UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
# FORM 10-K

**(Mark One)**

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018**

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

**Commission file number 001-16445**

## Rockwell Collins, Inc .
**(Exact name of registrant as specified in its charter)**

| | |
|---|---|
| **Delaware** | **52-2314475** |
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |
| **400 Collins Road NE Cedar Rapids, Iowa** | **52498** |
| (Address of principal executive offices) | (Zip Code) |

**Registrant's telephone number, including area code: (319) 295-1000**

**SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:**

| **Title of each class** | **Name of each exchange on which registered** |
|---|---|
| Common Stock, par value $.01 per share | 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 ☐

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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulations S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit 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 the 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, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

| | |
|---|---|
| Large accelerated filer ☑ | Accelerated filer ☐ |
| Non-accelerated filer ☐ | 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 ☑

The aggregate market value of the registrant's voting stock held by non-affiliates of the registrant on March 30, 2018 was approximately $22.1 billion. For purposes of this calculation, the registrant has assumed that its directors and executive officers are affiliates.

164,629,890 shares of the registrant's Common Stock were outstanding on October 31, 2018.

**DOCUMENTS INCORPORATED BY REFERENCE**

Certain information contained in the Proxy Statement for the Annual Meeting of Shareowners of the registrant to be held in 2019 is incorporated by reference into Part III.

**ROCKWELL COLLINS, INC.**

**Annual Report on Form 10-K**

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PART I

**Item 1.** ***Business.***

**General**

Rockwell Collins, Inc. (the Company or Rockwell Collins) designs, produces and supports cabin interior, communications and aviation systems and products for commercial and military customers and provides information management services through voice and data communication networks and solutions worldwide. The integrated system solutions and products we provide to our served markets are oriented around a set of core competencies: communications, navigation, automated flight control, displays/surveillance, bespoke interior products, simulation and training, integrated electronics and information management systems. We also provide a wide range of services and support to our customers through a worldwide network of service centers, including equipment repair and overhaul, service parts, field service engineering, training, technical information services and aftermarket used equipment sales. The structure of our business allows us to leverage these core competencies across markets and applications to bring high value solutions to customers. We operate in multiple countries and are headquartered in Cedar Rapids, Iowa.

Our Company's heritage is rooted in the Collins Radio Company, established in 1933. Rockwell Collins, Inc., the parent company, is incorporated in Delaware. As used herein, the terms "we", "us", "our", "Rockwell Collins" or the "Company" include subsidiaries and predecessors unless the context indicates otherwise.

Whenever reference is made in any Item of this Annual Report on Form 10-K to information in our Proxy Statement for the Annual Meeting of Shareowners to be held in 2019 ( 2019 Proxy Statement), such information shall be deemed to be incorporated herein by such reference.

All date references contained herein relate to our fiscal year ending on the Friday closest to September 30 unless otherwise stated. For ease of presentation, September 30 is utilized consistently throughout this report to represent the fiscal year end date. Fiscal years 2018 , 2017 and 2016 were 52-week fiscal years.

**Proposed Acquisition by United Technologies Corporation**

On September 4, 2017, the Company entered into an Agreement and Plan of Merger (the “Merger Agreement”) with United Technologies Corporation, a Delaware corporation (“UTC”), and Riveter Merger Sub Corp., a Delaware corporation and a wholly owned subsidiary of UTC (“Merger Sub”). Upon the terms and subject to the conditions set forth in the Merger Agreement, at the closing, Merger Sub will merge with and into Rockwell Collins, with Rockwell Collins surviving as a wholly owned subsidiary of UTC (the “UTC Merger”).

Pursuant to the Merger Agreement, at the effective time of the UTC Merger (the “Effective Time”), each share of Rockwell Collins common stock, par value $0.01 per share, issued and outstanding immediately prior to the Effective Time (other than (1) shares held by Rockwell Collins as treasury stock, UTC, or any subsidiaries of Rockwell Collins or UTC and (2) shares held by a holder who has properly exercised and perfected (and not effectively withdrawn or lost) such holder’s demand for appraisal rights under Section 262 of the General Corporation Law of the State of Delaware, which in each case will be treated as described in the Merger Agreement) will be converted into the right to receive (1) $93.33 in cash, without interest, plus (2) a fraction of a share of UTC common stock having a value equal to the quotient obtained by dividing $46.67 by the average of the volume-weighted average prices per share of UTC common stock on the New York Stock Exchange for each of the 20 consecutive trading days ending with the trading day immediately prior to the closing date (the “UTC stock price”), subject to a two-way collar mechanism described below (together, the “Merger Consideration”), less any applicable withholding taxes.

The fraction of a share of UTC common stock into which each such share of Rockwell Collins common stock will be converted is referred to as the exchange ratio. The exchange ratio will depend upon the UTC stock price. If the UTC stock price is greater than $107.01 but less than $124.37, the exchange ratio will be equal to the quotient of (i) $46.67 divided by (ii) the UTC stock price, which, in each case, will result in the stock consideration having a value equal to $46.67. If the UTC stock price is less than or equal to $107.01 or greater than or equal to $124.37, a two-way collar mechanism will apply, pursuant to which (i) if the UTC stock price is greater than or equal to $124.37, the exchange ratio will be fixed at 0.37525 and the value of the stock consideration will be more than $46.67, and (ii) if the UTC stock price is less than or equal to $107.01, the exchange ratio will be fixed at 0.43613 and the value of the stock consideration will be less than $46.67.

The completion of the UTC Merger is subject to customary conditions, including, without limitation, (1) the absence of any order or law that has the effect of enjoining or otherwise prohibiting the completion of the UTC Merger or resulting in the occurrence of certain conditions specified in the Merger Agreement and (2) the absence of a material adverse effect on Rockwell Collins and UTC. The completion of the UTC Merger is not subject to the approval of UTC's shareowners or the receipt of financing by UTC.

The Company and UTC have made customary representations and warranties in the Merger Agreement. The Merger Agreement also contains customary covenants and agreements, including covenants and agreements relating to (a) the conduct of each of the Company's and UTC's respective businesses between the date of the signing of the Merger Agreement and the consummation of the UTC Merger, and (b) the efforts of the parties to cause the UTC Merger to be completed.

The Merger Agreement includes termination provisions for both Rockwell Collins and UTC. The Merger Agreement provides that the Company may be required to pay UTC a termination fee equal to $695 million if the Merger Agreement is terminated by the Company under certain circumstances described in the Merger Agreement.

**Financial Information About Our Operating Segments**

Financial information with respect to our operating segments, including product line disclosures, revenues, operating earnings and total assets, is contained under the caption ***Segment Financial Results*** in ***Management's Discussion and Analysis of Financial Condition and Results of Operations*** in Item 7 below and in Note 21 of the ***Notes to Consolidated Financial Statements*** in Item 8 below.

**Access to the Company's Reports and Governance Information**

We maintain an internet website at www.rockwellcollins.com . Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to such reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge on this site as soon as reasonably practicable after the reports are filed with or furnished to the Securities and Exchange Commission (SEC). All reports we file with the SEC are also available free of charge via EDGAR through the SEC website at www.sec.gov . We also post corporate governance information (including our corporate governance guidelines and Board committee charters) and other information related to our Company on our internet website where it is available free of charge. We will provide, without charge, upon written request, copies of our SEC reports and corporate governance information. Our internet website and the information contained therein or connected thereto are not incorporated into this Annual Report on Form 10-K.

**Description of Business by Segment**

We serve a worldwide customer base through our Interior Systems, Commercial Systems, Government Systems and Information Management Services operating segments. These four segments are described in detail below.

***Interior Systems***

On April 13, 2017, we acquired B/E Aerospace and formed the Interior Systems business segment. Our Interior Systems business manufactures cabin interior products for commercial aircraft and business aviation customers. We sell our products and provide our services directly to virtually all of the world's major airlines and aerospace manufacturers. We have achieved a leading global market position in each of our major product categories, which include:

- commercial aircraft seats, including an extensive line of super first class, first class, business class, economy class and regional aircraft seats
- a full line of aircraft food and beverage preparation and storage equipment, including coffee and espresso makers, water boilers, beverage containers, refrigerators, freezers, chillers and a line of microwave, high efficiency convection and steam ovens
- modular lavatory systems, wastewater management systems and galley systems
- both chemical and gaseous aircraft oxygen storage, distribution and delivery systems, protective breathing equipment and a broad range of lighting products
- business jet and general aviation interior products, including an extensive line of executive aircraft and helicopter seats, direct and indirect overhead lighting systems, exterior lighting systems, passenger and crew oxygen systems, air valve systems and high-end aircraft monuments

Interior Systems sales are categorized by product type into interior products and services and aircraft seating.

Interior products and services includes a portfolio of interior structure products (galley structures, food and beverage preparation equipment, water and waste systems), integrated engineering services, oxygen and passenger service equipment, cabin lighting systems, de-icing equipment and aftermarket services. These products and services are marketed and sold to original equipment manufacturers (OEMs) as well as airliner customers.

Aircraft seating includes a portfolio of innovative and bespoke seating products for applications on all classes of commercial, business aviation, executive and helicopter platforms for line fit and retrofit programs. These products are marketed and sold directly to OEMs, airlines and completion centers across the globe.

***Commercial Systems***

Our Commercial Systems segment supplies aviation electronics systems, products and services to customers located throughout the world. The customer base is comprised of OEMs of commercial air transport, business and regional aircraft, commercial airlines and business aircraft operators. Our systems and products are used in both OEM applications as well as in retrofit and upgrade applications designed to increase the efficiency and enhance the value of existing aircraft.

Our commercial aviation electronics systems, products and services include:

- integrated avionics systems, such as Pro Line Fusion ®, which provide advanced avionics capabilities to meet the challenges of operating in the next generation global airspace. Pro Line Fusion ® capabilities include: touch control primary flight displays, advanced flight and performance management, flight guidance and information management
- integrated cabin electronics solutions, including cabin management systems with touch-screen controls, wireless connectivity equipment, high definition video and audio, and entertainment and information content such as Airshow moving maps
- communications systems and products, such as data link, high frequency (HF), very high frequency (VHF) and satellite communications systems
- navigation systems and products, including landing sensors to enable fully automatic landings, radio navigation and geophysical sensors, as well as flight management systems
- situational awareness and surveillance systems and products, such as synthetic and enhanced vision systems, surface surveillance and guidance solutions, head-up guidance systems, weather radar and collision avoidance systems
- integrated flight controls including fly-by-wire, advanced flight guidance with auto-land capability
- simulation and training systems, including full-flight simulators for crew training, visual system products, training systems and engineering services
- maintenance, repair, parts, after-sales support services and aftermarket used equipment

Commercial Systems sales are categorized into air transport aviation electronics and business and regional aviation electronics. Product category sales are delineated based upon the difference in the underlying customer base, size of aircraft and markets served.

Air transport aviation electronics include avionics, cabin systems and flight control systems for large commercial transport aircraft platforms. We design these items as sub-systems and work with OEMs to integrate with other suppliers' products into the flight deck and broader aircraft systems. Our products offered for OEM applications in the air transport category are marketed directly to aircraft OEMs and airline operators, while our products offered for aftermarket applications are primarily marketed to airline operators.

Business and regional aviation electronics include integrated avionics, cabin management and flight control systems for application on regional and business aircraft platforms. We develop integrated avionics, cabin and flight control solutions for business and regional aircraft OEMs and support them with integration into other aircraft systems. Products offered for OEM applications in the business and regional aircraft category are marketed directly to the aircraft OEMs. Products offered for aftermarket applications are primarily marketed through distributors for business aviation and directly to regional airline operators.

***Government Systems***

Our Government Systems segment provides a broad range of electronic products, systems and services to customers including the U.S. Department of Defense, various ministries of defense, other government agencies and defense contractors around the world. Our defense electronic solutions are designed to meet a wide range of customer requirements, but tend to share certain characteristics including design for rugged environments and use in size, weight and power constrained applications. These applications also typically have stringent product integrity and certification requirements with a high degree of customer oversight. These products, systems and services support airborne, precision weapon, ground and maritime applications on new equipment as well as in retrofit and upgrade applications designed to extend the service life and enhance the capability of existing aircraft, vehicle and weapon platforms.

Our defense-related systems, products and services include:

- communications systems and products designed to enable the transmission of information across the communications spectrum
- navigation products and systems, including radio navigation products, global positioning system (GPS) equipment and multi-mode receivers
- avionics systems for aircraft flight decks, including cockpit display products (multipurpose flat panel head-down displays, wide field of view head-up and helmet-mounted displays), flight controls, information/data processing and communications, navigation, safety and surveillance systems
- precision targeting, electronic warfare and range and training systems
- simulation and training systems, including visual system products, training systems and services
- space wheels for satellite stabilization
- maintenance, repair, parts, after-sales support services and aftermarket used equipment

Government Systems sales are categorized into avionics and communication and navigation products. Product category sales are delineated based upon underlying product technologies.

Avionics consists of electronic solutions for a broad range of airborne platforms including fixed wing aircraft and military and civil rotary wing aircraft, unmanned aerial systems (UAS) and the associated aircrew and maintenance training devices and services. We provide complete avionics solutions, including cockpit avionics, mission system applications and system integration, and also provide individual avionics products to platform integrators. We serve various roles within these markets including system and sub-systems integrator as well as provider of various electronic products. For the UAS market we provide cost effective, high performance integrated flight control, navigation, communication and sensor capabilities. Simulation and training solutions are provided for both fixed and rotary wing aircraft.

Communication and navigation products include full spectrum communication solutions for voice and data connectivity for government and military use in the air, on the ground and at sea. These communication products support military user requirements for high availability, highly secure, jam resistant wireless communication. Products include radio communication, data links, electronic warfare and networked communication systems. The navigation products are primarily comprised of global positioning system based products used for precision navigation and targeting applications. These applications include airborne, vehicular, maritime, soldier navigation devices, precision targeting subsystems, precision-guided weapons products, range and training systems and a variety of embedded GPS applications. Additional offerings include customized fully integrated thermal and power management solutions for participants in the defense industry, OEMs and the airlines.

***Information Management Services***

Our Information Management Services (IMS) segment provides communications services, systems integration and security solutions across the aviation, airport, rail and nuclear security markets to customers located around the world. The customer base includes commercial airlines, business aircraft operators, the U.S. Federal Aviation Administration (FAA), airport and critical infrastructure operators and major passenger and freight railroads. In October 2018, we announced that IMS will become part of the Commercial Systems segment. This reorganization will enable us to further capitalize on customers' increasing need for aviation connectivity solutions. This change will require us to revise our segment reporting beginning in the first quarter of fiscal 2019 to report the IMS business within the Commercial Systems segment.

Our information management services include:

- voice and data communication services, such as air-to-ground GLOBALink SM and ground-to-ground AviNet ® services, which enable satellite, VHF and HF transmissions between the cockpit, air traffic control, airline operation centers, reservation systems and other third parties ensuring safety and efficiency for commercial airlines and other related entities in the aviation ecosystem
- global, high throughput cabin connectivity solutions enabling airlines to provide an enhanced experience for their passengers and improved operational efficiency for crews
- robust connectivity management services that ensure interoperability between smart aircraft and legacy airline systems, allowing airlines to increase efficiency, reduce costs and enhance operations
- cybersecurity as a service to protect the integrity of our customers' information systems across a wide variety of domains including aviation, airports, rail and critical infrastructure
- around the clock global flight support services for business aircraft operators, under the ARINCDirect SM brand, including flight planning and datalink, international trip support, cabin connectivity solutions and flight operations management software
- airport communications and information systems designed to ease congestion and improve airport efficiency via airline agent and self-service check-in, airport operations, baggage management, boarding and access control solutions
- train dispatching and information systems including solutions to support positive train control as mandated by the 2008 Railroad Safety Improvement Act
- mission critical security command and control systems for nuclear power facilities with functions such as intrusion detection, access control, video and credential management and vehicle identification

**Customers, Sales and Marketing**

We serve a broad range of customers worldwide, including the U.S. Department of Defense, U.S. Coast Guard, civil agencies, airports, defense contractors, foreign ministries of defense, manufacturers of commercial helicopters, manufacturers of commercial air transport, airframe manufacturers, defense manufacturers, business and regional aircraft, commercial airlines, aerospace OEMs, fractional and other business jet operators, the FAA, critical infrastructure operators and major passenger and freight railroads. We market our systems, products and services directly to our customers through an internal marketing and sales force. In addition, we utilize a worldwide dealer network to distribute our products and international sales representatives to assist with international sales and marketing. In 2018 , various branches of the U.S. Government, both directly and indirectly through subcontracts, accounted for 23 percent of our total sales. Sales to The Boeing Company represented 16 percent of total sales in 2018.

Our largest customers have substantial bargaining power with respect to price and other commercial terms. Although we believe that we generally enjoy good relations with our customers, the loss of all or a substantial portion of our sales to any of our large volume customers for any reason, including the loss of contracts, bankruptcy, reduced or delayed customer requirements, strikes or other work stoppages affecting production by these customers, could have a material adverse effect on our business, financial condition, results of operations and cash flows.

**Competition**

We operate in a highly competitive environment. Principal competitive factors include total cost of ownership, product and system performance, network coverage, quality, service, warranty and indemnification terms, technology, design engineering capabilities, new product innovation and timely delivery. We compete worldwide with a number of U.S. and non-U.S. companies in each of our businesses. Many of these competitors are also our suppliers or customers. Principal competitors include BAE Systems Aerospace, Inc.; CAE Inc.; Diehl Aerosystems Holding GmBH; Elbit Systems Ltd.; Esterline Technologies Corp.; FlightSafety International; Garmin International Inc.; General Dynamics Corporation; General Electric Co.; Harris Corp.; Honeywell International, Inc.; Jamco America, Inc.; L3 Communications, Inc.; Northrop Grumman Corp.; Raytheon Co.; Recaro Aircraft Seating GmbH & Co. KG; Safran; Satcom Direct, Inc.; SITA; Thales S.A.; The Boeing Company; and Thompson Aero Seating Ltd. Several of our competitors are significantly larger than we are in terms of resources and market share and can offer a broader range of products. We believe that our systems, products and services are well positioned to compete in our served markets.

Industry consolidation has from time to time had a major impact on the competitive environment in which we operate. Our competitors periodically undertake mergers, alliances and realignments that contribute to a dynamic competitive landscape. We have contributed to this changing landscape in the past two years by completing a significant acquisition (B/E Aerospace, Inc.), one smaller acquisition and several strategic alliances to improve our competitive position and expand our market reach.

**Raw Materials, Supplies and Working Capital**

We believe we have adequate sources for the supply of raw materials and components for our manufacturing and service needs with suppliers located around the world. Electronic components and other raw materials used in the manufacturing of our products are generally available from several suppliers. We continue to work with our supply base for raw materials and components to ensure an adequate source of supply, utilizing strategic alliances, dual sourcing, identification of substitute or alternate parts that meet performance requirements and life-time buys. These life-time buys involve purchases of multiple years of supply in order to meet production and service requirements over the life span of a product. Although historically we have not experienced any significant difficulties in obtaining an adequate supply of raw materials and components necessary for our manufacturing operations or service needs, the loss of a significant supplier or the inability of a supplier to meet performance and quality specifications or delivery schedules could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our investment in inventory is a significant part of our working capital, and historically we have maintained sufficient inventory to meet our customers' requirements on a timely basis. This investment includes production stock, work-in-process, pre-production engineering costs, finished goods, spare parts and goods on consignment. Our accounts receivable also constitute a significant part of our working capital. Accounts receivable includes unbilled receivables which are primarily related to sales recorded under the percentage-of-completion method of accounting in accordance with applicable contract terms that have not been billed to customers. The critical accounting policies involving pre-production engineering costs and long-term contracts are discussed under the caption ***Management's Discussion and Analysis of Financial Condition and Results of Operations*** in Item 7 below. Additional information relating to accounts receivable and inventory is contained in Notes 2, 5 and 6 of the ***Notes to Consolidated Financial Statements*** in Item 8 below.

**Backlog**

The following table summarizes our backlog:

| | September 30 | |
|---|---|---|
| (in billions) | **2018** | 2017 |
| Interior Systems | **$ 3.9** | $ 3.6 |
| Commercial Systems | **2.4** | 2.2 |
| Government Systems: | | |
| Funded orders | **2.8** | 2.7 |
| Unfunded orders | **0.7** | 0.8 |
| Information Management Services | **0.3** | 0.3 |
| Total backlog | **$ 10.1** | $ 9.6 |

Our backlog represents the aggregate of the sales price of orders received from customers, but not recognized as revenue, and excludes unexercised options. Although we believe that the orders included in backlog are firm, most of our backlog orders can be modified or terminated by the customer. Our backlog at September 30, 2018 includes approximately $4.4 billion of orders that are expected to be filled after 2019 .

**Joint Ventures**

Joint ventures, strategic alliances, strategic investments and other cooperative arrangements are part of our business strategies to broaden the market for our products and develop new technologies.

We have a 50 percent ownership interest in each of the following:

- ACCEL (Tianjin) Flight Simulation Co., Ltd, a joint venture with Haite Group, for the joint development and production of commercial flight simulators in China
- ADARI Aviation Technology Company Limited, a joint venture with Aviation Data Communication Corporation Co., LTD, operates remote ground stations around China and develops certain content delivery management software
- AVIC Leihua Rockwell Collins Avionics Company, a joint venture with China Leihua Electronic Technology Research Institute, a subsidiary of the Aviation Industry Corporation of China (AVIC), which provides integrated surveillance system products for the C919 aircraft in China
- Data Link Solutions LLC, a joint venture with BAE Systems, plc, for joint pursuit of the worldwide military data link market
- ESA Vision Systems LLC, a joint venture with Elbit Systems, Ltd., for joint pursuit of helmet-mounted cueing systems for the worldwide military fixed wing aircraft market
- Quest Flight Training Limited, a joint venture with Quadrant Group, plc, which provides aircrew training services primarily for the United Kingdom Ministry of Defence
- Rockwell Collins CETC Avionics Co., Ltd. a joint venture with CETC Avionics Co., Ltd. to develop, produce and maintain communication and navigation products on Chinese commercial OEM platforms

**Acquisitions and Dispositions**

We regularly consider various business opportunities, including strategic acquisitions and alliances, licenses and marketing arrangements. We review the prospects of our existing businesses to determine whether any of them should be modified, sold or otherwise discontinued.

We completed two acquisitions in the past two years to augment our growth plans. These acquisitions were:

- in April 2017, we acquired B/E Aerospace, which provides aircraft cabin interior products and services
- in December 2016, we acquired Pulse.aero, a company specializing in self-bag drop technologies used by airlines and airports

We reached definitive agreements to divest the following three businesses, each of which is still subject to certain conditions to closing:

- in August 2018, we reached an agreement to sell our air transport in-flight entertainment (IFE) business, which designs, manufactures and services in-seat video, overhead video and content services and other products for the air transport IFE market
- in July 2018, we reached an agreement to sell our ElectroMechanical Systems business, which designs, manufactures and services actuation, pilot control and other specialty products for commercial and military aerospace applications. The business is being sold in order to comply with regulatory commitments associated with the pending UTC merger

- in May 2018, we reached an agreement to sell our engineered components business, which manufactures, sells and services diversified engineering components for niche aerospace, military and industrial applications. The business is being sold in order to comply with regulatory commitments associated with the pending UTC merger

Additional information relating to our acquisitions, dispositions and joint ventures is contained in Notes 3, 4 and 8 of the ***Notes to Consolidated Financial Statements*** in Item 8 below.

**Intellectual Property**

Our intellectual property rights include valuable patents, trademarks, copyrights, trade secrets, inventions and other proprietary rights. We own numerous U.S. and foreign patents and have numerous pending patent applications, including patents and patent applications purchased in our acquisitions. We also license certain patents relating to our manufacturing and other activities. While in the aggregate we consider our patents and licenses important to the operation of our business, we do not consider any individual patent or license to be of such importance that the loss or termination of any one patent or license would materially affect us.

Rockwell Automation, Inc. (Rockwell) owns the "Rockwell" name. In connection with our spin-off from Rockwell in 2001, we were granted the exclusive right to continue to use the Rockwell Collins name for use in our business other than in connection with the Rockwell Automation business or industrial automation products. Unless extended, this exclusive right would terminate following certain change of control events, including the completion of the UTC Merger, as described in our distribution agreement with Rockwell.

**Employees**

As of September 30, 2018 , we had approximately 31,200 employees and approximately 67 percent of them were located in the U.S. Approximately 10 percent of our employees located within the U.S. and 9 percent of our employees located outside of the U.S. are covered by collective bargaining agreements. Many of our employees located outside of the U.S. who are not covered by a collective bargaining agreement are represented by workers' councils or statutory labor unions. The collective bargaining agreements for most of our employees covered by collective bargaining were negotiated in 2018 and have varying contract terms between 3 and 5 years.

**Cyclicality and Seasonality**

The markets in which we sell our products are, to varying degrees, cyclical and have experienced periodic upswings and downturns. For example, markets for our commercial aerospace products have experienced downturns during periods of slowdowns in the commercial airline industry and during periods of weak conditions in the economy in general, as demand for new aircraft generally declines during these periods. We believe that we are currently benefiting from robust backlogs in commercial air transportation and increasing content as next generation aircraft enter into service. While we believe our Government Systems business is well positioned, it is also subject to some cyclicality, primarily as a result of U.S. Government defense budget cycles. Additional information related to the defense budget environment can be found under the caption ***Risk Factors*** in Item 1A below.

Our business tends to be seasonal with our fourth quarter usually producing relatively higher sales and cash flow and our first quarter usually producing relatively lower sales and cash flow. A large part of this seasonality variance is attributable to our Government Systems business and relates to the U.S. Government procurement cycle.

**Regulatory Matters**

As a defense contractor, our contract costs are audited and reviewed on a continual basis by the Defense Contract Management Agency and the Defense Contract Audit Agency. Audits and investigations are conducted from time to time to determine if our performance and administration of our U.S. Government contracts are compliant with applicable contractual requirements and procurement regulations and other applicable federal statutes and regulations. Under present U.S. Government procurement regulations, if indicted or adjudged in violation of procurement or other federal civil laws, a contractor, such as us, could be subject to fines, penalties, repayments or other damages. U.S. Government regulations also provide that certain findings against a contractor may lead to suspension or debarment from eligibility for awards of new U.S. Government contracts for up to three years. In addition, we are subject to various non-U.S. governmental contracting requirements.

The sale, installation and operation of our products in commercial aviation applications is subject to continued compliance with applicable regulatory requirements and future changes to those requirements. In the U.S., our commercial aviation products are required to comply with FAA regulations governing production and quality systems, airworthiness and installation approvals, repair procedures and continuing operational safety. Some of our products, such as radio frequency transmitters and receivers, must also comply with Federal Communications Commission (FCC) regulations governing authorization and operational approval of telecommunications equipment. Our communication services offered in the Information Management Services business are also subject to certain FCC regulations.

Internationally, similar requirements exist for communication services, airworthiness, installation and operational approvals. These requirements are administered by the national aviation authorities of each country and, in the case of Europe, coordinated by the European Joint Aviation Authorities. Many countries also impose specific telecommunications equipment requirements, administered through their national aviation authorities or telecommunications authorities. In Europe, approval to import products also requires compliance with European Commission directives, such as those associated with electrical safety, electro-magnetic compatibility, use of metric units of measurement and restrictions on the use of lead.

Products already in service may also become subject to mandatory changes for continued regulatory compliance as a result of any identified safety issue, which can arise from an aircraft accident, incident or service difficulty report.

Our products and technical data are controlled for export and import under various regulatory agencies. Audits and investigations by these agencies are a regular occurrence to ensure compliance with applicable federal statutes and regulations. Violations, including as a successor to an acquired business, can result in fines and penalties assessed against the Company as well as individuals, and the most egregious acts may result in a complete loss of export privileges.

Various anti-bribery and anti-corruption laws, as well as data privacy laws, are applicable to our business operations throughout the world.

Although we do not have any significant regulatory action pending against us, any such action could have a material adverse impact on our business, financial condition, results of operations and cash flows.

**Environmental Matters**

Federal, state and local requirements relating to the discharge of substances into the environment, the disposal of hazardous waste and other activities affecting the environment have had and will continue to have an impact on our manufacturing operations. To date, compliance with environmental requirements and resolution of environmental claims have been accomplished without material effect on our liquidity and capital resources, competitive position or financial condition. We believe that our expenditures for environmental capital investment and remediation necessary to comply with present regulations governing environmental protection and other expenditures for the resolution of environmental claims will not have a material adverse effect on our business or financial condition. Additional information on environmental matters is contained in Note 18 of the ***Notes to Consolidated Financial Statements*** in Item 8 below.

## Item 1A. *Risk Factors.*

**<u>Risks Related to Our Business/Industry:</u>**

***Reduction in U.S. Government spending adversely impacts Government Systems sales and profitability.***

In 2018 , 23 percent of our sales were derived from U.S. Government contracts, both directly and indirectly through subcontracts. While in 2018 the U.S. Congress acted to increase defense funding for the government's fiscal 2018 and 2019 budget periods, U.S. defense funding is expected to continue to be under pressure due to the overall economic environment, budget deficits and competing budget priorities. Cost cutting, efficiency initiatives, reprioritization and other affordability analysis by the U.S. Government on defense spending could present opportunities for us, but continued pressure on U.S. Government spending on defense could also adversely impact our Government Systems sales and profitability.

The U.S. Government has implemented various initiatives to address its fiscal challenges. In August 2011, Congress enacted the Budget Control Act (BCA) of 2011 which imposed spending caps and certain reductions in defense spending over a ten-year period through 2021. These spending caps and reductions, referred to as sequestration, went into effect in March 2013. Through a series of bipartisan agreements, Congress has been able to temporarily lift discretionary spending limits every year through 2019. However, unless a new agreement is enacted, the BCA will again be in force beginning in 2020. The continued uncertainty surrounding the U.S. defense budget could have a material adverse effect on the Company and the defense industry in general.

In years when the U.S. Government does not complete its annual budget and appropriations process prior to the beginning of its fiscal year (October 1), government operations are typically funded through a continuing resolution that authorizes agencies of the U.S. Government to continue to operate in the new year, but generally does not authorize new spending initiatives. During periods covered by a continuing resolution (or until the regular appropriation bills are passed), we may experience delays by the government in the procurement of new or existing products and services which can adversely impact our results of operations and cause variability in the timing of revenue between periods. During 2018, the U.S. Government completed the fiscal year 2019 Defense budget authorization and approval timeline on schedule and thus avoided the need for a continuing resolution for this part of government operations. Should the U.S. Government not complete fiscal year 2020 budgeting and appropriations in the same manner, we expect to be exposed to the effects of a continuing resolution in the future.

We offer a diverse range of defense products and services. We believe that this makes it less likely that cuts in any specific contract or program will have a long-term effect on our business; however, delays or termination of multiple or large programs or contracts could adversely affect our business and future financial performance. Potential changes in funding priorities may afford new or additional opportunities for our businesses in terms of existing, follow-on or replacement programs. While we would expect to compete and be well positioned as the incumbent on existing programs, we may not be successful, and any replacement programs may be funded at lower levels.

