

ESTERLINE TECHNOLOGIES CORP  
Form 10-K  
November 21, 2017  
UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

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

For the fiscal year ended September 29, 2017.

OR

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_ 3

Commission file number 1-6357

ESTERLINE TECHNOLOGIES CORPORATION

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction  
of incorporation or organization)

13-2595091  
(I.R.S. Employer  
Identification No.)

500 108th Avenue N.E., Bellevue, Washington 98004

(Address of principal executive offices)(Zip Code)

Registrant's telephone number, including area code (425) 453-9400

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

Title of each class	Name of each exchange on which registered
Common Stock (\$.20 par value)	New York Stock Exchange

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

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

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

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

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

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

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

Large accelerated filer Accelerated filer

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Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

Emerging growth company

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

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

As of November 16, 2017, 29,984,434 shares of the Registrant's common stock were outstanding. The aggregate market value of shares of common stock held by non-affiliates as of March 31, 2017, was \$2,562,036,264 (based upon the closing sales price of \$86.05 per share).

Documents Incorporated by Reference

Part III incorporates information by reference to the registrant's definitive proxy statement, to be filed with the Securities and Exchange Commission within 120 days after the close of the fiscal year ended September 29, 2017.

## PART I

This Report includes a number of forward-looking statements that reflect the Company's current views with respect to future events and financial performance. Please refer to the section addressing forward-looking information on page 10 for further discussion. In this report, "we," "our," "us," "Company," and "Esterline" refer to Esterline Technologies Corporation and subsidiaries, unless otherwise noted or context otherwise indicates.

### Explanatory Note

We changed our fiscal year to the twelve months ending the last Friday in September, effective beginning with the year ended on September 30, 2016. As a result, our 2015 fiscal year was shortened from twelve months to an eleven-month transition period ended on October 2, 2015.

Unless otherwise noted in this Part I:

•When financial results for fiscal 2016 are compared to the prior-year period, the results compare the twelve-month periods ended September 30, 2016, and October 2, 2015, respectively. The results for the twelve-month period ended October 2, 2015, are unaudited.

## Item 1. Business

### General Development of Business

Esterline, a Delaware corporation formed in 1967, is a leading specialized manufacturing company principally serving aerospace and defense customers. We design, manufacture and market highly engineered products and systems for application within the industries we serve.

Our current business and strategic plan focuses on continued development of our products principally for aerospace and defense markets in three key technology segments: Avionics & Controls, Sensors & Systems, and Advanced Materials. Our products are often mission critical, which have been designed into particular military and commercial platforms, and in certain cases can only be replaced by products of other manufacturers following a formal certification process. We are concentrating our efforts to expand our capabilities in these markets, anticipate the global needs of our customers and respond to such needs with comprehensive solutions. These efforts focus on continuous research and new product development, acquisitions, and strategic realignment of operations to expand our capabilities as a more comprehensive supplier to our customers across our entire product offering. Such expansion included the January 2015 acquisition of the defense, aerospace and training display business, Esterline Advanced Displays (EAD), of Belgium-based Barco N.V. (Barco). This acquisition is described in more detail in the "Liquidity and Capital Resources" section of Management's Discussion and Analysis of Financial Condition and Results of Continuing Operations contained in Item 7 of this report.

In December 2013 we announced the acceleration of our plans to consolidate certain facilities and create cost efficiencies through shared services in sales, general and administrative and support functions, which were completed in fiscal 2016. We incurred costs of \$8.7 million in fiscal 2016 and \$14.6 million in the recast twelve-month period of fiscal 2015 associated with these activities. The costs include severance, relocation of facilities, and losses from the write off of certain property, plant and equipment.

In March 2014 we entered into a Consent Agreement with the U.S. Department of State's Directorate of Defense Trade Controls Office of Defense Trade Controls Compliance (DTCC) to resolve alleged International Traffic in Arms Regulations (ITAR) civil violations. Among other things, the Consent Agreement required us to pay a \$20 million penalty, of which \$10 million was suspended and eligible for offset credit. In fiscal 2016 the DTCC approved costs we incurred to implement compliance measures to fully offset the \$10 million suspended payment. On September 5, 2017, the DTCC notified us that it is closing the Consent Agreement. The closing of the Consent Agreement was based on our certifications that all aspects of the Consent Agreement have been implemented and that our trade compliance program is adequate to identify, prevent, detect, correct, and report violations of the Arms Export Control Act (AECA) and ITAR, as well as the DTCC's assessment that we have fulfilled the terms of the Consent Agreement.

In fiscal 2014 our Board of Directors approved the plan to sell certain non-core business units including Eclipse Electronic Systems, Inc. (Eclipse), a manufacturer of embedded communication intercept receivers for signal intelligence applications; Wallop Defence Systems, Ltd. (Wallop), a manufacturer of flare countermeasure devices; a small distribution business; Pacific Aerospace and Electronics Inc. (PA&E), a manufacturer of hermetically sealed electrical connectors; and a small manufacturing business. As of September 30, 2017, we have sold these business units except for the land and building at Eclipse and Wallop, which are currently held for sale. These businesses are reported as discontinued operations.

We recorded a loss from discontinued operations of \$7.3 million, \$15.3 million, and \$40.3 million in fiscal 2017, 2016 and 2015, respectively.

Our products have a long history in the aerospace and defense industry and are found on most military and commercial aircraft, helicopters, and land-based systems. For example, our products are used on the majority of active and in-production U.S. military aircraft and on every Boeing commercial aircraft platform manufactured in the past 75 years. In addition, our products are supplied to Airbus, many of the major regional and business jet manufacturers, and the major aircraft engine manufacturers. We work closely with OEMs on new, highly engineered products with the objective of such products becoming designed into our customers' platforms; this integration often results in sole-source positions for OEM production and aftermarket business. We broadly categorize our commercial and military aerospace aftermarket sales as retrofit, repair services, and spare parts. Spare parts alone made up approximately 9% of total sales in fiscal 2017. Retrofit and repair services, which represent 3% of total sales in fiscal 2017, carry higher margins than OEM sales but lower margins than spare parts sales. In many cases, our aftermarket sales span the entire life of an aircraft.

We differentiate ourselves through our engineering and manufacturing capabilities and our reputation for safety, quality, on-time delivery, reliability, and innovation – all embodied in the Esterline Operating System, our way of approaching business that helps ensure all employees are focused on continuous improvement, teamwork, a safe work environment and compliance. Safety of our operations is a critical factor in our business, and accordingly, we incorporate applicable regulatory guidance in the design of our facilities and train our employees using a behavior-based approach that focuses on safety-designed work habits and on-going safety audits. Our industries are highly regulated, and compliance with applicable regulations, including export control and anti-bribery regulations, is an important focus in our business. We have a global code of business conduct and ethics, and we provide corporate-wide training and maintain local ethics advisors and export control specialists in our business units to support our compliance efforts. In fiscal 2017 we continued our significant efforts to build and strengthen our trade compliance program, driven in large part by the requirements of the Consent Agreement discussed above.

Our sales are diversified across three broad markets: defense, commercial aerospace and general industrial. For fiscal 2017, approximately 30% of our sales were from the defense market, 40% from the commercial aerospace market, and 30% from the general industrial market.

#### Financial Information About Industry Segments

A summary of net sales to unaffiliated customers, operating earnings and identifiable assets attributable to our business segments for fiscal 2017, 2016, and 2015 is reported in Note 18 to the Company's Consolidated Financial Statements under Item 8 of this report.

#### Description of Business

##### Avionics & Controls

Our Avionics & Controls business segment includes avionics systems, control and communication systems, and interface technologies capabilities. Avionics systems designs, develops and integrates cockpit avionics solutions as well as providing visualization solutions for commercial and defense applications. Control and communication systems designs and manufactures technology interface solutions for military and commercial aircraft and land- and sea-based military vehicles. Interface technologies manufactures and develops custom control panels and input systems for medical, industrial, military and gaming industries. We are a market leader in global positioning systems (GPS), head-up displays, enhanced vision systems, flight management systems, touchscreen display solutions and secure communication systems, all of which are used in a broad variety of applications. In addition, we develop, manufacture and market sophisticated, highly reliable component systems including lighted push-button and rotary switches, keyboards, lighted indicators, panels and displays.

Our products have been integrated into many existing aircraft designs, including every Boeing commercial aircraft platform currently in production. We are a Tier 1 supplier on the Boeing 787 and 777X programs to design and manufacture all of the cockpit overhead panels and embedded software for these systems. We provide high-quality and affordable visual display solutions to the air traffic control, naval, ground vehicles and unmanned systems and simulation and training markets. Our simulation and training solutions include a 360-degree rear projection display that offers high contrast and resolution and various types of large field-of-view collimated displays, and a deployable display with a roll-up, seamless spherical screen. We manufacture control sticks, grips and wheels, as well as specialized switching systems. In this area we primarily serve commercial and military aviation and airborne and ground-based military equipment manufacturing customers. For example, we are a leading manufacturer of pilot control grips for most types of military fighter jets and helicopters. Additionally, our software engineering center supports our customers' needs with applications such as flight management systems, air data computers and engine control systems.

