and from low 0.6 to high 4.6, respectively.

Based on the quantitative goodwill impairment test the Company determined that the fair value of the OTS reporting unit, determined using an equal weighting from the income and market approaches, was approximately 63% of its carrying value. As a result, the Company recorded goodwill impairment charges of \$6.5 million in CBU operating segment during the fourth quarter of fiscal year 2019, which represents the difference between the carrying value and the fair value of the OTS reporting unit. The Company recorded the goodwill impairment charge in "Selling, general and administrative" in the Company's Consolidated Statements of Income.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 10. Intangibles Assets

Intangible assets are summarized as follows (in thousands):

	Weighted Average	December			l ,
	Estimated Useful Life		2019		2018
Product technology	8 years	\$	207,511	\$	117,563
Customer relationships	11 years		67,274		73,260
Trademarks and trade name portfolios	8 years		18,557		7,220
Trade name portfolio not subject to amortization	indefinite		32,076		32,076
In-process research and development	8 years		34,698		1,638
Other	8 years		10,756		6,272
Acquired identifiable intangibles			370,872		238,029
Less accumulated amortization			(124,411)		(93,154)
Net acquired identifiable intangibles			246,461		144,875
Patents	7 years		6,075		6,086
Less accumulated amortization			(5,109)		(4,253)
Net patents			966		1,833
Acquired in-place leases and other	10 years		441		446
Less accumulated amortization			(354)		(309)
Net acquired in-place leases and other			87		137
		\$	247,514	\$	146,845

During the year ended December 31, 2019, the Company recorded \$159.7 million of identified intangibles assets in connection with the purchase price allocation associated with Acyclica, SeaPilot, Aeryon, Endeavor and New England Optical Systems, Inc. During the year ended December 31, 2018, the Company recorded \$6.0 million of identified intangibles assets in connection with the purchase price allocation associated with Fishing Hot Spot and Fishidy. Refer to Note 20, "Business Acquisitions and Divestitures" for further discussion.

During the fourth quarter of fiscal year 2019, the Company recognized an intangible asset impairment charge of \$1.2 million. These assets, included in Customer Relationships and Other, were determined not to be recoverable due to a change in their expected future economic benefit associated with the OTS restructuring and strategic shift discussed in Note 9, "Goodwill." The Company recorded the intangible asset impairment charge in "Selling, general and administrative" in the Company's Consolidated Statements of Income.

The aggregate amortization expense recorded in 2019, 2018 and 2017 was \$57.5 million, \$24.7 million and \$27.5 million, respectively. For intangible assets recorded at December 31, 2019, the estimated future aggregate amortization expense for the years ending December 31, 2020 through 2024 is approximately (in thousands):

2020	\$ 47,647
2021	45,589
2022	43,674
2023	40,481
2024	18,961

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 11. Credit Agreement

On March 29, 2019, the Company entered into a Second Amended and Restated Credit Agreement ("Restated Credit Agreement") with Bank of America, N.A., JPMorgan Chase Bank, N.A., U.S. Bank National Association, Citibank, N.A., MUFG Union Bank, N.A., and the other lenders party thereto. The Restated Credit Agreement amended and restated the Company's Original Credit Agreement, dated as of May 31, 2016. The Restated Credit Agreement provides for a \$650.0 million unsecured revolving credit facility, a \$100.0 million unsecured term loan facility available in U.S. dollars amortizing at 5.000 percent per annum, and a \$150.0 million unsecured term loan facility available in Swedish kronor amortizing at 5.000 percent per annum. The Restated Credit Agreement has a term of five years and matures on March 29, 2024. In connection with the closing of the Restated Credit Agreement, the Company made an initial borrowing of \$100.0 million in revolving loans, \$100.0 million in term loans in U.S. dollars, and the equivalent of \$150.0 million in term loans in Swedish kronor. Additionally, the Company repaid in full all outstanding amounts, consisting of revolving loans in an aggregate principal amount of \$375.0 million, under the Original Credit Agreement.

The Company has the right, subject to certain conditions, including approval of additional commitments by qualified lenders, to increase the availability under the revolving credit facility by an additional \$200.0 million until March 29, 2024. The Restated Credit Agreement allows the Company and certain designated subsidiaries to borrow in United States dollars, European euros, Swedish kronor, British pound sterling, Japanese yen, Canadian dollars, Australian dollars, and other agreed upon currencies. Interest rates under the Restated Credit Agreement are determined from the type and tenor of the borrowing and includes loans based on the published term Eurocurrency rate (e.g. LIBOR) in which the loan is denominated. The Eurocurrency rate loans have a floor of zero percent and an applicable margin that ranges from 1.000 percent to 1.375 percent depending on the Company's consolidated total leverage ratio. At December 31, 2019, the borrowing rate on the revolving loan was 3.049 percent per annum, the borrowing rate on the U.S. dollar term loan was 3.195 percent per annum and the borrowing rate on the Swedish kronor term loan was 1.348 percent per annum unadjusted for hedging. The Restated Credit Agreement requires the Company to pay a commitment fee on the amount of unused revolving commitments at a rate, based on its consolidated total leverage ratio, which ranges from 0.125 percent to 0.200 percent of unused revolving commitments. At December 31, 2019, the commitment fee on the amount of unused revolving credit was 0.175 percent per annum. The Restated Credit Agreement contains one financial covenant that requires maintenance of a consolidated total leverage ratio with which the Company was in compliance at December 31, 2019. The facilities available under the Restated Credit Agreement are unsecured. The Restated Credit Agreement also contains language providing for the adoption of a LIBOR successor rate consistent with market practice. The Company engaged in regular dialogue with its lenders and derivatives counterparties to keep apprised of the proposed successor rates in each of the jurisdictions in which there might be a need to execute a financial transaction. Although progress has been made by the various working groups, the Company believes it is too early to accurately assess any financial impact of the LIBOR benchmark reform.

At December 31, 2019, the Company had \$10.8 million of letters of credit outstanding, which reduces the total available revolving credit under the Restated Credit Agreement.

On January 11, 2019, a standby letter of credit, not to exceed Swedish kronor 2.2 billion, was issued under a new bilateral letter of credit reimbursement agreement ("L/C Agreement") to secure a payment guarantee required by the Swedish Tax Authorities in order to grant a respite from paying the tax reassessment described in Note 16, "Income Taxes." The outstanding amount of the L/C Agreement was equivalent to approximately \$237.2 million at December 31, 2019. Outstanding amounts under the L/C Agreement do not reduce the available revolving credit from the Restated Credit Agreement as described above.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 12. Accrued Product Warranties

The Company generally provides a twelve to twenty-four month warranty on its products. A provision for the estimated future costs of warranty, based upon historical cost and product performance experience, is recorded when revenue is recognized. The following table summarizes the Company's warranty liability and activity for 2019, 2018 and 2017 (in thousands):

	Year Ended December 31,					
	2019		2018			2017
Accrued product warranties, beginning of year	\$	18,583	\$	18,052	\$	20,845
Amounts paid for warranty services		(14,925)		(17,347)		(16,764)
Warranty provisions for products sold		14,616		17,888		14,422
Business acquisition		899		8		_
Currency translation adjustments and other		(29)		(18)		(451)
Accrued product warranties, end of year	\$	19,144	\$	18,583	\$	18,052
	-					
Current accrued product warranties, end of year	\$	14,611	\$	15,204	\$	15,024
Long-term accrued product warranties, end of year	\$	4,533	\$	3,379	\$	3,028

Note 13. Long-Term Debt

Long-term debt consists of the following (in thousands):

	December 31,			
		2019		2018
Unsecured notes	\$	425,000	\$	425,000
Credit Agreement		239,552		_
Unamortized discounts and issuance costs		(3,689)		(3,052)
	\$	660,863	\$	421,948
Current portion, long-term debt		12,444		
Long-term debt	\$	648,419	\$	421,948

In June 2016, the Company issued \$425 million aggregate principal amount of its 3.125 percent senior unsecured notes due June 15, 2021 (the "2016 Notes"). The net proceeds from the issuance of the 2016 Notes were approximately \$421.0 million, after deducting underwriting discounts and offering expenses, which are being amortized over a period of five years. Interest on the 2016 Notes is payable semiannually in arrears on December 15 and June 15. The proceeds from the 2016 Notes were used to repay the principal amount of the notes outstanding in July 2016 and are being used for general corporate purposes, including working capital and capital expenditure needs, business acquisitions and repurchases of the Company's common stock.

As discussed in Note 11, "Credit Agreement," on March 29, 2019, the Company made an initial borrowing of \$100.0 million in term loans in U.S. dollars, and the equivalent of \$150.0 million in term loans in Swedish kronor under the Restated Credit Agreement entered into on March 29, 2019. Both term loans amortize at 5.000 percent per annum with the current portion included in current liabilities.

Note 14. Commitments

Total net rent expense for the years ended December 31, 2019, 2018 and 2017 amounted to \$14.8 million, \$13.3 million and \$13.9 million, respectively. For additional information and future minimum obligations under all non-cancelable leases, refer to Note 7, "Leases."

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 15. Contingencies

Matters Involving the United States Department of State and Department of Commerce

On April 24, 2018, the Company entered into a Consent Agreement with the United States Department of State's Directorate of Defense Trade Controls ("DDTC") to resolve allegations regarding the unauthorized export of technical data and defense services to dual and third country nationals from certain Company facilities, the failure to properly use and manage export licenses and export authorizations, and failures to report certain payments under 22 CFR Part 130 in potential violation of the International Traffic in Arms Regulation ("ITAR"). The Consent Agreement has a four-year term and provides for: (i) a civil penalty of \$30.0 million with \$15.0 million of this amount suspended on the condition that the funds have or will be used for Department-approved Consent Agreement remedial compliance measures, (ii) the appointment of an external Special Compliance Official to oversee compliance with the Consent Agreement and the ITAR; (iii) two external audits of the Company's ITAR compliance program; and (iv) continued implementation of ongoing remedial compliance measures and additional remedial compliance measures related to automated systems and ITAR compliance policies, procedures, and training. During the first quarter of fiscal 2018, the Company recorded a \$15.0 million charge for the portion of the penalty that is not subject to suspension. In April 2018 and 2019, the Company paid \$1.0 million and \$3.5 million, respectively, of the \$15.0 million charge and as of December 31, 2019, the remaining amount payable of \$3.5 million and \$7.0 million has been recorded in other current liabilities and other long-term liabilities, respectively. The remaining \$10.5 million is payable in annual installments of \$3.5 million suspension amount.

As part of the Consent Agreement, DDTC acknowledged that the Company voluntarily disclosed certain of the alleged Arms Export Control Act and ITAR violations, which were resolved pursuant to the Consent Agreement, cooperated in the DDTC's review, and instituted a number of compliance program improvements.

In May 2017, the Company submitted an initial notification to DDTC regarding potential violations related to certain export classifications obtained through the commodity jurisdiction process and a final voluntary disclosure in August 2017. The Company also submitted a voluntary self-disclosure regarding the same matter with the United States Department of Commerce Bureau of Industry and Security ("BIS"). DDTC and BIS both acknowledged the submissions and, at the request of the agencies, the Company executed tolling agreements for this matter. The DDTC tolling agreement has lapsed; the Company executed a tolling agreement with BIS, and has extended the agreement, suspending the statute of limitations through March 1, 2020. The Company also executed a tolling agreement with the Department of Justice ("DOJ"), and has extended the agreement, suspending the statute of limitations with the DOJ through March 1, 2020. This matter remains under review by DDTC, DOJ, and BIS.