***We depend to a significant degree on U.S. Government contracts, which are subject to unique risks.***

In addition to normal business risks, our supply of systems and products to the U.S. Government is subject to unique risks which are largely beyond our control. These risks include:

- dependence on Congressional appropriations and administrative allotment of funds
- the ability of the U.S. Government to terminate, without prior notice, partially completed government programs and contracts that were previously authorized (although we may recover certain costs if terminated for convenience)
- changes in governmental procurement legislation and regulations and other policies which may reflect military and political developments, including U.S. Government initiatives to gain increased access to intellectual property
- significant changes in contract scheduling or program structure, which generally result in delays or reductions in deliveries or timing of cash receipts
- intense competition for available U.S. Government business necessitating increases in time and investment for design and development
- difficulty of forecasting costs and schedules when bidding on developmental and highly sophisticated technical work
- changes over the life of U.S. Government contracts, particularly development contracts, which generally result in adjustments of contract prices
- claims based on U.S. Government work and violation of associated compliance and other requirements, which may result in fines, the cancellation or suspension of payments or suspension or debarment proceedings affecting potential further business with the U.S. Government

***We are subject to risks arising from changes in the competitive environment in which we operate.***

We operate in a highly competitive environment. Many of our competitors are also our suppliers or customers on our programs and may be significantly larger than us. Among others, risks in the competitive environment include:

- increased competition resulting from industry consolidation and original equipment manufacturers' efforts to vertically integrate
- customers seeking more rights in intellectual property developed in connection with their program, price concessions, extensive liability protections and other customer favorable contract terms
- competitors offering lower prices and new solutions, developing new technologies or otherwise capturing more market share

***International conflicts and terrorism may adversely affect our business.***

Conflicts and political turmoil in certain regions outside the United States and the possibility of future terrorist attacks cause significant uncertainty with respect to business and financial markets and may adversely affect our business. These international conflicts also affect the price of oil, which has a significant impact on the financial health of our commercial customers. Although our Government Systems business may experience greater demand for its products as a result of increased government defense spending, factors arising (directly or indirectly) from international conflicts or terrorism which may adversely affect our commercial business include reduced aircraft build rates, upgrades, maintenance and spending on discretionary products, as well as increases in the cost of property and aviation products insurance and increased restrictions placed on our insurance policies.

***Our business is heavily concentrated in the aviation industry.***

As a provider of products and services to the aviation industry, we are significantly affected by the overall economic condition of that industry. The aviation industry is historically cyclical.

Our business, financial condition, results of operations and cash flows may be adversely impacted, among other things, by the following:

- reductions in demand for aircraft and delayed aircraft delivery schedules
- increased vertical integration efforts of the original equipment manufacturers of aircraft
- bankruptcy or other significant financial difficulties of our existing and potential customers
- reductions in the need for, or the deferral of, aircraft maintenance and repair services and spare parts support
- deferral of discretionary spending by our airline customers for cabin retrofit activities
- retirement or storage of older generation aircraft, resulting in fewer retrofits and less demand for services for those aircraft, as well as the increased availability of used or recycled equipment on the market
- limited availability of financing for airlines or aircraft
- impact on the aviation industry due to the volatility of fuel prices
- disruptions to commercial air travel demand

***A global or regional recession may adversely affect us.***

If a recession emerges that impacts where we do business, risks may include:

- declines in revenues, profitability and cash flows from reduced orders, payment delays or other factors caused by the economic problems of our customers
- adverse impacts on our access to short-term commercial paper borrowings or other credit sources
- supply problems associated with any financial constraints faced by our suppliers

***We derive a significant portion of our revenues from international sales and are subject to the risks of doing business outside the U.S.***

In 2018 , 48 percent of our total revenues were from sales of our products and services internationally, including foreign military sales. We expect that international sales will continue to account for a significant portion of our total sales. As a result, we are subject to risks of doing business internationally, including:

- laws, regulations and policies of non-U.S. governments relating to investments and operations, as well as U.S. laws affecting the activities of U.S. companies abroad

- the imposition of tariffs or embargoes, export controls and other trade restrictions, including the recent tariffs imposed by the U.S. and China and the possibility of additional tariffs or other trade restrictions relating to trade between the two countries
- regulatory requirements and potential changes, including anti-bribery, anti-money laundering, antitrust and data privacy requirements
- changes in government spending on defense programs
- uncertainties and restrictions concerning the availability of funding, credit or guarantees
- requirements of certain customers which obligate us to specified levels of in-country purchases, manufacturing or investments, known as offsets, and penalties in the event we fail to perform in accordance with the offset requirements
- impacts associated with foreign currency volatility
- uncertainties as to local laws and enforcement of contract and intellectual property rights
- rapid changes in government, economic and political policies, political or civil unrest or the threat of international boycotts or U.S. anti-boycott legislation

***We have made, and expect to continue to make, strategic acquisitions and partnerships that involve risks and uncertainties.***

We completed two acquisitions in the past two fiscal years. We will consider making minor acquisitions and partnerships in the future in an effort to enhance shareowner value. Acquisitions and partnerships involve certain risks and uncertainties, such as:

- difficulty in integrating newly-acquired businesses and commencing partnership operations in an efficient and cost-effective manner and the risk that we encounter significant unanticipated costs or other problems associated with integration or commencement
- challenges in achieving strategic objectives, cost and revenue synergies and other expected benefits
- risk that our markets do not evolve as anticipated and the targeted technologies do not prove to be those needed to be successful in those markets
- risk that we assume significant liabilities that exceed the limitations of any applicable indemnification provisions or the financial resources of any indemnifying parties
- loss of key employees of the acquired businesses or joint venture
- risk of diverting the attention of senior management from our existing operations
- risk of litigation associated with an acquisition

***We enter into fixed-price contracts that could subject us to losses in the event that we have cost overruns.***

During 2018 , approximately 94 percent of our total sales were, and a significant portion of our anticipated future sales will be, from fixed-price contracts. This allows us to benefit from cost savings, but it carries the burden of potential cost overruns since we assume all of the cost risk. If our initial cost estimates are incorrect, we can incur losses on these contracts. These fixed-price contracts can expose us to potentially large losses because the customer may compel us to complete a project or, in the event of a termination for default, pay the entire incremental cost of its replacement by another provider regardless of the size of any cost overruns that occur over the life of the contract. Because many of these projects involve new technologies and applications and can last for years, unforeseen events such as technological difficulties, fluctuations in the price of raw materials (including added tariffs), problems with subcontractors and cost overruns can result in the contractual price becoming less favorable or even unprofitable to us over time. Furthermore, if we do not meet project deadlines or specifications, we may need to renegotiate contracts on less favorable terms, be forced to pay penalties or liquidated damages or suffer major losses if the customer exercises its right to terminate. In addition, some of our contracts have provisions relating to cost controls and audit rights, and if we fail to meet the terms specified in those contracts we may not realize their full benefits. Our results of operations are dependent on our ability to maximize earnings from our contracts. Lower earnings caused by cost overruns could have an adverse impact on our financial condition, results of operations and cash flows.

***We are subject to risks in our integration processes and production systems, including potential issues in meeting stringent performance and reliability standards.***

The aerospace and defense business is complex, involving extensive coordination and integration with U.S. and non-U.S. suppliers and customers, highly-skilled labor, stringent regulatory and contractual requirements and performance and reliability standards. As a result, our ability to deliver products and systems on time, satisfy regulatory and customer requirements, and achieve or maintain program profitability is subject to significant risk. Operational delays or defects could result in increased production costs, as well as delayed deliveries and disruption to our customers.

***Tax changes could affect our effective tax rate and future profitability.***

Our future results could be adversely affected by changes in the effective tax rate as a result of changes in our overall profitability and changes in the mix of earnings in countries with differing statutory tax rates, changes in tax legislation, the results of audits and examination of previously filed tax returns and continuing assessment of our tax exposures. For example, in 2018 the U.S. Government enacted the Tax Cuts and Jobs Act (the Act), which contains significant changes to the U.S. tax system. We are analyzing the Act to determine the full impact of the new tax law, and to the extent any future guidance differs from our preliminary interpretation of the law, it could have a material effect on our financial position and results of operations.

***We depend on critical suppliers and subcontractors.***

We do not always have alternate sources of supply readily available for certain goods or services, such as liquid crystal displays. A shortage of raw materials or components, the loss of a significant supplier or subcontractor or their inability to meet performance, quality or delivery requirements due to natural disaster, financial stress, capacity constraints, military conflicts or other causes could have a material adverse effect on our business, financial condition, results of operations and cash flows.

***We depend on specialized test equipment.***

Some of our specialized test equipment that supports the reliability of our products and systems is the result of significant investment. Back-up test equipment may not be readily available. Damage to our specialized test equipment may result in protracted production recovery and may adversely impact our ability to service our products.

***A cybersecurity incident, network failure, data privacy breach or other business disruption could have negative impacts.***

We face cyber threats, threats to the physical security of our facilities, potential cyber attacks to the integrity of our networks and/or products, and the potential release or theft of our intellectual property or other important data as well as the potential for business disruptions associated with information technology (IT) failures. Possible areas of significant exposure to cyber threats or other disruptions include our enterprise information technology resources, our information management network that provides communication services to customers and our flight deck communication products and solutions. Any of these threats or disruptions may result in a material adverse effect on our business, financial condition, results of operations and cash flows. Risks may include:

- adverse effects to future results due to the theft, destruction, loss, corruption or release of personal data, confidential information or intellectual property
- operational or business disruptions resulting from the failure of IT or other systems and subsequent mitigation activities
- fines, penalties or negative publicity resulting in reputation or brand damage with our customers, suppliers, employees, shareowners and others

**Risks Related to Our B/E Aerospace Transaction:**

***We may be unable to successfully integrate B/E Aerospace's business and realize the anticipated benefits of the merger.***

The success of the merger will depend, in part, on our ability to successfully combine our business with B/E Aerospace's business and realize the anticipated benefits, including synergies, cost savings, innovation and operational efficiencies, from the combination. If we are unable to achieve these objectives within the anticipated time frame, or at all, the anticipated benefits may not be realized fully, or at all, or may take longer to realize than expected.

The merger involves the integration of B/E Aerospace's business with our existing business, which is a complex, costly and time-consuming process. We have not previously completed a transaction comparable in size or scope to the merger. The integration of the two companies may result in material challenges, including, without limitation:

- the diversion of management's attention from ongoing business concerns and performance shortfalls at one or both of the companies as a result of the devotion of management's attention to the integration
- maintaining employee morale and retaining key management and other employees
- the possibility of faulty assumptions underlying expectations
- retaining existing business and operational relationships and attracting new business and operational relationships
- consolidating corporate and administrative infrastructures and eliminating duplicative operations
- coordinating geographically separate organizations
- unanticipated issues in integrating information technology, communications and other systems
- unforeseen expenses or delays associated with the integration

Many of these factors are outside of our control and any one of them could result in delays, increased costs, decreases in the amount of expected revenues and diversion of management's time and energy, which could materially affect our financial position, results of operations and cash flows.

**Risks Related to the Pending Acquisition of the Company by UTC:**

***The UTC Merger is subject to conditions, some or all of which may not be satisfied, or completed on a timely basis, if at all. Failure to complete the UTC Merger could have material adverse effects on us.***

The completion of the UTC Merger is subject to a number of conditions. On November 23, 2018, UTC announced that the final regulatory approval required to close its acquisition of Rockwell Collins had been received and that the acquisition was expected to close within three business days.

The failure to satisfy all of the required conditions could delay the completion of the UTC Merger or prevent it from occurring at all. There can be no assurance that the conditions to the closing of the UTC Merger will be satisfied or waived or that the UTC Merger will be completed. Also, subject to limited exceptions, either we or UTC may terminate the Merger Agreement if the UTC Merger has not been completed by 5:00 p.m. (Eastern time) on March 4, 2019.

If the UTC Merger is not completed, our ongoing business may be materially adversely affected and, without realizing any of the benefits of having completed the UTC Merger, we will be subject to a number of risks, including the following:

- the market price of our common stock could decline
- we could owe a $695 million termination fee to UTC under certain circumstances, including a material breach by us
- time and resources, financial and other, committed by our management to integration planning or other matters relating to the UTC Merger could otherwise have been devoted to pursuing other beneficial opportunities
- we may experience negative reactions from the financial markets or from our customers, suppliers or employees
- we will be required to pay our costs relating to the UTC Merger, such as legal, accounting, financial advisory and printing fees, whether or not the UTC Merger is completed

In addition, if the UTC Merger is not completed, we could be subject to litigation related to any failure to complete the UTC Merger or related to any enforcement proceeding commenced against us to perform our obligations under the UTC Merger Agreement. Any of these risks could materially and adversely impact our ongoing business, financial condition, financial results and stock price.

Similarly, delays in the completion of the UTC Merger could, among other things, result in additional transaction costs, loss of revenue or other negative effects associated with uncertainty about completion of the UTC Merger and could materially and adversely affect our ongoing business, financial condition, financial results and stock price.

***The Merger Agreement contains provisions that limit our ability to pursue alternatives to the UTC Merger, could discourage a potential competing acquiror of the Company from making a favorable alternative transaction proposal and, in specified circumstances, could require us to pay a substantial termination fee to UTC.***

The Merger Agreement contains provisions that make it more difficult for us to be acquired by any company other than UTC. The Merger Agreement contains certain provisions that restrict our ability to, among other things, initiate, seek, solicit, knowingly facilitate, knowingly encourage, knowingly induce or knowingly take any other action reasonably expected to lead to, or engage in negotiations or discussions relating to, or approve or recommend, any third-party acquisition proposal.

In some circumstances, including a material breach by us, upon termination of the Merger Agreement, we would be required to pay a termination fee of $695 million to UTC.

These provisions could discourage a potential third-party acquiror or merger partner that might have an interest in acquiring all or a significant portion of us or pursuing an alternative transaction from considering or proposing such a transaction, even if it were prepared to pay consideration with a higher per share value than the value proposed to be received in the UTC Merger. In particular, the termination fee, if applicable, would be substantial, and could result in a potential third-party acquiror or merger partner proposing to pay a lower price to our shareowners than it might otherwise have proposed to pay absent such a fee.

If the Merger Agreement is terminated and we determine to seek another business combination, we may not be able to negotiate a transaction with another party on terms comparable to, or better than, the terms of the UTC Merger.

***The value of the stock portion of the Merger Consideration is subject to changes based on fluctuations in the value of UTC common stock.***

Upon completion of the UTC Merger, each issued and outstanding share of Rockwell Collins common stock (other than certain excluded shares) will be converted into the right to receive the Merger Consideration, which is equal to $93.33 in cash, without interest, plus a fraction of a share of UTC common stock having a value equal to the quotient obtained by dividing $46.67 by the average of the volume-weighted average prices per share of UTC common stock on the NYSE on each of the 20 consecutive trading days ending with the trading day immediately prior to the closing date, subject to adjustment based on a two-way collar mechanism as described below. If the UTC stock price is greater than $107.01 but less than $124.37, the exchange ratio will be equal to the quotient of (1) $46.67 divided by (2) the UTC stock price. However, if the UTC stock price is less than or equal to $107.01 or greater than or equal to $124.37, then a two-way collar mechanism will apply, pursuant to which (a) if the UTC stock price is greater than or equal to $124.37, the exchange ratio will be fixed at 0.37525 and result in more than $46.67 in value, and (b) if the UTC stock price is less than or equal to $107.01, the exchange ratio will be fixed at 0.43613 and result in less than $46.67 in value. Accordingly, the actual number of shares and the value of UTC common stock delivered to our shareowners will depend on the UTC stock price, and the value of the shares of UTC common stock delivered for each such share of our common stock may be greater than, less than or equal to $46.67. On November 23, 2018, UTC announced that the final regulatory approval required to close its acquisition of Rockwell Collins had been received and that the acquisition was expected to close within three business days.

***We are subject to business uncertainties and contractual restrictions while the UTC Merger is pending, which could adversely affect our business and operations.***

In connection with the pendency of the UTC Merger, it is possible that some customers, suppliers and other persons with whom we have a business relationship may delay or defer certain business decisions or might decide to seek to terminate, change or renegotiate their relationships with us as a result of the UTC Merger, which could negatively affect our revenues, earnings and/or cash flows, as well as the market price of our common stock, regardless of whether the UTC Merger is completed.

Under the terms of the Merger Agreement, we are subject to certain restrictions on the conduct of our business prior to completing the UTC Merger which may adversely affect our ability to execute certain of our business strategies, including the ability in certain cases to enter into or amend contracts, acquire or dispose of assets, incur indebtedness or incur capital expenditures. Such limitations could adversely affect our business and operations prior to the completion of the UTC Merger. Each of the risks described above may be exacerbated by delays or other adverse developments with respect to the completion of the UTC Merger.

***Completion of the UTC Merger will trigger change in control or other provisions in certain customer and other agreements to which we are a party, which may have an adverse impact on our or UTC's business and results of operations following completion of the UTC Merger.***

The completion of the UTC Merger will trigger change in control and other provisions in certain customer and other agreements to which we are a party. If we or UTC are unable to negotiate waivers of those provisions, customers or other counterparties may exercise their rights and remedies under the agreements, potentially terminating the agreements or seeking monetary damages or equitable remedies. Even if we and UTC are able to negotiate consents or waivers, the customers or other counterparties may require a fee for such waivers or seek to renegotiate the agreements on terms less favorable to us or the combined company. Certain of our customers have commented on the potential impact of the UTC Merger, including potential benefits, questions and concerns. Any of the foregoing or similar developments may have an adverse impact on our or UTC's business and results of operations following completion of the UTC Merger.

***Uncertainties associated with the UTC Merger may cause a loss of management personnel and other key employees, which could adversely affect our future business and operations.***

We are dependent on the experience and industry knowledge of our officers and other key employees to execute their business plans. Our success will depend in part upon our ability to retain certain key management personnel and employees. Prior to completion of the UTC Merger, current and prospective employees of us and UTC may experience uncertainty about their roles within UTC following the completion of the UTC Merger, which may have an adverse effect on our ability to attract or retain key management and other key personnel. In addition, no assurance can be given that UTC, after the completion of the UTC Merger, will be able to attract or retain key management personnel and other key employees to the same extent that we and UTC have previously been able to attract or retain their own employees.

***The UTC common stock to be received by our shareowners upon completion of the UTC Merger will have different rights from shares of Rockwell Collins common stock.***

Upon completion of the UTC Merger, our shareowners will no longer be shareowners of Rockwell Collins, but will instead become shareowners of UTC and their rights as UTC shareowners will be governed by the terms of UTC's certificate of incorporation and by-laws. The terms of UTC's certificate of incorporation and by-laws are in some respects materially different than the terms of our certificate of incorporation and by-laws, which currently govern the rights of our shareowners.

**Cautionary Statement**

This Annual Report on Form 10-K, and documents that are incorporated by reference in this Annual Report on Form 10-K, contains statements, including statements regarding certain projections, business trends and the proposed acquisition of Rockwell Collins by UTC, that are forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those projected as a result of certain risks and uncertainties, including but not limited to those disclosed in ***Risk Factors*** in Item 1A above and otherwise detailed herein, as well as other risks and uncertainties, including but not limited to those detailed from time to time in our SEC filings and, with respect to the proposed acquisition of Rockwell Collins, UTC's filings with the SEC. With respect to the business and operations of Rockwell Collins, these risks include but are not limited to: the financial condition of our customers and suppliers, including bankruptcies; the health of the global economy, including potential deterioration in economic and financial market conditions; adjustments to the commercial OEM production rates and the aftermarket; the impacts of natural disasters and pandemics, including operational disruption, potential supply shortages and other economic impacts; cybersecurity threats, including the potential misappropriation of assets or sensitive information, corruption of data or operational disruption; delays related to the award of domestic and international contracts; delays in customer programs, including new aircraft programs entering service later than anticipated; the continued support for military transformation and modernization programs; potential impact of volatility in oil prices, currency exchange rates or interest rates on the commercial aerospace industry or our business; the impact of terrorist events, regional conflicts or governmental sanctions on other nations on the commercial aerospace industry; changes in domestic and foreign government spending, budgetary, procurement and trade policies adverse to our businesses; market acceptance of our new and existing technologies, products and services; reliability of and customer satisfaction with our products and services; potential unavailability of our mission-critical data and voice communication networks; unfavorable outcomes on or potential cancellation or restructuring of contracts, orders or program priorities by our customers; recruitment and retention of qualified personnel; regulatory restrictions on air travel due to environmental concerns; effective negotiation of collective bargaining agreements by us, our customers, and our suppliers; performance of our customers and subcontractors; risks inherent in development and fixed-price contracts, particularly the risk of cost overruns; risk of significant reduction to air travel or aircraft capacity beyond our forecasts; our ability to execute to internal performance plans such as restructuring activities, productivity and quality improvements and cost reduction initiatives; achievement of B/E Aerospace integration and synergy plans; continuing to maintain our planned effective tax rates; our ability to develop contract compliant systems and products on schedule and within anticipated cost estimates; risk of fines and penalties related to noncompliance with laws and regulations including compliance requirements associated with U.S. Government work, export control, anticorruption and environmental regulations; risk of asset impairments; our ability to win new business and convert those orders to sales within the fiscal year in accordance with our annual operating plan; the uncertainties of the outcome of lawsuits, claims and legal proceedings. With respect to the proposed acquisition, these risks include but are not limited to: the ability of Rockwell Collins and UTC to satisfy the conditions to the closing of the transaction; the occurrence of events that may give rise to a right of one or both of the parties to terminate the merger agreement; negative effects of the announcement or the consummation of the transaction on the market price of UTC and/or Rockwell Collins common stock and/or on their respective businesses, financial conditions, results of operations and financial performance; risks relating to the value of UTC's shares to be issued in the transaction, significant transaction costs and/or unknown liabilities; the possibility that the anticipated benefits from the proposed transaction cannot be realized in full or at all or may take longer to realize than expected; risks associated with third party contracts containing consent and/or other provisions that may be triggered by the proposed transaction; risks associated with transaction-related litigation; the possibility that costs or difficulties related to the integration of Rockwell Collins' operations with those of UTC will be greater than expected; the outcome of legally required consultation with employees, their works councils or other employee representatives; and the ability of Rockwell Collins and the combined company to retain and hire key personnel. There can be no assurance that the proposed acquisition will in fact be consummated in the manner described or at all. For additional information on risks associated with the proposed merger and on other identifying factors that may cause actual results to vary materially from those stated in forward-looking statements, see the reports of United Technologies and Rockwell Collins on Forms 10-K, 10-Q and 8-K filed with or furnished to the SEC from time to time. In addition, in connection with the pending merger, UTC has filed a registration statement that includes a prospectus from UTC and a proxy statement from Rockwell Collins, which is effective and contains important information about UTC, Rockwell Collins, the transaction and related matters. Readers are cautioned not to place undue reliance on forward-looking statements. These forward-looking statements are made only as of the date hereof and Rockwell Collins assumes no obligation to update any forward-looking statement, except as otherwise required by law.

**Item 1B.** ***Unresolved Staff Comments.***

None.

**Item 2.** ***Properties.***

As of September 30, 2018 , we operated various manufacturing and engineering facilities, sales offices, warehouses and service locations throughout the U.S. and around the world. These facilities have aggregate floor space of approximately 10.8 million square feet. Of this floor space, 47 percent is owned and 53 percent is leased. There are no major encumbrances on any of our plants or equipment. In the opinion of management, our properties have been well maintained, are in sound operating condition and contain all equipment and facilities necessary to operate at present levels. A summary of floor space of these facilities at September 30, 2018 is as follows:

| Location (in thousands of square feet) | Owned Facilities | Leased Facilities | Total |
|---|---|---|---|
| **Interior Systems** | | | |
| U.S. | 394 | 2,016 | 2,410 |
| Europe / Africa / Middle East | 277 | 230 | 507 |
| Asia-Pacific | 705 | 150 | 855 |
| Americas, excluding U.S. | — | 264 | 264 |
| Total | 1,376 | 2,660 | 4,036 |
| | | | |
| **Commercial and Government Systems** | | | |
| U.S. | 3,355 | 1,668 | 5,023 |
| Europe / Africa / Middle East | 330 | 225 | 555 |
| Asia-Pacific | — | 416 | 416 |
| Americas, excluding U.S. | — | 148 | 148 |
| Total | 3,685 | 2,457 | 6,142 |
| | | | |
| **Information Management Services** | | | |
| U.S. | 39 | 556 | 595 |
| Europe / Africa / Middle East | — | 42 | 42 |
| Asia-Pacific | — | 26 | 26 |
| Americas, excluding U.S. | — | 1 | 1 |
| Total | 39 | 625 | 664 |
| **Combined Total** | 5,100 | 5,742 | 10,842 |

| Type of Facility (in thousands of square feet) | Owned Facilities | Leased Facilities | Total |
|---|---|---|---|
| **Interior Systems** | | | |
| Manufacturing and service | 1,300 | 2,219 | 3,519 |
| Sales, engineering and general office space | 76 | 441 | 517 |
| | | | |
| **Commercial and Government Systems** | | | |
| Manufacturing and service | 1,247 | 1,017 | 2,264 |
| Sales, engineering and general office space | 2,438 | 1,440 | 3,878 |
| | | | |
| **Information Management Services** | | | |
| Manufacturing and service | 39 | 81 | 120 |
| Sales, engineering and general office space | — | 544 | 544 |
| **Combined Total** | 5,100 | 5,742 | 10,842 |

We have facilities with a total of at least 200,000 square feet (in rounded thousands) in the following cities: Cedar Rapids, Iowa (2,910,000 square feet), Tanauan City, Philippines (770,000 square feet), Winston-Salem, North Carolina (660,000 square feet), Melbourne, Florida (400,000 square feet), Annapolis, Maryland (370,000 square feet), Richardson, Texas (280,000 square feet), Everett, Washington (240,000 square feet), Heidelberg, Germany (240,000 square feet), Nogales, Mexico (230,000 square feet), Irvine, California (210,000 square feet) and Coralville, Iowa (200,000 square feet). Most of our facilities for our Commercial

Systems and Government Systems businesses are shared and have therefore been presented together in the tables above. We have excluded from the tables above hundreds of leased locations wherein our Information Management Services business has radio frequency equipment in various locations throughout the world.

We purchase property insurance covering physical damage to our facilities and resulting business interruption from perils including fire, windstorm, flood and earthquake. This insurance generally provides replacement cost coverage subject to a $10 million deductible with certain exceptions. For example, certain of our facilities, including those located in California and Mexico, are located near major earthquake fault lines. For those facilities we maintain earthquake insurance with limits that may be less than full replacement cost. These exceptions are largely driven by the availability and cost of catastrophe coverage from the insurance markets.

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

Various lawsuits, claims and proceedings have been or may be instituted or asserted against us relating to the conduct of our business, including those pertaining to product liability, intellectual property, environmental, safety and health, exporting or importing, contract, employment and regulatory matters. Although the outcome of litigation cannot be predicted with certainty and some lawsuits, claims or proceedings may be disposed of unfavorably to us, management believes there are no material pending legal proceedings.

Related to the acquisition and post-closing compliance review of B/E Aerospace, as previously disclosed, the Company identified and is investigating the circumstances surrounding an employee's submission of certain expense reports for customer entertainment and gifts that preceded the acquisition and do not appear to have complied with applicable company policy. In March 2018, the Company voluntarily notified the Department of Justice (DOJ) and SEC Division of Enforcement of its investigation. The Company's investigation into this and other customer related expenditures is ongoing, and the outcome or the consequences thereof cannot be predicted at this time.

**Item 4.** ***Mine Safety Disclosures.***

Not applicable.

**Item 4A.** ***Executive Officers of the Company.***

The name, age, office, position held with us and principal occupations and employment during the past five years of each of our executive officers as of November 26, 2018 are as follows:

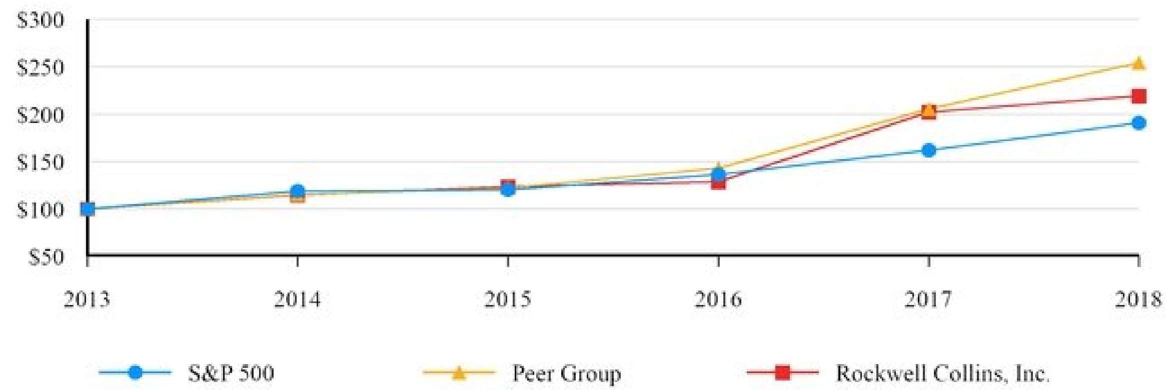
| Name, Office and Position, and Principal Occupations and Employment | Age |
|---|---|
| ***Robert K. Ortberg*** —Chairman of the Board of Directors since November 2015; Chief Executive Officer and a Director since August 2013; President since September 2012 | 58 |
| ***Patrick E. Allen*** —Senior Vice President and Chief Financial Officer since January 2005 | 54 |
| ***Tatum J. Buse*** —Vice President, Finance and Corporate Controller since September 2013 | 44 |
| ***Philip J. Jasper*** —Executive Vice President and Chief Operating Officer, Government Systems since September 2012 | 50 |
| ***Bruce M. King*** —Senior Vice President, Operations since May 2011 | 57 |
| ***Jeffrey D. MacLauchlan*** —Senior Vice President, Corporate Development since September 2014; Vice President, Corporate Development of Lockheed Martin Corporation prior thereto | 59 |
| ***Colin R. Mahoney*** —Senior Vice President, International and Service Solutions since February 2013 | 53 |
| ***Nan Mattai*** —Senior Vice President, Engineering and Information Technology since August 2015; Senior Vice President, Engineering and Technology prior thereto | 66 |
| ***David J. Nieuwsma*** —Executive Vice President and Chief Operating Officer, Interior Systems since October 2018; Senior Vice President, Information Management Services from April 2016 to October 2018; Vice President, Strategy and Business Development, Government Systems prior thereto | 54 |
| ***Robert J. Perna*** —Senior Vice President, General Counsel and Secretary since February 2014; Senior Vice President, General Counsel from January 2014 to February 2014; Vice President, General Counsel and Secretary for AM Castle & Co. prior thereto | 54 |
| ***Jeffrey A. Standerski*** —Senior Vice President, Human Resources since April 2016; Senior Vice President, Information Management Services from December 2013 to April 2016; Vice President and General Manager, Business and Regional Systems prior thereto | 52 |
| ***Kent L. Statler*** —Executive Vice President and Chief Operating Officer, Commercial Systems since February 2010 | 53 |
| ***Douglas E. Stenske*** —Vice President, Treasurer and Risk Management since September 2013 | 52 |
| ***Robert A. Sturgell*** —Senior Vice President, Washington Operations since April 2009 | 59 |

There are no family relationships, as defined, between any of the above executive officers and any other executive officer or any director. No officer was selected pursuant to any arrangement or understanding between the officer and any person other than us. All executive officers are elected annually.