Our proprietary products meet critical operational requirements and provide customers with significant technological advantages in areas such as night vision compatibility and active-matrix liquid-crystal displays (a technology enabling pilots to read display screens in a variety of light conditions as well as from extreme angles). Our products are incorporated in a wide variety of platforms ranging from military helicopters, fighters and transports, to commercial wide- and narrow-body, regional and business jets. In fiscal 2017 some of our largest customers for these products included Airbus, BAE Systems, The Boeing Company, Bombardier, FAA, Honeywell, L3 Technologies, Leonardo, Lockheed Martin, Pilatus, Rockwell Collins, Textron, Thales, and Triman.

In addition, we design and manufacture ruggedized military personal communication equipment, primarily headsets, handsets and field communications. We are the sole supplier of Active Noise Reduction (ANR) headsets to the British Army's tracked and wheeled vehicle fleets under the Bowman communication system program. We also supply ANR headsets to the U.S. Army's tracked and wheeled vehicle fleets. Additionally, we are the primary ANR headset supplier to the Canadian Army and have a long-standing relationship with allied armies around the world. In fiscal 2017 some of our largest customers for these products included BAE Systems, The Boeing Company, NATO Supply Procurement Agency, the U.S. Department of Defense (DoD), and Simex Defence.

We also manufacture a full line of keyboard, switch and input technologies for specialized medical equipment, high-tech gaming applications, and communication systems for military applications. These products include custom keyboards, keypads, and input devices that integrate cursor control devices, barcode scanners, displays, video, and voice activation and touch screens. We also produce instruments that are used for point-of-use and point-of-care diagnostics. We have developed a wide variety of technologies, including plastic and vinyl membranes that protect high-use switches and fully depressible buttons, and backlit elastomer switch coverings that are resistant to exposure from harsh chemicals. These technologies now serve as the foundation for a small but growing portion of our product line. In fiscal 2017, some of our largest customers for these products included Aristocrat Technologies, General Electric, Nuance, Philips, and Stat-Diagnostic.

#### Sensors & Systems

Our Sensors & Systems business segment includes power systems, connection technologies and advanced sensors capabilities. We develop and manufacture high-precision temperature, pressure and speed sensors principally for aerospace customers, electrical interconnect systems for severe environments for aerospace, defense, geophysics & marine, rail, and nuclear customers, as well as electrical power switching, control and data communication devices, and other related systems principally for aerospace and defense customers. We are the sole-source and aftersales supplier of temperature probes for use on all versions of the General Electric/Snecma CFM-56 jet engine. The CFM-56 jet engine has an installed base of over 30,000, and is standard equipment on the current generation Boeing 737 aircraft and approximately 60% of Airbus aircraft. We manufacture sensors for the environmental control system for Boeing 787 aircraft, and provide the primary power distribution assembly for the Airbus A400M military transport. We will provide the primary power distribution assembly for Embraer E-2 and Mitsubishi Regional Jet. Additionally, we have a Tier 1 position with Rolls-Royce for a large suite of sensors for the engines that power the A400M and A350. We design and manufacture interconnect solutions for harsh environments, connectors, backshells, conduits, planet probe interconnectors, and launcher umbilicals. We also design and manufacture composite connectors for the Boeing 787. The principal customers for our products in this business segment are jet engine manufacturers, airframe and industrial manufacturers. In fiscal 2017 some of our largest customers for these products included Airbus, BJK, The Boeing Company, Bombardier, Flame, General Electric, Rolls-Royce, Safran, TTI, Inc., and United Technologies Corporation (UTC) Aerospace Systems.

#### Advanced Materials

Our Advanced Materials business segment includes engineered materials and defense technologies capabilities. We develop and manufacture high-performance elastomer products used in a wide range of commercial aerospace, space and military applications, and highly engineered thermal components for commercial aerospace and industrial



applications. We also develop and manufacture combustible ordnance and countermeasures for military applications.

**Specialized High-Performance Applications.** We specialize in the development of proprietary formulations for silicone rubber and other elastomer products. Our elastomer products are engineered to address specific customer requirements where superior performance in high temperature, high pressure, caustic, abrasive and other difficult environments is critical. These products include clamping devices, thermal fire barrier insulation products, sealing systems, tubing and coverings designed in custom-molded shapes. Some of the products include proprietary elastomers that are specifically designed for use on or near a jet engine. We are a leading U.S. supplier of high-performance elastomer products to the aerospace industry, with our primary customers for these products being jet and rocket engine manufacturers, commercial and military airframe manufacturers, as well as commercial airlines. In fiscal 2017 some of the largest customers for these products included The Boeing Company, KLX Aerospace Solutions, Lockheed Martin, and Northrup Grumman.

We also develop and manufacture high temperature, lightweight metallic insulation systems for aerospace and marine applications. Our commercial aerospace programs include the Boeing 737, Airbus A320 and A380 series aircraft, and the International Aero Engines V2500 and Rolls-Royce BR710 engines. Our insulation material is used on diesel engine manifolds for earthmoving and agricultural applications. In addition, we specialize in the development of thermal protection for fire, nuclear, and petro-chemical industries. We design and manufacture high temperature components for industrial and marine markets. Our manufacturing processes consist of cutting, pressing, and welding stainless steel, inconel, and titanium fabrications. In fiscal 2017 some of the largest customers of these products included Airbus, Rolls-Royce, and Spirit AeroSystems.

Ordnance and Countermeasure Applications. We develop and manufacture combustible ordnance and warfare countermeasure devices for military customers. We manufacture molded fiber cartridge cases, mortar increments, igniter tubes and other combustible ordnance components primarily for the DoD. We are currently the sole supplier of combustible casings utilized by the U.S. Armed Forces. Sales are made either directly to the DoD or through prime contractors and General Dynamics. These products include the combustible case for the U.S. Army's new generation 155mm Modular Artillery Charge System, the 120mm combustible case used with the main armament system on the U.S. Army and Marine Corps' M1-A1/2 tanks, and the 60mm, 81mm and 120mm combustible mortar increments. We were recently selected as the exclusive provider of high- and low-velocity payloads for 40mm infrared training rounds. We are one of two suppliers to the U.S. Army of infrared decoy flares used by aircraft to help protect against radar and infrared guided missiles. We are currently the only supplier to the U.S. Army of countermeasures against radar-based threats. In fiscal 2017, in addition to the DoD, some of the largest customers of these products included Orbital ATK, General Dynamics, and Rikei.

A summary of product lines contributing sales of 10% or more of total sales for fiscal 2017, 2016, and 2015 is reported in Note 18 to the Consolidated Financial Statements under Item 8 of this report.

#### Marketing and Distribution

We believe that a key to continued success is our ability to meet customer requirements both domestically and internationally. We have and will continue to improve our world-wide sales and distribution channels in order to provide wider market coverage and to improve the effectiveness of our customers' supply chain. For example, our medical device assembly operation in Shanghai, China, serves our global medical customers, our service center in Singapore improves our capabilities in Asia for our temperature sensor customers, and our engineering and marketing offices in Bangalore, India, facilitate marketing opportunities in India. Other enhancements include combining sales and marketing forces of our operating units where appropriate, cross-training our sales representatives on multiple product lines, and cross-stocking our spares and components.

In the technical and highly engineered product segments in which we compete, relationship selling is particularly important in targeted marketing segments where customer and supplier design and engineering inputs need to be tightly integrated. Participation in industry trade shows is an effective method of meeting customers, introducing new products, and exchanging technical specifications. In addition to technical and industry conferences, our products are supported through direct internal international sales efforts, as well as through manufacturer representatives and selected distributors. As of September 29, 2017, 364 sales people, 253 representatives, and 315 distributors supported our operations.

#### Backlog

Backlog was \$1.3 billion at September 29, 2017, and September 30, 2016. We estimate that approximately \$440 million of backlog is scheduled to be shipped after fiscal 2018.

Backlog is subject to cancellation until delivered, and therefore, we cannot assure that our backlog will be converted into revenue in any particular period or at all. Except for the released portion, backlog also does not include

fixed-price, multi-year contracts.