In June 2017, BIS informed the Company of additional export licensing requirements that restrict the Company's ability to sell certain thermal products without a license to customers in China not identified on a list maintained by the United States Department of Commerce. This action was precipitated by concerns of sale without a license or potential diversion of some of the Company's products to prohibited end users and to countries subject to economic and other sanctions implemented by the United States. BIS subsequently favorably modified these restrictions to reduce the applicability of the restrictions to sales of FLIR's Tau camera cores (as opposed to finished products containing Tau camera cores) to customers in China not identified on a list maintained by the United States Department of Commerce and persons in a country other than those in EAR Country Group A:5 (Supplement No. 1 to Part 740 of the EAR). If the Company is found to have violated applicable rules and regulations with respect to customers and limitations on the export and end use of the Company's products, the Company could be subject to substantial fines and penalties, suspension of existing licenses or other authorizations and/or loss or suspension of export privileges.

At this time, based on available information regarding this proceeding, the Company is unable to reasonably estimate the time it may take to resolve these matters or the amount or range of potential loss, penalty or other government action, if any, that may be incurred in connection with these matters. However, an unfavorable outcome could result in substantial fines and penalties or loss or suspension of export privileges or of particular authorizations that could be material to the Company's financial position, results of operations or cash flows in and following the period in which such an outcome becomes estimable or known.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 15. Contingencies - (Continued)

SkyWatch Product Quality Matters

In March 2016, the Company learned of potential quality concerns with respect to as many as 315 Level III and Level IV SkyWatch Surveillance Towers sold by FLIR and companies acquired by FLIR from 2002 through 2014. The Company notified customers who purchased the affected SkyWatch Towers of the potential concerns and, as a precautionary measure, also temporarily suspended production of all Level III and Level IV SkyWatch Towers pending the completion of its review and the implementation of any necessary remedial measures. The Company identified the cause of these quality issues, notified customers of their option to request repair and modification of their in-field units, and has begun in-field repairs of identified affected units. While there still remains uncertainty related to estimating the costs associated with a potential remedy and number of units which may require such remedy, the Company currently estimates the range of potential loss on remaining units to be between \$3.5 million and \$10.1 million. As no single amount within the range is a better estimate than any other amount within the range, the Company has recorded an accrual of \$3.5 million in other current liabilities as of December 31, 2019. Factors underlying this estimated range of loss may change from time to time, and actual results may vary significantly from this estimate.

Shareholder Derivative Lawsuit

In October 2018, a shareholder filed a derivative lawsuit in the Circuit Court of the State of Oregon for the County of Multnomah under the caption Stein v. Carter, et al., Case No. 18CV46824, against the Company, as a nominal defendant, and certain current and former directors of the Company. Pointing to the Company's 2015 settlement with the United States Securities and Exchange Commission of alleged United States Foreign Corrupt Practices Act violations and 2018 settlement with United States Department of State of alleged export control violations, the complaint alleges that the Company's directors breached their fiduciary duties by failing to ensure that the Company had internal controls in place that would have prevented the alleged underlying misconduct and these settlements. The complaint also asserts claims for corporate waste and unjust enrichment, and seeks unspecified monetary damages from the individual defendants, injunctive relief, disgorgement of director compensation, and attorneys' fees and costs. Because the complaint is derivative in nature, it does not seek monetary damages from the Company. However, the Company may be required to advance, and ultimately be responsible for, the legal fees and costs incurred by the individual defendants.

On January 16, 2019, the defendants moved to dismiss the complaint. On March 21, 2019, instead of opposing the defendants' motion, the plaintiff filed an amended complaint. On April 25, 2019, the defendants moved to dismiss the amended complaint. On July 22, 2019, after complete briefing and oral argument, the court granted the defendants' motion to dismiss the amended complaint without prejudice and with leave to amend. On July 29, 2019, the plaintiff informed the court that the plaintiff would not file a second amended complaint. On August 6, 2019, the court entered an order of judgment and dismissal without prejudice.

Other Matters

The Company is also subject to other legal and administrative proceedings, investigations, claims and litigation arising in the ordinary course of business not specifically identified above. In these identified matters and others not specifically identified, the Company records a liability with respect to a matter when management believes it is both probable that a liability has been incurred and the Company can reasonably estimate the amount of the loss. The Company believes it has recorded adequate provisions for any probable and estimable losses for matters in existence on the date hereof. The Company reviews these provisions to reflect the impact of negotiations, settlements, rulings, advice of legal counsel and other information and events pertaining to a particular matter. While the outcome of each of these matters cannot be predicted with certainty, the Company believes the probability is remote that the outcome of each of these matters will individually have a material adverse effect on the Company's financial position, results of operations or cash flows. The costs to resolve all such matters may in the aggregate have a material adverse effect on the Company's financial position, results of operations or cash flows.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 16. Income Taxes

Pre-tax earnings by significant geographical locations are as follows (in thousands):

	 Year Ended December 31,					
	2019		2018		2017	
United States	\$ 81,695	\$	165,719	\$	143,924	
Foreign	160,221		141,384		135,141	
	\$ 241,916	\$	307,103	\$	279,065	

The provisions for income taxes are as follows (in thousands):

	Year Ended December 31,					
	2019		2018			2017
Current tax expense (benefit):						
Federal	\$	5,791	\$	17,900	\$	112,673
State		5,895		5,980		5,035
Foreign		9,061		(16,008)		19,689
		20,747		7,872		137,397
Deferred tax expense (benefit):						
Federal		11,459		1,273		34,857
State		(719)		235		473
Foreign		38,832		15,298		(885)
		49,572		16,806		34,445
Total income tax provision	\$	70,319	\$	24,678	\$	171,842

Net deferred tax assets (liabilities) were classified on the balance sheet as follows (in thousands):

	 December 31,				
	2019		2018		
Deferred tax assets, non-current	\$ 39,983	\$	100,620		
Deferred tax liabilities, non-current	(53,544)		(22,927)		
Net deferred tax assets	\$ (13,561)	\$	77,693		

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 16. Income Taxes - (Continued)

The tax effects of temporary differences that gave rise to significant portions of deferred tax assets and deferred tax liabilities were as follows (in thousands):

	December 31,			,
		2019		2018
Deferred tax assets:				
Accrued liabilities and allowances	\$	17,850	\$	19,783
Tax credit and loss carry-forwards		19,471		30,831
Stock-based compensation		10,660		12,461
Inventory basis differences		11,306		10,749
Deferred revenue		2,869		2,900
Intangible assets		_		20,882
Unremitted earnings of foreign subsidiaries		_		2,121
Other assets		265		1,156
Gross deferred tax assets		62,421		100,883
Valuation allowance		(2,787)		(3,196)
Total deferred tax assets, net		59,634		97,687
Deferred tax liabilities:				
Intangible assets		(38,209)		_
Property and equipment		(16,536)		(14,070)
Unremitted earnings of foreign subsidiaries		(13,225)		_
Other liabilities		(5,225)		(5,924)
Total deferred tax liabilities		(73,195)		(19,994)
Net deferred tax assets	\$	(13,561)	\$	77,693

At December 31, 2019, the Company had United States tax net operating loss carry-forwards totaling approximately \$9.4 million which expire between 2032 and 2039 and are subject to annual limitation under Section 382 of the Internal Revenue Code. The Company also has various foreign net operating loss carry-forwards totaling approximately \$62.8 million, a portion of which expire between 2019 and 2039, and a portion of which have an indefinite carry-forward period.

As of December 31, 2019, the Company has determined that a valuation allowance against its deferred tax assets of \$2.8 million is required, primarily related to foreign net operating losses and capital losses carried forward. A review of all available positive and negative evidence is considered, including past and future performance, the market environment in which the Company operates, utilization of tax attributes in the past, length of carry-back and carry-forward periods, and evaluation of potential tax planning strategies, when evaluating the realizability of deferred tax assets. The Company believes that it is more likely than not that the results of future operations will generate sufficient taxable income to realize the net deferred tax assets.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 16. Income Taxes - (Continued)

The provision for income taxes differs from the amount of tax determined by applying the applicable United States statutory federal income tax rate to pretax income as a result of the following differences:

	Year Ended December 31,				
	2019	2018	2017		
Statutory federal tax rate	21.0 %	21.0 %	35.0 %		
(Decrease) increase in rates resulting from:					
State taxes	2.6	2.5	1.8		
Difference between statutory rate and foreign effective rate	2.7	(0.2)	(10.7)		
Foreign, federal and state income tax credits	(3.3)	(1.5)	(2.0)		
European Union state aid matter	_	(10.8)	0.1		
United States transition tax	_	(2.6)	23.8		
Tax rate change on deferred items	1.0	_	5.1		
Unremitted earnings of foreign subsidiaries	2.3	(0.8)	5.4		
Audit settlements	6.7	_	_		
Other	(3.9)	0.4	3.1		
Effective tax rate	29.1 %	8.0 %	61.6 %		

The Company's effective tax rate in 2019 was higher than the United States Federal tax rate of 21.0 percent mainly due to accruals for settlements with various taxing authorities, state taxes, additional withholding tax due on future distributions of foreign earnings included in the transition tax levied by the Tax Cuts and Jobs Act of 2017 (the "Tax Act"), and higher tax rates on income earned in foreign jurisdictions. These amounts were offset by tax credits generated in the United States and foreign jurisdictions as well as excess tax benefits from stock compensation. The Company's effective tax rate in 2018 was lower than the United States Federal tax rate of 21.0 percent mainly due to recognition of previously unrecognized tax benefits relating to the European Union state aid recovery discussed above, excess tax benefits from stock compensation and a reduction in the accrual for the United States transition tax, offset partially by state taxes, higher tax rates applied to income earned in certain foreign jurisdictions, and other discrete items. The Company's effective tax rate in 2017 was higher than the United States federal tax rate of 35.0 percent mainly due to the Company's estimate of the impact of the Tax Act. Unrecognized tax benefits for intercompany pricing increased in various jurisdictions in 2017, but this was partially offset by excess tax benefits for stock compensation and the mix of lower foreign tax rates.

During the three-month period ending December 31, 2018, the Swedish Tax Authority ("STA") issued a reassessment of tax for the year ending December 31, 2012 to one of the Company's non-operating subsidiaries in Sweden. The reassessment concerns the use of tax credits applied against capital gains pursuant to European Union Council Directive 2009/133/EC, commonly referred to as the EU Merger Directive, and assesses taxes and penalties totaling approximately \$321.3 million (Swedish kroner 3.0 billion). The Company believes the STA's assertions in the reassessment are not in accordance with Swedish tax regulations and plans to defend the Company's positions through the Swedish court system, as necessary. Consequently, no adjustment to the Company's unrecognized tax benefits has been recorded in relation to this matter.

During the three-month period ended September 30, 2019, the European Commission announced the opening of a separate review to assess whether an excess profit tax ruling granted by Belgium to one of the Company's international subsidiaries is in breach of European Union state aid rules. The Company believes all taxes assessed by Belgium have been paid and has not adjusted unrecognized tax benefits in relation to this matter.

As of December 31, 2019 and 2018, the Company has accrued income tax liabilities of \$37.1 million and \$44.4 million, respectively, related to the Tax Act's transition tax which is paid in installments over an eight-year period and will not accrue interest. Due to prior year over payments, no amounts are due within the next twelve months.

As of December 31, 2019, the Company has undistributed earnings generated after January 1, 2018 by certain foreign subsidiaries of approximately \$183.0 million that the Company intends to indefinitely invest outside the United States and on which it has not recognized deferred tax. Estimating the amount of potential tax is not practicable due to the complexity and variety of assumptions required.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 16. Income Taxes - (Continued)

Management believes that the Company's recorded tax liabilities are adequate in the aggregate for its income tax exposures.