PART II

**Item 5.** ***Market for the Company's Common Equity, Related Stockholder Matters and Company Purchases of Equity Securities.***

**Shareowner Return Performance [(1)]**
(including dividend reinvestment)
Fiscal year ended September 30




**Cumulative Total Returns [(1)]**

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| Rockwell Collins, Inc. | $ 100.00 | $ 114.61 | $ 123.58 | $ 128.73 | $ 202.17 | $ 219.40 |
| S&P 500 | 100.00 | 118.78 | 120.24 | 136.54 | 161.95 | 190.95 |
| Peer Group | 100.00 | 114.97 | 122.29 | 143.03 | 205.32 | 254.10 |
| Closing market price of COL at fiscal year end | 68.59 | 77.35 | 82.24 | 84.34 | 130.71 | 140.47 |

[(1)] The cumulative total returns table and adjacent line graph compare the cumulative total shareowner return on the company's Common Stock against the cumulative total return of the S&P Aerospace and Defense Select Industry Index (Peer Group) and the S&P 500 Composite Index (S&P 500) for the five-year period ended September 30, 2018. In each case a fixed investment of $100 at the respective closing prices on September 30, 2013 and reinvestment of all dividends are assumed.

**Market Information**

Our common stock, par value $.01 per share, is listed on the New York Stock Exchange and trades under the symbol COL. On October 31, 2018 , there were 15,404 shareowners of record of our common stock.

**Dividends**

The following table sets forth the cash dividends per share paid by us during each quarter of our years ended September 30, 2018 and 2017 :

| Fiscal Quarters | **2018** | 2017 |
|---|---|---|
| First | **$ 0.33** | $ 0.33 |
| Second | **0.33** | 0.33 |
| Third | **0.33** | 0.33 |
| Fourth | **0.33** | 0.33 |

Based on our current dividend policy, we have been paying quarterly cash dividends which, on an annual basis, equal $1.32 per share. The declaration and payment of dividends, however, will be at the sole discretion of our Board of Directors, subject to certain restrictions in the Merger Agreement. There can be no assurance that we will continue to pay dividends at our current levels.

**Repurchases**

Our Board of Directors has authorized certain repurchases of our common stock. During 2018 , there were no repurchases of our common stock. During 2017 , we repurchased approximately 0.4 million shares of our common stock at a total cost of $39 million , at a weighted average cost of $104.32 per share.

The following table provides information with respect to purchases made by or on behalf of us or any "affiliated purchaser" (as defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934) of shares of our common stock during the three months ended September 30, 2018 :

| Period | Total Number of Shares Purchased | Average Price Paid per Share | Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs | Maximum Number (or Approximate Dollar Value) of Shares that May Yet Be Purchased Under the Plans or Programs [1] |
|---|---|---|---|---|
| July 1, 2018 through July 31, 2018 | — | $ — | — | $ 285 million |
| August 1, 2018 through August 31, 2018 | — | — | — | 285 million |
| September 1, 2018 through September 30, 2018 | — | — | — | 285 million |
| Total / Average | — | — | — | |

[1] On July 7, 2017, we announced that our Board authorized the repurchase of an additional $200 million of our common stock. The authorization has no stated expiration.

**Item 6.** ***Selected Financial Data.***

The following selected financial data should be read in conjunction with the consolidated financial statements and notes thereto included in Item 8 below. The Statement of Operations, Statement of Financial Position and other data have been derived from our audited financial statements. The Company operates on a 52/53 week fiscal year ending on the Friday closest to September 30. Fiscal years 2018, 2017, 2016 and 2015 were 52-week fiscal years while fiscal year 2014 was a 53-week fiscal year.

| | Years Ended September 30 | | | | |
|---|---|---|---|---|---|
| (dollars in millions, except per share amounts) | **2018(a)** | 2017(b) | 2016(c) | 2015(d) | 2014(e) |
| **Statement of Operations Data:** | | | | | |
| Sales | **$ 8,665** | $ 6,822 | $ 5,259 | $ 5,244 | $ 4,979 |
| Cost of sales | **6,382** | 4,868 | 3,642 | 3,630 | 3,469 |
| Selling, general and administrative expenses | **817** | 732 | 638 | 606 | 594 |
| Income from continuing operations | **1,032** | 705 | 727 | 694 | 618 |
| Income (loss) from discontinued operations, net of taxes | **—** | — | 1 | (8) | (14) |
| Net income | **1,032** | 705 | 728 | 686 | 604 |
| Net income as a percent of sales | **11.9%** | 10.3% | 13.8% | 13.1% | 12.1% |
| Diluted earnings per share from continuing operations | **6.22** | 4.79 | 5.50 | 5.19 | 4.52 |
| **Statement of Financial Position Data:** | | | | | |
| Working capital(f) | **$ 1,092** | $ 1,691 | $ 1,144 | $ 1,164 | $ 1,054 |
| Property, Net | **1,429** | 1,398 | 1,035 | 964 | 919 |
| Goodwill and intangible assets | **11,299** | 11,287 | 2,586 | 2,607 | 2,551 |
| Total assets | **19,026** | 17,997 | 7,699 | 7,294 | 6,994 |
| Short-term debt | **2,248** | 479 | 740 | 448 | 504 |
| Long-term debt, net | **5,681** | 6,676 | 1,374 | 1,670 | 1,652 |
| Shareowners' equity | **7,107** | 6,043 | 2,078 | 1,875 | 1,884 |
| **Other Data:** | | | | | |
| Capital expenditures | **$ 257** | $ 240 | $ 193 | $ 210 | $ 163 |
| Depreciation and amortization | **449** | 399 | 253 | 252 | 225 |
| Dividends per share | **1.32** | 1.32 | 1.32 | 1.26 | 1.20 |
| **Stock Price:** | | | | | |
| High | **$ 142.61** | $ 135.31 | $ 95.11 | $ 99.37 | $ 84.06 |
| Low | **130.01** | 78.54 | 76.03 | 72.35 | 65.76 |

(a) Income from continuing operations includes a $130 million income tax benefit due to the enactment of the Tax Cuts and Jobs Act (the Act). In addition, income from continuing operations includes $57 million of B/E Aerospace acquisition-related costs ($78 million before income taxes) and $31 million of transaction costs associated with the pending acquisition of the Company by UTC ($34 million before income taxes). Income from continuing operations also includes $44 million of restructuring, asset impairment and settlement of a contract matter charges ($39 million before income taxes). Approximately $30 million of the pre-tax expense was recorded within cost of sales and $9 million was included within other income, net.

(b) On April 13, 2017, we completed the acquisition of B/E Aerospace for $6.5 billion in cash and stock, plus the assumption of $2.0 billion of debt, net of cash acquired. To finance the acquisition and repay assumed debt, we issued 31.2 million shares of common stock, issued $4.35 billion of senior unsecured notes and borrowed $1.5 billion under a new senior unsecured syndicated term loan facility. Income from continuing operations includes $86 million of transaction, integration and financing costs associated with the acquisition of B/E Aerospace ($125 million before income taxes) and $15 million of transaction costs associated with the pending acquisition of the Company by UTC ($24 million before income taxes).

(c) Income from continuing operations includes a $24 million income tax benefit from the retroactive reinstatement of the previously expired Federal Research and Development Tax Credit and a $41 million income tax benefit due to the release of a valuation allowance for a U.S. capital loss carryforward. In addition, income from continuing operations includes $28 million of restructuring and asset impairment charges ($45 million before income taxes) primarily related to employee severance costs. Approximately $33 million of the pre-tax expense was recorded within cost of sales and $12 million was included within selling, general and administrative expenses.

(d) Income from continuing operations includes a $22 million income tax benefit from the retroactive reinstatement of the previously expired Federal Research and Development Tax Credit and a $16 million income tax benefit related to the remeasurement of certain prior year tax positions.
(e) Income from continuing operations includes $18 million of restructuring, pension settlement and ARINC transaction costs ($25 million before income taxes). Approximately $18 million of the pre-tax expense was recorded in selling, general and administrative expenses, $4 million was included within cost of sales, and $3 million was classified as interest expense. Income from continuing operations also includes a $9 million gain ($10 million before income taxes) resulting from the sale of the KOSI business. On December 23, 2013, we acquired ARINC for $1.405 billion. This acquisition was funded through a combination of new long-term debt and short-term commercial paper borrowings.
(f) Working capital consists of all current assets and liabilities, including cash and short-term debt.

**Item 7.** ***Management's Discussion and Analysis of Financial Condition and Results of Operations.***

The following discussion and analysis should be read in conjunction with our consolidated financial statements and notes thereto in Item 8 below. The following discussion and analysis contains forward-looking statements and estimates that involve risks and uncertainties. Actual results could differ materially from these estimates. Factors that could cause or contribute to differences from estimates include those discussed under ***Cautionary Statement*** and ***Risk Factors*** contained in Item 1A above.

We operate on a 52/53 week fiscal year ending on the Friday closest to September 30. For ease of presentation, September 30 is utilized consistently throughout Management's Discussion and Analysis of Financial Condition and Results of Operations to represent the fiscal year end date. Fiscal years 2018 , 2017 and 2016 were 52-week fiscal years. All date references contained herein relate to our fiscal year unless otherwise stated.

## OVERVIEW AND OUTLOOK

On September 4, 2017, we entered into the Merger Agreement providing for the acquisition of the Company by UTC. If the UTC Merger is consummated, we will become a wholly owned subsidiary of UTC. The agreement includes covenants and agreements relating to the conduct of our business between the date of signing the Merger Agreement and the consummation of the UTC Merger. In light of the announced transaction with UTC, we do not intend to issue financial guidance for fiscal year 2019. During 2018, we incurred $34 million of transaction costs associated with the pending UTC Merger. On November 23, 2018, UTC announced that the final regulatory approval required to close its acquisition of Rockwell Collins had been received and that the acquisition was expected to close within three business days.

On April 13, 2017, we completed our acquisition of B/E Aerospace for $6.5 billion in cash and stock, plus the assumption of $2.0 billion of debt, net of cash acquired. To finance the acquisition and repay assumed debt, we issued 31.2 million shares of common stock, issued $4.35 billion of senior unsecured notes and borrowed $1.5 billion under a senior unsecured syndicated term loan facility. Beginning in 2018, the B/E Aerospace thermal and electronic systems product lines, previously included in Interior products and services within the Interior Systems segment, are now being reported in the Government Systems segment. As these product lines primarily serve military and government customers, the reorganization is expected to generate additional revenue synergy opportunities for the Company. The results of operations of the acquired B/E Aerospace business are now reported in the Interior Systems and Government Systems business segments. Interior Systems and Government Systems sales and operating earnings for the year ended September 30, 2017, have been reclassified to conform to the current year presentation. See Note 3 of the ***Notes to Consolidated Financial Statements*** in Item 8 below for more information regarding the acquisition.

The B/E Aerospace acquisition expands our reach and broadens our portfolio of aircraft content with the addition of a wide range of cabin interior products for commercial aircraft and business jets including seating, food and beverage preparation and storage equipment, lighting and oxygen systems and modular galley and lavatory systems. The Company's portfolio of aircraft content now spans the aircraft from cockpit to cabin, communications to connectivity. The acquisition also further diversifies our geographic presence and customer mix as Interior Systems products and services are sold to airlines and original equipment manufacturers across the globe. In addition, the acquisition enhances our diversified and balanced business, serving both commercial and government markets. During 2018, we incurred $78 million of B/E Aerospace acquisition-related expenses.

Our Commercial Systems business supplies aviation electronics systems, products and services to customers located throughout the world. The Commercial Systems customer base is comprised of commercial air transport and business and regional aircraft OEMs, commercial airlines and business aircraft operators. The Government Systems business provides communication and navigation products and avionics to the U.S. Department of Defense, state and local governments, other government agencies, civil agencies, defense contractors and foreign ministries of defense around the world. These systems, products and services support airborne (fixed and rotary wing), ground and shipboard applications. Our Information Management Services (IMS) business enables mission-critical data and voice communications throughout the world to customers including the U.S. Federal Aviation Administration, commercial airlines, business aircraft operators, airport and critical infrastructure operators and major passenger and freight railroads. These communications are enabled by our high-performance, high-quality and high-assurance proprietary radio and terrestrial networks, enhancing customer efficiency, safety and connectivity. In October 2018, we announced that IMS will become part of the Commercial Systems segment. This reorganization will enable us to further capitalize on customers' increasing need for aviation connectivity solutions. This change will require that we revise our segment reporting beginning in the first quarter of fiscal 2019 to report the IMS business within the Commercial Systems segment.

Total sales increased $1.843 billion , or 27 percent , in 2018 compared to 2017 , primarily due to the B/E Aerospace acquisition, which contributed a revenue increase of $1.577 billion. Sales excluding the B/E Aerospace acquisition (organic sales) increased $261 million, or 4 percent, compared to 2017, due to revenue growth across all of our legacy businesses. [(1)]

Total segment operating earnings [(2)] increased $290 million to $1.616 billion in 2018 compared to 2017. The Interior Systems business contributed a $238 million increase in operating earnings, in addition, operating earnings increased across each of our legacy businesses.

Our effective tax rate decreased in 2018, primarily due to the Enactment of the Tax Cuts and Jobs Act (the Act) which resulted in a $154 million reduction in deferred tax liabilities, partially offset by a $24 million obligation related to unremitted foreign earnings. In addition to these discrete impacts, the effective tax rate was favorably impacted by a lower U.S. Federal statutory tax rate under the Act.

Diluted earnings per share increased 30 percent to $6.22 in 2018 compared to $4.79 in 2017, as higher segment operating earnings and the benefit of a lower effective tax rate in 2018 were partially offset by higher interest expense from debt issued to fund the B/E Aerospace acquisition and $39 million of pre-tax restructuring, impairment and settlement of a contract matter charges. In addition, diluted earnings per share was negatively impacted in 2018 by higher weighted average shares outstanding from the 31.2 million shares of common stock issued to finance the B/E Aerospace acquisition. Adjusted earnings per share increased 11 percent to $6.81 in 2018 compared to 2017 (see the below reconciliation between GAAP earnings per share and adjusted earnings per share).

Our cash flow used for operating activities was $310 million during 2018 , compared to cash flow provided by operating activities of $1.264 billion in 2017 . The increase in cash used for operating activities in 2018 was primarily due to higher discretionary contributions to our pension plan (to achieve a tax deduction at the pre-reform rate and reduce future Pension Benefit Guaranty Corporation premiums), higher incentive payments to customers, the timing of other operating cash payments and receipts and the accelerated payment of 2018 employee incentive compensation (consistent with requirements of the Merger Agreement, given that the UTC Merger was expected to close prior to our 2018 fiscal year end), as discussed in the ***Financial Condition and Liquidity*** section below. We continued to deploy cash for the benefit of our shareowners in 2018 by paying aggregate dividends of $216 million .

Fiscal year 2018 results are as follows:

| (in billions, except per share amounts) | FY18 Results |
|---|---|
| Total sales | $8.665 |
| Diluted earnings per share | $6.22 |
| Operating cash flow used for continuing operations | $(0.310) |
| Capital expenditures | $0.257 |
| Total research and development investment [(3)] | $1.348 |

[(1)] Organic sales, organic growth, and similar measures excluding the effects of the B/E Aerospace acquisition are non-GAAP measures which measure the applicable item (e.g., sales or sales growth) without giving effect to the contribution for such item as a result of the B/E Aerospace acquisition. Such non-GAAP measures are believed to be important indicators of our operations for purposes of period-to-period comparisons of the underlying businesses. The Company does not intend for any of the non-GAAP information to be considered in isolation or as a substitute for the related GAAP measures.
[(2)] Total segment operating earnings is a non-GAAP measure and is reconciled to the related GAAP measure, Income from continuing operations before income taxes, in Note 21 of the Notes to Consolidated Financial Statements. Total segment operating earnings is calculated as the total of segment operating earnings of our four segments. The non-GAAP total segment operating earnings information included in this disclosure is believed to be useful to investors in comparing our operating performance from period to period by isolating the effects of some items that vary from period to period without any correlation to core operating performance.
[(3)] Total research and development (R&D) investment is comprised of company- and customer-funded R&D expenditures and the net change in pre-production engineering costs capitalized within Inventory.

Adjusted earnings per share is a non-GAAP metric and is believed to be useful to investors' understanding and assessment of our ongoing operations and performance of the B/E Aerospace acquisition, which occurred on April 13, 2017. Adjusted earnings per share excludes certain one-time and non-cash expenses that we believe are not indicative of our ongoing operating results. We believe these measures are important indicators of the Company's operations for purposes of period-to-period comparison of our operating results. The non-GAAP information is not intended to be considered in isolation or as a substitute for the related GAAP measures.

A reconciliation between GAAP earnings per share and adjusted earnings per share is presented below for 2018 and 2017.

| | **2018** | 2017 |
|---|---|---|
| Earnings per share (GAAP) | **$ 6.22** | $ 4.79 |
| B/E Aerospace acquisition-related expenses | **0.34** | 0.58 |
| United Technologies transaction expenses | **0.19** | 0.10 |
| Amortization of acquisition-related intangible assets | **1.25** | 0.71 |
| Amortization of B/E Aerospace acquired contract liability | **(0.78)** | (0.41) |
| Amortization of B/E Aerospace inventory fair value adjustment | **—** | 0.38 |
| Restructuring and impairment charges and settlement of a contract matter | **0.27** | — |
| Discrete income tax impact from Tax Cuts and Jobs Act and pension contribution | **(0.68)** | — |
| Adjusted earnings per share | **$ 6.81** | $ 6.15 |

The below tables reconcile pre- and post-tax income on a GAAP basis with pre- and post-tax adjusted income for 2018 and 2017.

| | **2018** | | | | 2017 | | | |
|---|---|---|---|---|---|---|---|---|
| (dollars in millions) | **Pre-tax** | **Tax Expense** | **Net** | **Tax Rate** | Pre-tax | Tax Expense | Net | Tax Rate |
| Net income (GAAP) | **$ 1,112** | **$ 80** | **$ 1,032** | **7.2%** | $ 931 | $ 226 | $ 705 | 24.3% |
| B/E Aerospace acquisition-related expenses | **78** | **21** | **57** | | 125 | 39 | 86 | |
| United Technologies transaction expenses | **34** | **3** | **31** | | 24 | 9 | 15 | |
| Amortization of acquisition-related intangible assets | **268** | **62** | **206** | | 149 | 45 | 104 | |
| Amortization of B/E Aerospace acquired contract liability | **(141)** | **(12)** | **(129)** | | (69) | (8) | (61) | |
| Amortization of B/E Aerospace inventory fair value adjustment | **—** | **—** | **—** | | 74 | 18 | 56 | |
| Restructuring and impairment charges and settlement of a contract matter | **39** | **(5)** | **44** | | — | — | — | |
| Discrete income tax impact from Tax Cuts and Jobs Act and pension contribution | **—** | **112** | **(112)** | | — | — | — | |
| Adjusted net income | **$ 1,390** | **$ 261** | **$ 1,129** | **18.8%** | $ 1,234 | $ 329 | $ 905 | 26.7% |

Our long-term strategies are focused on the following:

- accelerate sales growth
- expand operating margins and improve cash flow conversion
- deploy capital with priorities on growth and shareowner return

**Accelerate sales growth**

Accelerating our business growth is a fundamental objective of our management team. For the past decade we have been in a period of significant investment in research and development to support market share gains throughout our businesses. Our record of success in migrating technologies across the enterprise is a core strength and enables us to realize the benefits of investment even if market conditions change. We are realizing the benefits of completing investments in these programs as new platforms enter service. Our focus on developing solutions aimed at making Rockwell Collins the supplier of choice is evidenced by our significant investment in research and development. Over the past 5 years, we invested approximately $5.3 billion in research and development, which has allowed us to develop new systems, products and software solutions for our customers and capture strategically important positions on a variety of air transport, business aviation and military aircraft.

Highlights of our strategy to accelerate top-line sales growth are as follows:

*Strong positions will fuel growth*
Our Interior Systems segment was created in April 2017 with the acquisition of B/E Aerospace. The Interior Systems current backlog of $3.9 billion increased $287 million during 2018. Increased aircraft production rates at commercial air transport and business jet OEMs fuel opportunities for continued growth. Backlog growth results from favorable trends in airline selectable equipment, including seating, lighting systems and food preparation and storage, as well as increased production of aircraft with standard Interior Systems equipment. Additionally, the large installed base provides a robust flow of aftermarket retrofit and spares opportunities to support long-term growth.

Within Commercial Systems, over the past several years we have captured key positions and market share gains on platforms such as the Boeing 737 MAX and 777X, as well as the Airbus A220. We successfully completed numerous milestones on these and other aircraft development programs throughout the year, including the certification of ProLine Fusion on the Bombardier Global 7500 which is scheduled to enter into service later this year. We believe these accomplishments have positioned us to continue to grow our market share. We previously announced that Airbus has selected our flight operations and maintenance exchanger solution, called FOMAX, as standard on their A320 family. Under this agreement, we will supply each A320 aircraft with a secure router to wirelessly send aircraft performance and maintenance data to ground-based operations.

Within Government Systems, we increased our backlog by $60 million during 2018. Defense budgets have been improving not only in the United States, but also throughout the world. During 2018, we were selected for our first international E2-D Advanced Hawkeye weapons system trainer, which is an important extension of our E2-D training system capabilities for the U.S. Navy into the Foreign Military Sales (FMS) market. We were also one of two companies selected by the U.S. Air Force for the technology maturation and risk reduction phase of the Airborne Launch Control System Replacement program (ALCS-R). ALCS-R will upgrade the survivable launch control system that is part of the United States' intercontinental ballistic missile deterrent, and is part of the broader initiative to modernize U.S. nuclear capabilities.

*We are capitalizing on aviation’s information age*
In today’s information-enabled world, the industry continues to trend away from hardware-based solutions to more software-based applications and the needs for connectivity are increasing for airlines, airports and passengers. Through organic innovations and acquisitions, our Information Management Services portfolio positions us as a leader in aviation information management, delivering efficiency and safety to our customers and their passengers.

As traffic on our air-to-ground network increases, we’re taking steps to enhance its capacity and usefulness. In the cockpit, more robust data streams and sophisticated applications are enhancing operational efficiencies, safety and on-time flight performance. In the cabin, broadband connectivity is enabling passengers to stay connected throughout their flight, and it also provides new ways to enhance the passenger experience. In 2018, we introduced our GlobalConnect offering that leverages our standard information management hardware positions on the Airbus A350XWB, A320NEO and A330NEO and the Boeing 787 to expand our portfolio of communications and data management services for airlines. Approximately 10 airlines have already subscribed to the new services.

*We will continue to grow globally*
Market opportunities outside the United States continue to evolve, driven in part by expanding populations and emerging economies. Security needs are on the rise in places around the globe, as countries seek to establish indigenous capabilities to protect their borders, infrastructure and resources. At the same time, global commercial air travel is expected to increase as we see a growing middle class in developing countries, generating higher traffic and demand for new aircraft. We believe we are positioned to grow by capturing new programs at emerging international OEMs, strategically positioning service centers around the globe and by launching joint ventures.

**Expand operating margins and improve cash flow conversion**

Operational excellence is a fundamental objective at our Company. We have extended Lean concepts beyond the factory floor to virtually every aspect of our business. We focus on streamlining processes, reducing costs and increasing quality while enhancing our ability to respond quickly to customer needs. In addition, our shared service model uses a centralized organizational structure to leverage resources across the business. This is evidenced by our product and technology centers of excellence, through which we apply our core competencies to solutions across our segments. By applying common tools and systems across our businesses, we can better manage our cost structure and maximize our R&D investments.

We believe our Company has a proven ability to both react quickly to changing business conditions and to execute business plans. For example, as we faced challenging conditions in business aviation and the defense environment in the past several years, we took actions to manage our cost structure, while focusing on our customers, continuing our commitment to operational excellence and maintaining our balanced business model. We will also distinguish ourselves through strong customer relationships, high returns on invested capital and continued investment in market differentiating technologies and programs. As we grow our Company, our goal is to generate long-term double-digit cash flow growth. In 2018, our operating cash flow was significantly impacted by discretionary cash contributions to our pension plans, an increase in cash incentive payments to customers and the timing of employee incentive compensation payments. See the ***Financial Condition and Liquidity*** section below.

**Deploy capital with priorities on growth and shareowner return**

We plan to allocate capital across our Company to prioritize debt repayment and to fund growth through investments in R&D, capital expenditures and minor acquisitions. On April 13, 2017, the Company completed the acquisition of B/E Aerospace for $6.5 billion in cash and stock, plus the assumption of $2.0 billion in net debt. The transaction combines our capabilities in flight deck avionics, cabin electronics, mission communications, simulation and training and information management systems with B/E Aerospace's range of cabin interior products, which include seating, food and beverage preparation and storage equipment, lighting and oxygen systems, and modular galley and lavatory systems for commercial airliners and business jets. The acquisition significantly increases our scale and diversifies our product portfolio, customer mix and geographic presence.

See the following sections for further discussion of our results of operations. For additional disclosure on segment operating earnings see Note 21 of the ***Notes to Consolidated Financial Statements*** in Item 8 below. Please also see our ***Risk Factors*** and ***Cautionary Statement*** in Item 1A of this Form 10-K.

## RESULTS OF OPERATIONS

The following management discussion and analysis of results of operations is based on reported financial results for 2016 through 2018 and should be read in conjunction with our consolidated financial statements and the notes thereto in Item 8 below.

***Consolidated Financial Results***

**Sales**

| (in millions) | 2018 | 2017 | 2016 |
|---|---|---|---|
| U.S. [1] [2] | $ 4,666 | $ 3,873 | $ 3,292 |
| Non-U.S. [1] | 3,999 | 2,949 | 1,967 |
| Total | $ 8,665 | $ 6,822 | $ 5,259 |
| Percent increase | 27% | 30% | |

[1] Sales are attributed to geographic region based on the location of our customers.
[2] For the years ended September 30, 2018 , 2017 and 2016 , U.S. sales include revenue from foreign military sales of $163 million , $139 million and $171 million , respectively.

*Sales for 2018 compared to 2017*

Total sales increased $1.843 billion , or 27 percent , for the year ended September 30, 2018 , compared to the prior year. B/E Aerospace, which was acquired on April 13, 2017, contributed $1.577 billion of the overall revenue growth. Sales excluding the B/E Aerospace acquisition (organic sales) increased $261 million, or 4 percent, compared to the prior year, driven by a $162 million increase within Commercial Systems, a $107 million increase within Government Systems and a $27 million increase within Information Management Services, partially offset by a $35 million organic revenue decrease within Interior Systems. Refer to the Interior Systems, Commercial Systems, Government Systems and Information Management Services sections of the Segment Financial Results below for a detailed discussion of sales by segment in 2018 and 2017 .

U.S. sales increased $793 million , or 20 percent , primarily due to sales from the B/E Aerospace acquisition. The remaining increase results primarily from higher Boeing 737 production rates and increased aftermarket revenues in Commercial Systems, as well as higher Government Systems sales to the U.S. Government.

Non-U.S. sales increased $1.050 billion , or 36 percent , primarily due to sales from the B/E Aerospace acquisition. The remaining variance is primarily driven by higher Airbus A320 and A350 production rates and increased aftermarket revenues in Commercial Systems.

*Sales for 2017 compared to 2016*

Total sales increased $1.563 billion , or 30 percent , for the year ended September 30, 2017, compared to the prior year. B/E Aerospace, which was acquired on April 13, 2017, contributed $1.406 billion of the overall revenue growth. Sales excluding the B/E Aerospace acquisition (organic sales) increased $157 million, or 3 percent, compared to the prior year, driven by a $74 million increase within Government Systems, a $60 million increase within Information Management Services and a $23 million increase within Commercial Systems. Refer to the Interior Systems, Commercial Systems, Government Systems and Information Management Services section of the Segment Financial Results below for a detailed discussion of sales by segment in 2017 and 2016.

U.S. sales increased $581 million , or 18 percent , primarily due to $567 million of sales from the B/E Aerospace acquisition. The remaining increase results primarily from higher Government Systems sales to the U.S. Government.

Non-U.S. sales increased $982 million , or 50 percent , primarily due to $839 million of sales from the B/E Aerospace acquisition. The remaining variance is primarily driven by higher Airbus A350 production rates, a favorable mix of international airline selectable equipment sales and higher customer-funded development program revenues in Commercial Systems and increased international usage of connectivity services at Information Management Services.

*B/E Aerospace Pro Forma Sales* (1)

Sales for the recently acquired B/E Aerospace business were $2.983 billion and $2.960 billion, on a pro forma basis, for the years ended September 30, 2018 and 2017, respectively. These pro forma results include sales of the Interior Systems segment and the two B/E Aerospace product lines now reported within the Government Systems segment. The $23 million, or 1 percent, increase in pro forma sales was primarily due to the following:

- a $64 million increase in thermal and electronic systems sales in Government Systems, primarily due to higher deliveries of cooling equipment
- partially offset by a $41 million decrease in Interior Systems pro forma sales discussed in the Interior Systems sales section below

(1) This pro forma sales information is believed to be useful to investors' understanding of the overall performance of the B/E Aerospace acquisition.

**Cost of Sales**

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Total cost of sales | **$ 6,382** | $ 4,868 | $ 3,642 |
| Percent of total sales | **73.7%** | 71.4% | 69.3% |

Cost of sales consists of all costs incurred to design and manufacture our products and provide our services and includes R&D, raw material, labor, facility, product warranty, depreciation, amortization, service and support and other related expenses.

*Cost of sales for 2018 compared to 2017*

Total cost of sales increased $1.514 billion primarily due to the following:

- $1.272 billion of inorganic cost of sales from the recently acquired B/E Aerospace business
- a $191 million increase from higher organic sales, which was unfavorably impacted by sales mix as discussed in the Government Systems and Information Management Services sections of the Segment Financial Results below

- a $65 million organic increase in company-funded R&D, as detailed in the Research and Development expense section below
- a $30 million increase due to an impairment charge associated with the settlement of a contract matter and employee separation costs
- a $28 million increase in amortization of pre-production engineering costs
- partially offset by the absence of $74 million of inventory fair value adjustment amortization recorded in the prior year related to the acquisition of B/E Aerospace

The increase in cost of sales as a percent of revenues was primarily due to sales mix, including impact of the acquired B/E aerospace business, and increased company-funded R&D expenses.