### Competition

Our products and services are affected by varying degrees of competition. We compete with other companies in most markets we serve. Many of these companies have far greater sales volumes and financial resources than we do. Some of our competitors are also our customers or suppliers on certain programs. The principal competitive factors in the commercial markets in which we participate are customer intimacy, product performance, on-time delivery performance, quality, service and price. Part of product performance requires expenditures in research and development that lead to product improvement. The market for many of our products may be affected by rapid and significant technological changes and new product introductions. Our principal competitors include Astronautics, BAE, Bose, Eaton, Elbit, EMS, Essex Industries, GE Aerospace, Honeywell, IAI, L-3, Otto Controls, RAFI, Rockwell Collins, SELEX, Telephonics, Thales, Ultra Electronics, Universal Avionics Systems Corporation, and Zodiac in our Avionics & Controls segment; Ametek, Amphenol, Eaton, Meggitt, STPI-Deutsch, TE Connectivity, Woodward and Zodiac in our Sensors & Systems segment; and Alloy Surfaces, AMTEC, Chemring, Doncasters, Hi-Temp, J&M, JPR Hutchinson, Kmass,

Meggitt (including Dunlop Standard Aerospace Group), Rheinmetall, Trelleborg, ULVA, UTC Aerospace Systems, UMPCO, and Woodward Products in our Advanced Materials segment.

#### Research and Development

Our product development and design programs utilize an extensive base of professional engineers, technicians and support personnel, supplemented by outside engineering and consulting firms when needed. In fiscal 2017 we expended \$103.0 million for research, development and engineering, compared with \$95.9 million in fiscal 2016 and \$100.4 million in the recast twelve-month period of fiscal 2015. Research and development expense has averaged 5.0% of sales per year for the three years ended September 29, 2017. We believe continued product development is key to our long-term growth, and consequently, we consistently invest in research and development. Examples include research and development projects relating to avionics displays, power systems, and controls. We actively participate in customer-funded research and development programs.

#### Foreign Operations

Our foreign operations consist of manufacturing facilities located in Belgium, Canada, China, the Dominican Republic, France, Germany, India, Mexico, Morocco, and the United Kingdom, and include sales and service operations located in Brazil, China, and Singapore. For further information regarding foreign operations, see Note 18 to the Consolidated Financial Statements under Item 8 of this report.

#### U.S. Government Contracts and Subcontracts

As a contractor and subcontractor to the U.S. government (primarily the DoD), we are subject to various laws and regulations that are more restrictive than those applicable to private sector contractors. Approximately 3% of our sales was made directly to the U.S. government in fiscal 2017. In addition, we estimate that our subcontracting activities to contractors for the U.S. government accounted for approximately 18% of sales during fiscal 2017. In total, we estimate that approximately 21% of our sales during the fiscal year were subject to U.S. government contracting regulations. Such contracts may be subject to termination, reduction or modification in the event of changes in government requirements, reductions in federal spending, and other factors.

Historically, our U.S. government contracts and subcontracts have been predominately fixed-price contracts. Generally, fixed-price contracts offer higher margins than cost-plus contracts in return for accepting the risk that increased or unexpected costs may reduce anticipated profits or cause us to sustain losses on the contracts. The accuracy and appropriateness of certain costs and expenses used to substantiate our direct and indirect costs for the U.S. government under both cost-plus and fixed-price contracts are subject to extensive regulation and audit by the Defense Contract Audit Agency, an arm of the DoD. The contracts and subcontracts to which we are a party are also subject to profit and cost controls and standard provisions for termination at the convenience of the U.S. government. Upon termination, other than for our default, we will normally be entitled to reimbursement for allowable costs and to an allowance for profit.

#### Trade Compliance Regulations

We are subject to U.S. export laws and regulations, including the ITAR, that generally restrict the export of defense products, technical data, and defense services. On March 5, 2014, the Company entered into a Consent Agreement with the DTCC to resolve alleged ITAR civil violations. The Consent Agreement settled the pending ITAR compliance matter with the DTCC previously reported by the Company that resulted from voluntary reports the Company filed with DTCC that disclosed possible technical and administrative violations of the ITAR. The Consent Agreement had a three-year term and provided for: (i) a payment of \$20 million, \$10 million of which was suspended and eligible for offset credit based on verified expenditures for past and future 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 compliance measures and additional remedial compliance measures related to automated systems and ITAR compliance policies, procedures, and training. The \$10 million portion of the settlement that was not subject to suspension was paid. Compliance expense associated with these measures was \$7.1 million in fiscal 2017 and \$10.4 million in the prior-year period. In fiscal 2016, the DTCC approved costs we incurred to implement compliance measures to fully offset the \$10 million suspended payment. The Consent Agreement was closed in the fourth quarter of fiscal 2017.

Our trade activities are also subject to customs and border control regulations, anti-bribery and anti-corruption regulations, and regulations that apply to supply chain activities, such as those relating to conflict minerals and the registration, evaluation, authorization and restriction of chemicals, as well as the defense federal acquisition regulations. Our failure to comply with applicable regulations could result in penalties, loss, or suspension of contracts, breach of contract claims, or other consequences, and the costs to maintain compliance with these regulations may be higher than we anticipate. Any of these consequences could adversely affect our operations or financial condition.

## Intellectual Property

Although we hold a number of patents and licenses, we do not believe that our operations are dependent on our patents and licenses. We have trademark registrations on our important business names and/or product names filed in key jurisdictions where our businesses operate and sell products. In general, we rely on technical superiority, continual product improvement, exclusive product features, lean manufacturing and operational excellence, including superior lead-time, on-time delivery performance and quality, and customer relationships to maintain competitive advantage.

## Seasonality

The timing of our revenues is impacted by the purchasing patterns of our customers, and as a result we do not generate revenues evenly throughout the year. Moreover, our first fiscal quarter, October through December, includes significant holiday vacation periods in both Europe and North America. This leads to decreased order and shipment activity; consequently, first quarter results are typically weaker than other quarters and not necessarily indicative of our performance in subsequent quarters. Beginning in fiscal 2016, we changed our fiscal year to the twelve months ended the last Friday in September to better align with the aerospace industry's business cycle.

## Sources and Availability of Raw Materials and Components

The sources and availability of certain raw materials and components are not as critical as they would be for manufacturers of a single product line, due to our vertical integration and diversification. However, certain components, supplies and raw materials for our operations are purchased from single sources. In such instances, we strive to develop alternative sources and design modifications to minimize the effect of business interruptions.

## Environmental Matters

We are subject to federal, state, local and foreign laws, regulations and ordinances that (i) govern activities or operations that may have adverse environmental effects, such as discharges to air and water, as well as handling and disposal practices for solid and hazardous waste, and (ii) impose liability for the costs of cleaning up, and certain damages resulting from, sites or past spills, disposals or other releases of hazardous substances.

At various times we have been identified as a potentially responsible party pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), and analogous state environmental laws, for the cleanup of contamination resulting from past disposals of hazardous wastes at certain sites to which we, among others, sent wastes in the past. CERCLA requires potentially responsible persons to pay for cleanup of sites from which there has been a release or threatened release of hazardous substances. Courts have interpreted CERCLA to impose strict, joint and several liability on all persons liable for cleanup costs. As a practical matter, however, at sites where there are multiple potentially responsible persons, the costs of cleanup typically are allocated among the parties according to a volumetric or other standard.

We have accrued liabilities for environmental remediation costs expected to be incurred. Environmental exposures are provided for at the time they are known to exist or are considered probable and estimable.

## Employees

We had 13,255 employees at September 29, 2017, of which 4,825 were based in the United States, 4,360 in Europe, 1,498 in Mexico, 981 in Canada, 791 in the Middle East and Asia, 635 in Morocco, and 165 in the Dominican Republic. Approximately 12% of the U.S.-based employees were represented by labor unions. Our non-U.S. operations are subject to union and national trade union agreements and to local regulations governing employment.

Financial Information About Foreign and Domestic Operations and Export Sales

See risk factor below entitled “Political and economic changes in foreign countries and markets, including foreign currency fluctuations, may have a material effect on our operating results” under Item 1A of this report and Note 18 to the Consolidated Financial Statements under Item 8 of this report.

Available Information About the Registrant

You can access financial and other information on our website, [www.esterline.com](http://www.esterline.com). We make available through our website, free of charge, copies of our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), as soon as reasonably practicable after filing such material electronically or otherwise furnishing it to the Securities and Exchange Commission (SEC). The SEC also maintains a website at [www.sec.gov](http://www.sec.gov), which

contains reports, proxy and information statements, and other information regarding public companies, including Esterline. Any reports filed with the SEC may also be obtained from the SEC's Reference Room at 100 F Street, NE, Washington, DC 20549. Our Corporate Governance Guidelines, charters for our required board committees, and our Code of Business Conduct and Ethics, which includes a code of ethics applicable to our accounting and financial employees, including our Chief Executive Officer and Chief Financial Officer, are available on our website, [www.esterline.com](http://www.esterline.com) on the Corporate Governance tab. Both of these documents are also available in print (at no charge) to any shareholder upon request. Our website and the information contained therein or connected thereto are not incorporated by reference into this Form 10-K.