The following table summarizes the activity related to unrecognized tax benefits, including amounts accrued for potential interest and penalties (in thousands):

	 Year Ended December 31,					
	2019		2018		2017	
Balance, beginning of year	\$ 33,205	\$	77,275	\$	51,851	
Increases related to current year tax positions	2,602		_		17,264	
Increases related to prior year tax positions	2,719		2,229		5,022	
Lapse of statute of limitations	(13,371)		(1,558)		(1,260)	
Settlements	(4,402)		(40,514)		(986)	
Change due to currency translation	_		(4,227)		5,384	
Balance, end of year	\$ 20,753	\$	33,205	\$	77,275	

The unrecognized tax benefits at December 31, 2019 relate to the United States, Belgium, United Kingdom, France and various other foreign jurisdictions, of which \$19.5 million would affect the Company's effective tax rate if recognized. The Company anticipates approximately \$10.6 million of its net unrecognized tax benefits will be recognized within 12 months as the result of settlements or effective settlements with various tax authorities, the closure of certain audits and the lapse of the applicable statute of limitations.

The Company classifies interest and penalties related to unrecognized tax benefits in the income tax provision. As of December 31, 2019, the Company had \$3.9 million of accrued interest and penalties related to unrecognized tax benefits that are recorded as current and non-current accrued income taxes on the Consolidated Balance Sheet.

The Company files United States federal, state and foreign income tax returns in jurisdictions with varying statutes of limitations. The Company currently has the following tax years open to examination by major taxing jurisdictions:

	Tax Years:
United States Federal	2016 - 2018
State of California	2015 - 2018
State of Massachusetts	2015 - 2018
State of Oregon	2016 - 2018
Sweden	2012 - 2018
United Kingdom	2015 - 2018
Belgium	2012 - 2018

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 17. Stock-based Compensation

Stock Incentive Plans

The Company has a stock-based compensation program that provides equity incentives for employees, consultants and directors. This program includes incentive and non-statutory stock options and non-vested stock awards (referred to as restricted stock unit awards) granted under two plans: the FLIR Systems, Inc. 2002 Stock Incentive Plan (the "2002 Plan") and the FLIR Systems, Inc. 2011 Stock Incentive Plan, as amended (the "2011 Plan"). The Company has discontinued issuing awards out of the 2002 Plan but previously granted awards under the 2002 Plan remain outstanding.

The Company has granted time-based options, time-based restricted stock unit awards, market-based restricted stock unit awards and performance-based restricted stock unit awards. Options generally expire ten years from the grant date. Time-based options and restricted stock unit awards generally vest over a three-year period. Market-based restricted stock unit awards granted during the year ended December 31, 2016 were earned based upon the Company's total shareholder return companed to the total shareholder return of the component company at the 60th percentile level in the S&P 500 Index over a three-year period. Performance-based restricted stock unit awards granted during the year ended December 31, 2016 were earned based upon the Company's return on invested capital over a three-year period. Performance-based restricted stock unit awards granted during the year ended December 31, 2017 may be earned based upon the Company's operating margin performance over a three-year period. Performance-based restricted stock unit awards granted during the years ended December 31, 2019 and 2018 may be earned based upon a combination of the Company's revenue and operating performance over a three-year period. Certain shares vested under the performance-based restricted stock unit awards must be held by the participant for a period of one year from the vest date.

Information with respect to stock option activity for 2019 is as follows:

	Shares (in thousands)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2018	2,156	\$ 29.67	4.7	
Granted	_	_		
Exercised	(763)	30.72		
Forfeited	(4)	36.73		
Outstanding at December 31, 2019	1,389	\$ 29.08	3.9	\$ 31,947
Exercisable at December 31, 2019	1,348	\$ 28.87	3.8	\$ 31,287
Vested and expected to vest at December 31, 2019	1,387	\$ 29.07	3.9	\$ 31,914

Information with respect to restricted stock unit activity for 2019 is as follows:

	Shares (in thousands)	Avera	righted nge Grant Fair Value
Outstanding at December 31, 2018	1,751	\$	40.77
Granted	1,028		50.32
Vested	(772)		37.24
Forfeited	(131)		45.92
Outstanding at December 31, 2019	1,876	\$	47.08

Included in the restricted stock units outstanding at December 31, 2019 were approximately 137,000 vested restricted stock units that were not distributed.

As of December 31, 2019, there were 5,916,000 shares of common stock reserved for future issuance under the stock incentive plans.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 17. Stock-based Compensation - (Continued)

Employee Stock Purchase Plan

The Company has an Employee Stock Purchase Plan (the "ESPP") which allows employees to purchase shares of the Company's common stock at 85 percent of the fair market value at the lower of either the date of enrollment or the purchase date. The ESPP provides for six-month offerings commencing on May 1 and November 1 of each year with purchases on April 30 and October 31 of each year. Shares purchased under the ESPP must be held by employees for a period of at least 18 months after the date of purchase. On April 19, 2019, the Company's shareholders approved the FLIR Systems, Inc. 2019 Employee Stock Purchase Plan ("2019 ESPP"). The final purchase under the 2009 ESPP was on April 30, 2019 and the first offering under the 2019 ESPP commenced on May 1, 2019. The Company reserved 1,500,000 shares of common stock for issuance under the 2019 ESPP. Shares purchased under the 2019 ESPP have no holding period requirements.

There were 169,000 shares issued at the average purchase price of \$42.21 during 2019 and 1,404,000 shares remained available under the 2019 ESPP at December 31, 2019 for future issuance. Shares issued for 2019 ESPP purchases are new shares.

Note 18. Other Employee Benefit Plans

Employee 401(k) Plans

The Company has a 401(k) Savings and Retirement Plan (the "401(k) Plan") to provide for voluntary salary deferral contributions on a pre-tax basis for employees within the United States in accordance with Section 401(k) of the Internal Revenue Code of 1986, as amended. The 401(k) Plan allows for contributions by the Company. The Company made and expensed matching contributions of \$11.3 million, \$9.8 million and \$8.9 million during the years ended December 31, 2019, 2018 and 2017, respectively.

Pension Plans

The Company previously provided a Supplemental Executive Retirement Plan (the "SERP") for certain officers of the Company based in the United States. As of December 31, 2017, the last remaining SERP participant retired. Consequently, during the year ended December 31, 2018, the Company recorded a settlement gain of approximately \$0.6 million, primarily associated with the change in projected benefit obligation associated with the adjusted date of expected retirement for the final SERP participant.

In addition, the Company previously offered certain employees outside the United States participation in a defined benefit pension plan that has been curtailed. The projected benefit obligation for the plans was \$3.6 million and \$3.7 million as of December 31, 2019 and 2018, respectively. The plans funding status was underfunded by \$3.6 million and \$3.7 million as of December 31, 2019 and 2018, respectively. A pension liability of \$1.3 million and \$1.2 million as of December 31, 2019 and 2018, respectively, has been recognized for the pension plans representing the excess of the unfunded accumulated benefit obligation over the accrued pension costs.

For the defined benefit pension plan outside the United States, the discount rates of 1.4 percent and 1.9 percent used during the years ended December 31, 2019 and 2018, respectively, were determined by reference to market yields at the end of the reporting period on high quality corporate bonds with similar maturities matching the duration of the projected benefit obligation.

Benefits expected to be paid under the plans are approximately (in thousands):

2020	\$ 280
2021	274
2022	258
2023	254
2024	250
Five years thereafter	1,061
	\$ 2,377

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 18. Other Employee Benefit Plans - (Continued)

Pension Plans - (Continued)

As a result of the benefits no longer accruing under these plans, the remaining components of ongoing pension cost recorded in accumulated other comprehensive (loss) income are deemed to be immaterial. The remaining obligations are recorded in other long-term liabilities.

Note 19. Operating Segments and Related Information

Operating Segments

The Company's chief operating decision maker ("CODM"), its Chief Executive Officer, evaluates each of its segments' performance and allocates resources based on revenue and segment operating income. Intersegment revenues are recorded at cost and are eliminated in consolidation. The Company and each of its segments employ consistent accounting policies.

The Company's three reportable operating segments are as follows:

Industrial Business Unit

The Industrial business unit develops and manufactures thermal and visible-spectrum imaging camera cores and components that are utilized by third parties to create thermal, industrial, and other types of imaging systems. The segment also develops and manufactures devices that image, measure, and assess thermal energy, gases, and other environmental elements for industrial, commercial, and scientific applications, imaging payloads for Unmanned Aerial Systems ("UAS"), machine vision cameras, people counting and tracking, and thermal imaging solutions for use by consumers in the smartphone and mobile devices markets. Products include thermal imaging cameras, gas detection cameras, firefighting cameras, process automation cameras, and environmental test and measurement devices.

Government and Defense Business Unit

The Government and Defense business unit develops and manufactures enhanced imaging and recognition solutions for a wide variety of military, law enforcement, public safety, and other government customers around the world for the protection of borders, troops, and public welfare. The segment also develops and manufactures sensor instruments and integrated platform solutions for the detection, identification, and suppression of chemical, biological, radiological, nuclear, and explosives ("CBRNE") threats for military force protection, homeland security, and commercial applications. Offerings include airborne, land, maritime, and man-portable multi-spectrum imaging systems, radars, lasers, imaging components, integrated multi-sensor system platforms, CBRNE detectors, nano-class UAS solutions, and services related to these systems.

Commercial Business Unit

The Commercial business unit develops and manufactures a wide variety of fixed-mounted visible and thermal imaging cameras and related software for perimeter security in critical infrastructure, enterprise, and smart city vertical markets, electronics and imaging instruments for the recreational and commercial maritime market, automatic incident detection sensors and related data analytics for traffic monitoring and control, and handheld thermal imaging systems for use in a variety of first responder and recreational applications. Products include thermal and visible-spectrum security cameras, and related software and accessories, a full suite of networked marine electronic systems including multi-function helm displays, navigational instruments, autopilots, radars, sonar systems, thermal and visible imaging systems, and communications equipment for boats of all sizes, traffic cameras, sensors and associated traffic management software, and hand-held thermal imagers.

The following tables present revenue, operating income, and assets for the three segments. Operating income as reviewed by the CODM is revenue less cost of goods sold and operating expenses, excluding general corporate expenses, acquisition related costs, executive transition costs, amortization of purchased intangible assets, purchase accounting adjustments, costs associated with the SkyWatch product remediation, restructuring expenses, asset impairment charges, export compliance matters, loss on sale of business and other charges. Net accounts receivable, inventories and demonstration assets for the operating segments are regularly reviewed by management and are reported below as segment assets. All remaining assets, liabilities, capital expenditures, and depreciation are managed on a Company-wide basis.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 19. Operating Segments and Related Information - (Continued)

Operating Segments - (Continued)

Operating segment information is as follows (in thousands):

	Year Ended December 31,						
		2019		2017			
Revenue—External Customers:							
Industrial	\$	737,656	\$	717,882	\$	672,120	
Government and Defense		794,941		663,436		629,147	
Commercial		354,429		394,368		499,167	
	\$	1,887,026	\$	1,775,686	\$	1,800,434	
Revenue—Intersegments:							
Industrial	\$	16,510	\$	19,482	\$	21,747	
Government and Defense		5,507		11,409		11,283	
Commercial		19,177		20,056		14,942	
Eliminations		(41,194)		(50,947)		(47,972)	
	\$	_	\$	_	\$	_	
Segment operating income:							
Industrial	\$	240,847	\$	216,880	\$	199,903	
Government and Defense		207,430		199,702		179,160	
Commercial		45,679		57,399		56,066	
	\$	493,956	\$	473,981	\$	435,129	

A reconciliation of the Company's consolidated segment operating income to consolidated earnings before income taxes is as follows (in thousands):