*Cost of sales for 2017 compared to 2016*

Total cost of sales increased $1.226 billion primarily due to the following:

- $1.140 billion of inorganic cost of sales from the recently acquired B/E Aerospace business
- an $83 million increase from higher organic sales, which was favorably impacted by benefits from cost savings initiatives
- a $40 million increase in employee incentive compensation costs
- partially offset by $33 million of asset and restructuring charges recorded in 2016
- further offset by a $9 million organic decrease in company-funded R&D expense in Government Systems and Information Management Services, as detailed in the Research and Development Expense section below

The increase in cost of sales as a percent of revenues was primarily due to the recently acquired B/E Aerospace business.

**Research and Development Expense**

R&D expense is included as a component of cost of sales and is summarized as follows:

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Customer-funded: | | | |
| Interior Systems | **$ 113** | $ 54 | $ — |
| Commercial Systems | **253** | 262 | 231 |
| Government Systems | **483** | 421 | 381 |
| Information Management Services | **6** | 9 | 9 |
| Total customer-funded | **855** | 746 | 621 |
| Company-funded: | | | |
| Interior Systems | **208** | 109 | — |
| Commercial Systems | **201** | 143 | 143 |
| Government Systems | **93** | 75 | 79 |
| Information Management Services [1] | **—** | — | 2 |
| Total company-funded | **502** | 327 | 224 |
| Total research and development expense | **$ 1,357** | $ 1,073 | $ 845 |
| Percent of total sales | **15.7%** | 15.7% | 16.1% |

[1] R&D expenses for the Information Management Services segment do not include costs of internally developed software and other costs associated with the expansion and construction of network-related assets. These costs are capitalized as Property on the Consolidated Statement of Financial Position.

We make significant investments in research and development to allow our customers to benefit from the latest technological advancements. Total R&D expense is comprised of both company-funded and customer-funded expenditures. In addition to the

R&D expenditures shown in the table above, we capitalize in inventory the cost of certain pre-production engineering effort incurred during the development phase of programs when the customer has provided us a long-term supply arrangement and a contractual guarantee for reimbursement. Pre-production engineering costs are then amortized over their useful lives. This amortization cost is included within customer-funded R&D expense and totaled $87 million , $59 million and $49 million for 2018 , 2017 and 2016 , respectively. Refer to ***Critical Accounting Policies*** section found in Item 7 below for further discussion of our investments in pre-production engineering effort.

Customer-funded R&D expenditures are incurred pursuant to contractual arrangements and are typically accounted for as contract costs within cost of sales, with the reimbursement accounted for as a sale in accordance with the percentage-of-completion method of accounting.

Company-funded R&D expenditures relate to the development of new products and the improvement of existing products and are expensed as incurred and included in cost of sales, as disclosed in Note 2 of the ***Notes to Consolidated Financial Statements*** in Item 8 below. Company-funded R&D expense consists primarily of payroll-related expenses of employees engaged in R&D activities, engineering-related product materials and equipment and subcontracting costs.

Total R&D expense increased $284 million from 2017 to 2018 . The customer-funded portion of R&D increased $109 million from 2017 to 2018 , primarily due to customer-funded expenditures from the recently acquired B/E Aerospace business. In addition, customer-funded expenditures for Government Systems increased $62 million due to fixed wing and test and training range programs while Commercial Systems decreased $9 million due to international regional jet programs. Company-funded R&D expenditures increased $175 million from 2017 to 2018 , primarily due to company-funded expenditures from the recently acquired B/E Aerospace business. In addition, company-funded expenditures for Commercial Systems increased $58 million due to the Bombardier Global 7500 and Boeing 777X programs while Government Systems increased $18 million due to spending on various Avionics programs.

Total R&D expense increased $228 million from 2016 to 2017 . The customer-funded portion of R&D increased $125 million from 2016 to 2017 , primarily due to $54 million of customer-funded expenditure from the recently acquired B/E Aerospace business. In addition, customer-funded expenditures for Government Systems increased $40 million due to fixed wing programs and Commercial Systems increased $31 million due to international regional jet programs and higher amortization of pre-production engineering costs. Company-funded R&D expenditures increased $103 million from 2016 to 2017 primarily due to $112 million of company-funded expenditures from the recently acquired B/E Aerospace business.

In addition to the R&D expenses above, development expenditures incurred primarily for the Airbus A350 and A220 platforms and the Bombardier Global 7500 program in 2018 resulted in a gross $85 million increase to our investments in pre-production engineering programs capitalized within inventory. The gross increase of $85 million for 2018 was $46 million less than the $131 million gross increase in pre-production engineering costs capitalized within inventory during 2017 , primarily due to lower costs incurred on the Bombardier Global 7500 and Boeing 737 MAX platforms, partially offset by an increase in costs incurred for the Airbus A350 program.

Development expenditures incurred on the Bombardier Global 7500, Airbus A220, Boeing 737 MAX and certain military transport programs in 2017 resulted in a gross $131 million increase to our investments in pre-production engineering programs capitalized within inventory. The gross increase of $131 million for 2017 was $46 million less than the $177 million net increase in pre-production engineering costs capitalized within inventory during 2016, primarily due to lower costs incurred for the Boeing 737 MAX platform.

Refer to Note 6 of the ***Notes to Consolidated Financial Statements*** in Item 8 below for further discussion of our investments in pre-production engineering effort.

**Selling, General and Administrative Expenses**

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Selling, general and administrative expenses | **$ 817** | $ 732 | $ 638 |
| Percent of total sales | **9.4%** | 10.7% | 12.1% |

Selling, general and administrative (SG&A) expenses consist primarily of personnel, facility and other expenses related to employees not directly engaged in manufacturing or R&D activities. These activities include marketing and business development, finance, legal, information technology and other administrative and management functions.

Total SG&A expenses increased $85 million , or 12 percent , in 2018 compared to 2017 , primarily due to the following:

- SG&A costs from the recently acquired B/E Aerospace business
- partially offset by the absence of international customer bankruptcy and employee severance charges recorded in 2017
- also offset by the benefits of cost savings initiatives

Total SG&A expenses increased $94 million , or 15 percent , in 2017 compared to 2016 , primarily due to the following:

- $99 million of SG&A costs from the recently acquired B/E Aerospace business
- international customer bankruptcy and employee severance charges in 2017
- a $3 million increase in employee incentive compensation costs
- partially offset by $12 million of restructuring and asset impairment charges recorded in 2016 and the benefits of cost savings initiatives

**Interest Expense**

| (in millions) | **2018** | 2017 | 2016 |
| --- | --- | --- | --- |
| Interest expense | **$ 262** | $ 187 | $ 64 |

Interest expense increased by $75 million in 2018 compared to 2017 , primarily due to the following:

- $89 million of incremental interest on the debt issued to fund the B/E Aerospace acquisition
- the combination of higher commercial paper balances and higher interest rates on commercial paper compared to the prior year
- partially offset by the absence of $29 million of bridge facility fees incurred in the prior year related to the B/E Aerospace acquisition

Interest expense increased by $123 million in 2017 compared to 2016 , primarily due to to the following:

- $92 million of incremental interest on the new debt issued to fund the B/E Aerospace acquisition
- $29 million of fees incurred in 2017 associated with the bridge credit agreement entered into in December 2016 pursuant to the acquisition of B/E Aerospace

See Note 9 of the ***Notes to Consolidated Financial Statements*** in Item 8 below for more detail regarding outstanding debt.

**Other Income, Net**

| (in millions) | **2018** | 2017 | 2016 |
| --- | --- | --- | --- |
| Other income, net | **$ 20** | $ 16 | $ 20 |

Other income, net increased by $4 million in 2018 compared to 2017 , primarily due to favorable resolution of certain claims associated with a divested business, as discussed in the Information Management Services section of the Segment Financial Results below, partially offset by asset impairment charges due to the planned sale of SMR Technologies (see Note 4 of the ***Notes to Consolidated Financial Statements*** in Item 8 below).

Other income, net decreased by $4 million in 2017 compared to 2016 , primarily due to the absence of a favorable settlement of a contractual matter with a customer of the ASES business. See Note 4 of the ***Notes to Consolidated Financial Statements*** in Item 8 below for more detail regarding this settlement.

**Income Tax Expense from Continuing Operations**

| (in millions) | | **2018** | | 2017 | | 2016 |
|---|---|---|---|---|---|---|
| Income tax expense | **$** | **80** | $ | 226 | $ | 208 |
| Effective income tax rate | | **7.2%** | | 24.3% | | 22.2% |

On December 22, 2017, the President of the United States signed into law the Tax Cuts and Jobs Act (the Act). The Act amends the Internal Revenue Code to reduce tax rates and modify policies, credits and deductions for individuals and businesses. For businesses, the Act reduces the corporate federal tax rate from a maximum of 35.0 percent to a flat 21.0 percent rate, effective January 1, 2018, and transitions from a worldwide tax system to a modified territorial tax system. The Act also adds many new provisions including changes to bonus depreciation, changes to the deduction for executive compensation and interest expense, a tax on global intangible low-taxed income (GILTI), the base erosion anti-abuse tax (BEAT) and a deduction for foreign-derived intangible income (FDII). Many of these provisions, including the tax on GILTI, the BEAT and the deduction for FDII, do not apply to the Company until 2019 and the Company continues to assess the impact of these provisions. The Company has elected to account for the tax on GILTI as a period cost and thus has not adjusted any of the deferred tax assets/liabilities of its foreign subsidiaries for the new tax. The two material items that impact the Company for 2018 are the reduction in the tax rate and a one-time tax that is imposed on the Company’s unremitted foreign earnings.

The difference between our effective income tax rate in 2018 and the statutory tax rate is primarily due to the benefit derived from the rate change on our deferred tax liabilities due to the enactment of the Act and the Federal Research and Development Tax Credit (Federal R&D Tax Credit), which provides a tax benefit on certain incremental R&D expenditures, partially offset by the tax on unremitted foreign earnings imposed by the Act.

The effective income tax rate in 2018 decreased from 2017 primarily due to the $ 154 million reduction in deferred tax liabilities resulting from the Act and the $73 million benefit of the lower U.S. Federal statutory rate on current year earnings, partially offset by the $ 24 million tax on unremitted foreign earnings imposed by the Act.

The effective income tax rate in 2017 increased from 2016 primarily due to the retroactive reinstatement of the Federal R&D Tax Credit and the release of a $41 million valuation allowance related to a U.S. capital loss carryforward in the prior year. In addition, the effective income tax rate in 2017 was favorably impacted by the jurisdictional mix of income as a result of the B/E Aerospace acquisition.

**Net Income and Diluted Earnings Per Share**

| (in millions, except per share amounts) | | **2018** | | 2017 | | 2016 |
|---|---|---|---|---|---|---|
| Income from continuing operations | **$** | **1,032** | $ | 705 | $ | 727 |
| Percent of sales | | **11.9%** | | 10.3% | | 13.8% |
| | | | | | | |
| Income from discontinued operations, net of taxes | | **—** | | — | | 1 |
| Net income | **$** | **1,032** | $ | 705 | $ | 728 |
| | | | | | | |
| Diluted earnings per share from continuing operations | **$** | **6.22** | $ | 4.79 | $ | 5.50 |
| Diluted earnings per share from discontinued operations | | **—** | | — | | 0.01 |
| Diluted earnings per share | **$** | **6.22** | $ | 4.79 | $ | 5.51 |
| | | | | | | |
| Weighted average diluted common shares | | **165.8** | | 147.2 | | 132.1 |

Income from continuing operations, net of taxes, for 2018 was $1.032 billion , up 46 percent , or $327 million , from the $705 million in income from continuing operations, net of taxes, reported for 2017 . Diluted earnings per share from continuing operations increased 30 percent to $6.22 during this same time period. The rate of increase in diluted earnings per share from continuing operations was less than the rate of increase in income from continuing operations, net of taxes, due to the 31.2 million shares of common stock issued to finance the B/E Aerospace acquisition.

Income from continuing operations, net of taxes, and diluted earnings per share from continuing operations in 2018 increased primarily due to:

- a $238 million increase in Interior Systems operating earnings, a $38 million increase in Commercial Systems operating earnings, a $13 million increase in Government Systems operating earnings and a $1 million increase in Information Management Services operating earnings
- a $146 million decrease in income tax expense as detailed in the Income Taxes section below
- an $8 million decrease in pre-tax transaction and integration costs associated with the acquisition of B/E Aerospace and the pending acquisition of Rockwell Collins by UTC
- partially offset by a $75 million increase in interest expense, primarily due to the debt issued to fund the B/E Aerospace acquisition
- also offset by $39 million of pre-tax restructuring, impairment and settlement of a contract matter charges recorded in 2018 (see Note 20 of the ***Notes to Consolidated Financial Statements*** in Item 8 below)

Income from continuing operations, net of taxes, for 2017 was $705 million , down 3 percent , or $22 million , from the $727 million in income from continuing operations, net of taxes, reported for 2016 . Diluted earnings per share from continuing operations decreased 13 percent to $4.79 during this same time period. The rate of decrease in diluted earnings per share from continuing operations was more than the rate of decrease in income from continuing operations, net of taxes, due to the 31.2 million shares of common stock issued to finance the B/E Aerospace acquisition.

Income from continuing operations, net of taxes, and diluted earnings per share from continuing operations in 2017 decreased primarily due to:

- $125 million of pre-tax transaction, integration and financing costs associated with the acquisition of B/E Aerospace
- $92 million of incremental interest expense on the new debt issued to fund the B/E Aerospace acquisition
- $24 million of pre-tax transaction costs associated with the pending acquisition of Rockwell Collins by UTC
- an $18 million increase in income tax expense as detailed in the Income Tax Expense from Continuing Operations section above
- partially offset by a $168 million increase in operating earnings from the recently acquired Interior Systems business, a $30 million increase in Information Management Services operating earnings and a $25 million increase in Government Systems operating earnings, net of a $12 million decrease in Commercial Systems operating earnings
- also offset by the absence of $45 million of pre-tax restructuring and asset impairment charges recorded in 2016

**Segment Financial Results**

One of the key metrics we use to describe year-over-year changes in operating income for each segment is the incremental (or reduced) earnings derived from higher (or lower) sales volumes. Similarly, the gross margin derived from these incremental (or reduced) earnings is often used to describe changes in segment operating margins. The incremental (or reduced) margin realized on the sales volume change tends to be disproportionately higher than the overall operating margin reported for the segment. This is because the overall operating margin for the segment contemplates more elements of our cost structure, such as company-funded R&D expense, depreciation, amortization and selling, general and administrative expenses.

***Interior Systems***

**Overview**

On April 13, 2017, we acquired B/E Aerospace and formed the Interior Systems business segment. As described in the Overview and Outlook section, sales and earnings of the B/E Aerospace thermal and electronic systems product lines, previously included in Interior products and services within the Interior Systems segment, are now being reported in the Government Systems segment. Interior Systems and Government Systems sales and operating earnings for the year ended

September 30, 2017, have been reclassified to conform to the current year presentation. See Note 3 of the ***Notes to Consolidated Financial Statements*** in Item 8 below for more information regarding the acquisition.

The Interior Systems business manufactures cabin interior products for the commercial aircraft and business aviation markets, including aircraft seats, a full line of aircraft food and beverage preparation and storage equipment, modular lavatory systems, wastewater management systems, galley systems, lighting products and oxygen systems. We sell our products and provide our services directly to virtually all of the world's major airlines and aerospace manufacturers. The near and long-term performance of our Interior Systems business is impacted by general worldwide economic health, commercial airline flight hours, commercial aircraft production and retirement rates and the financial condition of airlines worldwide.

For risks to the Interior Systems segment, see ***Risk Factors*** in Item 1A above. For additional disclosure on Interior Systems segment results see Note 21 of the ***Notes to Consolidated Financial Statements*** in Item 8 below.

**Interior Systems Sales**

The following table presents Interior Systems sales by product category:

| (in millions) | | **2018** | | 2017 | | 2016 |
|---|---|---|---|---|---|---|
| Interior products and services | **$** | **1,472** | $ | 717 | $ | — |
| Aircraft seating | | **1,237** | | 585 | | — |
| Total | **$** | **2,709** | $ | 1,302 | $ | — |
| Percent increase | | **108%** | | | | |

The 2017 results above reflect sales by the Interior Systems segment from April 13, 2017 through September 30, 2017.

*Interior Systems Sales for 2018 compared to 2017*

Total interior products and services sales increased $755 million, or 105 percent, compared to the same period in the prior year, primarily due to the following:

- a $781 million inorganic revenue increase due to the timing of the April 13, 2017, B/E Aerospace acquisition
- partially offset by $26 million in other net decreases to revenue, primarily due to timing of original equipment galley revenues and the absence of oxygen equipment retrofit deliveries which occurred in the prior year

Total aircraft seating sales increased $652 million, or 111 percent, compared to the same period in the prior year, primarily due to the following:

- a $661 million inorganic revenue increase due the timing of the April 13, 2017, B/E Aerospace acquisition
- partially offset by $9 million in other net decreases to revenue, primarily due to the completion of certain super first class programs

*Interior Systems Pro Forma Sales*

Note 3 of the ***Notes to Consolidated Financial Statements*** in Item 8 below presents supplemental pro forma financial data as if the acquisition of B/E Aerospace had been completed on October 1, 2015. The pro forma data included in Note 3 combines the Company's consolidated results with the stand-alone results of B/E Aerospace for the pre-acquisition periods. The supplemental pro forma data is not necessarily indicative of results that actually would have occurred had the acquisition been consummated on October 1, 2015.

*Interior Systems Sales for 2018 compared to Pro Forma Sales for 2017*

On a pro forma basis, sales for the Interior Systems segment would be $2.709 billion and $2.750 billion for the years ended September 30, 2018 and 2017, respectively. The $41 million, or 1 percent, decrease in the pro forma sales was primarily due to the following:

- a $65 million decrease in aircraft seating sales, primarily due to softening of the super first class seating market and the timing of other new seating equipment deliveries
- partially offset by a $24 million increase in interior products and services sales, primarily due to increased original equipment deliveries of galley inserts, advanced lavatories and cabins

*Interior Systems Pro Forma Sales for 2017 compared to Pro Forma Sales for 2016*

On a pro forma basis, sales for the Interior Systems segment would be $2.750 billion and $2.703 billion for the years ended September 30, 2017 and 2016, respectively. The $47 million, or 2 percent, increase in the pro forma sales was primarily due to the following:

- a $159 million increase in interior products and services sales, primarily due to increased original equipment deliveries of Airbus A350 galleys, Boeing 737 advanced lavatories and oxygen generators across multiple platforms
- partially offset by a $112 million decrease in aircraft seating, primarily due to the completion of certain super first class and retrofit programs

Refer to Note 3 of the ***Notes to Consolidated Financial Statements*** in Item 8 below for additional pro forma disclosures.

**Interior Systems Segment Operating Earnings**

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Segment operating earnings | **$ 406** | $ 168 | $ — |
| Percent of sales | **15.0%** | 12.9% | —% |

*Interior Systems Operating Earnings for 2018 compared to 2017*

Interior Systems operating earnings increased $238 million, or 142 percent, compared to the same period in the prior year, primarily due to the following:

- the $1.442 billion inorganic revenue increase discussed in the Interior Systems sales section above, which resulted in a $1.120 billion increase in cost and incremental earnings of $322 million, or 22 percent of the higher sales volume. The margins on the sales increase were favorably impacted by the benefit of cost synergies in the current year and unfavorably impacted by increases to certain product quality reserves
- the absence of $63 million of inventory fair value adjustment amortization recorded in the prior year
- partially offset by a $123 million increase in intangible asset amortization expense
- further offset by the $35 million organic revenue decrease discussed in the Interior Systems sales section above, which resulted in a $19 million decrease in cost and decreased earnings of $16 million, or 46 percent of the lower sales volume. The margins on the sales decrease were unfavorably impacted by sales mix due to the absence of higher margin oxygen retrofit deliveries which occurred in the prior year
- also offset by an $8 million increase in employee incentive compensation costs

2018 operating earnings include $229 million of intangible asset amortization expense, partially offset by $141 million of favorable acquired contract liability amortization. The 2017 results above reflect operating earnings of the Interior Systems segment from April 13, 2017, through September 30, 2017, and include $106 million of intangible asset amortization expense and $63 million of inventory fair value adjustment amortization that unfavorably impacted operating earnings, partially offset by $69 million of favorable acquired contract liability amortization.

***Commercial Systems***

**Overview**

Our Commercial Systems business supplies aviation electronics systems, products and services to customers located throughout the world. The customer base is comprised of OEMs of commercial air transport, business and regional aircraft, commercial airlines and business aircraft operators. The near and long-term performance of our Commercial Systems business is impacted by general worldwide economic health, commercial airline flight hours, corporate profits and the financial condition of airlines worldwide.

For risks to the Commercial Systems segment, see ***Risk Factors*** in Item 1A above. For additional disclosure on Commercial Systems segment results see Note 21 of the ***Notes to Consolidated Financial Statements*** in Item 8 below.

**Commercial Systems Sales**

The following table presents Commercial Systems sales by product category:

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Air transport aviation electronics: | | | |
| Original equipment | **$ 965** | $ 910 | $ 850 |
| Aftermarket | **593** | 541 | 542 |
| Wide-body in-flight entertainment | **15** | 19 | 38 |
| Total air transport aviation electronics | **1,573** | 1,470 | 1,430 |
| Business and regional aviation electronics: | | | |
| Original equipment | **495** | 477 | 534 |
| Aftermarket | **512** | 471 | 431 |
| Total business and regional aviation electronics | **1,007** | 948 | 965 |
| Total | **$ 2,580** | $ 2,418 | $ 2,395 |
| Percent increase | **7%** | 1% | |

*Commercial Systems Sales for 2018 compared to 2017*

Total air transport aviation electronics sales increased $103 million , or 7 percent , primarily due to the following:

- original equipment sales increased $55 million , or 6 percent , primarily due to higher Boeing 737, Airbus A320 and A350 production rates, partially offset by lower legacy wide-body production rates
- aftermarket sales increased $52 million , or 10 percent, primarily due to higher spares provisioning, service and support activity and regulatory mandate upgrade activity
- wide-body IFE sales decreased $4 million , or 21 percent , as airlines decommissioned their legacy IFE systems

Total business and regional aviation electronics sales increased $59 million , or 6 percent , primarily due to the following:

- original equipment sales increased $18 million , or 4 percent , primarily due to higher business jet equipment deliveries, partially offset by lower customer-funded development program revenues
- aftermarket sales increased $41 million , or 9 percent , primarily due to higher service and support, regulatory mandate upgrade and flight deck retrofit activities

*Commercial Systems Sales for 2017 compared to 2016*

Total air transport aviation electronics sales increased $40 million , or 3 percent , primarily due to the following:

- original equipment sales increased $60 million , or 7 percent , primarily due to higher Boeing 737 and Airbus A350 production rates, partially offset by lower legacy wide-body production rates

- aftermarket sales decreased $1 million , primarily due to lower retrofit and service and support sales, partially offset by higher regulatory mandate upgrade activity and higher used aircraft equipment sales

- wide-body IFE sales decreased $19 million , or 50 percent , as airlines decommissioned their legacy IFE systems

Total business and regional aviation electronics sales decreased $17 million , or 2 percent , primarily due to the following:

- original equipment sales decreased $57 million , or 11 percent , primarily due to lower business and regional aircraft OEM production rates, partially offset by higher product deliveries for the Airbus A220 and Global 7500 programs and higher customer-funded development program revenues

- aftermarket sales increased $40 million , or 9 percent , primarily due to higher regulatory mandate upgrade and flight deck retrofit activity

**Commercial Systems Segment Operating Earnings**

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Segment operating earnings | **$ 557** | $ 519 | $ 531 |
| Percent of sales | **21.6%** | 21.5% | 22.2% |

*Commercial Systems Operating Earnings for 2018 compared to 2017*

Commercial Systems operating earnings increased $38 million , or 7 percent , primarily due to the following:

- the $162 million increase in sales volume discussed in the Commercial Systems sales section above, which resulted in a $50 million increase in cost and incremental earnings of $112 million, or 69 percent of the higher sales volume. The margins on the sales increase were favorably impacted by sales mix as higher margin equipment and aftermarket sales increased and lower margin customer-funded development revenues decreased

- partially offset by a $58 million increase in company-funded R&D expense

- also offset by a $16 million increase in amortization of pre-production engineering

The increase in Commercial Systems operating earnings as a percent of sales was primarily due to higher sales volume and favorable sales mix, partially offset by higher company-funded R&D and pre-production engineering amortization costs.

*Commercial Systems Operating Earnings for 2017 compared to 2016*

Commercial Systems operating earnings decreased $12 million , or 2 percent , primarily due to the following:

- a $19 million increase in employee incentive compensation costs

- a $12 million increase in international customer bankruptcy and employee severance charges in 2017

- partially offset by benefits from cost savings initiatives

- in addition, the benefits of a $23 million increase in sales were unfavorably impacted by sales mix, as lower margin customer-funded development revenues increased and higher margin business jet OEM sales decreased

The decrease in Commercial Systems operating earnings as a percent of sales was primarily due to increased employee incentive compensation costs, international customer bankruptcy and employee severance charges, and unfavorable sales mix, partially offset by the benefits of cost savings initiatives.

***Government Systems***

**Overview**

The Government Systems business provides communication and navigation products and avionics to the U.S. Department of Defense, state and local governments, other government agencies, civil agencies, defense contractors and foreign ministries of defense around the world. These systems, products and services support airborne (fixed and rotary wing), ground and shipboard applications. The short- and long-term performance of our Government Systems business is affected by a number of factors, including the amount and prioritization of defense spending by the U.S. and non-U.S. governments, which is generally based on the security environment and underlying political landscape.

As described in the Overview and Outlook section, sales and earnings of the B/E Aerospace thermal and electronic systems product lines, previously included in Interior products and services within the Interior Systems segment, are now being reported in the Government Systems segment. Interior Systems and Government Systems sales and operating earnings for the year ended September 30, 2017, have been reclassified to conform to the current year presentation. See Note 3 of the ***Notes to Consolidated Financial Statements*** for more information regarding the acquisition.

For risks to the Government Systems segment, see ***Risk Factors*** in Item 1A above. For additional disclosure on Government Systems segment results see Note 21 of the ***Notes to Consolidated Financial Statements*** in Item 8 below.

**Government Systems Sales**

The following table presents Government Systems sales by product category:

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Avionics | **$ 1,503** | $ 1,472 | $ 1,483 |
| Communication and navigation | **1,128** | 912 | 723 |
| Total | **$ 2,631** | $ 2,384 | $ 2,206 |
| Percent increase | **10%** | 8% | |

*Government Systems Sales for 2018 compared to 2017*

Avionics sales increased $31 million , or 2 percent , primarily due to the following:

- a $45 million increase from higher fixed wing sales, primarily due to higher development program sales and higher deliveries for various fighter platforms
- partially offset by $14 million in other net decreases to revenue, primarily due to lower deliveries on various rotary wing platforms

Communication and navigation sales increased $216 million , or 24 percent , primarily due to the following:

- a $170 million increase from higher thermal and electronic systems sales, including a $140 million inorganic revenue increase due to the timing of the April 13, 2017, B/E Aerospace acquisition
- $69 million in other net increases to revenue, primarily due to higher test and training range sales and higher deliveries of GPS-related products
- partially offset by a $23 million decrease due to lower legacy communication product deliveries

*Government Systems Sales for 2017 compared to 2016*

Avionics sales decreased $11 million , or 1 percent , primarily due to the following:

- a $25 million decrease from lower fixed wing sales, primarily due to the wind-down of legacy tanker hardware deliveries and lower deliveries for various fighter platforms as a result of production issues, net of higher development program sales

- partially offset by a $14 million increase from higher simulation and training sales

Communication and navigation product sales increased $189 million , or 26 percent , primarily due to the following:

- a $104 million increase due to the B/E Aerospace acquisition as discussed above
- a $23 million increase from higher data links sales
- a $22 million increase from higher deliveries of GPS-related products
- $40 million in other net increases to revenue, primarily due to higher test and training range sales and higher legacy communication sales

**Government Systems Segment Operating Earnings**

| (in millions) | | **2018** | | 2017 | | 2016 |
|---|---|---|---|---|---|---|
| Segment operating earnings | **$** | **515** | $ | 502 | $ | 477 |
| Percent of sales | | **19.6%** | | 21.1% | | 21.6% |

*Government Systems Operating Earnings for 2018 compared to 2017*

Government Systems operating earnings increased $13 million , or 3 percent , primarily due to the following:

- the $247 million increase in sales volume discussed in the Government Systems sales section above, which resulted in a $209 million increase in cost and incremental earnings of $38 million, or 15 percent of the higher sales volume. The margins on the sales increase were unfavorably impacted by sales mix as lower margin customer-funded development revenues and B/E Aerospace thermal and electronic systems sales increased and higher margin product sales decreased
- partially offset by an $18 million increase in company-funded R&D expense
- also offset by a $7 million organic increase in amortization of pre-production engineering

The decrease in Government Systems operating earnings as a percent of sales was primarily due to unfavorable sales mix and higher company-funded R&D and preproduction engineering amortization costs.

*Government Systems Operating Earnings for 2017 compared to 2016*

Government Systems operating earnings increased $25 million , or 5 percent , primarily due to the following:

- the $74 million increase in sales volume discussed in the Government Systems sales section above, which resulted in a $43 million increase in cost and incremental earnings of $31 million, or 42 percent of the higher sales volume. The margins on the sales increase were favorably impacted by benefits from cost savings initiatives
- a $7 million decrease in company-funded R&D expense
- a $6 million increase due to reclassification of the operating earnings of the B/E Aerospace thermal and electronic systems product lines as discussed above
- partially offset by a $19 million increase in employee incentive compensation costs

The decrease in Government Systems operating earnings as a percent of sales was primarily due to margins on the B/E Aerospace thermal and electronic systems sales and increased employee incentive compensation costs, partially offset by earnings from the higher sales volume, the benefits of cost savings initiatives and decreased company-funded R&D expense.

*Information Management Services*

**Overview**

Our Information Management Services business enables mission-critical data and voice communications throughout the world to customers including the FAA, commercial airlines, business aircraft operators, airport and critical infrastructure operators and major passenger and freight railroads. These communications are enabled by our high-performance, high-quality and high-assurance proprietary radio and terrestrial networks, enhancing customer efficiency, safety and connectivity. The near and long-term performance of our Information Management Services business is impacted by general worldwide economic health, commercial airline and business aircraft flight hours and corporate profits.

For risks to the Information Management Services segment, see ***Risk Factors*** in Item 1A above. For additional disclosure on Information Management Services segment results see Note 21 of the ***Notes to Consolidated Financial Statements*** in Item 8 below.

**Information Management Services Sales**

The following table presents Information Management Services sales:

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Sales | **$ 745** | $ 718 | $ 658 |
| Percent increase | **4%** | 9% | |

*Information Management Services Sales for 2018 compared to 2017*

Total Information Management Services sales increased $27 million , or 4 percent . Aviation-related sales grew 6 percent, primarily due to increased usage of connectivity services, partially offset by the absence of a bulk sale of connectivity related equipment that occurred in the prior year. Non-aviation sales decreased 2 percent, primarily due to the completion of nuclear security mandate revenues.