#### Executive Officers of the Registrant

The names and ages of all executive officers of the Company and the positions and offices held by such persons as of November 21, 2017, are as follows:

Name	Position with the Company	Age
Curtis C. Reusser	Chairman, President and Chief Executive Officer	57
Robert D. George	Executive Vice President, Chief Financial Officer and Corporate Development	61
Paul P. Benson	Executive Vice President and Chief Human Resources Officer	53
Marcia J. Mason	Executive Vice President and General Counsel	65
Roger A. Ross	Executive Vice President and President, Sensors & Systems	49
Albert S. Yost	Executive Vice President and President, Advanced Materials and Avionics & Controls	52

Mr. Reusser has been Chairman, President and Chief Executive Officer since March 2014, and served as President and Chief Executive Officer from October 2013 to March 2014. Previously, he was President, Aircraft Systems of UTC Aerospace Systems for United Technologies Corporation, a provider of a broad range of high-technology products and services to the global aerospace and building systems industries, from July 2012 to October 2013. Mr. Reusser has a B.S. degree in Industrial and Mechanical Engineering from the University of Washington and a Certificate in Business Management from the University of San Diego.

Mr. George has been Executive Vice President, Chief Financial Officer and Corporate Development since June 2016. From October 2012 to June 2016, he was Vice President, Chief Financial Officer and Corporate Development. From July 2011 to October 2012, he was Vice President, Chief Financial Officer, Corporate Development and Secretary. Mr. George has an M.B.A. from the Fuqua School of Business at Duke University and a B.A. degree in Economics from Drew University.

Mr. Benson has been Executive Vice President and Chief Human Resources Officer since June 2016. From April 2015 to June 2016, he was Vice President and Chief Human Resources Officer. Prior to that time, he was Vice President, Human Resources from December 2014 to March 2015 and Senior Director, Human Resources from November 2014 to December 2014. Prior to that time, he was Senior Human Resources Director at Hewlett Packard Company, a technology products and services company, from 2006 to November 2014. Mr. Benson has an M.B.A. from Arizona State University and a B.A. degree in Business from St. Martin's College.

Ms. Mason has been Executive Vice President and General Counsel since June 2016. From September 2013 to June 2016, she was Vice President and General Counsel. Prior to that time she was General Counsel and Vice President, Administration from August 2012 to September 2013. Ms. Mason has a J.D. degree from Northwestern University School of Law and a B.A. degree in Political Science from Portland State University.



Mr. Ross has been Executive Vice President and President, Sensors & Systems since June 2016. From August 2015 to June 2016, he was President, Sensors & Systems Segment. Prior to that time, he was Senior Vice President, Actuation & Propeller Systems, at UTC Aerospace Systems for United Technologies Corporation, a provider of a broad range of high-technology products and services to the global aerospace and building systems industries, from January 2014 to July 2015. From January 2010 to December 2013, he was Vice President, Aerostructures Aftermarket at UTC Aerospace Systems for United Technologies Corporation. Mr. Ross has an M.B.A. from the University of Colorado, and M.S. and B.S. degrees in Mechanical Engineering from Colorado State University.

Mr. Yost has been Executive Vice President and President, Advanced Materials and Avionics & Controls since June 2016. From August 2015 to June 2016, he was President, Avionics & Controls and Advanced Materials Segments. Prior to that time, he was President, Advanced Materials Segment since March 2015 and President, Advanced Materials and Treasurer from March 2014 to February 2015. From July 2011 to February 2014, he was Group Vice President and Treasurer. Mr. Yost has an M.B.A. from Utah State University and a B.A. degree in Economics from Brigham Young University.

## Forward-Looking Statements

This annual report on Form 10-K includes forward-looking statements. These statements may be identified by the use of forward-looking terminology such as “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “might,” “plan,” “potential,” “predict,” “should” or “will” or the negative thereof or other variations thereon or comparable terminology. In particular, statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance contained in this report under the headings “Risks Relating to Our Business and Our Industry,” “Management’s Discussion and Analysis of Financial Condition and Results of Continuing Operations” and “Business” are forward-looking statements.

We have based these forward-looking statements on our current expectations, assumptions, estimates and projections. While we believe these expectations, assumptions, estimates and projections are reasonable, such forward-looking statements are only predictions and involve known and unknown risks and uncertainties, many of which are beyond our control. These and other important factors, including those discussed in this report under the headings “Risks Relating to Our Business and Our Industry,” “Management’s Discussion and Analysis of Financial Condition and Results of Continuing Operations” and “Business” may cause our actual results, performance or achievements to differ materially from any future results, performance or achievements expressed or implied by these forward-looking statements. Some of the key factors that could cause actual results to differ from our expectations are:

- A significant reduction in defense spending;
- Loss of a significant customer or defense program;
- Our ability to comply with the complex laws and regulations that affect our business;
- Our inability to execute on our integration plans or otherwise integrate acquired operations or complete acquisitions;
- A significant downturn in the aerospace industry; and
- A decrease in demand for our products as a result of competition, technological innovation or otherwise.

Additionally, our actual sales and operating earnings may vary from quarter to quarter due to the timing of revenue recognition, sales mix and changes in manufacturing efficiency.

Given these risks and uncertainties, you should not place undue reliance on such forward-looking statements. The forward-looking statements included or incorporated by reference into this report are made only as of the date hereof. We do not undertake and specifically decline any obligation to update any such statements or to publicly announce the results of any revisions to any such statements to reflect future events or developments.

## Item 1A. Risk Factors

### Risks Relating to Our Business and Our Industry

The loss of a significant customer or defense program could have a material adverse effect on our operating results.

Some of our operations are dependent on a relatively small number of customers and aerospace and defense programs, which change from time to time. Significant customers in fiscal 2017 included The Boeing Company, Flame, General Electric, Hawker Beechcraft, Honeywell, Lockheed Martin, Northrop Grumman, Rolls-Royce, the DoD, and UTC Aerospace Systems. There can be no assurance that our current significant customers will continue to buy our products at current levels. The loss of a significant customer or the cancellation of orders related to a sole-source defense program could have a material adverse effect on our operating results if we were unable to replace the related sales.

Our revenues and operating results are subject to fluctuations that may cause our operating results to decline.

Our business is susceptible to seasonality, economic cycles and changes to business conditions, and as a result, our operating results have fluctuated widely in the past and are likely to continue to do so. Our revenue tends to fluctuate based on a number of market factors, including domestic and foreign economic conditions and developments affecting the specific industries and customers we serve. For example, it is possible that a global recession could occur and result in a more severe downturn in commercial aviation and defense. In addition, our operating and financial results are impacted by acquisitions, divestitures or adverse business developments. Our ability to effectively manage our portfolio of businesses and our business operations as well as respond to business changes will have an impact on our financial and operating results.

It is also possible that in the future our operating results in a particular quarter or quarters will not meet the expectations of securities analysts or investors, causing the market price of our common stock or senior notes to decline. We believe that quarter-to-quarter comparisons of our operating results are not a good indication of our future performance and should not be relied upon to predict our future performance.

We may be unable to realize expected benefits from our business integration efforts and our profitability may be hurt or our business otherwise might be adversely affected.

In 2014 we began to consolidate certain facilities to create greater cost efficiencies through shared services in sales, general administration and support functions across our segments. In fiscal 2017 we focused on achieving direct and indirect overhead reductions and improving our operational efficiencies at recently consolidated facilities and creating shared services. These integration activities are intended to generate operating expense savings through direct and indirect overhead expense reductions as well as other savings and realizing these savings may be difficult. If we do not successfully manage our continuing integration activities, or any other similar activities that we may undertake in the future, expected efficiencies and benefits might be delayed or not realized, and our operations and business could be disrupted. Risks associated with these actions include inability to complete or delay in the planned transfer of business activities to other locations due to dependency on third-party agreements or certification of projects affected by the transfer, unanticipated costs in implementing the initiatives, delays in implementation of anticipated workforce reductions, adverse effects on employee morale, creation of customer or supplier uncertainty that may impact our business, and the failure to meet operational targets due to the loss of employees. If any of these risks are realized, our ability to achieve anticipated cost reductions may be impaired or our business may otherwise be harmed, which could have a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

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

We are also subject to a variety of U.S. and international export control laws and regulations such as the U.S. Export Administration Regulations (EAR) and ITAR, which generally restrict the export of defense products, technology, technical data and defense services. Our trade activities are also subject to international sanctions that significantly restrict or prohibit the sale of certain goods and services in specified countries, including Russia, in which our customers operate or support programs. Our failure to comply with any of these regulations could result in penalties, loss, or suspension of contracts or other consequences. In addition, we may need to hold shipments or expend significant resources to re-work, re-design or re-certify our products, to achieve compliance with applicable export control regulations. If we are required to take any of these measures, we may lose revenue opportunities, expend significant resources and/or be exposed to late-delivery penalties or other claims from our customers. Any of these could adversely affect our operations and financial condition. As further described in this report under "Item 1," in September 2017 the Consent Agreement with the DTCC arising from our earlier handling of ITAR-controlled transactions, including the substance of prior voluntary disclosures and other aspects of ITAR compliance errors was closed.