	Year Ended December 31,						
		2019		2018		2017	
Consolidated segment operating income	\$	493,956	\$	473,981	\$	435,129	
Unallocated corporate expenses		(139,555)		(108,940)		(93,564)	
Amortization of purchased intangible assets		(57,376)		(24,524)		(27,391)	
Asset impairment charges		(13,666)		(3,349)		_	
Restructuring expenses		(10,099)		(4,854)		(625)	
Loss on sale of business		_		(13,708)		(23,588)	
Consolidated earnings from operations		273,260	-	318,606		289,961	
Interest and non-operating expense, net		(31,344)		(11,503)		(10,896)	
Consolidated earnings before income taxes	\$	241,916	\$	307,103	\$	279,065	

Unallocated corporate expenses include general corporate expenses, acquisition related costs, executive transition costs, purchase accounting adjustments, costs associated with the SkyWatch product remediation and export compliance matters.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 19. Operating Segments and Related Information - (Continued)

Operating Segments - (Continued)

A reconciliation of the Company's consolidated segment operating assets to consolidated total assets is as follows (in thousands):

	•	-		
		Decen	.,	
		2019		2018
Operating segment assets:				
Net accounts receivable, inventories and demonstration assets:				
Industrial	\$	279,352	\$	266,457
Government and Defense		332,639		307,041
Commercial		125,814		137,560
	\$	737,805	\$	711,058
Goodwill:				
Industrial		404,476		391,603
Government and Defense		728,697		284,188
Commercial		231,423		228,780
	\$	1,364,596	\$	904,571
Total operating segment assets	\$	2,102,401	\$	1,615,629
Assets not allocated:				
Cash and cash equivalents	\$	284,592	\$	512,144
Prepaid expenses and other current assets		86,337		69,445
Property and equipment, net		255,905		247,407
Deferred income taxes		39,983		100,620
Intangible assets, net		247,514		146,845
Other assets	\$	120,809	\$	89,152
Total assets	\$	3,137,541	\$	2,781,242

Revenue and Long-Lived Assets by Geographic Area

Information related to revenue by significant geographical location, determined by the end customer, is as follows (in thousands):

							Year Ended	Dece	mber 31,					
			20	19							2	2018		
	Industrial		Government and Defense		Commercial		Total		Government and Industrial Defense		(Commercial	Total	
United States	\$ 392,510	\$	513,428	\$	131,256	\$	1,037,194	\$	364,443	\$	420,032	\$	150,052	\$ 934,527
Europe	130,060		118,301		150,124		398,485		130,901		89,725		156,227	376,853
Asia	157,819		63,717		35,618		257,154		159,150		55,160		40,850	255,160
Middle East/Africa	14,799		90,110		17,843		122,752		18,089		85,726		27,240	131,055
Canada/Latin America	42,468		9,385		19,588		71,441		45,299		12,793		19,999	78,091
	\$ 737,656	\$	794,941	\$	354,429	\$	1,887,026	\$	717,882	\$	663,436	\$	394,368	\$ 1,775,686

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 19. Operating Segments and Related Information - (Continued)

Revenue and Long-Lived Assets by Geographic Area - (Continued)

Long-lived assets are comprised of net property and equipment, net identifiable intangible assets, goodwill and other long-term assets. Long-lived assets by significant geographic locations are as follows (in thousands):

	 Decer	1,	
	 2019		2018
United States	\$ 1,137,375	\$	720,885
Europe	435,024		446,704
Other foreign	416,425		220,386
	\$ 1,988,824	\$	1,387,975

Major Customers

Revenue derived from major customers is as follows (in thousands):

2019 2018 2017 ernment \$ 603,769 \$ 511,094 \$ 466,30		7	Year E	nded December	31,	
\$ 603,769 \$ 511,094 \$ 466,30		2019		2018		2017
	\$	603,769	\$	511,094	\$	466,304

Note 20. Business Acquisitions and Divestitures

Fishing Hot Spots, Inc.

On March 26, 2018, the Company completed a transaction to acquire 100% of the outstanding stock of Fishing Hot Spots, Inc., a privately held technology company, for approximately \$7.1 million in cash. During the third quarter of fiscal year 2018, the Company finalized the purchase price allocation and recorded \$2.2 million of identified intangible assets and goodwill of \$4.7 million in the Commercial business unit.

Fishidy, Inc.

On April 3, 2018, the Company completed a transaction to acquire 100% of the outstanding stock of Fishidy, Inc., a privately held startup technology company, for approximately \$7.1 million in cash. During the fourth quarter of fiscal year 2018, the Company finalized the purchase price allocation and recorded \$3.8 million of identified intangible assets and goodwill of \$4.6 million in the Commercial business unit.

Acyclica, Inc.

On September 10, 2018, the Company completed a transaction to acquire 100% of the outstanding stock of Acyclica, Inc., a privately held software developer for automotive roadway and intersection data generation and analysis for approximately \$9.7 million in cash, including an estimate for contingent consideration pursuant to the stock purchase agreement. During the third quarter of fiscal year 2019, the Company finalized the purchase price allocation and recorded \$2.7 million of net tangible assets and goodwill of \$7.0 million in the Commercial business unit.

SeaPilot AB

On October 16, 2018, the Company acquired substantially all of the outstanding shares of SeaPilot AB, a privately held technology company for approximately \$4.7 million in cash. During the third quarter of fiscal year 2019, the Company finalized the purchase price allocation and recorded \$1.7 million of net tangible assets and goodwill of \$3.0 million in the Commercial business unit.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 20. Business Acquisitions and Divestitures - (continued)

Aeryon Labs, Inc.

On January 28, 2019, the Company completed its acquisition of 100% of the outstanding stock of Aeryon Labs, Inc. ("Aeryon"), a privately held developer of high-performance UAS for the global military, public safety, and critical infrastructure markets for approximately \$205.9 million in cash. The acquisition enhances the Company's domain knowledge in unmanned aerial systems and expands distribution channels in adjacent markets. During the fourth quarter of fiscal year 2019, the Company finalized the purchase price allocation and recorded \$44.3 million of identified intangible assets and \$161.5 million of goodwill in the Government and Defense business unit.

The allocation of the purchase price for Aeryon is as follows (in thousands):

Cash acquired	\$ 5,145
Other tangible assets and liabilities	6,097
Net deferred taxes	(11,130)
Identified intangible assets	44,292
Goodwill	161,518
Total purchase price	\$ 205,922

The goodwill of \$161.5 million represents intellectual capital and the acquired assembled workforce, none of which qualify for recognition as a separate intangible asset. All of the goodwill presented above is not expected to be deductible for tax purposes.

The Company identified \$44.3 million of intangible assets. The following table summarizes the acquired intangible assets and their estimated fair values and estimated useful lives (in thousands, except years):

	Estimated Useful Life	Amount
Developed technology	5.0 years	\$ 32,300
In-process research and development	7.0 years	4,100
Trademarks and trade name	8.0 years	4,050
Backlog	1.0 year	2,842
Other technology	3.0 years	1,000
		\$ 44,292

Acquisition-date identifiable intangible assets primarily consist of intangibles derived from developed technology, in-process research and development, trademarks and backlog. Developed technology represents the economic advantage of having certain technologies in place that lowers manufacturing and operating costs and drives higher margins. In-process research and development consist of unpatented in-process and add-on payload hardware. Trademarks provide value to the marketing or promotion of an entity and its products or services. Backlog represents "pre-sold" business at the date of acquisition, which provides positive earning streams post acquisition that exceed what is required to provide a return on the other assets employed.

The developed technology and in-process research and development were valued using the income approach and relief from royalty method. The trade names and backlog were valued using an income approach method.

Endeavor Robotics Holdings, Inc.

On March 4, 2019, the Company completed its acquisition of 100% of the outstanding stock of Endeavor Robotics Holdings, Inc. ("Endeavor") a privately held developer of tactical unmanned ground vehicles for the global military, public safety, and critical infrastructure markets for approximately \$385.9 million in cash. The acquisition enhances the Company's offerings in unmanned ground systems and expands distribution channels in adjacent markets. Based on the Company's preliminary purchase price allocation, the Company recorded \$102.7 million of intangible assets and \$284.0 million of goodwill in the Government and Defense business unit. The final allocation of the purchase price related to tax attributes remains open as we anticipate finalizing calculations for positions to be included on pre-closing tax returns during the first quarter of fiscal year 2020.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 20. Business Acquisitions and Divestitures - (continued)

Endeavor Robotics Holdings, Inc. - (Continued)

The preliminary allocation of the purchase price for Endeavor is as follows (in thousands):

Cash acquired	\$ 6,687
Other tangible assets and liabilities	14,915
Net deferred taxes	(22,394)
Identified intangible assets	102,740
Goodwill	283,983
Total purchase price	\$ 385,931

The goodwill of \$284.0 million represents intellectual capital and the acquired assembled workforce, none of which qualify for recognition as a separate intangible asset. All of the preliminary goodwill presented above is not expected to be deductible for tax purposes.

The Company identified \$102.7 million of intangible assets. The following table summarizes the acquired intangible assets and their preliminary estimated fair values and estimated useful lives (in thousands, except years):

	Estimated Useful Life	Amount
Developed technology	5.0 years	\$ 60,400
In-process research and development	9.0 years	28,000
Trademarks and trade name	4.5 years	9,990
Backlog	1.0 year	3,850
Customer contracts	1.0 year	500
		\$ 102,740

Acquisition-date identifiable intangible assets primarily consist of intangibles derived from developed technology, in-process research and development, trademarks and backlog. Developed technology represents the economic advantage of having certain technologies in place that lowers manufacturing and operating costs and drives higher margins. In-process research and development consist of proprietary robot technology. Trademarks provide value to the marketing or promotion of an entity and its products or services. Backlog represents "pre-sold" business at the date of acquisition, which provides positive earning streams post acquisition that exceed what is required to provide a return on the other assets employed.

The developed technology and in-process research and development were valued using the income approach and relief from royalty method. The trade names and backlog were valued using an income approach method.

New England Optical Systems, Inc.

On May 1, 2019, the Company acquired the outstanding stock of New England Optical Systems, Inc., a privately-held engineering and manufacturing company engaged in the design and production of infrared optical assemblies. The transaction consideration includes a \$21.9 million cash payment with up to an additional \$12.0 million in deferred compensation payable over a two-year period. Based on the Company's preliminary purchase price allocation, the Company recorded \$6.4 million of identified intangible assets and \$14.0 million of goodwill in the Industrial business unit. All of the preliminary goodwill is expected to be deductible for tax purposes. The final allocation of the purchase price to identified intangible assets, goodwill and related tax attributes is subject to final determination of fair value and is expected to be finalized during the second quarter of fiscal year 2020.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 20. Business Acquisitions and Divestitures - (continued)

New England Optical Systems, Inc. - (Continued)

The preliminary allocation of the purchase price for New England Optical Systems, Inc. is as follows (in thousands):

Cash acquired	\$ 15
Other tangible assets and liabilities	1,479
Identified intangible assets	6,400
Goodwill	13,987
Total purchase price	\$ 21,881

The Company identified \$6.4 million of intangible assets. The following table summarizes the acquired intangible assets and their preliminary estimated fair values and estimated useful lives (in thousands, except years):

	Estimated Useful Life	An	nount
Know how	10.0 years	\$	3,900
Customer relationship	4.0 years		2,500
		\$	6,400

The business acquisitions listed above are not significant as defined in Regulation S–X under the Securities Exchange Act of 1934, nor are they significant compared to the Company's overall results of operations. Consequently, no pro forma financial information is provided.