*Information Management Services Sales for 2017 compared to 2016*

Total Information Management Services sales increased $60 million , or 9 percent . Aviation-related sales grew 11 percent, primarily due to increased usage of connectivity services and increased connectivity related equipment deliveries. Non-aviation sales grew 6 percent, primarily due to nuclear security mandate revenue.

**Information Management Services Segment Operating Earnings**

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Segment operating earnings | **$ 138** | $ 137 | $ 107 |
| Percent of sales | **18.5%** | 19.1% | 16.3% |

*Information Management Services Operating Earnings for 2018 compared to 2017*

Information Management Services operating earnings increased $1 million , or 1 percent, primarily due to:

- favorable resolution of certain claims associated with a divested business
- a $27 million increase in sales volume discussed in the Information Management Services sales section above, which resulted in a $19 million increase in cost and an increase in earnings of $8 million, or 30 percent of the higher sales volume. The margins on the sales increase were unfavorably impacted by lower margin equipment related sales
- partially offset by the absence of favorable resolution of certain international business jet support services claims in the prior year
- also offset by asset disposition and customer bankruptcy costs and an increase in the allowance for doubtful accounts related to specific customer collection risks

- further offset by a $5 million increase in employee incentive compensation costs

The decrease in operating earnings as a percent of sales was primarily due to the above mentioned favorable claims resolution, partially offset by asset disposition and customer bankruptcy costs, an increase in the allowance for doubtful accounts and increased employee incentive compensation costs.

*Information Management Services Operating Earnings for 2017 compared to 2016*

Information Management Services operating earnings increased $30 million , or 28 percent, primarily due to:

- a $60 million increase in sales volume discussed in the Information Management Services sales section above, which resulted in a $33 million increase in cost and an increase in earnings of $27 million, or 45 percent of the higher sales volume. The margins on the sales increase were favorably impacted by benefits from cost savings initiatives

- operating earnings were positively impacted in 2017 by the favorable resolution of certain prior year claims associated with international business jet support services, in excess of the 2016 benefit associated with similar claims

The increase in operating earnings as a percent of sales was primarily due to higher sales volume and the above mentioned favorable resolution of prior year claims.

**General Corporate, Net**

General corporate expenses that are not allocated to our operating segments are included in General corporate, net. These costs are included within Cost of sales, SG&A and Other income, net on the Consolidated Statement of Operations. General corporate, net is summarized as follows:

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| General corporate, net | **$ 56** | $ 57 | $ 44 |

General corporate, net expense decreased $1 million during 2018 as compared to 2017 .

General corporate, net expense increased $13 million during 2017 as compared to 2016 , primarily due to costs of the acquired B/E Aerospace business and higher employee incentive compensation costs.

**Retirement Plans**

Net benefit expense (income) for pension benefits and other retirement benefits are as follows:

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Pension benefits | **$ (29)** | $ (25) | $ (24) |
| Other retirement benefits | **13** | 14 | 14 |
| Net benefit (income) expense | **$ (16)** | $ (11) | $ (10) |

*Pension Benefits*

In 2018, five of the Company's eight collective bargaining agreements were negotiated and participation in the Rockwell Collins Pension Plan is now closed to newly hired employees pursuant to those negotiations. The individuals covered by the agreements will instead receive supplemental Company contributions to the existing defined contribution savings plan. The Company previously amended its U.S. qualified and non-qualified defined benefit pension plans to discontinue benefit accruals for salary increases and services rendered after September 30, 2006 for all salaried and hourly employees who were not covered by collective bargaining agreements. Our total cash contributions to defined contribution savings plans were $69 million , $54 million and $46 million for 2018 , 2017 and 2016 , respectively.

In October 2014, the Society of Actuaries published a new set of mortality tables (RP-2014). For our 2017 year end pension liability valuation, the Company continued to use the RP-2014 tables with an adjustment for plan experience, but utilized the MP-2016 mortality improvement scale adjusted to reflect convergence to an ultimate annual rate of mortality improvement of 0.75 percent by 2032. For the 2018 year end pension liability valuation, the Company continued to use the RP-2014 tables with an adjustment for plan experience, but utilized the MP-2017 mortality improvement scale adjusted to reflect convergence to an ultimate annual rate of mortality improvement of 0.75 percent by 2033. Both the MP-2016 and MP-2017 mortality improvement scales indicate that U.S. mortality continues to improve, but at a slower average rate. See additional details in the ***Critical Accounting Policies*** section in Item 7A below.

A "spot rate approach" has been used to calculate pension interest and service cost. The spot rate approach applies separate discount rates for each projected benefit payment in the calculation of pension interest and service cost.

Defined benefit pension income for the years ended September 30, 2018 , 2017 and 2016 was $29 million , $25 million and $24 million , respectively.

The increase in pension income in 2018 compared to 2017 was primarily due to an anticipated increase in return on plan assets as well as a change in the discount rate, impacting interest costs and amortization of net actuarial losses. The increase in pension income in 2017 compared to 2016 was primarily due to a change in the discount rate, impacting interest costs and amortization of net actuarial losses.

During 2018 , the funded status of our pension plans went from a deficit of $1.016 billion at September 30, 2017 to a deficit of $356 million at September 30, 2018 . The improvement in funded status was primarily due to an increase in contributions by the Company to its pension plans from $68 million during the year ended September 30, 2017 to $467 million during the year ended September 30, 2018, an increase in plan assets due to favorable market returns during 2018, and the favorable impact from an increase in the discount rate used to measure our U.S. pension obligations from 3.53 percent at September 30, 2017 to 4.02 percent at September 30, 2018.

Our objective with respect to the funding of our pension plans is to provide adequate assets for the payment of future benefits. Pursuant to this objective, we will fund our pension plans as required by governmental regulations and may consider discretionary contributions as conditions warrant. We believe our strong financial position continues to provide us the opportunity to make contributions to our pension plans without inhibiting our ability to pursue strategic investments.

There is no minimum statutory funding requirement for 2019. Any additional future contributions necessary to satisfy minimum statutory funding requirements are dependent upon actual plan asset returns, interest rates and other actuarial assumptions.

*Other Retirement Benefits*

Other retirement benefits expense for the years ended September 30, 2018 , 2017 and 2016 was $13 million , $14 million and $14 million , respectively.

## FINANCIAL CONDITION AND LIQUIDITY

***Cash Flow Summary***

Our ability to generate significant cash flow from operating activities coupled with our expected ability to access the credit markets enables us to execute our growth strategies and return value to our shareowners. The timing of our cash inflows is historically heavily weighted towards the second half of our fiscal year, particularly our fourth quarter. We expect this trend to continue in the future.

**Operating Activities**

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Cash (used for) provided by operating activities from continuing operations | **$ (310)** | $ 1,264 | $ 723 |

The $1.574 billion increase in cash used for operating activities in 2018 compared to 2017 was primarily due to the following:

- higher payments for production inventory and other operating costs, which increased $2.214 billion to $7.366 billion compared to $5.152 billion in 2017 due to cash payments of the recently acquired B/E Aerospace business and a $234 million increase in cash incentive payments to customers in 2018

- payments to our pension plan increased $399 million as we made contributions of $467 million in 2018 compared to $68 million in 2017. The incremental contribution was made to achieve a tax deduction at the pre-reform rate and reduce future Pension Benefit Guaranty Corporation premiums

- payments for employee incentive pay increased $213 million, primarily due to the accelerated payment of 2018 employee incentive compensation, as discussed below. In 2017, $121 million was paid for employee incentive pay costs expensed during 2016. In the first fiscal quarter of 2018, $182 million was paid for employee incentive pay costs expensed during 2017. In addition, $152 million was paid in the fourth fiscal quarter of 2018 for employee incentive pay costs expensed during 2018. Payment of 2018 employee incentive compensation was accelerated, consistent with requirements of the Merger Agreement, given that the UTC Merger was expected to close prior to our 2018 fiscal year end. Incentive pay costs expensed in 2018 and 2017 were higher than in 2016 primarily due the acquisition of B/E Aerospace

- partially offset by higher cash receipts from customers, which increased by $1.063 billion to $8.010 billion in 2018, compared to $6.947 billion in 2017, primarily due to cash receipts of the recently acquired B/E Aerospace business. The increase in cash receipts from customers was less than the sales volume increase of $1.843 billion primarily due to the timing of sales relative to the collection of receivables from customers as well as a $248 million decrease in cash generated by sales of accounts receivable under factoring arrangements (see Note 5 of the ***Notes to Consolidated Financial Statements*** in Item 8 below)

- also offset by lower cash payments for income taxes, which decreased $202 million to $28 million in 2018 compared to $230 million in 2017. The decrease in cash used for income tax payments was primarily due to a $387 million discretionary pension contribution made in July 2018, a lower federal income tax rate as a result of the Tax Cuts and Jobs Act and the receipt of certain tax refunds

The $541 million increase in cash provided by operating activities in 2017 compared to 2016 was primarily due to the following:

- higher cash receipts from customers, which increased by $1.867 billion to $6.947 billion in 2017 compared to $5.080 billion in 2016, primarily due to cash receipts of the recently acquired B/E Aerospace business. The increase in cash receipts from customers was more than the sales volume increase of $1.563 billion due to the timing of sales relative to the collection of receivables from customers

- partially offset by higher payments for production inventory and other operating costs, which increased by $1.135 billion to $5.152 billion in 2017, compared to $4.017 billion in 2016, primarily due to cash payments of the recently acquired B/E Aerospace business

- also offset by cash payments for income taxes, which increased $100 million to $230 million in 2017, compared to $130 million in 2016. The increase in cash used for income tax payments was primarily due to the retroactive reinstatement of the Federal R&D tax credit as a result of the Protecting Americans from Tax Hikes Act in 2016, as well as pre-tax income associated with the recently acquired B/E Aerospace business

- further offset by payments for transaction costs associated with the B/E Aerospace acquisition of $114 million in 2017

**Investing Activities**

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Cash (used for) investing activities from continuing operations | **$ (256)** | $ (3,674) | $ (209) |

The $3.418 billion reduction in cash used for investing activities in 2018 compared to 2017 was primarily due to the following:

- $3.429 billion of cash payments for acquisitions in 2017, primarily related to the acquisition of B/E Aerospace
- partially offset by a $17 million increase in cash payments for property additions in 2018 compared to the prior year, primarily due to the B/E Aerospace acquisition

The $3.465 billion increase in cash used for investing activities in 2017 compared to 2016 was primarily due to the following:

- $3.417 billion in cash consideration paid, net of cash acquired, related to the April 2017 acquisition of B/E Aerospace
- a $47 million increase in cash payments for property additions to $240 million in 2017, primarily driven by the B/E Aerospace acquisition

**Financing Activities**

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Cash provided by (used for) financing activities from continuing operations | **$ 610** | $ 2,759 | $ (422) |

The $2.149 billion decrease in cash provided by financing activities in 2018 compared to 2017 was primarily due to the following:

- $3.980 billion of prior year financing activities related to B/E Aerospace acquisition. $6.099 billion in net proceeds from the issuance of long-term debt were principally used to repay $2.119 billion of assumed B/E Aerospace debt, finance the cash portion of the B/E Aerospace purchase price and pay related transaction fees and expenses
- partially offset by a $1.280 billion increase in net proceeds from short-term commercial paper borrowings
- further offset by a $541 million decrease in repayments of long-term debt

The $3.181 billion increase in cash provided by financing activities in 2017 compared to 2016 was primarily due to the following:

- $3.980 billion related to financing of the B/E Aerospace acquisition. $6.099 billion in net proceeds from the issuance of long-term debt were principally used to repay $2.119 billion of assumed B/E Aerospace debt, finance the cash portion of the B/E Aerospace purchase price and pay related transaction fees and expenses
- cash repurchases of common stock decreased $215 million to $46 million in 2017, compared to $261 million in 2016
- partially offset by a $930 million increase in repayments of long-term debt and a $102 million decrease in the net proceeds from short-term commercial paper borrowings

*Share Repurchase Program*

Cash flow from operations provided funds for repurchasing our common stock under our share repurchase program as follows:

| (in millions, except per share amounts) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Amount of share repurchases | **$ —** | $ 39 | $ 255 |
| Number of shares repurchased | **—** | 0.4 | 2.9 |
| Weighted average price per share | **$ —** | $ 104.32 | $ 87.30 |

None of the 2017 or 2016 share repurchases reflected in the table above are included within accounts payable at September 30, 2017 or 2016 , respectively.

*Dividends*

We declared and paid cash dividends of $216 million , $194 million and $172 million in 2018 , 2017 and 2016 , respectively. Based on our current dividend policy, we expect to pay quarterly cash dividends which, on an annual basis, would equal $1.32 per share. We expect to fund dividends using cash generated from operations. The declaration and payment of future dividends is at the sole discretion of the Board of Directors, subject to certain restrictions in the Merger Agreement.

***Financial Condition and Liquidity***

We maintain a capital structure that we believe enables us sufficient access to credit markets. When combined with our ability to generate strong levels of cash flow from our operations, this capital structure has provided the strength and flexibility necessary to pursue strategic growth opportunities and to return value to our shareowners.

A comparison of key elements of our financial condition as of September 30, 2018 and 2017 are as follows:

| | September 30 | |
|---|---|---|
| (in millions) | **2018** | 2017 |
| Cash and cash equivalents | **$ 738** | $ 703 |
| | | |
| Short-term debt | **(2,248)** | (479) |
| Long-term debt, net | **(5,681)** | (6,676) |
| Total Debt | **$ (7,929)** | $ (7,155) |
| Total equity | **$ 7,114** | $ 6,050 |
| Debt to total capitalization [1] | **53%** | 54% |

[1] Calculated as Total debt divided by the sum of Total debt plus Total equity

On April 13, 2017, we completed our acquisition of B/E Aerospace for $6.5 billion in cash and stock, plus the assumption of $2.0 billion in debt, net of cash acquired. The $6.5 billion purchase price included cash consideration of $3.5 billion and $3.0 billion of common stock issued for B/E Aerospace common stock (31.2 million shares of common stock issued to B/E Aerospace shareholders at the April 13, 2017 closing share price of $96.63). The cash consideration, related transaction fees and expenses and assumed debt were financed through the issuance of $4.35 billion of senior unsecured notes and $1.5 billion borrowed under a 3-year senior unsecured syndicated term loan facility that was entered into on December 16, 2016.

We primarily fund our contractual obligations, capital expenditures, small to medium-sized acquisitions, dividends and share repurchases with cash generated from operating activities. As of September 30, 2018 , approximately 60 percent of our cash and cash equivalents reside at non-U.S. locations and may not be readily accessible for use in the U.S. We are studying changes enacted by the Tax Cuts and Jobs Act, costs of repatriation and the current and future cash needs of foreign operations to determine whether there is an opportunity to tax efficiently repatriate additional foreign cash balances in the future.

Due to the fluctuations of cash flows, we supplement our internally-generated cash flow from time to time by issuing short-term commercial paper. Under our commercial paper program, we may sell up to $1.5 billion face amount of unsecured short-term promissory notes in the commercial paper market. The commercial paper notes have maturities of not more than 364 days from the date of issuance. At September 30, 2018 , short-term commercial paper borrowings outstanding were $1.5 billion , with a weighted-average annualized interest rate and maturity period of 2.42 percent and 9 days, respectively. At September 30, 2017 , short-term commercial paper borrowings outstanding were $330 million, with a weighted-average annualized interest rate and maturity period of 1.45 percent and 18 days, respectively. The maximum amount of short-term commercial paper borrowings outstanding during 2018 was $1.5 billion .

We have a $1.5 billion five-year senior unsecured revolving credit agreement with various banks that expires in December 2021. At September 30, 2018 and September 30, 2017 , there were no outstanding borrowings under the Company's revolving credit facility.

In December 2016, we entered into a $4.35 billion 364-day senior unsecured bridge term loan credit agreement and a $1.5 billion three-year senior unsecured term loan credit agreement. The bridge facility terminated upon receipt of proceeds from the notes issued to finance a portion of the B/E Aerospace acquisition. Proceeds from borrowings under the term loan facility were used to finance a portion of the B/E Aerospace acquisition and to pay related transaction fees and expenses. At September 30, 2018 , the outstanding principal balance of the term loan credit agreement was $481 million .

The revolving credit agreement and term loan credit agreement include one financial covenant requiring us to maintain a consolidated debt to total capitalization ratio of not greater than 65 percent (excluding the equity impact of accumulated other comprehensive loss related to defined benefit retirement plans). The ratio was 48 percent at September 30, 2018 .

In addition, alternative sources of liquidity could include funds available from the issuance of equity securities, debt securities and potential asset securitization strategies.

Credit ratings are a significant factor in determining our ability to access short-term and long-term financing, as well as the cost of such financing. Our strong credit ratings have enabled continued access to both short- and long-term credit markets. The following is a summary of our credit ratings as of September 30, 2018 :

| Credit Rating Agency | Short-Term Rating | Long-Term Rating | Outlook |
|---|---|---|---|
| Fitch Ratings | F2 | BBB | Positive |
| Moody’s Investors Service | P-2 | Baa2 | Stable |
| Standard & Poor’s | A-2 | BBB | Positive |

We were in compliance with all debt covenants at September 30, 2018 and September 30, 2017 .

***Factoring Arrangements***

We sell certain accounts receivable on a non-recourse basis to unrelated financial institutions under factoring agreements arranged by certain customers. Under the terms of the agreements, we retain no rights or interest and have no obligations with respect to the sold receivables. We account for these transactions as sales of receivables and record cash proceeds when received as cash provided by operating activities in the Consolidated Statement of Cash Flows. The unfavorable impact on cash used for operating activities during 2018 was $154 million . The favorable impact on cash provided by operating activities during 2017 was $94 million . The cost of participating in these programs was immaterial to our results.

***Off-balance Sheet Arrangements***

As of September 30, 2018 , other than operating leases, we had no material off-balance sheet arrangements, including guarantees, retained or contingent interests in assets transferred to unconsolidated entities, derivative instruments indexed to our stock and classified in shareowners' equity on our Consolidated Statement of Financial Position or variable interests in entities that provide financing, liquidity, market risk or credit risk support to our Company.

***Contractual Obligations***

The following table summarizes certain of our contractual obligations as of September 30, 2018 , as well as when these obligations are expected to be satisfied.

| | Payments Due by Period | | | | |
|---|---|---|---|---|---|
| (in millions) | Total | Less than 1 Year | 1 - 3 Years | 4 - 5 Years | Thereafter |
| Long-term debt | $ 6,481 | $ 750 | $ 331 | $ 1,350 | $ 4,050 |
| Interest on long-term debt | 2,549 | 231 | 392 | 326 | 1,600 |
| Non-cancelable operating leases | 506 | 89 | 134 | 87 | 196 |
| Non-cancelable capital leases, including interest | 65 | 6 | 11 | 12 | 36 |
| Purchase obligations: | | | | | |
| Purchase orders | 2,432 | 1,842 | 405 | 176 | 9 |
| Purchase contracts | 133 | 35 | 58 | 20 | 20 |
| Total | $ 12,166 | $ 2,953 | $ 1,331 | $ 1,971 | $ 5,911 |

Interest payments under long-term debt obligations exclude the potential effects of the related interest rate swap contracts. See Note 9 of the ***Notes to Consolidated Financial Statements*** in Item 8 below.

We lease certain office and manufacturing facilities as well as certain machinery and equipment under various lease contracts. Our commitments under operating leases, in the form of non-cancelable future lease payments, are not reflected as a liability on our Consolidated Statement of Financial Position. The principal portion of capital lease obligations is reflected within Other Liabilities on our Consolidated Statement of Financial Position.

Purchase obligations include purchase orders and purchase contracts. Purchase orders are executed in the normal course of business and may or may not be cancelable. Purchase contracts include agreements with suppliers under which there is a commitment to buy a minimum amount of products or pay a specified amount regardless of actual need. Generally, items represented in purchase obligations are not reflected as liabilities on our Consolidated Statement of Financial Position.

The table excludes obligations with respect to pension and other post-retirement benefit plans (see Note 10 of the ***Notes to Consolidated Financial Statements*** in Item 8 below). There is no minimum statutory funding requirement for 2019 and the Company does not currently expect to make any discretionary contributions during 2019 to these plans. Any additional future contributions necessary to satisfy minimum statutory funding requirements are dependent upon actual plan asset returns, interest rates and actuarial assumptions. With the exception of certain bargaining unit plans, payments due under other post-retirement benefit plans are funded as the expenses are incurred.

In addition, the table excludes liabilities for unrecognized tax benefits, which totaled $214 million at September 30, 2018 , as we cannot reasonably estimate the ultimate timing of cash settlements to the respective taxing authorities (see Note 13 of the ***Notes to Consolidated Financial Statements*** in Item 8 below).

The following table reflects certain of our commercial commitments as of September 30, 2018 :

| | Amount of Commitment Expiration by Period | | | | |
|---|---|---|---|---|---|
| (in millions) | Total Amount Committed | Less than 1 Year | 1 - 3 Years | 4 - 5 Years | Thereafter |
| Letters of credit [1] | $ 364 | $ 172 | $ 111 | $ 69 | $ 12 |

[1] See Note 16 of the ***Notes to Consolidated Financial Statements*** in Item 8 below for a discussion of letters of credit.

In addition to the obligations disclosed above, we occasionally enter into offset agreements, required by certain customers in some non-U.S. countries, as a condition to obtaining contract awards for our products and services. These agreements, which generally extend over several years, are customary in our industry and are designed to enhance the social and economic environment of the country in which our customers operate. These commitments may be satisfied through activities that do not require us to use cash, including transfer of technology, providing manufacturing and other consulting support to in-country projects, strategic alliances and transactions conducted by third parties (e.g., our vendors). These agreements may also be satisfied through our use of cash for activities such as placement of direct work or vendor orders for supplies and/or services, building or leasing facilities for in-country operations, in-country employment of a non-U.S. country's citizens and other forms of assistance in the applicable country. The offset rules and regulations, as well as the underlying contracts, may differ from one country to another.

We typically do not commit to offset agreements until contract awards for our products or services are definitive. Should we be unable to meet the offset obligations we may be subject to contractual penalties, and our chances of receiving additional business from the applicable customers could be reduced or, in certain cases, eliminated. We historically have not been required to pay material penalties related to offset obligations and are currently in compliance with our offset commitments.

At September 30, 2018 , we had outstanding offset obligations totaling approximately $374 million that extend through 2036. The amounts ultimately applied against our offset requirements are based on negotiations with the customer and the cost to fulfill the obligation is typically only a fraction of the original obligation.

## RECENTLY ISSUED ACCOUNTING STANDARDS

For information related to recently issued accounting standards, see Note 2 of the ***Notes to Consolidated Financial Statements*** in Item 8 below.

## ENVIRONMENTAL

For information related to environmental claims, remediation efforts and related matters, see Note 18 of the ***Notes to Consolidated Financial Statements*** in Item 8 below.

## CRITICAL ACCOUNTING POLICIES

The preparation of our financial statements in accordance with accounting principles generally accepted in the United States of America requires us to make estimates, judgments and assumptions that affect our financial condition and results of operations that are reported in the accompanying consolidated financial statements, as well as the related disclosure of assets and liabilities, contingent upon future events.

Understanding the critical accounting policies discussed below and related risks is important in evaluating our financial condition and results of operations. We believe the following accounting policies used in the preparation of the consolidated financial statements are critical to our financial condition and results of operations as they involve a significant use of management judgment on matters that are inherently uncertain. If actual results differ significantly from management's estimates, there could be a material effect on our financial condition, results of operations and cash flows. Management regularly discusses the identification and development of these critical accounting policies with the Audit Committee of the Board of Directors.

***Accounting for Long-Term Contracts***

A substantial portion of our sales to government customers and certain of our sales to commercial customers are made pursuant to long-term contracts requiring development and delivery of products over several years and often contain fixed-price purchase options for additional products. Certain of these contracts are accounted for under the percentage-of-completion method of accounting. Sales and earnings under the percentage-of-completion method are recorded either as products are shipped under the units-of-delivery method, or based on the ratio of actual costs incurred to total estimated costs expected to be incurred related to the contract under the cost-to-cost method. Approximately 16 percent of our sales are accounted for under the percentage-of-completion method of accounting.

The percentage-of-completion method of accounting requires management to estimate the profit margin for each individual contract and to apply that profit margin on a uniform basis as sales are recorded under the contract. The estimation of profit margins requires management to make projections of the total sales to be generated and the total costs that will be incurred under a contract. These projections require management to make numerous assumptions and estimates relating to items such as the complexity of design and related development costs, performance of subcontractors, availability and cost of materials, labor productivity and cost, overhead and capital costs and manufacturing efficiency. These contracts often include purchase options for additional quantities and customer change orders for additional or revised product functionality. Sales and costs related to profitable purchase options are included in our estimates only when the options are exercised while sales and costs related to unprofitable purchase options are included in our estimates when exercise is determined to be probable. Sales related to change orders are included in profit estimates only if they can be reliably estimated and collectability is reasonably assured. Purchase options and change orders are accounted for either as an integral part of the original contract or separately, depending upon the nature and value of the item. Anticipated losses on contracts are recognized in full in the period in which losses become probable and estimable.

Estimates of profit margins for contracts are typically reviewed by management on a quarterly basis. Assuming the initial estimates of sales and costs under a contract are accurate, the percentage-of-completion method results in the profit margin being recorded evenly as revenue is recognized under the contract. Changes in these underlying estimates due to revisions in sales and cost estimates, the combining of contracts or the exercise of contract options may result in profit margins being recognized unevenly over a contract as such changes are accounted for on a cumulative basis in the period estimates are revised. Cumulative catch-up adjustments resulting from changes in estimates did not have a material effect on our results of operations during the years ended September 30, 2018 , 2017 or 2016 .

***Program Investments***

We defer certain pre-production engineering costs in Inventories, net and record up-front sales incentives in Intangible Assets (collectively referred to as Program Investments). These Program Investments are amortized over their estimated useful lives, up to a maximum of 15 years. Estimated useful lives are limited to the amount of time we are virtually assured to earn revenues through a contractually enforceable right included in long-term supply arrangements with our customers. This provides the best matching of expense over the related period of benefit. The following provides an overview of the Program Investments:

| | September 30 | |
|---|---|---|
| (in millions) | **2018** | 2017 |
| Pre-production engineering costs | **$ 1,166** | $ 1,175 |
| Up-front sales incentives | **578** | 243 |
| Total Program Investments | **$ 1,744** | $ 1,418 |

We defer the cost of certain pre-production engineering costs incurred during the development phase of a program in connection with long-term supply arrangements that contain contractual guarantees for reimbursement from customers. These customer guarantees generally take the form of a minimum order quantity with quantified reimbursement amounts if the minimum order quantity is not taken by the customer. These costs are deferred in inventory to the extent of the contractual guarantees and are amortized over their estimated useful lives using a units-of-delivery method, up to 15 years. This amortization expense is included in customer funded R&D as a component of cost of sales. Amortization is based on our expectation of delivery rates on a program-by-program basis and begins when we start recognizing revenue as we deliver equipment for the program. Pre-production engineering costs in excess of the contractual guarantee, and costs incurred pursuant to supply arrangements that do not contain customer guarantees for reimbursement, are expensed as incurred.

We also provide up-front sales incentives prior to delivering products or performing services to certain commercial customers in connection with sales contracts. Up-front sales incentives are recorded as a customer relationship intangible asset and are amortized using a units-of-delivery method over the period we have received a contractually enforceable right related to the incentives, up to 15 years after entry into service. Amortization is based on our expectation of delivery rates on a program-by-program basis. Amortization begins when we start recognizing revenue as we deliver equipment for the program. Up-front sales incentives consisting of cash payments or customer account credits are amortized as a reduction of sales, whereas incentives consisting of free products are amortized as cost of sales.

Risks inherent in recovering the value of our Program Investments include, but are not limited to, the following:

- changes in market conditions may affect product sales under a program. In particular, the commercial aerospace market has been historically cyclical and subject to downturns during periods of weak economic conditions, which could be prompted or exacerbated by political or other U.S. or international events
- bankruptcy or other significant financial difficulties of our customers
- our ability to produce products could be impacted by the performance of subcontractors, the availability of specialized materials and other production risks

We evaluate the carrying amount of Program Investments for recovery at least annually or when potential indicators of impairment exist, such as a change in the estimated number of products to be delivered under a program. No significant impairment charges related to Program Investments were recorded in 2018 , 2017 or 2016 . While we believe our Program Investments are recoverable over time, the cancellation of a program by a customer coupled with bankruptcy or other financial difficulties, would represent the most significant impairment factor related to Program Investments. We also evaluate our amortization of Program Investments quarterly based on our expectation of delivery rates on a program-by-program basis. The impact of changes in expected delivery rates on the Program Investments' amortization is adjusted as needed on a prospective basis.

Amortization expense for pre-production engineering and up-front sales incentives for 2018 , 2017 and 2016 was as follows:

| (in millions) | 2018 | 2017 | 2016 |
|---|---|---|---|
| Amortization of pre-production engineering | **$ 87** | $ 59 | $ 49 |
| Amortization of up-front sales incentives | **21** | 13 | 18 |
| Total amortization of Program Investments | **$ 108** | $ 72 | $ 67 |

As disclosed in Note 3 of the ***Notes to Consolidated Financial Statements*** in Item 8 below, the weighted-average amortization period for up-front sales incentives is approximately 12 years. Anticipated amortization expense for the up-front sales incentives at September 30, 2018 , for 2019 and beyond is summarized below:

| (in millions) | 2019 | 2020 | 2021 | 2022 | 2023 | Thereafter |
|---|---|---|---|---|---|---|
| Anticipated amortization expense for up-front sales incentives | 24 | 26 | 26 | 26 | 25 | 451 |

As discussed in Note 2 of the ***Notes to Consolidated Financial Statements*** in Item 8 below, adoption of the new revenue recognition standard on October 1, 2018, resulted in elimination of the $1.166 billion pre-production engineering balance and approximately $120 million of customer relationship intangible assets. Therefore, $120 million of amortization expense associated with customer relationship intangible assets as contemplated in the table above will be avoided.

Pre-production engineering costs comprise 44 percent of our total Inventory balance at September 30, 2018 , compared to 48 percent at September 30, 2017 . Pre-production engineering costs decreased $9 million from September 30, 2017 to September 30, 2018 . The majority of this decrease was attributable to increased amortization of pre-production engineering. Additionally, up-front sales incentives to Commercial Systems customers increased $335 million from September 30, 2017 to September 30, 2018 , primarily due to the extension of certain long-term sales contracts.

Growth in our Program Investments continues to be driven by the expanded market share our Company successfully captured over the past several years. Commercial Systems has secured positions on several key platforms in the air transport market, including the Boeing 737 MAX and Airbus A350. In the business and regional jet market, our Pro Line Fusion avionics system has been selected by customers around the globe, including Bombardier, Embraer and Gulfstream.