We are subject to the Foreign Corrupt Practices Act, or FCPA, the U.K. Bribery Act and other anti-bribery and anti-corruption laws that generally prohibit companies and their intermediaries from bribing foreign officials and non-governmental commercial parties for the purpose of obtaining or keeping business or otherwise obtaining favorable treatment. In particular, we may be held liable for actions taken by our strategic or local partners even though our partners are not subject to these laws. Any determination that we have violated the FCPA, the U.K. Bribery Act or similar laws could result in sanctions that could have a material adverse effect on our business, financial condition and results of operation.

Our financial performance may be adversely affected by information system business disruptions or failures.

Our business may be impacted by information technology attacks or system failures. Cybersecurity attacks, in particular, are evolving and include, but are not limited to, malicious software, attempts to gain unauthorized access to data, and other electronic security breaches that could lead to disruptions in systems, unauthorized release of confidential or otherwise protected information and corruption of data. We have experienced cybersecurity attacks in the past and may experience them in the future, potentially with more frequency. In addition, we have numerous, unique communications, data management and operations support systems across our enterprise that require expertise

and significant resources to maintain and upgrade. We have taken measures to mitigate potential risks to our technology information and systems and are implementing plans to modernize and upgrade our systems, in part to comply with U.S. government contracting requirements and with the European Union (EU) General Data Protection Regulation that will become effective in May 2018. However, our plans to upgrade our systems will take time to deploy across our enterprise and the timing, nature and scope of system disruptions and failures are unpredictable. As a result, we may experience production downtimes, operational delays or other detrimental impacts on our operations or ability to provide products and services to our customers. Our ability to collect and report financial information from our businesses may be impacted. The compromising of confidential or otherwise protected information, destruction or corruption of data, security breaches, or other manipulation or improper use of our systems or networks could occur. We may also experience financial losses from remedial actions, including significant expenditures to restore or replace systems, loss of business or potential liability under contracts or pursuant to regulations that require us to maintain confidential and other data securely, and/or damage to our reputation. Any of these consequences could have a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

Implementing our acquisition strategy involves risks, and our failure to successfully implement this strategy could have a material adverse effect on our business.

One of our key strategies is to grow our business by selectively pursuing acquisitions. Since 1996 we have completed over 30 acquisitions, and we are continuing to actively pursue additional acquisition opportunities, some of which may be material to our business and financial performance. Although we have been successful with this strategy in the past, we may not be able to grow our business in the future through acquisitions for a number of reasons, including:

- Encountering difficulties identifying and executing acquisitions;
- Increased competition for targets, which may increase acquisition costs;
- Consolidation in our industry reducing the number of acquisition targets;
- Competition laws and regulations preventing us from making certain acquisitions; and
- Acquisition financing not being available on acceptable terms or at all.

In addition, there are potential risks associated with growing our business through acquisitions, including the failure to successfully integrate and realize the expected benefits of an acquisition. For example, with any past or future acquisition, there is the possibility that:

- The business culture of the acquired business may not match well with our culture;
- Technological and product synergies, economies of scale and cost reductions may not occur as expected;
- Management may be distracted from overseeing existing operations by the need to integrate acquired businesses;
- We may acquire or assume unexpected liabilities;
- Unforeseen difficulties may arise in integrating operations and systems;
- We may fail to retain and assimilate employees of the acquired business;
- We may experience problems in retaining customers and integrating customer bases; and
- Problems may arise in entering new markets in which we may have little or no experience and managing the resulting portfolio changes.

Failure to continue implementing our acquisition strategy, including successfully integrating acquired businesses, could have a material adverse effect on our business, financial condition and results of operations.

Our future financial results could be adversely impacted by asset impairment charges.

We are required to test both acquired goodwill and other indefinite-lived intangible assets for impairment on an annual basis based upon a fair value approach, rather than amortizing them over time. We have chosen to perform our annual impairment reviews of goodwill and other indefinite-lived intangible assets during the fourth quarter of each fiscal year. We also are required to test goodwill for impairment between annual tests if events occur or circumstances change that would more likely than not reduce our enterprise fair value below its book value.

As we have grown through acquisitions, we have accumulated \$1.1 billion of goodwill, \$41.4 million of indefinite-lived intangible assets, and \$317.8 million of definite-lived intangible assets, out of total assets of \$3.1 billion at September 29, 2017. As a result, the amount of any annual or interim impairment could be significant and could have a material adverse effect on our reported financial results for the period in which the charge is taken.

We performed our annual impairment review for fiscal 2017 as of July 1, 2017, and our review indicated that no impairment of goodwill or other indefinite-lived assets exists at any of our reporting units.

Reductions in defense spending could adversely affect our business.

Approximately 30% of our business is dependent upon defense spending. The defense industry is dependent upon the level of equipment expenditures by the armed forces of countries around the world, and especially those of the United States, which represents a significant portion of worldwide defense expenditures. Reductions in defense spending in

2018 and beyond are possible, which could have significant future consequences to our business, including termination or disruption of programs and personnel reductions that could impact our manufacturing operations and engineering capabilities.

We may have exposure to greater than anticipated tax liabilities and a higher effective tax rate.

We are subject to income taxes in the United States and foreign jurisdictions. Our effective tax rate is influenced by a number of factors, including, but not limited to, the mix of earnings in countries with differing statutory tax rates, modification on tax policy, interpretation of existing tax laws, and our ability to sustain our reporting positions on examination. Any adverse changes in those factors could have a negative effect on our effective tax rate and financial results.

In addition, the U.S. and foreign governments have introduced proposals for changes in tax legislation, or have adopted tax laws in response to the guidelines provided by the Organization for Economic Co-Operation and Development to address base erosion and profit shifting. These changes will increase tax uncertainty and may adversely impact our effective tax rate.

Our operations depend on our production facilities throughout the world. These production facilities are subject to physical and other risks that could disrupt production.

Our production facilities could be damaged or disrupted by a natural disaster, war, political unrest, terrorist activity or a pandemic. In addition, our facilities are subject to local labor conditions that may lead to labor strikes, work stoppages or high levels of employee turnover that could also disrupt our business operations. Several of our production facilities are located in California, and thus are in areas with above average seismic activity and may also be at risk of damage in wildfires. Although we have obtained property damage and business interruption insurance for our production facilities, a major catastrophe such as an earthquake or other natural disaster at any of our sites, or significant labor strikes, work stoppage, political unrest, war or terrorist activities in any of the areas where we conduct operations, could result in a prolonged interruption of our business. Any disruption resulting from these events could cause significant delays in shipments of products and the loss of sales and customers. We cannot assure you that we will have insurance to adequately compensate us for any of these events.

We may not be able to compete effectively.

Our products and services are affected by varying degrees of competition. We compete with other companies and divisions and units of larger companies in most markets we serve, many of which have greater sales volumes or financial, technological or marketing resources than we do. Our principal competitors include: Astronautics, BAE, Bose, Eaton, ECE, Elbit, EMS, GE Aerospace, Honeywell, IAI, L-3, Otto Controls, RAFI, Rockwell Collins, SELEX, Telephonics, Thales, Ultra Electronics, and Universal Avionics Systems Corporation in our Avionics & Controls segment; Ametek, Amphenol, Eaton, ECE, MPC Products, Meggitt, STPI-Deutsch, and TE Connectivity in our Sensors & Systems segment; and Chemring, Doncasters, Hi-Temp, J&M, JPR Hutchinson, Kmass, Meggitt (including Dunlop Standard Aerospace Group), Rheinmetall, Trelleborg, ULVA, UMPCO, and UTC Aerospace Systems in our Advanced Materials segment. The principal competitive factors in the commercial markets in which we participate are product performance, on-time delivery performance, quality, service and price. Maintaining product performance requires expenditures in research and development that lead to product improvement and new product introduction. Companies with more substantial financial resources may have a better ability to make such expenditures. The business model for some of our businesses is based upon access to the aftermarket and its premium pricing over OEM pricing. The strategic goal of our major OEM customers is to increase their access to the aftermarket from their supplier base, which would correspondingly decrease our sales to aftermarket customers. We cannot assure that we will be able to continue to successfully compete in our markets, which could adversely affect our business, financial condition, and results of operations.

The amount of debt we have outstanding, as well as any debt we may incur in the future, could have an adverse effect on our operational and financial flexibility.