Divestitures of the Consumer and Small and Medium-Sized Security Businesses

On February 6, 2018 the Company sold the Consumer and Small and Medium-sized ("SMB") Security businesses within the Commercial business unit for total cash consideration of approximately \$28.8 million. As a result of this combined sale, the Company recognized an approximately pre-tax loss of \$13.7 million during the year ended December 31, 2018. This group of assets was previously classified as held for sale during the fourth quarter of 2017, when the Company recorded an approximately pre-tax loss on net assets held for sale of \$23.6 million. This disposal does not qualify as discontinued operations and therefore, its operating results are included in the Company's continuing operations for all periods presented through the date of the sale.

Note 21. Shareholders' Equity

On February 8, 2017, the Company's Board of Directors authorized the repurchase of up to 15.0 million shares of common stock in the open market or through privately negotiated transactions. This authorization expired on February 8, 2019. On February 7, 2019, the Company's Board of Directors authorized the repurchase of up to 15.0 million shares of common stock in the open market or through privately negotiated transactions. This authorization will expire on February 7, 2021. During the year ended December 31, 2019, the Company repurchased approximately 2.5 million shares of the Company's common stock through open market transactions under the 2019 authorization. The total cash payments for the repurchase of the Company's common stock during the year ended December 31, 2019 were approximately \$125.0 million.

During the year ended December 31, 2019, the Company paid dividends quarterly at the rate of \$0.17 per share for a total of \$91.7 million. During the year ended December 31, 2018, the Company paid dividends quarterly at the rate of \$0.16 per share for a total of \$88.1 million.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 22. Restructuring

The Company has various active restructuring programs focused on reorganization and discontinuation of certain businesses, targeted workforce reductions, and facility consolidation actions. These targeted reductions will enable the Company to better align its resources in areas providing the greatest benefit in the current business environment.

During the years ended December 31, 2019, 2018 and 2017, the Company recorded net pre-tax restructuring charges for these programs totaling approximately \$10.1 million, \$4.9 million and \$0.6 million, respectively, which primarily represent employee termination benefits and costs to consolidate, relocate or discontinue operations. In addition, during the year ended December 31, 2019 the Company incurred goodwill and intangible asset impairment charges totaling approximately \$6.5 million and \$1.2 million, respectively, related to the restructuring actions. Inventory write-downs associated with the restructuring actions were also incurred and totaled \$5.9 million and \$3.3 million for the years ended December 31, 2019 and 2018, respectively. Refer to Note 9, "Goodwill," Note 10, "Intangibles Assets," and Note 6, "Inventories," for further discussion.

Accrued restructuring balances are recorded as a current liability within "Accrued payroll and related benefits" on the Consolidated Balance Sheets and not deemed material as of December 31, 2019.

In February 2020, the Company initiated a strategy-driven restructuring plan, Project Be Ready, to simplify the Company's product portfolio and better align resources with higher growth opportunities while reducing costs. Project Be Ready includes an organizational realignment, targeted workforce reductions, and facility optimization initiatives. All previously approved ongoing restructuring activities will be consolidated into Project Be Ready.

The Company expects to incur total costs of approximately \$40.0 million to \$55.0 million related to Project Be Ready, including approximately \$20.0 million to \$25.0 million of employee separation costs, approximately \$5.0 million to \$10.0 million of facility consolidation expenses, and approximately \$15.0 million to \$20.0 million of third party and other costs. The Company estimates that a majority of the cumulative pretax costs will be cash outlays related to employee separation, facility consolidation, and third-party expenses. The Company expects the costs to be recognized beginning in the first quarter of 2020 and continue through 2021.

Note 23. Subsequent Events

In February 2020, the Company committed to a plan to sell its Raymarine non-thermal maritime electronics business subject to certain conditions of the proposed transaction and customary regulatory approvals. The business, which is designed and marketed primarily to recreational boaters and light-commercial customers, is being actively marketed and it is the Company's intention to complete the sale within calendar year 2020. The Company is in the process of evaluating the overall estimated financial impacts.

On February 21, 2020, the Company's Board of Directors declared a quarterly dividend of \$0.17 per share on the Company's common stock, payable on March 20, 2020, to shareholders of record as of the close of business on March 6, 2020. The total cash payment of this dividend will be approximately \$22.8 million.

QUARTERLY FINANCIAL DATA (UNAUDITED)

FLIR SYSTEMS, INC.

(In thousands, except per share data)

	Q1	Q2	Q3	Q4
2019				
Revenue	\$ 444,736	\$ 481,998	\$ 471,248	\$ 489,044
Gross profit	233,659	233,620	229,587	232,637
Net earnings ⁽¹⁾	61,748	46,118	62,047	1,684
Earnings per share:				
Basic earnings per share	\$ 0.46	\$ 0.34	\$ 0.46	\$ 0.01
Diluted earnings per share	\$ 0.45	\$ 0.34	\$ 0.46	\$ 0.01
2018				
Revenue	\$ 439,618	\$ 452,707	\$ 434,898	\$ 448,463
Gross profit	217,914	232,551	222,074	227,779
Net earnings ⁽²⁾	39,195	71,563	73,151	98,516
Earnings per share:				
Basic earnings (loss) per share	\$ 0.28	\$ 0.52	\$ 0.53	\$ 0.72
Diluted earnings (loss) per share	\$ 0.28	\$ 0.51	\$ 0.52	\$ 0.71

⁽¹⁾ Net earnings for the fourth quarter of 2019 includes discrete tax expense of \$23.2 million and \$13.7 million of asset impairment charges associated with the Company's restructuring of the OTS business.

The sum of the quarterly earnings per share does not always equal the annual earnings per share as a result of the computation of quarterly versus annual average shares outstanding.

⁽²⁾ Net earnings for the fourth quarter of 2018 includes \$15.0 million for the costs of a regulatory settlement and a discrete tax benefit of \$33.1 million for the cancellation of Belgium tax assessments issued as part of the European Commission's decision regarding state aid.

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

As of December 31, 2019, the Company completed its annual evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and the Company's Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures. Based on the evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures are effective to ensure that information required to be disclosed by the Company in the reports it files or submits under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms. There were no changes in the Company's internal control over financial reporting that occurred during the Company's fourth fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Our internal control over financial reporting is designed to provide reasonable assurance to our management and Board of Directors regarding the preparation and fair presentation of published financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in the *Internal Control—Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO").

Based on our evaluation using the *Internal Control—Integrated Framework (2013)*, our management concluded that our internal control over financial reporting was effective as of December 31, 2019.

KPMG LLP, an independent registered public accounting firm, has issued an attestation report on the Company's internal control over financial reporting as of December 31, 2019, which is included elsewhere in this Form 10-K.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors FLIR Systems, Inc.:

Opinion on Internal Control Over Financial Reporting

We have audited FLIR Systems, Inc.'s and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements), and our report dated February 27, 2020 expressed an unqualified opinion on those consolidated 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 of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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/ KPMG LLP

Portland, Oregon February 27, 2020

ITEM 9B. OTHER INFORMATION

On February 26, 2020, the Company initiated a strategy-driven restructuring plan (the "Project Be Ready") to simplify the Company's product portfolio and better align resources with higher growth opportunities while reducing costs. Project Be Ready includes an organizational realignment, targeted workforce reductions, and facility optimization initiatives and is expected to continue through 2021. The Company has discontinued certain non-core consumer centric product lines within the Outdoor and Tactical Systems business and has entered a formal process to evaluate divestiture of its Raymarine non-thermal maritime electronics business. In addition, the Company will restructure its business units by consolidating from three business units to two by integrating the remaining businesses within the Commercial business unit into the Industrial business unit beginning in the first quarter of 2020. All previous approved ongoing restructuring activities will be consolidated into Project Be Ready.

The Company currently estimates that it will incur total costs of approximately \$40.0 million to \$55.0 million related to Project Be Ready, including approximately \$20.0 million to \$25.0 million of employee separation costs, approximately \$5.0 million to \$10.0 million of facility consolidation expenses, and approximately \$15.0 million to \$20.0 million of third party and other costs. The Company estimates that a majority of the cumulative pretax costs will be cash outlays related to employee separation, facility consolidation, and third-party expenses. The Company expects the costs to be recognized beginning in the first quarter of 2020 and continue through 2021. The amounts and timing of all estimates are subject to change until finalized. The actual amounts and timing may vary materially based on various factors. See "Forward-Looking Statements" above.

This disclosure is intended to satisfy the requirements of Item 2.05 of Form 8-K.

On February 21, 2020, the Board of Directors of the Company approved an amended form of restricted stock unit ("RSU") grant agreement for eligible participants including the Company's named executive officers under the FLIR Systems Inc. 2011 Stock Incentive Plan, amended. The amended form is attached to this Annual Report on Form 10-K as Exhibit 10.12. The forms of RSU grant agreement was amended to, among other things, provide for (i) accrual of dividend equivalents on the RSUs during the vesting period, to be paid if and when the underlying RSUs vest and (ii) full vesting of awards upon a termination without Cause within 12 months following a Change in Control (as such terms are defined in the form of RSU grant agreement), unless the awards are not assumed in the Change in Control, in which case they will fully vest upon the Change in Control. The terms and conditions of the form of RSU grant agreement will apply unless the grantee participates in the Company's Executive Severance Benefit Plan and/or the Company's Change in Control Severance Plan (the "Severance Plans"), in which case the treatment of awards will be governed by the terms and conditions of the applicable Severance Plan.

This disclosure is intended to satisfy the requirements of Item 5.02 of Form 8-K.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information with respect to directors and executive officers of the Company is included under "Corporate Governance and Related Matters," "Management," "Delinquent Section 16(a) Reports," and "Audit Committee Report" in the Company's definitive proxy statement for its 2020 Annual Meeting of Shareholders and is incorporated herein by reference.

The Company has adopted a Code of Ethics for Senior Financial Officers (the "Code of Ethics") that applies to the Company's Chief Executive Officer, Chief Financial Officer, Controller and persons performing similar duties. The Code of Ethics is publicly available on the Company's website (www.flir.com) in the Governance area of the Investor Relations segment of the website. None of the material on the Company's website is part of this Annual Report. If there is any waiver from or amendment to any provision of the Code of Ethics for the Company's Chief Executive Officer, Chief Financial Officer, Controller and persons performing similar duties, the Company will disclose the nature of such waiver or amendment on its website.

ITEM 11. EXECUTIVE COMPENSATION

Information with respect to executive compensation is included under "Compensation Discussion and Analysis," "Compensation Committee Report," "Compensation of Named Executive Officers," and "Director Compensation" in the Company's definitive proxy statement for its 2020 Annual Meeting of Shareholders and is incorporated herein by reference.

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

Information with respect to security ownership of certain beneficial owners and management is included under "Stock Owned by Management" and "Stock Owned by Principal Shareholders" in the Company's definitive proxy statement for its 2020 Annual Meeting of Shareholders and is incorporated herein by reference. Information with respect to equity compensation plans is included under "Equity Compensation Plan Information" in the Company's definitive proxy statement for its 2020 Annual Meeting of Shareholders and is incorporated herein by reference.

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

Information with respect to certain relationships and related transactions is included under "Certain Relationships and Related Transactions" in the Company's definitive proxy statement for its 2020 Annual Meeting of Shareholders and is incorporated herein by reference. Information with respect to Director independence is included under "Corporate Governance and Related Matters—Board of Directors Committees" in the Company's definitive proxy statement for its 2020 Annual Meeting of Shareholders and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information with respect to principal accountant fees and services is included under "Ratification of Selection of the Independent Registered Public Accounting Firm and Related Information—Fees Paid to KPMG LLP" in the Company's definitive proxy statement for its 2020 Annual Meeting of Shareholders and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial Statements

The financial statements are included in Item 8 above.

(a)(2) Financial Statement Schedules

No schedules are included because the required information is inapplicable, not required or are presented in the financial statements or the related notes thereto.