We believe our Program Investments are recoverable based upon our contractually enforceable rights under long-term supply arrangements and the expected revenues and profits associated with our positions on these aircraft platforms.

***Income Taxes***

At the end of each quarterly reporting period, we estimate an effective income tax rate that is expected to be applicable for the full fiscal year. The estimate of our effective income tax rate involves significant judgments resulting from uncertainties in the application of complex tax laws and regulations across many jurisdictions, implementation of tax planning strategies and estimates as to the jurisdictions where income is expected to be earned. These estimates may be further complicated by new laws, new interpretations of existing laws and rulings by taxing authorities. For example, in 2018 the United States Government enacted the Tax Cuts and Jobs Act (the Act), which contains significant changes to the U.S. tax system. Due to the subjectivity and complex nature of these underlying issues, our actual effective income tax rate and related tax liabilities may differ from our initial estimates. Differences between our estimated and actual effective income tax rates and related liabilities are recorded in the period they become known or as our estimates are revised based on additional information. The resulting adjustment to our income tax expense could have a material effect on our results of operations in the period the adjustment is recorded. A one percentage point change in our effective income tax rate would change our annual income from continuing operations by approximately $11 million .

Deferred tax assets and liabilities are recorded for tax carryforwards and the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting and income tax purposes. The future realization of our deferred tax assets ultimately depends on our ability to generate sufficient taxable income of the appropriate character (for example, ordinary income or capital gains) within the carryback and carryforward periods available under the tax law and our ability to execute successful tax planning strategies. Management believes it is more likely than not that the long-term deferred tax assets will be realized through the reduction of future taxable income. A change in the ability of our operations to continue to generate future taxable income, or our ability to implement tax planning strategies, could affect our ability to realize the future tax deductions underlying our net deferred tax assets, and require us to record a valuation allowance against our net deferred tax assets. The recognition of a valuation allowance would result in a reduction to net income and if significant, could have a material impact on our effective tax rate, results of operations and financial position in any given period.

As part of the determination of our tax liability, management exercises considerable judgment in evaluating tax positions taken by us in determining the income tax provision and establishes reserves for tax contingencies in accordance with the Income Taxes topic of the FASB Accounting Standards Codification. See Note 13 of the ***Notes to Consolidated Financial Statements*** in Item 8 below for further detail regarding the impacts of the Act, unrecognized tax benefits, deferred taxes and the factors considered in evaluating deferred tax asset realization.

***Goodwill***

As of September 30, 2018 , we had $9.107 billion of goodwill related to various business acquisitions. We perform goodwill impairment tests on an annual basis during the fourth quarter of each fiscal year, or on an interim basis if events or circumstances indicate that it is more likely than not that impairment has occurred.

Goodwill is potentially impaired if the carrying value of the reporting unit that contains the goodwill exceeds its estimated fair value. The fair values of our reporting units are generally determined using a combination of an income approach, which estimates fair value based upon future discounted cash flows, and a market approach, which estimates fair value using market multiples, ratios and valuations of a set of comparable public companies within our industry. We completed our annual goodwill impairment test in the fourth quarter of 2018 and concluded no impairment of goodwill exists, as all goodwill reporting units had a calculated fair value in excess of carrying value of greater than 20 percent. Although goodwill is not currently impaired, there can be no assurance that future impairments will not occur. Significant negative industry or economic trends, disruptions to our business, failure to achieve synergies from recent acquisitions, or other unexpected significant changes in the use of certain assets could all have a negative effect on fair values in the future.

***Pension Benefits***

In 2018, five of our eight collective bargaining agreements were negotiated and participation in the Rockwell Collins Pension Plan is now closed to newly hired employees pursuant to those negotiations. The individuals covered by the agreements will instead receive supplemental Company contributions to the existing defined contribution savings plan. We previously amended our U.S. qualified and non-qualified defined benefit pension plans to discontinue benefit accruals for salary increases and services rendered after September 30, 2006 for all salaried and hourly employees who were not covered by collective bargaining agreements. Accounting standards require these plans to be measured on an actuarial basis. These accounting standards will generally reduce, but not eliminate, the volatility of pension expense as actuarial gains and losses resulting from both normal year-to-year changes in valuation assumptions and the differences from actual experience are deferred and amortized. The application of these accounting standards requires management to make numerous assumptions and judgments that can significantly affect these measurements. Critical assumptions made by management in performing these actuarial valuations include the selection of discount rates and expectations regarding the future rate of return on pension plan assets.

In October 2014, the Society of Actuaries published a new set of mortality tables (RP-2014). While accounting standards do not prescribe the use of a specific set of mortality tables in the measurement of pension obligations, mortality is a key assumption in developing actuarial estimates. For our 2017 year end pension liability valuation, we used the RP-2014 tables with an adjustment for plan experience, and utilized the MP-2016 mortality improvement scale adjusted to reflect convergence to an ultimate annual rate of mortality improvement of 0.75 percent by 2032. For the 2018 year end pension liability valuation, we continued to use the RP-2014 tables with an adjustment for plan experience, but utilized the MP-2017 mortality improvement scale adjusted to reflect convergence to an ultimate annual rate of mortality improvement of 0.75 percent by 2033. Both the MP-2016 and MP-2017 mortality improvement scales indicate that U.S. mortality continues to improve, but at a slower average rate. These changes resulted in a decrease to the 2018 projected pension benefit obligation of $18 million.

Discount rates are used to determine the present value of our pension obligations and also affect the amount of pension expense recorded in any given period. We estimate the discount rate based on the rates of return of high quality, fixed-income investments with maturity dates that reflect the expected time horizon over which benefits will be paid (see Note 10 of the ***Notes to Consolidated Financial Statements*** in Item 8 below). Changes to the discount rate could have a material effect on our reported pension obligations and would also impact the related pension expense.

A "spot rate approach" has been used to calculate pension and other retirement benefits interest and service costs. The spot rate approach applies separate discount rates for each projected benefit payment in the calculation of pension interest and service cost.

The expected rate of return is our estimate of the long-term earnings rate on our pension plan assets and is based upon both historical long-term actual and expected future investment returns considering the current investment mix of plan assets. Differences between the actual and expected rate of return on plan assets can impact our expense for pension benefits.

Holding all other factors constant, the estimated impact on 2018 pension expense and pension benefit obligation for our U.S. plans caused by hypothetical changes to key assumptions is as follows:

| | Change in Assumption (in millions) | |
|---|---|---|
| Assumption | 25 Basis Point Increase | 25 Basis Point Decrease |
| Pension obligation discount rate | $97 pension projected benefit obligation decrease | $102 pension projected benefit obligation increase |
| Pension obligation discount rate | $1 pension expense increase | $1 pension expense decrease |
| Expected long-term rate of return on plan assets | $7 pension expense decrease | $7 pension expense increase |

**Item 7A.** ***Quantitative and Qualitative Disclosures about Market Risk.***

*Interest Rate Risk*

In addition to using cash provided by normal operating activities, we utilize a combination of short-term and long-term debt to finance operations and make acquisitions. Our operating results and cash flows are exposed to changes in interest rates that could adversely affect the amount of interest expense incurred and paid on debt obligations in any given period. In addition, changes in interest rates can affect the fair value of our debt obligations. Such changes in fair value are only relevant to the extent these debt obligations are settled prior to maturity. We manage our exposure to interest rate risk by maintaining an appropriate mix of fixed and variable rate debt and may employ financial instruments in the form of interest rate swaps to help meet this objective.

At September 30, 2018 , we had the following unsecured notes outstanding:

| | September 30, 2018 | | |
|---|---|---|---|
| (in millions, except interest rate figures) | Interest Rate | Carrying Value | Fair Value |
| Fixed-rate notes due: | | | |
| July 2019 | 1.95% | $ 300 | $ 298 |
| July 2019 | 5.25% | 300 | 305 |
| November 2021 | 3.10% | 250 | 246 |
| March 2022 | 2.80% | 1,100 | 1,070 |
| December 2023 | 3.70% | 400 | 397 |
| March 2024 | 3.20% | 950 | 917 |
| March 2027 | 3.50% | 1,300 | 1,235 |
| December 2043 | 4.80% | 400 | 406 |
| April 2047 | 4.35% | 1,000 | 957 |
| Variable-rate term loan due: | | | |
| April 2020 | 1 month LIBOR + 1.25% (1) | 481 | 481 |

(1) We have the option to elect a one-, two-, three- or six-month LIBOR interest rate and have elected the one-month rate during the fourth quarter of 2018 . The one-month LIBOR rate at September 30, 2018 was approximately 2.26 percent.

In June 2015, we entered into interest rate swap contracts which effectively converted $150 million of the 5.25 percent Notes due 2019 to floating rate debt based on three-month LIBOR plus 3.56 percent.

In March 2014, we entered into interest rate swap contracts which effectively converted $200 million of the Notes due 2023 to floating rate debt based on one-month LIBOR plus 0.94 percent.

In January 2010, we entered into interest rate swap contracts which effectively converted $150 million of the 5.25 percent Notes due 2019 to floating rate debt based on six-month LIBOR plus 1.235 percent.

A hypothetical 10 percent increase in average market interest rates would have decreased the fair value of our long-term fixed rate debt, exclusive of the effects of the interest rate swap contracts, by $125 million. A hypothetical 10 percent decrease in average market interest rates would have increased the fair value of our long-term fixed rate debt, exclusive of the effects of the interest rate swap contracts, by $131 million. The fair value of the $500 million notional value of interest rate swap contracts was a $ 2 million net liability at September 30, 2018 . A hypothetical 10 percent increase in average market interest rates would decrease the fair value of our interest rate swap contracts by $3 million. A 10 percent decrease in average market interest rates would increase the fair value of our interest rate swap contract by $3 million. Our results of operations are affected by changes in market interest rates related to variable rate debt. Inclusive of the effect of the interest rate swaps, a hypothetical 10 percent increase or decrease in average market interest rates would not have a material effect on our operations or cash flows. For more information related to outstanding debt obligations and derivative financial instruments, see Notes 9, 14 and 15 in the ***Notes to Consolidated Financial Statements*** in Item 8 below.

*Foreign Currency Risk*

We transact business in various foreign currencies which exposes our cash flows and earnings to changes in foreign currency exchange rates. We attempt to manage this exposure through operational strategies and the use of foreign currency forward exchange contracts (foreign currency contracts). All foreign currency contracts are executed with banks we believe to be creditworthy and are primarily denominated in currencies of major industrial countries. The majority of our non-functional currency firm and anticipated receivables and payables are typically hedged using foreign currency contracts. It is our policy not to manage exposure to net investments in non-U.S. subsidiaries or enter into derivative financial instruments for speculative purposes. Notional amounts of outstanding foreign currency contracts were $0 million and $1.312 billion at September 30, 2018 and 2017 , respectively. The decrease in the notional amount of outstanding foreign currency contracts is primarily due to the maturation of certain foreign currency contracts entered into to offset remeasurement of certain intercompany loans that matured in 2018. The 2017 notional value consisted primarily of contracts for the British pound sterling and European euro, and are stated in U.S. dollar equivalents at spot exchange rates at September 30, 2017. For more information related to currency forward exchange contracts, see Notes 14 and 15 in the ***Notes to Consolidated Financial Statements*** in Item 8 below.

**Item 8.** ***Financial Statements and Supplementary Data.***

**MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Rockwell Collins' internal control over financial reporting is a process designed, under the supervision of the Chief Executive Officer and Chief Financial Officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Our internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of Rockwell Collins; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with accounting principles generally accepted in the United States of America, and that our receipts and expenditures are being made only in accordance with authorizations of Rockwell Collins' management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on the consolidated financial statements.

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

Management assessed the effectiveness of Rockwell Collins' internal control over financial reporting as of September 30, 2018 . In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control-Integrated Framework (2013)* . Based on this assessment, management determined that Rockwell Collins maintained effective internal control over financial reporting as of September 30, 2018 .

Rockwell Collins' internal control over financial reporting as of September 30, 2018 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is included within the ***Controls and Procedures*** section in Item 9A of this Form 10-K.

| /s/ ROBERT K. ORTBERG | /s/ PATRICK E. ALLEN |
|---|---|
| Robert K. Ortberg<br>Chairman, President and<br>Chief Executive Officer | Patrick E. Allen<br>Senior Vice President and<br>Chief Financial Officer |

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareowners and the Board of Directors of Rockwell Collins, Inc.:

**Opinion on the Financial Statements**

We have audited the accompanying consolidated statements of financial position of Rockwell Collins, Inc. and subsidiaries (the “Company”) as of September 28, 2018 and September 29, 2017, and the related consolidated statements of operations, comprehensive income, cash flows, and equity for each of the three years in the period ended September 28, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of September 28, 2018 and September 29, 2017, and the results of its operations and its cash flows for each of the three years in the period ended September 28, 2018, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company’s internal control over financial reporting as of September 28, 2018, based on the criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated November 26, 2018 expressed an unqualified opinion on the Company’s internal control over financial reporting.

**Basis for Opinion**

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

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

/s/ Deloitte & Touche LLP

Chicago, Illinois

November 26, 2018

We have served as the Company’s auditor since 2001.

**ROCKWELL COLLINS, INC.**
**CONSOLIDATED STATEMENT OF FINANCIAL POSITION**
**(in millions, except per share amounts)**

| | September 30 | |
|---|---|---|
| | **2018** | 2017 |
| **ASSETS** | | |
| **Current Assets:** | | |
| Cash and cash equivalents | **$ 738** | $ 703 |
| Receivables, net | **2,109** | 1,426 |
| Inventories, net | **2,649** | 2,451 |
| Businesses held for sale | **91** | — |
| Other current assets | **191** | 180 |
| Total current assets | **5,778** | 4,760 |
| | | |
| **Property, Net** | **1,429** | 1,398 |
| **Goodwill** | **9,107** | 9,158 |
| **Customer Relationship Intangible Assets** | **1,654** | 1,525 |
| **Other Intangible Assets** | **538** | 604 |
| **Deferred Income Tax Asset** | **16** | 21 |
| **Other Assets** | **504** | 531 |
| **TOTAL ASSETS** | **$ 19,026** | $ 17,997 |
| **LIABILITIES AND EQUITY** | | |
| **Current Liabilities:** | | |
| Short-term debt | **$ 2,248** | $ 479 |
| Accounts payable | **821** | 927 |
| Compensation and benefits | **276** | 385 |
| Advance payments from customers | **377** | 361 |
| Accrued customer incentives | **280** | 287 |
| Product warranty costs | **194** | 186 |
| Other current liabilities | **490** | 444 |
| Total current liabilities | **4,686** | 3,069 |
| | | |
| **Long-term Debt, Net** | **5,681** | 6,676 |
| **Retirement Benefits** | **525** | 1,208 |
| **Deferred Income Tax Liability** | **346** | 331 |
| **Other Liabilities** | **674** | 663 |
| | | |
| **Equity:** | | |
| Common stock ($0.01 par value; shares authorized: 1,000; shares issued: September 30, 2018, 175.0; September 30, 2017, 175.0) | **2** | 2 |
| Additional paid-in capital | **4,604** | 4,559 |
| Retained earnings | **4,654** | 3,838 |
| Accumulated other comprehensive loss | **(1,471)** | (1,575) |
| Common stock in treasury, at cost (shares held: September 30, 2018, 10.5; September 30, 2017, 12.1) | **(682)** | (781) |
| Total shareowners' equity | **7,107** | 6,043 |
| Noncontrolling interest | **7** | 7 |
| Total equity | **7,114** | 6,050 |
| **TOTAL LIABILITIES AND EQUITY** | **$ 19,026** | $ 17,997 |

See Notes to Consolidated Financial Statements.

**ROCKWELL COLLINS, INC.**
**CONSOLIDATED STATEMENT OF OPERATIONS**
**(in millions, except per share amounts)**

| | Year Ended September 30 | | |
|---|---|---|---|
| | **2018** | 2017 | 2016 |
| **Sales** | | | |
| Product sales | **$ 7,643** | $ 5,885 | $ 4,411 |
| Service sales | **1,022** | 937 | 848 |
| Total sales | **8,665** | 6,822 | 5,259 |
| | | | |
| **Costs, expenses and other:** | | | |
| Product cost of sales | **5,699** | 4,237 | 3,045 |
| Service cost of sales | **683** | 631 | 597 |
| Selling, general and administrative expenses | **817** | 732 | 638 |
| Transaction and integration costs | **112** | 120 | — |
| Interest expense | **262** | 187 | 64 |
| Other income, net | **(20)** | (16) | (20) |
| Total costs, expenses and other | **7,553** | 5,891 | 4,324 |
| | | | |
| **Income from continuing operations before income taxes** | **1,112** | 931 | 935 |
| Income tax expense | **80** | 226 | 208 |
| **Income from continuing operations** | **1,032** | 705 | 727 |
| | | | |
| Income from discontinued operations, net of taxes | **—** | — | 1 |
| | | | |
| **Net income** | **$ 1,032** | $ 705 | $ 728 |
| | | | |
| **Earnings per share:** | | | |
| Basic | | | |
| Continuing operations | **$ 6.29** | $ 4.85 | $ 5.57 |
| Discontinued operations | **—** | — | 0.01 |
| Basic earnings per share | **$ 6.29** | $ 4.85 | $ 5.58 |
| | | | |
| Diluted | | | |
| Continuing operations | **$ 6.22** | $ 4.79 | $ 5.50 |
| Discontinued operations | **—** | — | 0.01 |
| Diluted earnings per share | **$ 6.22** | $ 4.79 | $ 5.51 |
| | | | |
| **Weighted average common shares:** | | | |
| Basic | **164.0** | 145.5 | 130.5 |
| Diluted | **165.8** | 147.2 | 132.1 |
| | | | |
| **Cash dividends per share** | **$ 1.32** | $ 1.32 | $ 1.32 |

See Notes to Consolidated Financial Statements.

**ROCKWELL COLLINS, INC.**
**CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME**
**(in millions)**

| | Year Ended September 30 | | |
|---|---|---|---|
| | **2018** | 2017 | 2016 |
| Net income | **$ 1,032** | $ 705 | $ 728 |
| Unrealized foreign currency translation and other adjustments | **(39)** | 77 | (20) |
| Pension and other retirement benefits adjustments (net of taxes: 2018, $(46); 2017, $(140); 2016, $102) | **144** | 243 | (181) |
| Foreign currency cash flow hedge adjustments (net of taxes: 2018, $0; 2017, $0; 2016, $1) | **(1)** | 3 | 2 |
| Comprehensive income | **$ 1,136** | $ 1,028 | $ 529 |

See Notes to Consolidated Financial Statements.

**ROCKWELL COLLINS, INC.**
**CONSOLIDATED STATEMENT OF CASH FLOWS**
**(in millions)**

| | Year Ended September 30 | | |
|---|---|---|---|
| | **2018** | 2017 | 2016 |
| **Operating Activities:** | | | |
| Net income | **$ 1,032** | $ 705 | $ 728 |
| Income from discontinued operations, net of tax | **—** | — | 1 |
| Income from continuing operations | **1,032** | 705 | 727 |
| Adjustments to arrive at cash (used for) provided by operating activities: | | | |
| Non-cash restructuring and impairment charges and settlement of a contract matter | **34** | — | 6 |
| Depreciation | **204** | 168 | 144 |
| Amortization of intangible assets, pre-production engineering costs and other | **386** | 226 | 109 |
| Amortization of acquired contract liability | **(141)** | (69) | — |
| Amortization of inventory fair value adjustment | **—** | 74 | — |
| Stock-based compensation expense | **35** | 31 | 27 |
| Compensation and benefits paid in common stock | **58** | 67 | 59 |
| Deferred income taxes | **(13)** | 43 | 48 |
| Pension plan contributions | **(467)** | (68) | (69) |
| Fair value of acquisition-related contingent consideration | **—** | — | 1 |
| Changes in assets and liabilities, excluding effects of acquisitions and foreign currency adjustments: | | | |
| Receivables | **(680)** | 121 | (91) |
| Production inventory | **(255)** | (50) | (18) |
| Pre-production engineering costs | **(85)** | (94) | (177) |
| Accounts payable | **(102)** | 141 | 38 |
| Compensation and benefits | **(109)** | 39 | (4) |
| Advance payments from customers | **17** | 10 | (82) |
| Accrued customer incentives | **(7)** | (8) | 14 |
| Product warranty costs | **10** | (21) | (2) |
| Income taxes | **64** | (45) | 25 |
| Other assets and liabilities [(1)] | **(291)** | (6) | (32) |
| **Cash (Used for) Provided by Operating Activities from Continuing Operations** | **(310)** | 1,264 | 723 |
| **Investing Activities:** | | | |
| Property additions | **(257)** | (240) | (193) |
| Acquisition of business, net of cash acquired | **—** | (3,429) | (17) |
| Other investing activities | **1** | (5) | 1 |
| **Cash (Used for) Investing Activities from Continuing Operations** | **(256)** | (3,674) | (209) |
| **Financing Activities:** | | | |
| Repayment of long-term debt, including current portion | **(389)** | (930) | — |
| Repayment of acquired long-term debt | **—** | (2,119) | — |
| Purchases of treasury stock [(2)] | **(12)** | (46) | (261) |
| Cash dividends | **(216)** | (194) | (172) |
| Increase in long-term borrowings | **—** | 6,099 | — |
| Increase (decrease) in short-term commercial paper borrowings, net | **1,170** | (110) | (8) |
| Proceeds from the exercise of stock options | **63** | 64 | 21 |
| Other financing activities | **(6)** | (5) | (2) |
| **Cash Provided by (Used for) Financing Activities from Continuing Operations** | **610** | 2,759 | (422) |
| Effect of exchange rate changes on cash and cash equivalents | **(9)** | 14 | (4) |
| **Net Change in Cash and Cash Equivalents** | **35** | 363 | 88 |
| **Cash and Cash Equivalents at Beginning of Period** | **703** | 340 | 252 |
| **Cash and Cash Equivalents at End of Period** | **$ 738** | $ 703 | $ 340 |

(1) Includes $254 million of up-front sales incentive payments made in 2018 (see Note 3)
(2) Includes net settlement of employee tax withholding upon vesting of share-based payment awards

See Notes to Consolidated Financial Statements.

## ROCKWELL COLLINS, INC.
## CONSOLIDATED STATEMENT OF EQUITY
## (in millions)

| | Common Stock | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Shares Outstanding | Par Value | Additional Paid-In Capital | Retained Earnings | Accumulated Other Comprehensive Loss | Treasury Stock | Noncontrolling Interest | Total Equity |
| Balance at September 30, 2015 | 131.9 | $ 2 | $ 1,519 | $ 5,124 | $ (1,699) | $ (3,071) | $ 5 | $ 1,880 |
| Net income | — | — | — | 728 | — | — | — | 728 |
| Other comprehensive income | — | — | — | — | (199) | — | — | (199) |
| Cash dividends | — | — | — | (172) | — | — | — | (172) |
| Shares issued: | | | | | | | | |
| Exercise of stock options | 0.4 | — | (2) | — | — | 23 | — | 21 |
| Vesting of performance shares and restricted stock units | 0.1 | — | (10) | — | — | 4 | — | (6) |
| Employee stock purchase plan | 0.1 | — | 2 | — | — | 8 | — | 10 |
| Employee savings plan | 0.6 | — | 14 | — | — | 35 | — | 49 |
| Stock-based compensation | — | — | 27 | — | — | — | — | 27 |
| Treasury share repurchases | (2.9) | — | — | — | — | (255) | — | (255) |
| Treasury share retirements [(1)] | — | (1) | (44) | (2,353) | — | 2,398 | — | — |
| Other | — | — | — | — | — | — | 1 | 1 |
| Balance at September 30, 2016 | 130.2 | $ 1 | $ 1,506 | $ 3,327 | $ (1,898) | $ (858) | $ 6 | $ 2,084 |
| Net income | — | — | — | 705 | — | — | — | 705 |
| Other comprehensive income | — | — | — | — | 323 | — | — | 323 |
| Cash dividends | — | — | — | (194) | — | — | — | (194) |
| Shares issued: | | | | | | | | |
| Exercise of stock options | 1.1 | — | (5) | — | — | 69 | — | 64 |
| Vesting of performance shares and restricted stock units | 0.2 | — | (12) | — | — | 5 | — | (7) |
| Employee stock purchase plan | 0.1 | — | 4 | — | — | 7 | — | 11 |
| Employee savings plan | 0.5 | — | 21 | — | — | 35 | — | 56 |
| B/E Aerospace business acquisition | 31.2 | 1 | 3,014 | | | | | 3,015 |
| Stock-based compensation | — | — | 31 | — | — | — | — | 31 |
| Treasury share repurchases | (0.4) | — | — | — | — | (39) | — | (39) |
| Other | — | — | — | — | — | — | 1 | 1 |
| Balance at September 30, 2017 | 162.9 | $ 2 | $ 4,559 | $ 3,838 | $ (1,575) | $ (781) | $ 7 | $ 6,050 |
| Net income | — | — | — | 1,032 | — | — | — | 1,032 |
| Other comprehensive income | — | — | — | — | 104 | — | — | 104 |
| Cash dividends | — | — | — | (216) | — | — | — | (216) |
| Shares issued: | | | | | | | | |
| Exercise of stock options | 1.1 | — | (6) | — | — | 69 | — | 63 |
| Vesting of performance shares and restricted stock units | 0.1 | — | (15) | — | — | 3 | — | (12) |
| Employee savings plan | 0.4 | — | 31 | — | — | 27 | — | 58 |
| Stock-based compensation | — | — | 35 | — | — | — | — | 35 |
| Balance at September 30, 2018 | 164.5 | $ 2 | $ 4,604 | $ 4,654 | $ (1,471) | $ (682) | $ 7 | $ 7,114 |

[(1)] During the year ended September 30, 2016 the Company retired 40 million shares of treasury stock. These shares were retired at a weighted-average price of $59.95 per share, resulting in a $2.4 billion reduction in treasury stock. The retired shares were returned to the status of authorized and unissued.

See Notes to Consolidated Financial Statements.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

## 1. Business Description and Basis of Presentation

Rockwell Collins, Inc. (the Company or Rockwell Collins) designs, produces and supports cabin interior, communications and aviation systems and products for commercial and military customers and provides information management services through voice and data communication networks and solutions worldwide.

The Company operates on a 52/53 week fiscal year ending on the Friday closest to September 30. Each of 2018 , 2017 and 2016 were 52-week fiscal years. For ease of presentation, September 30 is utilized consistently throughout these financial statements and notes to represent the fiscal year end date. All date references contained herein relate to the Company's fiscal year unless otherwise stated.

On September 4, 2017, the Company entered into an Agreement and Plan of Merger (Merger Agreement) with United Technologies Corporation (UTC). The Merger Agreement provides that the Company will be acquired by UTC. Each Company shareowner will receive $93.33 per share in cash and $46.67 in shares of UTC common stock in the merger, subject to a 7.5 percent collar centered on UTC's August 22, 2017 closing share price of $115.69 . The transaction is subject to the satisfaction of customary closing conditions. The Company incurred $34 million and $24 million of merger-related costs for the year ended September 30, 2018 and 2017, respectively. These costs are included in Transaction and integration costs in the Consolidated Statement of Operations. At September 30, 2018 and 2017, there were $12 million and $24 million , respectively, of merger-related costs that were unpaid and included in Accounts payable and Compensation and benefits on the Consolidated Statement of Financial Position.

On April 13, 2017, the Company acquired B/E Aerospace, a leading manufacturer of aircraft cabin interior products and services. Prior to 2018, the financial results of the entire B/E Aerospace business were reported in the Interior Systems segment. Beginning in 2018, the B/E Aerospace thermal and electronic systems product lines, which primarily serve military and government customers, are now being reported in the Government Systems segment. This reorganization is expected to generate additional revenue synergy opportunities for the Company. The results of operations of the acquired B/E Aerospace business are now reported in the Interior Systems and Government Systems business segments. Interior Systems and Government Systems sales and operating earnings for 2017 have been reclassified to conform to the current year presentation.

## 2. Significant Accounting Policies

*Consolidation*
The consolidated financial statements include the accounts of the Company and all majority-owned subsidiaries. The Company has two consolidated subsidiaries with income attributable to a noncontrolling interest. The net income and comprehensive income attributable to the noncontrolling interest is insignificant. The Company's investments in entities it does not control but over which it has the ability to exercise significant influence are accounted for under the equity method and are included in Other Assets. All intercompany transactions are eliminated.

*Foreign Currency Translation and Transactions*
The functional currency for significant subsidiaries operating outside the United States is typically their respective local currency. Assets and liabilities of subsidiaries operating outside the United States with a functional currency other than the U.S. dollar are translated into U.S. dollars using the exchange rate at the balance sheet date. Sales, costs and expenses are translated at the average exchange rates in effect during the period. Foreign currency translation gains and losses are included as a component of Accumulated other comprehensive loss within the Consolidated Statements of Comprehensive Income and Equity.

Foreign exchange transaction losses due to the remeasurement of account balances in foreign currencies are included within the Consolidated Statement of Operations and were $23 million for 2017 and were not material to the Company's results of operations for 2018 and 2016 .

*Revenue Recognition*
The Company enters into sales arrangements that may provide for multiple deliverables to a customer. The Company identifies all goods and/or services that are to be delivered separately under a sales arrangement and allocates revenue to each deliverable based on relative fair values. Fair values are generally established based on the prices charged when sold separately by the Company. In general, revenues are separated between products, engineering, maintenance, communication and installation services. The allocated revenue for each deliverable is then recognized using appropriate revenue recognition methods.

Sales related to long-term contracts requiring development and delivery of products over several years are generally accounted for under the percentage-of-completion method of accounting in accordance with the Construction-Type and Production-Type Contracts subtopic of the Financial Accounting Standards Board (FASB) Accounting Standards Codification. The percentage-of-completion method is predominately used in the Government Systems and Interior Systems segments and sales and earnings under qualifying contracts are recorded either as products are shipped under the units-of-delivery method, or based on the ratio of actual costs incurred to total estimated costs expected to be incurred related to the contract under the cost-to-cost method. Purchase options and change orders are accounted for either as an integral part of the original contract or separately depending upon the nature and value of the item. Sales and costs related to profitable purchase options are included in estimates only when the options are exercised whereas sales and costs related to unprofitable purchase options are included in estimates when exercise is determined to be probable. Sales related to change orders are included in estimates only if they can be reliably estimated and collectability is reasonably assured. Anticipated losses on contracts are recognized in full in the period in which losses become probable and estimable. Changes in estimates of profit or loss on contracts are included in earnings on a cumulative basis in the period the estimate is changed.

Sales related to long-term separately priced product maintenance or warranty contracts are accounted for based on the terms of the underlying agreements. Certain contracts are fixed-price contracts with sales recognized ratably over the contractual life, while other contracts have a fixed hourly rate with sales recognized based on actual labor or flight hours incurred. The cost of providing these services is expensed as incurred.