As of September 29, 2017, we had approximately \$759.4 million of long-term debt outstanding, including a credit facility and \$17.4 million in current maturities of long-term debt. The credit facility is secured by substantially all of the Company's assets.

Our level of debt could have significant consequences to our business, including the following:

• Depending on interest rates and debt maturities, a substantial portion of our cash flow from operations could be dedicated to paying principal and interest on our debt, thereby reducing funds available for our acquisition strategy, capital expenditures or other purposes, including repurchases of outstanding shares of common stock, depending on



market conditions, share price and other factors;

• A significant amount of debt could make us more vulnerable to changes in economic conditions or increases in prevailing interest rates;

• Our ability to obtain additional financing for acquisitions, capital expenditures or for other purposes could be impaired;

• The increase in the amount of debt we have outstanding increases the risk of non-compliance with some of the covenants in our debt agreements which require us to maintain specified financial ratios; and

• We may be more leveraged than some of our competitors, which may result in a competitive disadvantage.

Political and economic changes in foreign countries and markets, including foreign currency fluctuations, may have a material effect on our operating results.

Foreign sales originating from non-U.S. locations were approximately 49% of our total sales in fiscal 2017, and we have manufacturing facilities in a number of foreign countries. A substantial portion of our Avionics & Controls operations is based in Belgium, Canada and the U.K., and a substantial portion of our Sensors & Systems operations is based in France and the U.K. We also have manufacturing operations in China, the Dominican Republic, Germany, India, Japan, Mexico, and Morocco. Doing

business in foreign countries is subject to numerous risks, including political and economic instability, restrictive trade policies of foreign governments, changes in the local labor-relations climate, economic conditions in local markets, health concerns, inconsistent product regulations or unexpected changes in regulatory and other legal requirements by foreign agencies or governments, the imposition of product tariffs and the burdens of complying with a wide variety of international and U.S. export laws and differing regulatory requirements. U.S. international trade policy is uncertain under the new administration, including, for example, the government's decision to renegotiate the North American Free Trade Agreement, which could cause an increase in customs duties that in turn could adversely affect intercompany transactions among Esterline's operating subsidiaries in Canada, Mexico and the U.S., and increase transaction costs with third party suppliers and customers. Further, the U.K. voter approval of an exit from the EU, known as "Brexit," caused and may continue to cause significant volatility in global stock markets and currency exchange rate fluctuations and may create further global economic uncertainty that may adversely impact the economies of the U.K., the EU and other nations in which we conduct business. To the extent that foreign sales are transacted in a foreign currency, we are subject to the risk of losses due to foreign currency fluctuations. In addition, we have substantial assets denominated in foreign currencies, primarily the British pound, Canadian dollar and euro, that are not offset by liabilities denominated in those foreign currencies. These net foreign currency investments are subject to material changes in the event of fluctuations in foreign currencies against the U.S. dollar.

A global recession may adversely affect our business operations and results, capital, and cost of capital.

In the event of a global recession, our customers may choose to delay or postpone purchases from us until the economy and their businesses strengthen. Decisions by current or future customers to forgo or defer purchases and/or our customers' inability to pay for our products may adversely affect our earnings and cash flow. A recession could also adversely affect our future cost of debt and equity. Any inability to obtain adequate financing from debt and equity sources could force us to self-fund strategic initiatives or even forgo some opportunities, potentially harming our financial position, results of operations, and liquidity.

A downturn in the aircraft market could adversely affect our business.

The aerospace industry is cyclical in nature and affected by periodic downturns that are beyond our control. The principal customers for manufacturers of commercial aircraft are the commercial and regional airlines, which can be adversely affected by a number of factors, including a recession, increasing fuel and labor costs, intense price competition, outbreak of infectious disease and terrorist attacks, as well as economic cycles, all of which can be unpredictable and are outside our control. Any decrease in demand resulting from a downturn in the market could adversely affect our business, financial condition, and results of operations.

Our backlog is subject to modification or termination, which may reduce our sales in future periods.

We currently have a backlog of orders based on our contracts with customers. Under many of our contracts, our customers may unilaterally modify or terminate their orders at any time. In addition, the maximum contract value specified under a government contract awarded to us is not necessarily indicative of the sales that we will realize under that contract. For example, we are a sole-source prime contractor for many different military programs with the U.S. DoD. We depend heavily on the government contracts underlying these programs. Over its lifetime, a program may be implemented by the award of many different individual contracts and subcontracts. The funding of government programs is subject to congressional appropriation.

Changes in defense procurement models may make it more difficult for us to successfully bid on projects as a prime contractor and limit sole-source opportunities available to us.

In recent years the trend in combat system design and development appears to be evolving toward the technological integration of various battlefield components, including combat vehicles, command and control network communications, advanced technology artillery systems and robotics. If the U.S. military procurement approach

continues to require this kind of overall battlefield combat system integration, we expect to be subject to increased competition from aerospace and defense companies which have significantly greater resources than we do.

We may lose money or generate less than expected profits on our contracts, including our fixed-price contracts.

Our customers set demanding specifications for product performance, reliability and cost. Some of our government contracts and subcontracts provide for a predetermined, fixed price for the products we make regardless of the costs we incur. Therefore, we must absorb cost overruns, notwithstanding the difficulty of estimating all of the costs we will incur in performing these contracts and in projecting the ultimate level of sales that we may achieve. Our failure to accurately scope the statement of work, anticipate technical problems, estimate costs accurately, integrate technical processes effectively, reduce dependency on sole-source or poor-performing suppliers, control costs or otherwise meet contractual obligations such as timely delivery and meeting quality specifications during performance of a contract may reduce the profitability or cause a loss on the contract. While we believe that we have recorded adequate provisions in our financial statements for losses on our fixed-price and other contracts as required

under GAAP, we cannot assure that our contract loss provisions will be adequate to cover all actual future losses. Therefore, we may incur losses on contracts that we had expected to be profitable, or such contracts may be less profitable than expected.

Our business is subject to government contracting regulations, and our failure to comply with such laws and regulations could harm our operating results and prospects.

We estimate that approximately 21% of our sales in fiscal 2017 were attributable to contracts in which we were either the prime contractor to, or a subcontractor to a prime contractor to, the U.S. government. As a contractor and subcontractor to the U.S. government, we must comply with laws and regulations relating to the formation, security, administration and performance of federal government contracts that affect how we do business with our customers and may impose added costs to our business. For example, these regulations and laws include provisions that contracts we have been awarded are subject to:

• Protest or challenge by unsuccessful bidders;

- Unilateral termination, reduction or modification in the event of changes in government requirements; and

• Significant data security requirements for our information systems.

The accuracy and appropriateness of certain costs and expenses used to substantiate our direct and indirect costs for the U.S. government under both cost-plus and fixed-price contracts are subject to extensive regulation and audit by the Defense Contract Audit Agency, an arm of the U.S. DoD. Responding to governmental audits, inquiries or investigations may involve significant expense and divert management attention. Our failure to comply with these or other government procurement laws and regulations could result in contract termination, suspension or debarment from contracting with the federal government, loss of opportunities to participate in future government programs, civil fines and damages, and criminal prosecution and penalties, any of which could have a material adverse effect on our operating results.

A significant portion of our business depends on U.S. government contracts, which are often subject to competitive bidding, and a failure to compete effectively or accurately anticipate the success of future projects could adversely affect our business.

We obtain many of our U.S. government contracts through a competitive bidding process that subjects us to risks associated with:

• The frequent need to bid on programs in advance of the completion of their design, which may result in unforeseen technological difficulties and/or cost overruns;

• The substantial time and effort, including design, development and marketing activities, required to prepare bids and proposals for contracts that may not be awarded to us; and

• The design complexity and rapid rate of technological advancement of defense-related products.

In addition, in order to win the award of developmental programs, we must be able to align our research and development and product offerings with the government's changing concepts of national defense and defense systems. The government's termination of, or failure to fully fund, one or more of the contracts for our programs would have a negative impact on our operating results and financial condition. Furthermore, we serve as a subcontractor on several military programs that, in large part, involve the same risks as prime contracts.

Overall, we rely on key contracts with U.S. government entities for a significant portion of our sales and business. A substantial reduction in these contracts would materially adversely affect our operating results and financial position.

The market for our products may be affected by our ability to adapt to technological change.

The rapid change of technology is a key feature of all of the markets in which our businesses operate. To succeed in the future, we will need to design, develop, manufacture, assemble, test, market, and support new products and enhancements to our existing products in a timely and cost-effective manner. Historically, our technology has been developed through internal research and development expenditures, as well as customer-sponsored research and development programs. There is no guarantee that we will continue to maintain, or benefit from, comparable levels of research and development in the future. In addition, our competitors may develop technologies and products that are more effective than those we develop or that render our technology and products obsolete or noncompetitive. Furthermore, our products could become unmarketable if new industry standards emerge. We cannot assure that our existing products will not require significant modifications in the future to remain competitive or that new products we introduce will be accepted by our customers, nor can we assure that we will successfully identify new opportunities, continue to have the needed financial resources to develop new products in a timely or cost-effective manner or execute on a research and development program effectively to yield expected or any return on investment.