(a)(3) Exhibits

<u>Number</u>	<u>Description</u>
2.1	Agreement and Plan of Merger, by and among FLIR Detection, Inc., Echo Robotic Merger Sub, Inc., Endeavor Robotic
	Holdings, Inc., Arlington Capital Partners III, L.P. and FLIR Systems, Inc., dated as of February 8, 2019 (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed on February 13, 2019 (File Number 000-21918)).
3.1	Second Restated Articles of Incorporation of FLIR Systems, Inc., as amended through May 12, 2008 (incorporated by reference
	to Exhibit 3.1 to the Annual Report on Form 10-K filed on February 27, 2009 (File Number 000-21918)).
3.2	Fifth Amendment to Second Restated Articles of Incorporation of FLIR Systems, Inc. as amended on April 25, 2013
	(incorporated by reference to Exhibit 3.1 to the Quarterly Report on Form 10-Q filed on August 8, 2013 (File Number 000-21918)).
3.3	Sixth Amendment to Second Restated Articles of Incorporation of FLIR Systems, Inc., as amended on June 2, 2016 (incorporated
	by reference to Appendix A to the Definitive Proxy Statement on Schedule 14A filed on March 9, 2016 (File Number 000-21918))
3.4	Fourth Restated Bylaws of FLIR Systems, Inc., as amended through October 20, 2016 (incorporated by reference to Exhibit 3.1
	to the Current Report on Form 8-K filed on October 24, 2016 (File Number 000-21918)).
4.1	<u>Description of FLIR Systems Inc.'s Securities.</u>
4.2	<u>Indenture, dated August 19, 2011, between FLIR Systems, Inc. and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed on August 19, 2011 (File Number 000-21918)).</u>
4.3	First Supplemental Indenture, dated August 19, 2011, between FLIR Systems, Inc. and U.S. Bank National Association, as
	trustee (incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed on August 19, 2011 (File Number 000-21918)).
4.4	Second Supplemental Indenture, dated January 30, 2012, between FLIR Commercial Systems, Inc., FLIR Government Systems,
	Inc. and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.4 to the Annual Report on Form 10-K
4.5	filed on February 29, 2012 (File Number 000-21918)).
4.5	Third Supplemental Indenture, dated December 31, 2014, between FLIR Surveillance, Inc. and U.S. Bank National Association, as trustee. (incorporated by reference to Exhibit 4.5 to the Annual Report on Form 10-K filed on February 27, 2015 (File Number
	<u>000-21918)).</u>
4.6	<u>Fourth Supplemental Indenture, dated June 10, 2016, by and between FLIR Systems, Inc. and U.S. Bank National Association (incorporated by reference to Exhibit 4.2 of the Current Report on Form 8-K filed on June 10, 2016 (File Number 000-21918)).</u>
4.7	Form of 3.125% Note due June 15, 2021 (incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K filed on
	<u>June 10, 2016 (File Number 000-21918)).</u>
10.1	FLIR Systems, Inc. 2002 Stock Incentive Plan, amended October 23, 2013 (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed on November 8, 2013 (File Number 000-21918)).(1)
10.2	Form of Stock Option Agreement for 2002 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 on the Current Report
	on Form 8-K filed on May 4, 2007 (File Number 000-21918)). (1)
10.3	Form of Deferred Stock Agreement for 2002 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 on the Current
	Report on Form 8-K filed on May 4, 2007 (File Number 000-21918)). (1)

- FLIR Systems, Inc. 2009 Employee Stock Purchase Plan (incorporated by reference to Exhibit A to the Definitive Proxy 10.4 Statement on Schedule 14A filed on March 20, 2009 (File Number 000-21918)).(1) 10.5 FLIR Systems, Inc. 2011 Stock Incentive Plan, amended April 25, 2014 (incorporated by reference to the Definitive Proxy Statement on Schedule 14A filed on March 14, 2014 (File Number 000-21918)).(1) Form of Stock Option Agreement (Time-Based Vesting) for the 2011 Stock Incentive Plan, amended May 11, 2015 (incorporated 10.6 by reference to Exhibit 10.3 to the Quarterly Report on Form 10-Q filed on August 5, 2015 (File Number 000-21918)). (1) Form of Stock Option Agreement (Time-Based Vesting - Outside Directors) for the 2011 Stock Incentive Plan, amended May 11, 10.7 2015 (incorporated by reference to Exhibit 10.4 to the Quarterly Report on Form 10-Q filed on August 5, 2015 (File Number 000-21918)). (1) Form of Restricted Stock Unit Agreement (Performance-Based Vesting) for the 2011 Stock Incentive Plan, amended May 11, 10.8 2015(incorporated by reference to Exhibit 10.17 to the Annual Report on Form 10-K filed on February 29, 2012 (File Number 000-21918)). (1) Form of Restricted Stock Unit Agreement (Time-Based Vesting) for the 2011 Stock Incentive Plan, amended May 11, 2015 10.9 (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed on August 5, 2015 (File Number 000-10.11 Form of Restricted Stock Unit Agreement (Market-Based Vesting) for the 2011 Stock Incentive Plan, amended May 11, 2015 (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q filed on August 5, 2015 (File Number 000-21<u>918</u>)). (1) 10.12 Form of Restricted Stock Unit Agreement For Grantees Located Inside the United State for the 2011 Stock Incentive Plan, as amended. (1) 10.13 FLIR Systems, Inc. 2012 Executive Bonus Plan (incorporated by reference to Exhibit 10.27 of the Annual Report on Form 10-K filed on February 27, 2015 (File Number 000-21918)).(1) Underwriting Agreement by and among FLIR Systems, Inc. and Merrill Lynch, Pierce, Fenner & Smith Incorporated and J.P. 10.14 Morgan Securities LLC, as representatives of the several underwriters named therein, dated as of June 1, 2016 (incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on June 3, 2016 (File Number 000-21918)). 10.15 Amended and Restated Employment Agreement between FLIR Systems, Inc. and James J. Cannon dated as of April 24, 2018 (incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on April 25, 2018 (File Number 000-21918)). Change of Control Agreement between FLIR Systems, Inc. and James J. Cannon dated as of June 19, 2017 (incorporated by 10.16 reference to Exhibit 10.2 of the Current Report on Form 8-K filed on May 23, 2017 (File Number 000-21918)).(1) Offer Letter between FLIR Systems, Inc. and Carol P. Lowe dated as of October 16, 2017 (incorporated by reference to Exhibit 10.17 10.1 of the Current Report on Form 8-K filed on October 24, 2017 (File Number 002-21918)),(1) 10.18 Letter of Credit Reimbursement Agreement among FLIR Systems, Inc. and Bank of America, N.A., dated December 24, 2018 (incorporated by reference to Exhibit 10.21 of the Annual Report on Form 10-K filed on February 27, 2019 (File Number 000-21918)). 10.19 Separation and Consulting Agreement, dated February 15, 2019, between FLIR Systems, Inc. and Todd M. DuChene (incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on February 19, 2019 (File Number 000-21918)).(1) FLIR Systems, Inc. 2019 Employee Stock Purchase Plan (incorporated by reference to Exhibit B to the Definitive Proxy 10.20 Statement on Schedule 14A filed on March 8, 2019 (File Number 000-21918)).(1) 10.21 Second Amended and Restated Credit Agreement, dated as of March 29, 2019, by and among FLIR Systems, Inc., certain subsidiaries of FLIR Systems, Inc., as designated borrowers, Bank of America, N.A., as administrative agent, JPMorgan Chase
- Second Amended and Restated Credit Agreement, dated as of March 29, 2019, by and among FLIR Systems, Inc., certain subsidiaries of FLIR Systems, Inc., as designated borrowers, Bank of America, N.A., as administrative agent, JPMorgan Chase Bank, N.A. and U.S. Bank National Association, as co-syndication agents, Citibank, N.A. and MUFG Union Bank, N.A., as co-documentation agents, and the other lenders party thereto (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed on April 1, 2019 (File Number 000-21918)).
- 10.22 Form of Change in Control Severance Benefit Plan (incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed on October 22, 2019 (File Number 000-21918)). (1)
- 10.23 Form of Executive Severance Benefit Plan (incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed on October 22, 2019 (File Number 000-21918)). (1)
- 21.0 Subsidiaries of FLIR Systems, Inc.

23.0	Consent of KPMG LLP.
31.1	Principal Executive Officer Certification Pursuant to Sarbanes-Oxley Act of 2002, Section 302.
31.2	Principal Financial Officer Certification Pursuant to Sarbanes-Oxley Act of 2002, Section 302.
32.1	Certification by the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification by the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	Inline XBRL Instance Document - The instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

⁽¹⁾ This exhibit constitutes a management contract or compensatory plan or arrangement.

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 on the 27th day of February 2020.

FLIR SYSTEMS, INC.

(Registrant)

Ву:

Carol P. Lowe

Executive Vice President and Chief Financial Officer

/s/ CAROL P. LOWE

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 indicated on February 27, 2020.

Signature	Title
/s/ James J. Cannon	President, Chief Executive Officer and Director
James J. Cannon	
/s/ Carol P. Lowe	Executive Vice President and Chief Financial Officer
Carol P. Lowe	(Principal Financial Officer)
/s/ Travis B. Johnson	Vice President and Corporate Controller
Travis B. Johnson	(Principal Accounting Officer)
/s/ Earl R. Lewis	Chairman of the Board of Directors
Earl R. Lewis	
/s/ John D. Carter	Director
John D. Carter	
/s/ William W. Crouch	Director
William W. Crouch	
/s/ Catherine A. Halligan	Director
Catherine A. Halligan	
/s/ Angus L. Macdonald	Director
Angus L. Macdonald	
/s/ MICHAEL T. SMITH	Director
Michael T. Smith	
/s/ Cathy A. Stauffer	Director
Cathy A. Stauffer	
/s/ Robert S. Tyrer	Director
Robert S. Tyrer	
/s/ John W. Wood, Jr.	Director
John W. Wood, Jr.	
/s/ Steven E. Wynne	Director
Steven E. Wynne	

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

FLIR Systems, Inc. ("we," "our," or the "Company") has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: our common stock, \$0.01 par value per share (the "Common Stock").

DESCRIPTION OF COMMON STOCK

The general terms and provisions of our Common Stock are summarized below. This summary does not purport to be complete and is subject to, and is qualified in its entirety by express reference to, our Second Restated Articles of Incorporation, as amended (our "Articles of Incorporation"), our Fourth Restated Bylaws, as amended (our "Bylaws"), and the applicable provisions of the Oregon Business Corporation Act (the "OBCA"). We encourage you to read our Articles of Incorporation and Bylaws, which are filed as exhibits to the Annual Report on Form 10-K of which this Exhibit 4.1 is a part, and the applicable provisions of the OBCA for additional information.

Authorized Shares

Under our Articles of Incorporation, we have the authority to issue 500,000,000 shares of Common Stock.

Voting Rights

Each holder of shares of our Common Stock is entitled to one vote for each share owned of record on all matters submitted to a vote of shareholders. Except as noted below and in the Articles of Incorporation, the vote of shareholders required to decide any question brought before a shareholder meeting at which a quorum is present is a majority of the outstanding shares present in person or represented by proxy at that meeting and entitled to vote on the question subject to the shareholder vote. In a contested election of directors, which is an election in which there are more nominees for election than board positions to be filled, directors are elected by the vote of a plurality of the outstanding shares present in person or represented by proxy at that meeting and entitled to vote on the election of directors. Our shareholders do not have cumulative voting rights as to the election of directors.

Dividend Rights

Subject to the preferential rights of any holders of any series of our preferred stock that may be issued in the future, the holders of the Common Stock are entitled to such dividends and distributions, whether payable in cash or otherwise, as may be declared from time to time by our board of directors from legally available funds.