The Company recognizes sales for most other products or services when all of the following criteria are met: an agreement of sale exists, product delivery and acceptance has occurred or services have been rendered, pricing is fixed or determinable and collection is reasonably assured.

As discussed in the Recently Issued Accounting Standards section below, the Company adopted the new accounting guidance with respect to revenue recognition on October 1, 2018.

*Cash and Cash Equivalents*
Cash and cash equivalents include time deposits, certificates of deposit with original maturity dates of three months or less and money market funds.

*Allowance for Doubtful Accounts*
Allowances are established in order to report receivables at net realizable value on the Company's Consolidated Statement of Financial Position. The determination of these allowances requires Company management to make estimates and judgments as to the collectability of customer account balances. The allowance for doubtful accounts reflects the Company's best estimate of probable losses inherent in the accounts receivable balance. The Company determines the allowance based on known troubled accounts, historical experience and other currently available evidence.

*Inventories*
Inventories are stated at the lower of cost or market using costs which approximate the first-in, first-out method, less related progress payments received. Inventoried costs include direct costs of manufacturing, certain engineering costs and allocable overhead costs. The Company regularly compares inventory quantities on hand on a part level basis to estimated forecasts of product demand and production requirements as well as historical usage. Based on these comparisons, management establishes an excess and obsolete inventory reserve as needed. Inventory valuation reserves were $125 million and $89 million at September 30, 2018 and 2017 , respectively.

The Company defers certain pre-production engineering costs during the development phase of a program in connection with long-term supply arrangements that contain contractual guarantees for reimbursement from customers. Such customer guarantees generally take the form of a minimum order quantity with quantified reimbursement amounts if the minimum order quantity is not taken by the customer. These costs are deferred to the extent of the contractual guarantees and are amortized over their estimated useful lives using a units-of-delivery method, up to 15 years. This amortization expense is included as a component of cost of sales. Amortization is based on the Company's expectation of delivery rates on a program-by-program basis and begins when the Company starts recognizing revenue as the Company delivers equipment for the program. The estimated useful life is limited to the amount of time the Company is virtually assured to earn revenues under long-term supply arrangements with the Company's customers. Pre-production engineering costs incurred pursuant to supply arrangements that do not contain customer guarantees for reimbursement are expensed as incurred.

*Progress Payments*
Progress payments relate to both receivables and inventories and represent cash collected from government-related contracts whereby the governments have a legal right of offset related to the receivable or legal title to the work-in-process inventory.

*Property*
Property is stated at acquisition cost, net of accumulated depreciation. Depreciation of property is generally provided using straight-line methods over the following estimated useful lives: buildings and improvements, 15 - 50 years; machinery and equipment (including internally developed software and other costs associated with the expansion and construction of Information Management Services network-related assets), 5 - 20 years; information systems software and hardware, 5 - 17 years; and furniture and fixtures, 12 - 16 years. Depreciation methods and lives are reviewed periodically with any changes recorded on a prospective basis.

Significant renewals and betterments are capitalized and replaced units are written off. Maintenance and repairs, as well as renewals of minor amounts, are charged to expense in the period incurred. The fair value of liabilities associated with the retirement of property is recorded when there is a legal or contractual requirement to incur such costs and the costs can be reasonably estimated. Upon the initial recognition of a contractual or legal liability for an asset retirement obligation, the Company capitalizes the asset retirement cost by increasing the carrying amount of the property by the same amount as the liability. This asset retirement cost is then depreciated over the estimated useful life of the underlying property. The Company did not have any significant asset retirement obligations at September 30, 2018 and 2017 .

*Goodwill and Intangible Assets*
Goodwill and intangible assets generally result from business acquisitions. The purchase price of the acquisition is assigned to tangible and intangible assets and liabilities assumed based on fair value. The excess of the purchase price over the amounts assigned is recorded as goodwill. Assets acquired and liabilities assumed are allocated to the Company's reporting units based on the Company's integration plans and internal reporting structure. As of September 30, 2018 the Company had seven reporting units. Purchased intangible assets with finite lives are amortized, generally on a straight-line basis, over their estimated useful lives, ranging from 4 - 23 years. Goodwill and intangible assets with indefinite lives are not amortized, but are reviewed at least annually for impairment.

*Customer Relationship Up-Front Sales Incentives*
The Company provides up-front sales incentives prior to delivering products or performing services to certain commercial customers in connection with sales contracts. Up-front sales incentives are recorded as a customer relationship intangible asset and are amortized using a units-of-delivery method over the period the Company has received a contractually enforceable right related to the incentives, up to 15 years after entry into service. Amortization is based on the Company's expectation of delivery rates on a program-by-program basis. Amortization begins when the Company starts recognizing revenue as the Company delivers equipment for the program. Up-front sales incentives consisting of cash payments or customer account credits are amortized as a reduction of sales, whereas incentives consisting of free products are amortized as cost of sales.

*Accrued Customer Incentives*
Incentives earned by customers based on purchases of Company products or services are recognized as a liability when the related sale is recorded. Incentives consisting of cash payments or customer account credits are recognized as a reduction of sales, while incentives consisting of free products and account credits where the customer's use is restricted to future purchases are recognized as cost of sales.

*Impairment of Long-Lived Assets*
Long-lived assets are reviewed for impairment when management plans to dispose of assets or when events or circumstances indicate that the carrying amount of a long-lived asset is more-likely-than-not unrecoverable. Assets held for disposal are reported at the lower of the carrying amount or fair value less cost to sell. Management determines fair value using a discounted future cash flow analysis or other accepted valuation techniques. Long-lived assets held for use are reviewed for impairment by comparing the carrying amount of an asset to the undiscounted future cash flows expected to be generated by the asset over its remaining useful life. If an asset is considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the asset exceeds its fair value.

Goodwill and indefinite-lived intangible assets are tested annually for impairment with more frequent tests performed if indications of impairment exist. The Company's annual impairment testing date is in the fourth quarter of each fiscal year. Impairment for intangible assets with indefinite lives exists if the carrying value of the intangible asset exceeds its fair value. Goodwill is potentially impaired if the carrying value of a reporting unit exceeds its estimated fair value.

*Advance Payments from Customers*
Advance payments from customers represent cash collected from customers in advance of revenue recognition.

*Capital Leases*
Assets under capital lease and capital lease obligation are initially measured at the lower of estimated fair value or present value of the minimum lease payments. The present value of minimum lease payments is calculated for payments during the noncancelable lease term using the lower of the Company's estimated incremental borrowing rate or the rate implicit in the lease, if known. Capital lease obligation is recorded within Other Liabilities and the related assets are recorded in Property, Net or Other Assets based upon their intended use. Payments are allocated between a reduction of the lease obligation and interest expense using the interest method. Assets under capital lease are depreciated over the noncancelable lease term, ranging from 5 - 15 years, consistent with the Company's depreciation policy.

*Research and Development*
The Company performs R&D activities relating to the development of new products and the improvement of existing products. Company-funded R&D programs are expensed as incurred and included in cost of sales. Company-funded R&D expenditures were $502 million , $327 million and $224 million for fiscal years ended September 30, 2018 , 2017 and 2016 , respectively.

*Environmental*
Liabilities for environmental matters are recorded in the period in which it is probable that an obligation has been incurred and the cost can be reasonably estimated. At environmental sites in which more than one potentially responsible party has been identified, the Company records a liability for its estimated allocable share of costs related to its involvement with the site as well as an estimated allocable share of costs related to the involvement of insolvent or unidentified parties. At environmental sites in which the Company is the only responsible party, the Company records a liability for the total estimated costs of remediation.

*Income Taxes*
Current tax liabilities and assets are based upon an estimate of taxes payable or refundable in the current year for each jurisdiction in which the Company is subject to tax. As part of the determination of its tax liability, management exercises considerable judgment in evaluating tax positions taken by the Company in determining the income tax provision and establishes reserves for uncertain tax positions in accordance with the Income Taxes topic of the FASB Accounting Standards Codification. Deferred tax assets and liabilities are recorded for the estimated future tax effects attributable to temporary differences between the carrying amounts of assets and liabilities used for financial reporting purposes and their respective carrying amounts for income tax purposes. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized.

*Derivative Financial Instruments*
The Company uses derivative financial instruments in the form of foreign currency forward exchange contracts and interest rate swap contracts for the purpose of reducing exposure to changes in foreign currency exchange rates on business transactions and interest rates, respectively. The Company's policy is to execute such instruments with banks the Company believes to be creditworthy and not enter into derivative financial instruments for speculative purposes or to manage exposure for net investments in non-U.S. subsidiaries. These derivative financial instruments do not subject the Company to undue risk as gains and losses on these instruments generally offset gains and losses on the underlying assets, liabilities or anticipated transactions that are being hedged.

All derivative financial instruments are recorded at fair value in the Consolidated Statement of Financial Position. For a derivative that has not been designated as an accounting hedge, the change in fair value is recognized immediately through earnings. For a derivative that has been designated as an accounting hedge of an existing asset or liability (a fair value hedge), the change in the fair value of both the derivative and underlying asset or liability is recognized immediately through earnings. For a derivative designated as an accounting hedge of an anticipated transaction (a cash flow hedge), the change in the fair value is recorded on the Consolidated Statement of Financial Position in Accumulated other comprehensive loss to the extent the derivative is effective in mitigating the exposure related to the anticipated transaction. The change in the fair value related to the ineffective portion of the hedge, if any, is immediately recognized in earnings. The amount recorded within Accumulated other comprehensive loss is reclassified into earnings in the same period during which the underlying hedged transaction affects earnings. The Company does not exclude any amounts from the measure of effectiveness for either fair value or cash flow hedges.

*Use of Estimates*
The financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America, which require management to make estimates and assumptions that affect the amounts reported in the financial statements. Actual results could differ from those estimates. Estimates are used in accounting for, among other items, long-term contracts, allowances for doubtful accounts, inventory obsolescence, product warranty cost liabilities, customer incentives, retirement benefits, income taxes, environmental matters, pre-production engineering costs, recoverability of long-lived assets and contingencies. Estimates and assumptions are reviewed periodically and the effects of changes, if any, are reflected in the Consolidated Statement of Operations in the period they are determined.

*Concentration of Risks*
The Company's products and services are concentrated within the aerospace and defense industries with customers consisting primarily of military and commercial aircraft manufacturers, commercial airlines, the U.S. Government and non-U.S. governments. As a result of this industry focus, the Company's current and future financial performance is largely dependent upon the overall economic conditions within these industries. In particular, the commercial aerospace market has been historically cyclical and subject to downturns during periods of weak economic conditions, which could be prompted or exacerbated by political or other U.S. or international events. The defense market may be affected by changes in budget appropriations, procurement policies, political developments both in the U.S. and abroad and other factors. The Company depends to a large degree on U.S. Government spending, as a significant portion of the Company's sales are derived from U.S. Government contracts, both directly and indirectly through subcontracts.

The U.S. Government has implemented various initiatives to address its fiscal challenges. In August 2011, Congress enacted the Budget Control Act (BCA) of 2011 which imposed spending caps and certain reductions in defense spending over a ten-year period through 2021. These spending caps and reductions, referred to as sequestration, went into effect in March 2013. Through a series of bipartisan agreements, Congress has been able to temporarily lift discretionary spending limits every year through 2019. However, unless a new agreement is enacted, the BCA will again be in force beginning in 2020. The continued uncertainty surrounding the U.S. defense budget could have a material adverse effect on the Company and the defense industry in general.

In years when the U.S. Government does not complete its annual budget and appropriations process prior to the beginning of its fiscal year (October 1), government operations are typically funded through a continuing resolution that authorizes agencies of the U.S. Government to continue to operate in the new year, but generally does not authorize new spending initiatives. During periods covered by a continuing resolution (or until the regular appropriation bills are passed), the Company may experience delays by the government in the procurement of new or existing products and services which can adversely impact results of operations and cause variability in the timing of revenue between periods. During 2018, the U.S. Government completed the fiscal year 2019 Defense budget authorization and approval timeline on schedule and thus avoided the need for a continuing resolution for this part of government operations. Should the U.S. Government not complete fiscal year 2020 budgeting and appropriations in the same manner, the Company expects to be exposed to the effects of a continuing resolution in the future. The Company remains confident that its product offerings are well positioned to meet the needs of government customers in this uncertain environment and the Company continues to enhance international strategies and make proactive adjustments to the Company's cost structure as necessary.

In addition to the overall business risks associated with the Company's concentration within the aerospace and defense industries, the Company is also exposed to a concentration of collection risk on credit extended to certain aircraft manufacturers and airlines. The Company performs ongoing credit evaluations on the financial condition of all of its customers and maintains allowances for uncollectible accounts receivable based on expected collectability. Although management believes its allowances are adequate, the Company is not able to predict with certainty the changes in the financial stability of its customers. Any material change in the financial status of any one customer or group of customers could have a material adverse effect on the Company's results of operations, financial position or cash flows.

As of September 30, 2018 , approximately 10 percent of the Company's employees in the U.S. were represented by U.S. collective bargaining agreements, most of which were negotiated in 2018 and have varying contract terms between 3 and 5 years.

*Recently Adopted Accounting Standards*
In March 2018, the Financial Accounting Standards Board (FASB) issued an amendment to formally codify the guidance provided by the Securities and Exchange Commission (SEC) in Staff Accounting Bulletin (SAB) 118. SAB 118 provides additional guidance allowing companies to use a one year measurement period, similar to that used in business combinations, to account for the impacts of the Tax Cuts and Jobs Act (the Act) in their financial statements. The Company has accounted for the impacts of the Act, including the use of reasonable estimates where necessary. The Company may continue to refine its estimates throughout the measurement period.

In March 2016, the FASB issued a new standard simplifying certain aspects of accounting for share-based payments (see Note 12). The new standard requires that excess tax benefits and shortfalls be recorded as income tax benefit or expense in the income statement, rather than in equity, and requires excess tax benefits from stock-based compensation to be classified within operating cash flow. Additionally, the new standard allows a policy election to either estimate the number of awards expected to be forfeited at the time of award issuance or record stock-based compensation for forfeitures as they occur. In order to simplify accounting for share-based payments, the Company adopted the new guidance during the second quarter of 2016, which resulted in a $4 million benefit to tax expense and a favorable impact to operating cash flows of $4 million in 2016. With respect to forfeitures, the Company will continue to estimate the number of awards expected to be forfeited upon award issuance.

*Recently Issued Accounting Standards*
In February 2018, the FASB issued a new standard giving companies the option to reclassify tax effects stranded in accumulated other comprehensive income as a result of the Act to retained earnings. The guidance can be applied retrospectively or in the period of adoption and is effective for the Company in 2020, with early adoption permitted. The Company is currently evaluating the impact of this standard on the consolidated financial statements.

In March 2017, the FASB issued a new standard on the presentation of the net periodic cost of postretirement benefit programs, which the Company adopted retrospectively on October 1, 2018. The new standard requires sponsors of defined benefit postretirement plans to present the non-service cost components of net periodic benefit cost separate from the service cost component on the income statement. The new standard also requires that the non-service cost components of net periodic benefit cost no longer be capitalized within assets. Applying a practical expedient to estimate the impact of the reclassification, the Company expects adoption of the new standard to result in a decrease to segment operating earnings of approximately $30 million and $27 million for the years ended September 30, 2018 and 2017, respectively, and a corresponding increase in unallocated corporate income, with no impact to net income.

In February 2016, the FASB issued a comprehensive new lease accounting standard, which provides revised guidance on accounting for lease arrangements by both lessors and lessees. Several amendments to the new standard have been issued, which are intended to drive consistent interpretation and application and simplify implementation of the new standard. The central requirement of the new standard is that lessees must recognize lease-related assets and liabilities for all leases with a term longer than 12 months. The Company is evaluating the effect the standard will have on the Company's consolidated financial statements and related disclosures, but expects a material change to the balance sheet due to the recognition of right-of-use assets and lease liabilities related to the Company's portfolio of real estate leases. The new guidance is not expected to materially impact accounting for those leases the Company enters with customers. The new standard is effective for the Company in 2020, with early adoption permitted.

In May 2014, the FASB issued a comprehensive new revenue recognition standard that effectively replaced all guidance on the topic. The Company adopted the new standard and related amendments on October 1, 2018 utilizing the modified retrospective transition method.

The Company has substantially completed its evaluation of the new standard and has assessed the impacts of adoption on its consolidated financial statements and disclosures. Changes under the new standard include, among other items, accounting for development costs and associated customer funding related to commercial contracts, the elimination of customer relationship intangible assets related to free products provided to customers as up-front sales incentives and increased use of over time revenue recognition based on costs incurred for certain contracts satisfying the criteria established in the new standard. The new standard also significantly enhances required disclosures regarding revenue and related assets and liabilities. The most significant changes to the Company are described below.

Under the Company's historical accounting policy, customer funding received for development effort was recognized as revenue as the development activities were performed. Under the new standard, the Company has concluded that the development effort on commercial contracts does not represent a performance obligation. Therefore, customer funding specific to the development effort must be deferred as a contract liability and recognized as revenue when revenue is recognized for the related products, delaying the timing of revenue recognition. The Company currently expenses development costs associated with commercial contracts unless the arrangement includes a contractual guarantee for reimbursement from the customer. Under the new standard, development costs are expensed as incurred except for those costs incurred pursuant to customer funding. Development costs eligible for deferral are limited to an amount equal to the associated customer funding. The development costs will be capitalized as contract fulfillment cost assets and recognized as expense when revenue is recognized for the related products, consistent with the amortization of deferred development specific customer funding into revenue. The Company is still calculating the impact of this change on adoption-date retained earnings.

Further, development costs incurred pursuant to contractual guarantees for reimbursement are no longer capitalized within Inventory as pre-production engineering costs. The $1.166 billion adoption-date balance of capitalized development costs within Inventory was eliminated upon adoption and the related post-adoption amortization expense will be avoided.

Under the Company's historical accounting policy, up-front sales incentives consisting of free products were capitalized as a customer relationship intangible asset. Upon adoption of the new standard, free product provided to the customer is considered a performance obligation and must be expensed when transferred, with revenue allocated when applicable. As a result of this change, approximately $120 million of customer relationship intangible assets were eliminated as of the adoption date and a corresponding contract asset of approximately $ 20 million was recorded for the uncollected portion of revenue recognized. This change will also result in a decrease in post-adoption amortization expense.

Under the Company’s historical accounting policy, certain contracts either recognized revenue based on shipping terms or used a units-of-delivery method. Under the new standard, many of these contracts meet one or more of the mandatory criteria for over time revenue recognition. The Company is still finalizing the adoption-date retained earnings impact for these contracts, but does not expect the ongoing effect of recognizing revenue using an over time method to be material.

Beginning in 2019, disclosures in the Company's notes to Consolidated Financial Statements related to revenue recognition will be expanded under the new standard to include discussions on the nature, amount, timing and uncertainty of revenue arising from contracts with customers. Disclosures will include qualitative and quantitative information about performance obligations, contract assets and liabilities, cost to fulfill a contract, disaggregation of revenue and the significant judgments made in applying the new standard.

Other new accounting standards issued but not effective until after September 30, 2018 are not expected to have a material impact on the Company's financial statements.

## 3. Acquisitions, Goodwill and Intangible Assets

*Acquisitions*

*B/E Aerospace*
On April 13, 2017, the Company completed the acquisition of B/E Aerospace, a leading manufacturer of aircraft cabin interior products and services, for $6.5 billion in cash and stock, plus the assumption of $2.0 billion of debt, net of cash acquired. The transaction combines the Company's capabilities in flight deck avionics, cabin electronics, mission communication and navigation, simulation and training and information management services with B/E Aerospace's range of cabin interior products, which include seating, food and beverage preparation and storage equipment, lighting and oxygen systems and modular galley and lavatory systems for commercial airliners and business jets. The acquisition advances the Company's global growth strategy by expanding the Company's previous focus on cockpit, cabin management, communication and connectivity solutions, and diversifies the Company's product portfolio and customer mix. Results of the acquired business are reported in the Interior Systems and Government Systems business segments (see Note 1).

The $6.5 billion gross purchase price for the acquisition of B/E Aerospace includes the following:

| (in millions) | | |
|---|---|---|
| Cash consideration | $ | 3,521 |
| Value of common stock issued for B/E Aerospace common stock [1] | | 3,015 |
| Total purchase price | $ | 6,536 |

(1) 31.2 million shares of common stock issued to B/E Aerospace shareholders at the Company's April 13, 2017 closing share price of $96.63 .

The cash consideration was financed through the issuance of $4.35 billion of senior unsecured notes and $1.5 billion borrowed under a senior unsecured syndicated term loan facility (see Note 9). The remaining proceeds of the debt offering were used to repay assumed B/E Aerospace debt and a portion of the Company's outstanding short-term commercial paper borrowings.

The purchase price allocation was finalized in the second quarter of 2018 and resulted in the recognition of $7.2 billion of goodwill, none of which is deductible for tax purposes. The goodwill is included in the Interior Systems and Government Systems segments. The goodwill is a result of expected cost synergies from the consolidation of certain corporate and administrative functions, supply chain savings and low-cost manufacturing, expected revenue synergies from the integration of legacy products and technologies with those of B/E Aerospace and intangible assets that do not qualify for separate recognition, such as the assembled B/E Aerospace workforce.

The following table summarizes the fair value of assets acquired and liabilities assumed at the acquisition date:

| (in millions) | April 13, 2017 |
|---|---|
| Cash and cash equivalents | $ 104 |
| Receivables, net | 485 |
| Inventories, net [1] | 542 |
| Other current assets | 45 |
| Property, net | 271 |
| Intangible Assets | 1,586 |
| Other Assets | 53 |
| Total Identifiable Assets Acquired | 3,086 |
| | |
| Accounts payable | (231) |
| Compensation and benefits | (75) |
| Advance payments from customers | (62) |
| Accrued customer incentives | (48) |
| Product warranty costs | (117) |
| Other current liabilities [2] | (366) |
| Long-term Debt, Net | (2,119) |
| Retirement Benefits | (12) |
| Deferred Income Tax Liability | (287) |
| Other Liabilities [2] | (433) |
| Total Liabilities Assumed | (3,750) |
| Net Identifiable Assets Acquired, excluding Goodwill | (664) |
| Goodwill | 7,200 |
| Net Assets Acquired | $ 6,536 |

[1] Inventories, net includes a $74 million adjustment to state Work in process and Finished goods inventories at their fair value as of the acquisition date. The inventory fair value adjustment was amortized as a non-cash increase to Cost of sales during the year ended September 30, 2017.

[2] As of the acquisition date, the Company made adjustments totaling $486 million related to acquired existing long-term contracts with terms less favorable than could be realized in market transactions as of the acquisition date. The adjustments were primarily recognized within Other current liabilities and Other Liabilities based upon estimates regarding the period in which the liabilities will be amortized to the Consolidated Statement of Operations as non-cash reductions to Cost of sales. $141 million of the acquired contract liabilities were recognized as a reduction to Cost of sales during the year ended September 30, 2018.

Before the purchase price allocation was finalized in the second quarter of 2018, revisions were made to the estimated acquisition-date fair value of assets acquired and liabilities assumed. The revisions were primarily due to a change in estimate with respect to the future repatriation of certain foreign earnings, adjustments to the income tax accounts as a result of filing the pre-acquisition returns, recognition of a liability associated with the KLX Tax Sharing and Indemnification Agreement (see Note 16) and revisions to the fair value of certain acquired property. These fiscal year 2018 measurement period adjustments resulted in a $15 million net increase to Goodwill and did not have a material impact on the financial results of prior periods.

The Intangible Assets included above consist of the following:

| | Weighted Average Life (in years) | Fair Value (in millions) |
|---|---|---|
| Developed technology | 9 | $ 435 |
| Seating customer relationships | 6 | 860 |
| Other customer relationships | 8 | 291 |
| Total | 7 | $ 1,586 |

B/E Aerospace's results of operations have been included in the Company's operating results for the period subsequent to the completion of the acquisition on April 13, 2017. During 2018 and 2017, B/E Aerospace contributed sales of $2.983 billion and $1.406 billion , respectively. Excluding the discrete impacts of the Tax Cuts and Jobs Act (see Note 13) and transaction, integration and financing costs, B/E Aerospace contributed net income of $349 million and $140 million for 2018 and 2017, respectively.

*Transaction, Integration and Financing Costs*
The Company recorded total transaction, integration and financing costs related to the B/E Aerospace acquisition in the Consolidated Statement of Operations as follows:

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Transaction and integration costs | **$ 78** | $ 96 | $ — |
| Bridge facility fees (included in Interest expense) | **—** | 29 | — |
| Total Transaction, integration and financing costs | **$ 78** | $ 125 | $ — |

At September 30, 2018 , $11 million of transaction, integration and financing costs were unpaid and included in Accounts payable and Compensation and benefits on the Consolidated Statement of Financial Position.

*Supplemental Pro-Forma Data*
The following unaudited supplemental pro forma data presents consolidated pro forma information as if the acquisition and related financing had been completed as of the beginning of the year prior to acquisition, or on October 1, 2015.

The unaudited supplemental pro-forma financial information does not reflect the potential realization of revenue synergies or cost savings, nor does it reflect other costs relating to the integration of the two companies. This pro-forma data should not be considered indicative of the results that would have actually occurred if the acquisition and related financing had been consummated on October 1, 2015, nor are they indicative of future results.

The unaudited supplemental pro forma financial information was calculated by combining the Company's results with the stand-alone results of B/E Aerospace for the pre-acquisition periods, which were adjusted to account for certain transactions and other costs that would have been incurred during this pre-acquisition period.

| (in millions, except per share amounts) | 2017 | 2016 |
|---|---|---|
| | (Pro forma) | (Pro forma) |
| Sales | $ 8,376 | $ 8,121 |
| Net income attributable to common shareowners from continuing operations | 900 | 696 |
| Basic earnings per share from continuing operations | 6.18 | 4.31 |
| Diluted earnings per share from continuing operations | 6.11 | 4.26 |

The following significant adjustments were made to account for certain transactions and costs that would have occurred if the acquisition had been completed on October 1, 2015. These adjustments are net of any applicable tax impact and were included to arrive at the pro forma results above.

| (in millions) | 2017 | 2016 |
|---|---|---|
| Increases (decreases) to pro forma net income: | | |
| Net reduction to depreciation resulting from fixed asset adjustments (1) | $ 12 | $ 21 |
| Advisory, legal and accounting service fees (2) | 156 | (123) |
| Amortization of acquired B/E Aerospace intangible assets, net (3) | (83) | (152) |
| Interest expense incurred on acquisition financing, net (4) | (17) | (65) |
| Long-term contract program adjustments (5) | (59) | (128) |
| Acquired contract liability amortization (6) | 63 | 124 |
| Inventory fair value adjustment amortization (7) | 56 | (56) |
| Compensation adjustments (8) | 6 | 14 |

(1) Captures the net impact to depreciation expense resulting from various purchase accounting adjustments to fixed assets.
(2) Reflects the elimination of transaction-related fees incurred by B/E Aerospace and Rockwell Collins in connection with the acquisition and assumes all of the fees were incurred during the first quarter of 2016.
(3) Eliminates amortization of the historical B/E Aerospace intangible assets and replaces it with the new amortization for the acquired intangible assets.
(4) Reflects the addition of interest expense for the debt incurred by Rockwell Collins to finance the B/E Aerospace acquisition, net of interest expense that was eliminated on the historical B/E Aerospace debt that was repaid at the acquisition date. The adjustment also reflects the elimination of interest expense incurred by Rockwell Collins for bridge loan financing which was assumed to not be required for purposes of the pro forma periods presented.
(5) Eliminates B/E Aerospace capitalized development costs and deferred revenues on certain long-term contracts.
(6) Reflects amortization of liabilities recognized for acquired contracts with terms less favorable than could be realized in market transactions as of the acquisition date.
(7) Reflects amortization of adjustment made to state Work in process and Finished goods inventories at fair value as of the acquisition date.
(8) Reflects reduction in compensation expense due to the vesting of B/E Aerospace stock awards upon the acquisition and the termination of certain B/E Aerospace executives and board members.

*Pulse.aero*
On December 20, 2016, the Company acquired 100 percent of the outstanding shares of Pulse.aero, a United Kingdom-based company specializing in self-bag drop technologies used by airlines and airports. The purchase price, net of cash acquired, was $18 million , of which $14 million was paid during the year ended September 30, 2017 and $4 million was paid during the year ended September 30, 2018 . On the acquisition date, the Company recorded a $5 million liability for the fair value of post-closing consideration that could be paid, contingent upon the achievement of certain revenue targets and development milestones. The Company made contingent consideration payments of $2 million during the year ended September 30, 2017 and $3 million during the year ended September 30, 2018 . In the third quarter of 2017, the purchase price allocation was finalized, with $12 million allocated to goodwill and $6 million to intangible assets. The intangible assets have a weighted average life of approximately 9 years. None of the goodwill resulting from the acquisition is tax deductible. The excess purchase price over net assets acquired, including intangible assets, reflects the Company's view that this acquisition will expand the Company's airport passenger processing offerings.

The B/E Aerospace acquisition is included in the Interior Systems and Government Systems segments (see Note 1) and the Pulse.aero acquisition is included in the Information Management Services segment. The results of operations for the acquisitions have been included in the Company's operating results for the periods subsequent to their respective acquisition dates. Pro-forma results of operations have not been presented for Pulse.aero as the effect of the acquisition is not material to the Company's consolidated results of operations.

*Goodwill*
Changes in the carrying amount of goodwill are summarized as follows:

| (in millions) | Interior Systems | Commercial Systems | Government Systems | Information Management Services | Total |
|---|---|---|---|---|---|
| Balance at September 30, 2016 | $ — | $ 326 | $ 503 | $ 1,090 | $ 1,919 |
| B/E Aerospace acquisition | 7,185 | — | — | — | 7,185 |
| Pulse.aero acquisition | — | — | — | 12 | 12 |
| Foreign currency translation adjustments | 38 | (1) | 3 | 2 | 42 |
| Balance at September 30, 2017 | 7,223 | 325 | 506 | 1,104 | 9,158 |
| B/E Aerospace acquisition adjustments | (370) | — | 385 | — | 15 |
| Reclassification of business held for sale (See Note 4) | (59) | — | — | — | (59) |
| Foreign currency translation adjustments | (5) | (1) | (1) | — | (7) |
| Balance at September 30, 2018 | $ 6,789 | $ 324 | $ 890 | $ 1,104 | $ 9,107 |

The Company performs an impairment test of goodwill and indefinite-lived intangible assets each fiscal year, or at any time there is an indication goodwill or indefinite-lived intangibles are more-likely-than-not impaired, commonly referred to as triggering events. The Company's 2018 , 2017 and 2016 impairment tests resulted in no impairment.