The airline industry is heavily regulated and if we fail to comply with applicable requirements, our results of operations could suffer.

Governmental agencies throughout the world, including the U.S. Federal Aviation Administration (FAA), prescribe standards and qualification requirements for aircraft components, including virtually all commercial airline and general aviation products, as well as regulations regarding the repair and overhaul of aircraft engines. Specific regulations vary from country to country, although compliance with FAA requirements generally satisfies regulatory requirements in other countries. We include, with the replacement parts that we sell to our customers, documentation certifying that each part complies with applicable regulatory requirements and meets applicable standards of airworthiness established by the FAA or the equivalent regulatory agencies in other countries. In order to sell our products, we and the products we manufacture, must also be certified by our individual OEM customers. If any of the material authorizations or approvals qualifying us to supply our products is revoked or suspended, then the sale of the subject product would be prohibited by law, which would have an adverse effect on our business, financial condition, and results of operations.

From time to time, the FAA or equivalent regulatory agencies in other countries propose new regulations or changes to existing regulations, which are usually more stringent than existing regulations. If these proposed regulations are adopted and enacted, we may incur significant additional costs to achieve compliance, which could have a material adverse effect on our business, financial condition, and results of operations.

We depend on the continued contributions of our executive officers and other key management, each of whom would be difficult to replace.

Our future success depends to a significant degree upon the continued contributions of our senior management and our ability to attract and retain other highly qualified management personnel. We face competition for management from other companies and organizations. Therefore, we may not be able to retain our existing management personnel or fill new management positions or vacancies created by expansion or turnover at our existing compensation levels. Although we have entered into change of control agreements with members of senior management, we do not have employment contracts with our key executives, nor have we purchased “key-person” insurance on the lives of any of our key officers or management personnel to reduce the impact to our company that the loss of any of them would cause. Specifically, the loss of any of our executive officers would disrupt our operations and divert the time and attention of our remaining officers. Additionally, failure to attract and retain highly qualified management personnel would damage our business prospects.

If we are unable to protect our intellectual property rights adequately, the value of our products could be diminished.

Our success is dependent in part on obtaining, maintaining and enforcing our proprietary rights and our ability to avoid infringing on the proprietary rights of others. While we take precautionary steps to protect our technological advantages and intellectual property and rely in part on patent, trademark, trade secret and copyright laws, we cannot assure that the precautionary steps we have taken will completely protect our intellectual property rights. Because patent applications in the United States are maintained in secrecy until either the patent application is published or a patent is issued, we may not be aware of third-party patents, patent applications and other intellectual property relevant to our products that may block our use of our intellectual property or may be used in third-party products that compete with our products and processes. In the event a competitor successfully challenges our products, processes, patents or licenses or claims that we have infringed upon their intellectual property, we could incur substantial litigation costs defending against such claims, be required to pay royalties, license fees or other damages or be barred from using the intellectual property at issue, any of which could have a material adverse effect on our business, operating results, and financial condition.

In addition to our patent rights, we also rely on unpatented technology, trade secrets and confidential information. Others may independently develop substantially equivalent information and techniques or otherwise

gain access to or disclose our technology. We may not be able to protect our rights in unpatented technology, trade secrets and confidential information effectively. We require each of our employees and consultants to execute a confidentiality agreement at the commencement of an employment or consulting relationship with us. However, these agreements may not provide effective protection of our information or, in the event of unauthorized use or disclosure, they may not provide adequate remedies.

Future asbestos claims could harm our business.

We are subject to potential liabilities relating to certain products we manufactured containing asbestos. We had insurance coverage for asbestos exposures in products prior to November 1, 2003. Since November 1, 2003, insurance coverage for asbestos claims has been unavailable. Our policy coverage for exposures prior to November 1, 2003, declines ratably, by formula, as the number of years increases since coverage expired. Accordingly, we continue to have partial insurance coverage for exposure to asbestos contained in our products prior to November 1, 2003. To date, asbestos claims have not been material to our consolidated results of operations or financial position.

As a result of the termination of the NASA Space Shuttle program, manufacturing of rocket engine insulation material containing asbestos ceased in July 2010. In December 2011, we dismantled our facility used to manufacture the asbestos-based insulation for the Space Shuttle program. We have an agreement for indemnification for certain losses we may incur as a result of asbestos claims relating to a product we previously manufactured, but we cannot assure that this indemnification agreement will fully protect us from losses arising from asbestos claims.

To the extent we are not insured or indemnified for losses from asbestos claims relating to our products, asbestos claims could adversely affect our operating results and our financial condition.

Environmental laws and regulations may subject us to significant liability.

Our business and our facilities are subject to a number of federal, state, local and foreign laws, regulations and ordinances governing, among other things, the use, manufacture, storage, handling and disposal of hazardous materials and certain waste products. Among these environmental laws are rules by which a current or previous owner or operator of land may be liable for the costs of investigation, removal or remediation of hazardous materials at such property. In addition, these laws typically impose liability regardless of whether the owner or operator knew of, or was responsible for, the presence of any hazardous materials. Persons who arrange for the disposal or treatment of hazardous materials may be liable for the costs of investigation, removal or remediation of such substances at the disposal or treatment site, regardless of whether the affected site is owned or operated by them.

Because we own and operate, and previously owned and operated, a number of facilities that use, manufacture, store, handle or arrange for the disposal of various hazardous materials, we may incur costs for investigation, removal and remediation, as well as capital costs, associated with compliance with environmental laws. At the time of our asset acquisition of the Electronic Warfare Passive Expendables Division of BAE Systems North America (BAE), certain environmental remedial activities were required under a Part B Permit issued to the infrared decoy flare facility by the Arkansas Department of Environmental Quality under the Federal Resource Conservation and Recovery Act. The Part B Permit was transferred to our subsidiary, Armtec, along with the remedial obligations. Under the terms of the asset purchase agreement, BAE agreed to perform and pay for these remedial obligations at the infrared decoy flare facility up to a maximum amount of \$25.0 million. BAE is currently conducting monitoring activities as required under the asset purchase agreement.

At the end of fiscal 2017, we had a \$2.0 million liability in current liabilities of businesses held for sale related to the removal of hazardous material at our Wallop countermeasure flare facility.

Although environmental costs have not been material in the past, we cannot assure that these matters, or any similar liabilities that arise in the future, will not exceed our resources, nor can we completely eliminate the risk of accidental contamination or injury from these materials.

An accident at our combustible ordnance or flare countermeasure operations could harm our business.

We are subject to potential liabilities in the event of an accident at our combustible ordnance and flare countermeasure operations. Our products are highly flammable during certain phases of the manufacturing process. Accordingly, our facilities are designed to isolate these operations from direct contact with employees. Our overall safety infrastructure is compliant with regulatory guidelines. In addition, we utilize hazard detection and intervention systems. Our employees receive safety training and participate in internal safety demonstrations. We continuously track safety effectiveness in relation to the U.S. Bureau of Labor Statistics, OSHA, and the HSE in the U.K. to help ensure performance is within industry standards. In addition, we perform on-going process safety hazard analyses, which are conducted by trained safety teams to identify risk areas that arise. We monitor progress through review of safety action reports that are produced as part of our operations. Although we believe our safety programs are robust and our compliance with our programs is high, it is possible for an accident to occur. We have had incidents in the past, including accidents at our Arkansas plant in 2014 and 2016 and an accident at our Wallop plant in 2016. The



accidents in 2016 resulted in three serious injuries and the closure of our Arkansas plant for approximately 4 months. We are insured in excess of our deductible on losses from property, loss of business, and for personal liability claims from an accident; however, we may not be able to maintain insurance coverage in the future at an acceptable cost. Significant losses not covered by insurance could have a material adverse effect on our business, financial condition, and results of operations.

We may be required to defend lawsuits or pay damages in connection with the alleged or actual harm caused by our products.

We face an inherent business risk of exposure to product liability claims in the event that the use of our products is alleged to have resulted in harm to others or to property. For example, our operations expose us to potential liabilities for personal injury or death as a result of the failure of an aircraft component that has been designed, manufactured or serviced by us. We may incur significant liability if product liability lawsuits against us are successful. While we believe our current general liability and

product liability insurance is adequate to protect us from future product liability claims, we cannot assure that coverage will be adequate to cover all claims that may arise. Additionally, we may not be able to maintain insurance coverage in the future at an acceptable cost. Significant losses not covered by insurance or for which third-party indemnification is not available could have a material adverse effect on our business, financial condition, and results of operations.