Liquidation Rights

Upon our liquidation (voluntary or otherwise), dissolution or winding-up and after payment of all prior claims against our assets and our outstanding obligations and subject to the preferential rights of holders of any series of our preferred stock that may be issued in the future, the holders of the Common Stock will be entitled to receive a distribution specified in the Articles of Incorporation (the "Common Adjustment"). Following the payment of the full amount of the liquidation preferences of any series of preferred stock and the Common Adjustment in respect of all outstanding shares of preferred stock and Common Stock, respectively, holders of preferred stock and holders of shares of Common Stock shall receive their ratable and proportionate share of the remaining assets of the Company to be distributed in the ratio of 100 to 1 with respect to such preferred stock and Common Stock, on a per share basis, respectively.

Other Matters

All issued and outstanding shares of our Common Stock are fully paid and nonassessable, which means the holders of the outstanding shares of the Common Stock may not be required to contribute additional amounts of capital or pay additional amounts with respect to such shares of the Common Stock to the Company or be liable for any obligations or liabilities of the Company that the Company may fail to discharge. A share of the Common Stock is fully paid and nonassessable if such share has been issued for consideration legally permissible under the OBCA and the board of directors has determined that the consideration received or to be received for shares to be issued is adequate. The holders

of our Common Stock are not entitled to any preemptive or other first right to acquire any treasury shares or any additional issue of shares of stock or other securities of the Company. The shares of the Common Stock are not subject to conversion or redemption by the Company, and the holders of shares of the Common Stock do not have any right or option to convert such shares into any other security or property of the Company or to cause the Company to redeem such shares of the Common Stock. There are no sinking fund provisions applicable to the Common Stock.

Certain Anti-Takeover Effects

Certain provisions of the OBCA and of our Articles of Incorporation and Bylaws could have certain anti-takeover effects and may delay, deter or prevent a tender offer or takeover attempt that a shareholder might consider to be in its best interests, as discussed below:

Authorized but Unissued Shares. Subject to the requirements of The NASDAQ Stock Market LLC and other applicable law, our authorized but unissued shares of Common Stock may be available for future issuance without shareholder approval. We may use these additional shares for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of Common Stock could render more difficult or discourage an attempt to obtain control of us by means of a tender offer, takeover attempt or otherwise.

Undesignated Preferred Stock. Our Articles of Incorporation provides that our board of directors may issue up to 10,000,000 shares of preferred stock and fix the designations, powers, preferences and rights related to that preferred stock. Preferred stock could be issued by our board of directors to increase the number of outstanding shares, making a takeover more difficult and expensive.

Advance Notice Requirements. Our Bylaws establish an advance notice procedure for shareholders seeking to nominate candidates for election to the board of directors or for proposing matters which can be acted upon at shareholders' meetings.

Special Meetings of Shareholders. Our Bylaws provide that special meetings of shareholders may be called by our president or by our board of directors and shall be called by the president at the request of the holders of not less than one-tenth of all our outstanding shares of Common Stock entitled to vote at the meeting (subject to the procedures and other requirements set forth in our Bylaws).

No Shareholder Action by Written Consent. Under the OBCA, action required or permitted to be taken at a meeting of shareholders may be taken by action without a meeting if the action is taken by all of the shareholders entitled to vote on the action. The OBCA also provides that a corporation's articles of incorporation may provide that action without a meeting may be taken by shareholders having not less than the minimum number of votes that would be needed to take the action if a meeting were held; however, our Articles of Incorporation do not provide for action by less than unanimous written consent.

Proxy Access. Our Bylaws contain provisions which provide that a shareholder, or group of up to 20 shareholders, that has owned continuously for at least three years shares of Common Stock representing an aggregate of at least 3% of the Company's outstanding shares of Common Stock, may nominate and include in the Company's proxy materials director nominees constituting up to 25% of the Board, provided that the eligible shareholder(s) and nominee(s) satisfy other applicable requirements of the Bylaws.

No Cumulative Voting or Classified Board. Our Articles of Incorporation and Bylaws do not provide for cumulative voting on the election of directors and we currently do not have a classified board of directors.

Oregon Takeover Statutes.

• Hostile Takeovers. Under the Oregon Control Share Act (the "OCSA"), a person who acquires "control shares" acquires the voting rights with respect to the control shares only to the extent granted by a majority of the preexisting, disinterested shareholders of the corporation. "Control shares" are shares acquired in an acquisition that would, when added to all other shares held by the acquiring person, bring such person's total voting power

(but for the OCSA) to or above any of three threshold levels: 20%, 331/3% or 50% of the total outstanding voting stock. A "control share acquisition" is an acquisition of ownership or the power to direct voting of control shares. Control shares acquired within 90 days of, and control shares acquired pursuant to a plan to make a control share acquisition, are considered to have been acquired in the same transaction. The provisions of the OCSA apply equally to transactions approved or opposed by the corporation's board of directors. Shares are not deemed to be acquired in a control share acquisition if, among other things, they are acquired from the issuing corporation, or are issued pursuant to a plan of merger or exchange effected in compliance with the OBCA and the issuing corporation is a party to the merger or exchange agreement. We have opted out of the coverage of the OCSA.

- Interested Shareholder Transactions. The OBCA, in specified circumstances, prohibits a person who is an "interested shareholder" (defined generally as a person with 15% or more of a corporation's outstanding voting stock) of a corporation listed on a national securities exchange from engaging in a "business combination" (defined generally as a merger, consolidation, or other transaction, including a sale, lease, or other disposition of assets with an aggregate market value equal to 10% or more of the aggregate market value of the corporation) with the corporation for a three-year period following the time the shareholder became an "interested shareholder". In addition, a corporation's articles of incorporation or bylaws may exclude a corporation from these restrictions. We have not elected to opt out of these business combination provisions of the OBCA.
- Board of Directors' Criteria for Evaluating Business Combinations. Under the OBCA, members of the board of directors of a corporation are authorized to consider certain factors in determining the best interests of the corporation when evaluating any (i) offer of another party to make a tender or exchange offer, (ii) merger or consolidation proposal, or (iii) offer of another party to purchase or otherwise acquire all or substantially all of the assets of the corporation. These factors include the social, legal and economic effects on employees, customers and suppliers of the corporation and on the communities and geographical areas in which the corporation and its subsidiaries operate, the economy of the state and the nation, the long-term and short-term interests of the corporation and its shareholders, including the possibility that these interests may be best served by the continued independence of the corporation, and other relevant factors.

Listing

Our Common Stock is traded on the NASDAQ Global Select Market under the trading symbol "FLIR."

Transfer Agent

Our transfer Agent and registrar is Computershare.



Exhibit 10.12

RESTRICTED STOCK UNIT AGREEMENT For Grantees Located Inside the United States

Awarded to: participant name Grant Date: arant date

Number of Shares: shares

This Restricted Stock Unit Agreement (the "Agreement") is made between FLIR Systems, Inc. ("the Company"), and you, an employee or consultant of the Company or one of its Subsidiaries (the "Grantee").

The Company sponsors the FLIR Systems, Inc. 2011 Stock Incentive Plan, as amended (the "Plan"). The Plan governs the terms of the award referenced in this Agreement and controls in the event of any ambiguity between the Plan and this Agreement. A copy of the Plan as amended can be found on the Company intranet or may be obtained by contacting the Company's Human Resources Department. The terms and provisions of the Plan are incorporated herein by reference. By signing this Agreement, you acknowledge that you have obtained and reviewed a copy of the Plan. When used herein, the capitalized terms that are defined in the Plan shall have the meanings given to them in the Plan, including the term "Committee," which means the Compensation Committee of the Company's Board of Directors.

Your failure to execute this Agreement within 180 days of the Grant Date may result in its cancellation.

In recognition of the value of your contribution to the Company, you and the Company mutually covenant and agree as follows:

- 1. <u>Grant</u>. Subject to the terms and conditions of the Plan and this Agreement, the Company grants to you, the Grantee, the right to receive on the vesting dates described herein shares of the Company's common stock (the "Shares") under the terms hereof.
- 2. <u>No Rights as Shareholder Prior to Issuance and Delivery of Shares</u>. Grantee shall not be deemed for any purpose to be a shareholder of the Company as to any Shares subject to this Agreement, including the right to any dividends issued over the vesting period, until the Shares have been issued and delivered to Grantee in accordance with the Plan and this Agreement.
- 3. <u>Dividend Equivalents</u>. If the Company declares one or more cash or stock dividends on the Shares during the period commencing on the Grant Date and ending on and including the day immediately preceding the day on which the Shares subject to this Agreement are issued to you, then, on the date each such dividend is paid to the holders of Shares, you shall be credited with dividend equivalent units ("Dividend Equivalent Units") in accordance with the following:



- (a) If a dividend with respect to the Shares is payable in cash, then, as of the applicable dividend payment date, you shall be credited with that number of Dividend Equivalent Units (rounded to the nearest whole unit) equal to (i) the amount of the cash dividend payable with respect to a Share, multiplied by (ii) the number of Shares subject to this Agreement that are outstanding as of the record date of such dividend, divided by (iii) the closing price of a Share on the dividend payment date.
- (b) If a dividend with respect to the Shares is payable in Shares, then, as of the dividend payment date, you shall be credited with that number of Dividend Equivalent Units (rounded to the nearest whole unit) equal to (i) the number of Shares distributed in the dividend with respect to a Share, multiplied by (ii) the number of Shares subject to this Agreement that are outstanding as of the record date of such dividend.

Any such Dividend Equivalent Units credited hereunder shall be subject to the same terms and conditions which apply to the underlying Shares to which they relate and shall vest and settle, or be forfeited, as applicable, at the same time and in the same manner as the underlying Shares to which they relate. The foregoing does not obligate the Company to pay dividends on the Shares and nothing in the Plan or in this Agreement shall be interpreted as creating such an obligation. Notwithstanding anything to the contrary in this Agreement, if the Shares subject to this Agreement are scheduled to vest and settle between a dividend record date and a dividend payment date, then Dividend Equivalent Units with respect to such dividend shall be credited and paid to you on the earlier of (x) the dividend payment date for such dividend and (y) March 15th following the date on which the underlying Shares to which the Dividend Equivalent Units relate vest.

- 4. <u>Vesting</u>. The Shares subject to this Agreement shall vest in accordance with the vesting schedule as detailed in the appendix titled "**Vesting Schedule**." Once the Shares vest in accordance with the terms of this Agreement or the Plan, the Company shall issue and deliver a stock certificate (or other evidence of ownership) for a corresponding number of Shares to Grantee on, or within 30 days following, the applicable vesting date or, if later, the date on which the Shares are distributed pursuant to the terms of the Company's Stock Deferral Plan.
- 5. <u>Rights of Grantee with Respect to Shares Delivered</u>. Grantee shall enjoy all shareholder rights with respect to Shares that have been issued and delivered, subject to any restrictions on sale imposed by any share ownership restrictions that are in place as of the date of this agreement.
- 6. <u>Termination of Service</u>. In the event that Grantee's continuous service as an employee or consultant with the Company and its Subsidiaries terminates for any reason other than due to death or a Qualifying Disability, as defined in Section 7, or as a result of a termination without Cause within 12 months following a Change in Control, as such terms are defined in Section 8, including a termination due to retirement, the Shares subject to this Agreement shall immediately expire and no additional Shares shall be issued and delivered to Grantee pursuant to this Agreement.



In the event of a dispute as to the date that Grantee's continuous service as an employee or consultant terminates for purposes of the Plan, such date shall be determined by the Committee, in its sole discretion, which determination shall be final.

- 7. <u>Death or Qualifying Disability</u>. In the event of Grantee's death or in the event that Grantee's continuous service as an employee or consultant with the Company and its Subsidiaries terminates as a result of Grantee's Qualifying Disability, the Shares subject to this Agreement shall immediately vest. For purposes of this Agreement, a "Qualifying Disability" shall mean a Disability, as defined below, which the Committee determines is expected to prevent Grantee from thereafter engaging in any gainful employment. For purposes of this Agreement, a "Disability" shall mean a total and permanent disability as defined in section 22(e)(3) of the Code. The determination of whether Grantee's Disability is a Qualifying Disability shall be made by the Committee in its sole discretion, and such determination shall be final.
- 8. <u>Change in Control; Termination without Cause following a Change in Control</u>. In the event of a Change in Control in which the award referenced in this Agreement is not being assumed or continued, the Shares subject to this Agreement shall immediately vest on the date of such Change in Control. If, within 12 months following a Change in Control in which the award referenced in this Agreement is assumed or continued, the Grantee's continuous service as an employee or consultant with the Company and its Subsidiaries is terminated by the Company or the applicable Subsidiary without Cause, the Shares subject to this Agreement shall immediately vest. Notwithstanding the foregoing, if the Grantee is a participant in the Company's Executive Severance Benefit Plan and/or the Company's Change in Control Severance Plan (collectively, the "Severance Plans"), then the treatment of the Shares subject to this Agreement upon a termination of the Grantee's employment without Cause shall be governed by the terms and conditions of the applicable Severance Plan in lieu of the terms and conditions of this Agreement.
- (a) For purposes of this Agreement, the term "Change in Control" shall mean the occurrence of a "change in the ownership," a "change in the effective control" or a "change in the ownership of a substantial portion of the assets" of the Company. In determining whether an event shall be considered a "change in the ownership," a "change in the effective control" or a "change in the ownership of a substantial portion of the assets" of the Company, the following provisions shall apply: (i) a "change in the ownership" of the Company shall occur on the date on which any one person, or more than one person acting as a group, acquires ownership of stock of the Company that, together with stock held by such person or group, constitutes more than 50% of the total fair market value or total voting power of the stock of the Company, as determined in accordance with Treasury Regulation §1.409A-3(i)(5)(v); (ii) a "change in the effective control" of the Company shall occur on the date on which a majority of the members of the Company's Board is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of the appointment or election, as determined in accordance with Treasury Regulation §1.409A-3(i)(5)(vi); and (iii) a "change in the ownership of a substantial portion of the assets" of the Company shall occur on the date on which any one person, or more than one person acting as a group, acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets



from the Company that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Company immediately before such acquisition or acquisitions, as determined in accordance with Treasury Regulation §1.409A-3(i)(5)(vii). A transfer of assets shall not be treated as a "change in the ownership of a substantial portion of the assets" when such transfer is made to an entity that is controlled by the shareholders of the Company, as determined in accordance with Treasury Regulation §1.409A-3(i)(5)(vii)(B).

- (b) For purposes of this Agreement, the term "Cause" shall mean, with respect to the Grantee, unless otherwise provided in an applicable agreement between the Grantee and the Company or any of its Subsidiaries: (i) any material violation by the Grantee of any law or regulation applicable to the business of the Company; (ii) the Grantee's conviction for, or plea of no contest to, a felony or a crime involving moral turpitude; (iii) the Grantee's commission of an act of personal dishonesty that is intended to result in the substantial personal enrichment of the Grantee (excluding inadvertent acts that are promptly cured following notice); (iv) continued material violations by the Grantee of the Grantee's lawful and reasonable duties of employment (including, but not limited to, compliance with material written policies of the Company and material written agreements with the Company), which violations are demonstrably willful and deliberate on the Grantee's part, but, if such violation is curable, only after the Company has delivered a written demand for performance to the Grantee that describes the basis for the Company's belief that the Grantee has not substantially performed the Grantee's duties and the Grantee has not cured within a period of 15 days following notice; (v) the Grantee's willful failure (other than due to physical incapacity) to cooperate with an investigation by a governmental authority or the Company of the Company's business or financial condition; (vi) any other willful misconduct or gross negligence by the Grantee that is materially injurious to the financial condition or business reputation of the Company; or (vii) a material breach of the Grantee's fiduciary duty to the Company.
- 9. <u>Nontransferability of this Agreement</u>. Neither this Agreement nor the Shares subject to this Agreement may be sold, transferred, assigned, pledged, hypothecated, encumbered or otherwise disposed of, other than by will, the laws of descent and distribution or pursuant to beneficiary designation procedures approved by the Company, and any such attempted action shall be void.
- 10. Withholding Taxes. The vesting and issuance of Shares to Grantee is a taxable event for which the Company is obligated to withhold taxes. Grantee agrees to pay to the Company an amount sufficient to provide for any federal, state, and local withholding taxes, including FICA taxes, in connection with the issuance and delivery of any Shares by the Company to Grantee. Grantee may satisfy this withholding obligation by electing in writing (i) to transfer from Grantee's Fidelity cash account an amount sufficient to satisfy the withholding obligation, or (ii) to have the Company withhold from the Shares otherwise to be delivered to Grantee that number of Shares that would satisfy the withholding obligation. In the absence of a timely election by Grantee, the Committee will use option (ii).

If the Committee withholds Shares to satisfy the withholding obligation, the following rules apply:



- (a) The value of the Shares withheld or transferred must equal (or exceed by at most a fractional Share) the minimum withholding obligation.
- (b) The value of the Shares withheld or transferred shall be the Fair Market Value determined as of the vesting date.
- 11. <u>Exclusion of Shares from Compensation</u>. Shares issued and delivered to Grantee pursuant to the Plan will not constitute compensation to Grantee for purposes of any retirement, life insurance or other employee benefit plan of the Company.
- 12. <u>Termination of Agreement</u>. This Agreement shall terminate when no further Shares may be delivered to Grantee pursuant to this Agreement.
- 13. <u>Governing Law</u>. This Agreement is governed by, and subject to, the laws of the State of Oregon, as provided in the Plan. For purposes of litigating any dispute that arises under this Agreement, the parties hereby submit to and consent to the jurisdiction of the State of Oregon, and agree that such litigation shall be conducted in the appropriate state or federal court of Oregon.
- 14. <u>Electronic Delivery and Participation</u>. The Company may, in its sole discretion, deliver any documents related to the award referenced in this Agreement or to participation in the Plan or to future awards that may be granted under the Plan by electronic means or to request Grantee's consent to participate in the Plan by electronic means. Grantee hereby consents to receive such documents by electronic delivery and 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.
- 15. <u>Severability</u>. The provisions of this Agreement are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable.
- 16. <u>Insider Trading Restrictions</u>. Grantee acknowledges that Grantee may be subject to insider trading restrictions, which may affect his or her ability to acquire or dispose of Shares or rights to Shares (*e.g.*, restricted stock units) acquired under the Plan during such times as Grantee is considered to have "inside information" regarding the Company. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. Grantee is responsible for ensuring compliance with any applicable restrictions and is advised to consult his or her personal legal advisor on this matter.
- 17. <u>Section 409A</u>. Notwithstanding anything in the Plan, this Agreement or any other agreement (whether entered into before, on or after the Grant Date) to the contrary, if the vesting of the balance, or some lesser portion of the balance, of the Shares is accelerated in connection with Grantee's "separation from service" within the meaning of Section 409A, as determined by the Company, other than due to death, and if (x) Grantee is a U.S. taxpayer and a "specified employee"



within the meaning of Section 409A at the time of such separation from service and (y) the payment of such accelerated Shares will result in the imposition of additional tax under Section 409A if paid to Grantee on or within the six (6) month period following Grantee's separation from service, then the payment of such accelerated Shares will not be made until the date six (6) months and one (1) day following the date of Grantee's separation from service, unless Grantee dies following his or her separation from service, in which case, the Shares will be paid to Grantee's estate as soon as practicable following his or her death. It is the intent of this Agreement that it and all payments and benefits to U.S. taxpayers hereunder be exempt from, or comply with, the requirements of Section 409A so that none of the Shares provided under this Agreement will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to be so exempt or so comply. Each payment payable to a U.S. taxpayer under this Agreement is intended to constitute a separate payment for purposes of Treasury Regulation Section 1.409A-2(b)(2). For purposes of this Agreement, "Section 409A" means Section 409A of the Code, and any final Treasury Regulations and Internal Revenue Service guidance thereunder, as each may be amended from time to time.

FLIR SYSTEMS, INC.

GRANTEE

James J. Cannon

Name

President and Chief Executive Officer

Signed Electronically

Subsidiaries of FLIR Systems, Inc.

- FLIR Commercial Systems, Inc., a California, USA Corporation
- FLIR Government Systems, Inc., a Delaware, USA Corporation
- FLIR Detection, Inc., a Delaware, USA Corporation
- FLIR Surveillance, Inc., a Delaware, USA Corporation
- FLIR Unmanned Ground Systems Inc., a Delaware, USA Corporation
- FLIR Unmanned Aerial Systems ULC, a Canadian Corporation
- FLIR Integrated Imaging Solutions, a Canadian Corporation
- FSI Holdings CV, a Netherlands Corporation
- FLIR Systems BV, a Netherlands Corporation
- FLIR Systems Holding AB, a Sweden Corporation
- FLIR Systems AB, a Sweden Corporation
- FLIR Systems Trading Belgium BVBA, a Belgium Corporation
- RIHL Ltd., a United Kingdom Corporation
- Raymarine UK Ltd., a United Kingdom Corporation

Consent of Independent Registered Public Accounting Firm

To the Board of Directors FLIR Systems, Inc.:

We consent to the incorporation by reference in the registration statements (No. 33-95248, 333-102992, 333-125822, 333-176972, 333-206204, and 333-231437) on Form S-8 and No. 333-234452 on Form S-3 of FLIR Systems, Inc. (the Company) of our reports dated February 27, 2020, with respect to the consolidated balance sheets of the Company as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively the consolidated financial statements) and the effectiveness of internal control over financial reporting as of December 31, 2019, which reports appear in the December 31, 2019 Annual Report on Form 10-K of the Company.

Our report on the consolidated financial statements refers to a change in accounting for leases in 2019 due to the adoption of Accounting Standards Codification Topic 842, *Leases*. Additionally, our report on the consolidated financial statements refers to a change in accounting for revenue and the income tax impact of intra-entity transfers of assets in 2018 due to the adoption of Accounting Standards Codification Topic 606, *Revenue from Contracts with Customers* and Accounting Standards Update 2016-16, *Intra-entity Transfers of Assets Other Than Inventory*, respectively.

/s/ KPMG LLP

Portland, Oregon February 27, 2020

I, James J. Cannon, certify that:

- 1. I have reviewed this annual report on Form 10-K of FLIR Systems, Inc.;
- 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal 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 evaluations; 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
- The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control of financial reporting, to the registrant's auditors and the audit committee of 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 27, 2020

/s/ James J. Cannon

James J. Cannon

President and Chief Executive Officer

I, Carol P. Lowe, certify that:

- 1. I have reviewed this annual report on Form 10-K of FLIR Systems, Inc.;
- 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal 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 evaluations; 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
- The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control of financial reporting, to the registrant's auditors and the audit committee of 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 27, 2020

/s/ CAROL P. LOWE

Carol P. Lowe

Executive Vice President and Chief Financial Officer

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

In connection with the Annual Report of FLIR Systems, Inc. (the "Company") on Form 10-K for the year ending December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, James J. Cannon, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date February 27, 2020

/s/ James J. Cannon

James J. Cannon

President and Chief Executive Officer

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

In connection with the Annual Report of FLIR Systems, Inc. (the "Company") on Form 10-K for the year ending December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Carol P. Lowe, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date February 27, 2020

/s/ CAROL P. LOWE

Carol P. Lowe

Chief Financial Officer