## Item 2. Properties

The following table summarizes our properties that are greater than 100,000 square feet or related to a principal operation, including identification of the business segment, as of September 29, 2017:

Location	Type of Facility	Business Segment	Approximate Square Footage	Owned or Leased
Brea, CA	Office & Plant	Advanced Materials	325,000	Owned
East Camden, AR	Office & Plant	Advanced Materials	276,000	Leased
Stillington, U.K.	Office & Plant	Advanced Materials	275,000	Owned
Montréal, Canada	Office & Plant	Avionics & Controls	272,000	Owned
Everett, WA	Office & Plant	Avionics & Controls	216,000	Leased
Champagné, France	Office & Plant	Sensors & Systems	191,000	Owned
Tijuana, Mexico	Office & Plant	Advanced Materials	141,000	Leased*
Coeur d'Alene, ID	Office & Plant	Avionics & Controls	140,000	Leased
Coachella, CA	Office & Plant	Advanced Materials	140,000	Owned
Marolles, France	Office & Plant	Sensors & Systems	140,000	Owned
Kortrijk, Belgium	Office & Plant	Avionics & Controls	130,000	Owned
Tijuana, Mexico	Office & Plant	Sensors & Systems	129,000	Leased*
Buena Park, CA	Office & Plant	Sensors & Systems	115,000	Owned**
Tangier, Morocco	Office & Plant	Sensors & Systems	115,000	Leased
Bourges, France	Office & Plant	Sensors & Systems	109,000	Owned
Farnborough, U.K.	Office & Plant	Sensors & Systems	103,000	Leased
Sylmar, CA	Office & Plant	Avionics & Controls	103,000	Leased
Kent, WA	Office & Plant	Advanced Materials	100,000	Owned
Valencia, CA	Office & Plant	Advanced Materials	88,000	Owned
Tijuana, Mexico	Office & Plant	Sensors & Systems	73,000	Leased*
Gloucester, U.K.	Office & Plant	Advanced Materials	68,000	Leased
Tijuana, Mexico	Office & Plant	Sensors & Systems	61,000	Leased*

\* Included in the Company's Tijuana manufacturing campus.

\*\* The building is located on a parcel of land covering 16.1 acres that is leased by the Company.

In total, we own approximately 2,400,000 square feet and lease approximately 2,300,000 square feet of manufacturing facilities and properties.

Item 3. Legal Proceedings

From time to time we are involved in legal proceedings arising in the ordinary course of business. We believe that adequate reserves for these liabilities have been made and that there is no litigation pending that could have a material adverse effect on our results of operations and financial condition.

See Note 12 to the consolidated financial statements included in Part 1, Item 8 of this report for information regarding legal proceedings.

Item 4. Mine Safety Disclosures

Not applicable.

## PART II

## Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

## Market Price of Esterline Common Stock

In Dollars

For Fiscal Years	2017		2016	
	High	Low	High	Low
Quarter				
First	\$94.73	\$69.85	\$96.44	\$75.86
Second	96.50	80.76	81.99	45.12
Third	102.70	83.35	70.52	56.72
Fourth	100.60	76.00	79.10	58.71

Principal Market – New York Stock Exchange

At the end of fiscal 2017, there were approximately 219 holders of record of the Company's common stock. On November 16, 2017, there were 217 holders of record of our common stock.

On June 19, 2014, our Board of Directors approved a \$200 million share repurchase program. On March 11, 2015, our Board of Directors approved an additional \$200 million for the share repurchase program. Under the program, we are authorized to repurchase up to \$400 million of outstanding shares of common stock from time to time, depending on market conditions, share price and other factors. We made no repurchases of common stock during fiscal 2017. Subsequent to September 29, 2017, we repurchased 37,500 shares of common stock for approximately \$2.6 million through November 16, 2017. There is \$88.9 million available for purchase under our share repurchase program after these recent purchases.

No cash dividends were paid during fiscal 2017 and 2016. Our current secured credit facility restricts the amount of dividends we can pay. We do not anticipate paying any dividends in the foreseeable future.

The following graph shows the performance of the Company's common stock compared to the S&P 500 Index, the S&P MidCap 400 Index, and the S&P 400 Aerospace & Defense Index for a \$100 investment made on October 26, 2012.

## Item 6. Selected Financial Data

## Selected Financial Data

In Thousands, Except Per Share Amounts

For Fiscal Years	Twelve Months Ended				
	2017	2016	2015 (Unaudited)  (Recast)	2014	2013
<b>Operating Results <sup>1</sup></b>					
Net sales	\$2,002,195	\$1,992,631	\$2,002,793	\$2,029,471	\$1,866,659
Cost of Sales	1,336,736	1,331,386	1,323,405	1,314,762	1,168,632
Selling, general and administrative	375,413	395,274	384,156	361,190	364,149
Research, development and engineering	103,024	95,939	100,426	97,591	88,982
Restructuring charges	-	4,873	8,143	13,642	-
Insurance recovery	(7,789 )	(5,000 )	-	-	-
Gain on sale of product line	-	-	-	-	(2,264 )
Goodwill impairment	-	-	-	-	3,454
Other income	-	-	(12,503 )	-	-
Operating earnings from continuing operations	194,811	170,159	199,166	242,286	243,706
Interest income	(527 )	(367 )	(632 )	(555 )	(535 )
Interest expense	30,208	30,091	33,114	33,010	39,637
Loss on extinguishment of debt	-	-	11,451	533	946
Earnings from continuing operations before income taxes	165,130	140,435	155,233	209,298	203,658
Income tax expense	38,928	22,535	26,911	43,716	32,803
Earnings from continuing operations attributable to Esterline, net of tax	124,698	116,951	127,895	165,029	169,125
Earnings (loss) from discontinued operations attributable to Esterline, net of tax	(7,311 )	(15,266 )	(40,319 )	(62,611 )	(4,391 )
Net earnings attributable to Esterline	117,387	101,685	87,576	102,418	164,734
Gross profit as a percent of sales	33.2 %	33.2 %	33.9 %	35.2 %	37.4 %

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Selling, general and administrative

as a percent of sales	18.8	%	19.8	%	19.2	%	17.8	%	19.5	%
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Research, development and

engineering as a percent of sales	5.1	%	4.8	%	5.0	%	4.8	%	4.8	%
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Earnings from continuing operations

before income taxes as a percent

of sales	8.2	%	7.0	%	7.8	%	10.3	%	10.9	%
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Earnings from continuing operations

attributable to Esterline, net of tax,

as a percent of sales	6.2	%	5.9	%	6.4	%	8.1	%	9.1	%
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Earnings (loss) per share attributable to Esterline - diluted:

Continuing operations	\$4.15		\$3.93		\$4.10		\$5.09		\$5.33	
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Discontinued operations	(0.24	)	(0.51	)	(1.29	)	(1.93	)	(0.14	)
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Earnings (loss) per share - diluted	3.91		3.42		2.81		3.16		5.19	
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## Selected Financial Data

In Thousands, Except Per Share Amounts

For Fiscal Years	Eleven Months Ended			
	2015	2014	(Unaudited)	
			(Recast)	
Operating Results <sup>1</sup>				
Net sales	\$1,774,449	\$1,801,127		
Cost of Sales	1,185,056	1,176,413		
Selling, general and administrative	346,781	323,957		
Research, development and engineering	91,491	88,656		
Restructuring charges	6,639	12,103		
Other income	(12,503 )	-		
Operating earnings from continuing operations	156,985	199,998		
Interest income	(578 )	(501 )		
Interest expense	30,090	29,986		
Loss on extinguishment of debt	11,451	533		
Earnings from continuing operations before income taxes	116,022	169,980		
Income tax expense	18,956	35,759		
Earnings from continuing operations attributable to Esterline, net of tax	96,665	133,694		
Earnings (loss) from discontinued operations attributable to Esterline, net of tax	(37,053 )	(59,240 )		
Net earnings attributable to Esterline	59,612	74,454		
Gross profit as a percent of sales	33.2	% 34.7		%
Selling, general and administrative as a percent of sales	19.5	% 18.0		%
Research, development and engineering as a percent of sales	5.2	% 4.9		%
Earnings (loss) per share attributable to Esterline - diluted:				
Continuing operations	\$3.10	\$4.12		
Discontinued operations	(1.19 )	(1.83 )		
Earnings (loss) per share - diluted	1.91	2.29		

## Selected Financial Data

In Thousands, Except Per Share Amounts

For Fiscal Years	2017	2016	2015	2014	2013
Financial Structure					
Total assets	\$3,130,323	\$3,032,031	\$3,000,488	\$3,193,467	\$3,262,112
Credit facilities	50,000	155,000	160,000	100,000	130,000
Long-term debt, net	709,424	698,796	701,457	509,720	537,859
Total Esterline shareholders' equity	1,836,607	1,600,557			