*Intangible Assets*
Intangible assets are summarized as follows:

| | **September 30, 2018** | | | September 30, 2017 | | |
|---|---|---|---|---|---|---|
| (in millions) | **Gross** | **Accum Amort** | **Net** | Gross | Accum Amort | Net |
| Intangible assets with finite lives: | | | | | | |
| Developed technology and patents | **$ 807** | **$ (324)** | **$ 483** | $ 806 | $ (256) | $ 550 |
| Backlog | **6** | **(6)** | **—** | 6 | (5) | 1 |
| Customer relationships: | | | | | | |
| Acquired | **1,489** | **(413)** | **1,076** | 1,495 | (213) | 1,282 |
| Up-front sales incentives | **692** | **(114)** | **578** | 336 | (93) | 243 |
| License agreements | **18** | **(11)** | **7** | 15 | (10) | 5 |
| Trademarks and tradenames | **15** | **(14)** | **1** | 15 | (14) | 1 |
| Intangible assets with indefinite lives: | | | | | | |
| Trademarks and tradenames | **47** | **—** | **47** | 47 | — | 47 |
| Intangible assets | **$ 3,074** | **$ (882)** | **$ 2,192** | $ 2,720 | $ (591) | $ 2,129 |

During 2018, up-front sales incentives increased $335 million , primarily due to the extension of certain long-term sales contracts. Pursuant to the terms of contractual agreements, the Company paid $254 million in cash sales incentives during 2018.

Amortization expense for intangible assets for 2018 , 2017 and 2016 was $290 million , $162 million and $60 million , respectively. As of September 30, 2018 , the weighted average amortization period remaining for up-front sales incentives was approximately 12 years.

Anticipated annual amortization expense for intangible assets is as follows:

| (in millions) | 2019 | 2020 | 2021 | 2022 | 2023 | Thereafter |
|---|---|---|---|---|---|---|
| Anticipated amortization expense for up-front sales incentives | $ 24 | $ 26 | $ 26 | $ 26 | $ 25 | $ 451 |
| Anticipated amortization expense for all other intangible assets | 265 | 264 | 264 | 260 | 192 | 322 |
| Total | $ 289 | $ 290 | $ 290 | $ 286 | $ 217 | $ 773 |

As discussed in Note 2, adoption of the new revenue recognition standard on October 1, 2018, resulted in elimination of approximately $120 million of customer relationship intangible assets, therefore, the amortization expense associated with that balance as contemplated in the table above will be avoided.

**4. Discontinued Operations and Divestitures**

*Air Transport In-Flight Entertainment Business*
On August 24, 2018, the Company reached a definitive agreement to sell its air transport in-flight entertainment (IFE) business. The IFE business designs, manufactures and services in-seat video, overhead video and content services and other products for the air transport IFE market. The sale is subject to customary closing conditions and is expected to close in the fourth calendar quarter of 2018. The business is being sold as a result of the Company's prior decision to cease investment in air transport IFE capabilities. The Company does, however, continue to invest in cabin connectivity solutions for the air transport market.

During the three months ended September 30, 2018, the Company classified the IFE business as held for sale. As of September 30, 2018, assets of $23 million are included within Businesses held for sale and liabilities of $5 million are included within Other current liabilities on the Consolidated Statement of Financial Position. The major classes of assets and liabilities primarily include net Inventories of $19 million and net Property of $4 million . The operating results of the held for sale business are included in the Commercial Systems segment.

*ElectroMechanical Systems Business*
On July 20, 2018, the Company reached a definitive agreement to sell its ElectroMechanical Systems (EMS) business which operates within the Commercial Systems segment. EMS designs, manufactures and services actuation, pilot control and other specialty products for commercial and military aerospace applications. The sale is subject to regulatory approvals, completion of UTC's pending acquisition of Rockwell Collins and other customary closing conditions, which results in the criteria for held for sale accounting treatment not being satisfied as of September 30, 2018. The business is being sold in order to comply with regulatory commitments associated with the pending UTC merger (see Note 1).

*Engineered Components Business*
On May 31, 2018, the Company reached a definitive agreement to sell its engineered components business, formerly known as SMR Technologies. SMR Technologies manufactures, sells and services diversified engineering components for niche aerospace, military and industrial applications. The sale is subject to customary closing conditions and is expected to close in the fourth calendar quarter of 2018. The business is being sold in order to comply with regulatory commitments associated with the pending UTC merger (see Note 1).

During the three months ended June 30, 2018, the Company classified the engineered components business as held for sale and recorded a pre-tax loss of $9 million ( $22 million after tax) for the write-down to fair value less costs to sell, which was recorded within Other income, net on the Consolidated Statement of Operations. The high effective tax rate is primarily attributable to the non-deductibility of goodwill for income tax purposes. As of September 30, 2018, assets of $68 million are included within Businesses held for sale and liabilities of $3 million are included within Other current liabilities on the Consolidated Statement of Financial Position. The major classes of assets and liabilities primarily include Goodwill of $59 million and Intangible assets of $8 million . The operating results of the held for sale business are included in the Interior Systems segment.

*ASES Business*
On March 10, 2015, the Company sold its ASES business, which provides military aircraft integration and modifications, maintenance and logistics and support, to align with the Company's long-term primary business strategies. The initial sales price was $3 million , and additional post-closing consideration of $2 million was received in December 2016. During 2016, the Company recorded $2 million of income from discontinued operations ( $1 million after tax), primarily due to the favorable settlement of a contractual matter with a customer of the ASES business.

## 5. Receivables, Net

Receivables, net are summarized as follows:

| (in millions) | September 30, 2018 | September 30, 2017 |
|---|---|---|
| Billed | **$ 1,639** | $ 1,055 |
| Unbilled | **596** | 461 |
| Less progress payments | **(108)** | (78) |
| Total | **2,127** | 1,438 |
| Less allowance for doubtful accounts | **(18)** | (12) |
| Receivables, net | **$ 2,109** | $ 1,426 |

Receivables expected to be collected beyond the next twelve months are classified as long-term and are included in Other Assets. Total receivables due from the U.S. Government including the Department of Defense and other government agencies, both directly and indirectly through subcontracts, were $337 million and $279 million at September 30, 2018 and 2017 , respectively. U.S. Government unbilled receivables, net of progress payments, were $119 million and $89 million at September 30, 2018 and 2017 , respectively. Receivables, net due from equity affiliates were $61 million at September 30, 2018 .

Unbilled receivables principally represent sales recorded under the percentage-of-completion method of accounting that have not been billed to customers in accordance with applicable contract terms.

The Company sells certain accounts receivable on a non-recourse basis to unrelated financial institutions under factoring agreements arranged by certain customers. Under the terms of the agreements, the Company retains no rights or interest and has no obligations with respect to the sold receivables. The Company accounts for these transactions as sales of receivables and records cash proceeds when received as cash provided by operating activities in the Consolidated Statement of Cash Flows. Cash generated by participating in these programs was zero and $154 million in 2018 and 2017 , respectively. The unfavorable impact on cash used for operating activities during 2018 was $154 million . The favorable impact on cash provided by operating activities during 2017 was $94 million . The cost of participating in these programs was immaterial to the Company's results.

## 6. Inventories, Net

Inventories, net are summarized as follows:

| (in millions) | September 30, 2018 | September 30, 2017 |
|---|---|---|
| Finished goods | **$ 289** | $ 259 |
| Work in process | **381** | 347 |
| Raw materials, parts and supplies | **828** | 677 |
| Less progress payments | **(15)** | (7) |
| Total | **1,483** | 1,276 |
| Pre-production engineering costs | **1,166** | 1,175 |
| Inventories, net | **$ 2,649** | $ 2,451 |

Amortization expense for pre-production engineering costs for 2018 , 2017 and 2016 was $87 million , $59 million and $49 million , respectively. As discussed in Note 2, adoption of the new revenue recognition standard on October 1, 2018, resulted in elimination of the $1.166 billion pre-production engineering balance.

In accordance with industry practice, inventories include amounts which are not expected to be realized within one year. These amounts primarily relate to pre-production engineering costs and life-time-buy inventory not expected to be realized within one year of $1.129 billion and $1.160 billion at September 30, 2018 and 2017 , respectively. Life-time-buy inventory is inventory that is typically no longer produced by the Company's vendors but for which multiple years of supply are purchased in order to meet production and service requirements over the life span of a product.

## 7. Property, Net

Property, net is summarized as follows:

| (in millions) | September 30, 2018 | September 30, 2017 |
|---|---|---|
| Land | $ 22 | $ 22 |
| Buildings and improvements | 659 | 597 |
| Machinery and equipment | 1,463 | 1,400 |
| Information systems software and hardware | 570 | 510 |
| Furniture and fixtures | 93 | 87 |
| Capital leases | 58 | 58 |
| Construction in progress | 246 | 250 |
| Total | 3,111 | 2,924 |
| Less accumulated depreciation | (1,682) | (1,526) |
| Property, Net | $ 1,429 | $ 1,398 |

Property additions acquired by incurring accounts payable, which are reflected as a non-cash transaction in the Company's Consolidated Statement of Cash Flows, were $20 million , $23 million and $20 million at September 30, 2018 , 2017 and 2016 , respectively.

A portion of the Company's operations are conducted in leased real estate facilities, including both operating and, to a lesser extent, capital leases. Accumulated depreciation relating to assets under capital lease totals $18 million and $14 million as of September 30, 2018 and 2017 , respectively. Amortization of assets under capital lease is recorded as depreciation expense. As of September 30, 2018 , remaining minimum lease payments for Property under capital leases total $65 million , including $17 million of interest.

## 8. Other Assets

Other assets are summarized as follows:

| (in millions) | September 30, 2018 | September 30, 2017 |
|---|---|---|
| Long-term receivables | $ 185 | $ 211 |
| Investments in equity affiliates | 5 | 7 |
| Exchange and rental assets (net of accumulated depreciation of $111 at September 30, 2018 and $106 at September 30, 2017) | 71 | 71 |
| Other | 243 | 242 |
| Other Assets | $ 504 | $ 531 |

*Long-term receivables*
Long-term receivables expected to be collected beyond the next twelve months are principally comprised of unbilled accounts receivable pursuant to sales recorded under the percentage-of-completion method of accounting that have not yet been billed to customers in accordance with applicable contract terms.

*Investments in Equity Affiliates*
Investments in equity affiliates primarily consist of seven joint ventures:

- ACCEL (Tianjin) Flight Simulation Co., Ltd (ACCEL): ACCEL is a joint venture with Haite Group, for the joint development and production of commercial flight simulators in China
- ADARI Aviation Technology Company Limited (ADARI): ADARI is a joint venture with Aviation Data Communication Corporation Co., LTD, that operates remote ground stations around China and develops certain content delivery management software
- AVIC Leihua Rockwell Collins Avionics Company (ALRAC): ALRAC is a joint venture with China Leihua Electronic Technology Research Institute (a subsidiary of the Aviation Industry Corporation of China, or AVIC), for the joint production of integrated surveillance system products for the C919 aircraft in China
- Data Link Solutions LLC (DLS): DLS is a joint venture with BAE Systems, plc for the joint pursuit of the worldwide military data link market
- ESA Vision Systems LLC (ESA): ESA is a joint venture with Elbit Systems, Ltd. for the joint pursuit of helmet-mounted cueing systems for the worldwide military fixed wing aircraft market
- Quest Flight Training Limited (Quest): Quest is a joint venture with Quadrant Group plc that provides aircrew training services primarily for the United Kingdom Ministry of Defence
- Rockwell Collins CETC Avionics Co., Ltd (RCCAC): RCCAC is a joint venture with CETC Avionics Co., Ltd (CETCA) for the development, production, and maintenance of communication and navigation products on Chinese commercial OEM platforms

Each joint venture is 50 percent owned by the Company and accounted for under the equity method. Under the equity method of accounting for investments, the Company’s proportionate share of the earnings or losses of its equity affiliates are included in Net income and classified as Other income, net in the Consolidated Statement of Operations. For segment performance reporting purposes, Rockwell Collins’ share of earnings or losses of ESA, DLS and Quest are included in the operating results of the Government Systems segment, ACCEL, ALRAC and RCCAC are included in the operating results of the Commercial Systems segment and ADARI is included in the operating results of the Information Management Services segment.

In the normal course of business or pursuant to the underlying joint venture agreements, the Company may sell products or services to equity affiliates. The Company defers a portion of the profit generated from these sales equal to its ownership interest in the equity affiliates until the underlying product is ultimately sold to an unrelated third party. Sales to equity affiliates were $ 226 million , $262 million and $229 million for the years ended September 30, 2018 , 2017 and 2016 , respectively. The deferred portion of profit generated from sales to equity affiliates was $1 million at September 30, 2018 and $2 million at September 30, 2017 .

*Exchange and Rental Assets*
Exchange and rental assets consist primarily of Company products that are either exchanged or rented to customers on a short-term basis in connection with warranty and other service related activities. These assets are recorded at acquisition or production cost and depreciated using the straight-line method over their estimated lives, up to 15 years. Depreciation methods and lives are reviewed periodically with any changes recorded on a prospective basis. Depreciation expense for exchange and rental assets was $11 million , $10 million and $9 million for the years ended September 30, 2018 , 2017 and 2016 , respectively.

## 9. Debt

*Short-term Debt*

| (in millions, except weighted average amounts) | | **September 30, 2018** | | September 30, 2017 |
|---|---|---|---|---|
| Short-term commercial paper borrowings outstanding [(1)] | **$** | **1,500** | $ | 330 |
| Current portion of long-term debt | | **748** | | 149 |
| Short-term debt | **$** | **2,248** | $ | 479 |
| Weighted average annualized interest rate of commercial paper borrowings | | **2.42%** | | 1.45% |
| Weighted average maturity period of commercial paper borrowings (days) | | **9** | | 18 |

(1) The maximum amount of short-term commercial paper borrowings outstanding during the year ended September 30, 2018 was $1.5 billion .

*Commercial Paper Program*
Under the Company’s commercial paper program, the Company may sell up to $1.5 billion face amount of unsecured short-term promissory notes in the commercial paper market. The commercial paper program is supported by the Company's $1.5 billion five -year revolving credit facility.

*Revolving Credit Facilities*
The Company has a $1.5 billion five -year senior unsecured revolving credit agreement with various banks. At September 30, 2018 and 2017 , there were no outstanding borrowings under the Company's revolving credit facility.

Short-term credit facilities available to non-U.S. subsidiaries amounted to $20 million as of September 30, 2018 , of which $2 million was utilized to support commitments in the form of commercial letters of credit. At September 30, 2018 and 2017 , there were no borrowings outstanding under these credit facilities.

At September 30, 2018 and September 30, 2017 , there were no significant commitment fees or compensating balance requirements under any of the Company’s credit facilities.

*Bridge Credit Facility*
On December 16, 2016, pursuant to the B/E Aerospace acquisition, the Company entered into a $4.35 billion 364 -day senior unsecured bridge term loan credit agreement with various banks. This bridge facility terminated upon receipt of proceeds from the notes issued to finance a portion of the B/E Aerospace acquisition.

*Long-term Debt*
On December 16, 2016, pursuant to the B/E Aerospace acquisition, the Company entered into a $1.5 billion three -year senior unsecured term loan credit agreement with various banks. As of September 30, 2018 , borrowings under this facility were $481 million and bear interest at LIBOR plus 1.25 percent amortized in equal quarterly installments of 2.5 percent , or $38 million , with the balance payable on April 13, 2020. During the year ended September 30, 2018 , the Company made principal prepayments of $238 million in accordance with the loan's prepayment provisions. Proceeds of borrowings under the term loan facility were used to finance a portion of the B/E Aerospace acquisition and to pay related transaction fees and expenses.

The revolving credit agreement and term loan credit agreement each include one financial covenant requiring the Company to maintain a consolidated debt to total capitalization ratio of not greater than 65 percent (excluding the equity impact of accumulated other comprehensive loss related to defined benefit retirement plans). The Company was in compliance with this financial covenant at September 30, 2018 . The credit facilities also contain covenants that require the Company to satisfy certain conditions in order to incur debt secured by liens, engage in sale/leaseback transactions or merge or consolidate with another entity.

On April 10, 2017, the Company issued $4.65 billion of senior unsecured notes. The net proceeds of the offering were principally used to finance a portion of the B/E Aerospace acquisition and to pay related transaction fees and expenses. Net proceeds of $300 million were used to repay a portion of the Company's outstanding short-term commercial paper borrowings.

The principal amount of long-term debt, net of discount and debt issuance costs, is summarized as follows:

| (in millions, except interest rate figures) | Interest Rate | September 30, 2018 | September 30, 2017 |
|---|---|---|---|
| Fixed-rate notes due: | | | |
| July 2019 | 1.95% | **$ 300** | $ 300 |
| July 2019 | 5.25% | **300** | 300 |
| November 2021 | 3.10% | **250** | 250 |
| March 2022 | 2.80% | **1,100** | 1,100 |
| December 2023 | 3.70% | **400** | 400 |
| March 2024 | 3.20% | **950** | 950 |
| March 2027 | 3.50% | **1,300** | 1,300 |
| December 2043 | 4.80% | **400** | 400 |
| April 2047 | 4.35% | **1,000** | 1,000 |
| Variable-rate term loan due: | | | |
| April 2020 | 1 month LIBOR + 1.25% [1] | **481** | 870 |
| Fair value swap adjustment (Notes 14 and 15) | | **(2)** | 14 |
| Total | | **6,479** | 6,884 |
| Less unamortized debt issuance costs and discounts | | **50** | 59 |
| Less current portion of long-term debt | | **748** | 149 |
| Long-term Debt, Net | | **$ 5,681** | $ 6,676 |

[1] The Company has the option to elect a one-, two-, three- or six-month LIBOR interest rate and has elected the one-month rate during the fourth quarter of 2018 . The one-month LIBOR rate at September 30, 2018 was approximately 2.26 percent.

Cash payments for debt interest and fees during the year ended September 30, 2018 were $249 million . Cash payments for debt interest and fees during the year ended September 30, 2017 were $192 million , of which $29 million related to fees incurred in connection with the bridge credit facility. Cash payments for debt interest and fees during the year ended September 30, 2016 were $56 million .

## 10. Retirement Benefits

The Company sponsors defined benefit pension (Pension Benefits) and other postretirement (Other Retirement Benefits) plans which provide monthly pension and other benefits to eligible employees upon retirement.

*Pension Benefits*
The Company historically provided pension benefits to most of the Company's U.S. employees in the form of non-contributory, defined benefit plans that are considered qualified plans under applicable laws. The benefits provided under these plans for salaried employees are generally based on years of service and average compensation. The benefits provided under these plans for hourly employees are generally based on specified benefit amounts and years of service. In addition, the Company sponsors an unfunded non-qualified defined benefit plan for certain employees.

In 2018, five of the Company's eight collective bargaining agreements were negotiated and participation in the Rockwell Collins Pension Plan is now closed to newly hired employees pursuant to those negotiations. The individuals covered by the agreements will instead receive supplemental Company contributions to the existing defined contribution savings plan. The Company previously amended its U.S. qualified and non-qualified defined benefit pension plans to discontinue benefit accruals for salary increases and services rendered after September 30, 2006 for all salaried and hourly employees who were not covered by collective bargaining agreements.

The Company also maintains six defined benefit pension plans in countries outside of the U.S., three of which are unfunded.

*Other Retirement Benefits*

Other retirement benefits consist of retiree health care and life insurance benefits that are provided to substantially all of the Company's U.S. employees hired before October 1, 2006 and their beneficiaries. Employees generally become eligible to receive these benefits if they retire after age 55 with at least 10 years of service. Most plans are contributory with retiree contributions generally based upon years of service and adjusted annually by the Company. Retiree medical plans pay a stated percentage of expenses reduced by deductibles and other coverage. The amount the Company will contribute toward retiree medical coverage for most participants is fixed. Additional premium contributions will be required from participants for all costs in excess of the Company's fixed contribution amount. 2018 bargaining unit negotiations closed participation in the retiree health plan to certain newly hired employees and in some instances to individuals retiring after specified dates ranging from 2020 to 2022. Retiree life insurance plans provide coverage at a flat dollar amount or as a multiple of salary. With the exception of certain bargaining unit plans, Other Retirement Benefits are funded as expenses are incurred.

*Components of Expense (Income)*

The components of expense (income) for Pension Benefits and Other Retirement Benefits are summarized below:

| | Pension Benefits | | | Other Retirement Benefits | | |
|---|---|---|---|---|---|---|
| (in millions) | **2018** | 2017 | 2016 | **2018** | 2017 | 2016 |
| Service cost | **$ 12** | $ 13 | $ 11 | **$ 2** | $ 3 | $ 3 |
| Interest cost | **120** | 111 | 126 | **6** | 5 | 6 |
| Expected return on plan assets | **(243)** | (241) | (238) | **(2)** | (2) | (2) |
| Amortization: | | | | | | |
| Prior service credit | **—** | — | (1) | **—** | (1) | (1) |
| Net actuarial loss | **82** | 92 | 78 | **7** | 9 | 8 |
| Net benefit expense (income) | **$ (29)** | $ (25) | $ (24) | **$ 13** | $ 14 | $ 14 |

A spot rate approach, which applies separate discount rates for each projected benefit payment, has been used to calculate pension interest and service cost.

*Funded Status and Net Liability*

The Company recognizes the unfunded status of defined benefit retirement plans on the Consolidated Statement of Financial Position as Retirement Benefits. The current portion of the liability is the amount by which the actuarial present value of benefits included in the benefit obligation payable in the next twelve months exceeds the fair value of the plan assets and is reflected in Compensation and benefits in the Consolidated Statement of Financial Position.

The following table reconciles the projected benefit obligations (PBO), plan assets, funded status and net liability for the Company's Pension Benefits and Other Retirement Benefits:

| | Pension Benefits | | Other Retirement Benefits | |
|---|---|---|---|---|
| (in millions) | **2018** | 2017 | **2018** | 2017 |
| PBO at beginning of period | **$ 4,202** | $ 4,527 | **$ 213** | $ 231 |
| Service cost | **12** | 13 | **2** | 3 |
| Interest cost | **120** | 111 | **6** | 5 |
| Discount rate and other assumption changes | **(200)** | (156) | **(9)** | (7) |
| Actuarial losses (gains) | **9** | 4 | **(5)** | (6) |
| Plan participant contributions | **—** | — | **4** | 4 |
| Benefits paid | **(219)** | (223) | **(14)** | (17) |
| Group annuity purchase | **—** | (101) | **—** | — |
| Plan amendments | **(11)** | — | **(7)** | — |
| B/E Aerospace acquisition | **—** | 16 | **—** | — |
| Other | **(5)** | 11 | **—** | — |
| PBO at end of period | **3,908** | 4,202 | **190** | 213 |
| Plan assets at beginning of period | **3,186** | 3,074 | **20** | 19 |
| Actual return on plan assets | **120** | 362 | **2** | 2 |
| Company contributions | **467** | 68 | **9** | 12 |
| Plan participant contributions | **—** | — | **4** | 4 |
| Benefits paid | **(219)** | (223) | **(14)** | (17) |
| Group annuity purchase | **—** | (103) | **—** | — |
| B/E Aerospace acquisition | **—** | 4 | **—** | — |
| Other | **(2)** | 4 | **—** | — |
| Plan assets at end of period | **3,552** | 3,186 | **21** | 20 |
| Funded status of plans | **$ (356)** | $ (1,016) | **$ (169)** | $ (193) |
| Funded status consists of: | | | | |
| Retirement benefits liability | **$ (356)** | $ (1,015) | **$ (169)** | $ (193) |
| Compensation and benefits liability | **(12)** | (11) | **—** | — |
| Other assets | **12** | 10 | **—** | — |
| Net liability | **$ (356)** | $ (1,016) | **$ (169)** | $ (193) |

In July 2017, an agreement to purchase a group annuity contract was entered into by the Company's pension plan. The pension plan transferred $103 million of plan assets to an insurance company. The agreement resulted in a reduction of the Company's PBO by $101 million and transferred the administrative responsibilities for these participants to the insurance company.

For the Company's 2017 year end pension liability valuation, the Company used the RP-2014 tables with an adjustment for plan experience, and utilized the MP-2016 mortality improvement scale adjusted to reflect convergence to an ultimate annual rate of mortality improvement of 0.75 percent by 2032. For the 2018 year end pension liability valuation, the Company continued to use the RP-2014 tables with an adjustment for plan experience, but utilized the MP-2017 mortality improvement scale adjusted to reflect convergence to an ultimate annual rate of mortality improvement of 0.75 percent by 2033. Both the MP-2016 and MP-2017 mortality improvement scales indicate that U.S. mortality continues to improve, but at a slower average rate.

The Company's non-U.S. defined benefit pension plans represented 5 percent of the total PBO at September 30, 2018 and 2017 , respectively. The accumulated benefit obligation for all defined benefit pension plans was $3.903 billion and $4.185 billion at September 30, 2018 and 2017 , respectively.

*Other Comprehensive Loss*
The following table summarizes the amounts included in Accumulated other comprehensive loss before tax related to retirement benefits as of September 30, 2018 and 2017 and changes recognized in Other comprehensive loss before tax for the years ended September 30, 2018 and 2017 :

| | Pension Benefits | | Other Retirement Benefits | |
|---|---|---|---|---|
| (in millions) | Prior Service Cost (Credit) | Net Actuarial Loss | Prior Service Cost (Credit) | Net Actuarial Loss |
| Balance at September 30, 2016 | $ 10 | $ 2,751 | $ (5) | $ 116 |
| Current year prior service cost | — | — | — | — |
| Current year net actuarial gain | — | (270) | — | (13) |
| Amortization of prior service cost | — | — | 1 | — |
| Amortization of actuarial loss | — | (92) | — | (9) |
| Balance at September 30, 2017 | 10 | 2,389 | (4) | 94 |
| Current year prior service cost | (11) | — | (6) | — |
| Current year net actuarial gain | — | (70) | — | (14) |
| Amortization of prior service cost | — | — | — | — |
| Amortization of actuarial loss | — | (82) | — | (7) |
| Balance at September 30, 2018 | $ (1) | $ 2,237 | $ (10) | $ 73 |

The estimated amounts that will be amortized from Accumulated other comprehensive loss into expense (income) for Pension Benefits and Other Retirement Benefits during the year ending September 30, 2019 are as follows:

| (in millions) | Pension Benefits | Other Retirement Benefits | Total |
|---|---|---|---|
| Prior service cost | $ — | $ (2) | $ (2) |
| Net actuarial loss | 75 | 5 | 80 |
| Total | $ 75 | $ 3 | $ 78 |

*Actuarial Assumptions*
The following table presents the significant assumptions used in determining the benefit obligations:

| | Pension Benefits | | | | Other Retirement Benefits | |
|---|---|---|---|---|---|---|
| | U.S. | | Non-U.S. | | U.S. | |
| | **2018** | 2017 | **2018** | 2017 | **2018** | 2017 |
| Discount rate | **4.02%** | 3.53% | **2.28%** | 2.29% | **3.94%** | 3.39% |
| Compensation increase rate | **4.00%** | 4.00% | **2.89%** | 3.05% | **4.00%** | 4.00% |

Discount rates used to calculate the benefit obligations are determined by using a weighted average of market-observed yields for high quality, fixed-income securities that correspond to the payment of benefits.

The Company's U.S. qualified and non-qualified plans were previously amended to discontinue benefit accruals for salary increases and services rendered after 2006 for non-union employees. 2018 bargaining unit negotiations closed participation in the Rockwell Collins Pension Plan to certain newly hired employees. In the U.S., certain sub-plans associated with collective bargaining agreements continue to accrue benefits, and only the ARINC Union sub-plan is impacted by increases in compensation.

Significant assumptions used in determining the net benefit expense (income) are as follows:

| | Pension Benefits | | | | Other Retirement Benefits | |
|---|---|---|---|---|---|---|
| | U.S. | | Non-U.S. | | U.S. | |
| | **2018** | 2017 | **2018** | 2017 | **2018** | 2017 |
| Discount rate | **3.53%** | 3.22% | **2.29%** | 1.72% | **3.39%** | 3.39% |
| Expected long-term return on plan assets | **8.00%** | 8.00% | **6.73%** | 6.74% | **8.00%** | 8.00% |
| Compensation increase rate | **4.00%** | 4.00% | **3.05%** | 3.03% | **4.00%** | 4.00% |
| Health care cost gross trend rate (1) | **—** | — | **—** | — | **7.50%** | 7.50% |
| Ultimate trend rate (1) | **—** | — | **—** | — | **5.00%** | 5.00% |
| Year that trend reaches ultimate rate (1) | **—** | — | **—** | — | **2022** | 2022 |

(1) Due to the effect of the fixed Company contribution, increasing or decreasing the health care cost trend rate by one percentage point would not have a significant impact on the Company's cost of providing Other Retirement Benefits.

Expected long-term return on plan assets for each year presented is based on both historical long-term actual and expected future investment returns considering the current investment mix of plan assets. The Company uses a market-related value of plan assets reflecting changes in the fair value of plan assets over a five-year period. The Company amortizes actuarial gains and losses in excess of 10 percent of the greater of the market-related value of plan assets or the projected benefit obligation (the corridor) on a straight-line basis over the expected future lifetime of inactive participants, which was approximately 24 years at September 30, 2018 , as almost all of the plan's participants are considered inactive.

Prior service costs resulting from plan amendments are amortized in equal annual amounts over the average remaining service period of affected active participants or over the remaining life expectancy of affected retired participants.

*Plan Assets*

Total plan assets for Pension Benefits and Other Retirement Benefits as of September 30, 2018 and 2017 were $3.573 billion and $3.206 billion , respectively. The Company has established investment objectives that seek to preserve and maximize the amount of plan assets available to pay plan benefits. These objectives are achieved through investment guidelines requiring diversification and allocation strategies designed to maximize the long-term returns on plan assets while maintaining a prudent level of investment risk. These investment strategies are implemented using actively managed and indexed assets. Target and actual asset allocations as of September 30, 2018 and 2017 are as follows:

| | Target Mix | **2018** | 2017 |
|---|---|---|---|
| Equities | 40% - 70% | **52%** | 57% |
| Fixed income | 25% - 60% | **46%** | 40% |
| Alternative investments | 0% - 15% | **0%** | 0% |
| Cash | 0% - 5% | **2%** | 3% |

Alternative investments may include real estate, hedge funds, venture capital and private equity. There were no plan assets invested in the securities of the Company as of September 30, 2018 and 2017 or at any time during the years then ended. Target and actual asset allocations are periodically rebalanced between asset classes in order to mitigate investment risk and maintain asset classes within target allocations.

The following table presents the fair value of the Company's pension plans' assets as of September 30, 2018 and 2017 , by asset category segregated by level within the fair value hierarchy, as described in Note 14:

| | **September 30, 2018** | | | | | September 30, 2017 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Asset category (in millions) | **Level 1** | **Level 2** | **Level 3** | **Not Leveled (1)** | **Total** | Level 1 | Level 2 | Level 3 | Not Leveled (1) | Total |
| Equity securities: | | | | | | | | | | |
| U.S. equity | **$ 552** | **$ 8** | **$ —** | **$ 592** | **$ 1,152** | $ 558 | $ 15 | $ — | $ 394 | $ 967 |
| Non-U.S. equity | **693** | **10** | **—** | **—** | **703** | 814 | 28 | — | — | 842 |
| Fixed income securities: | | | | | | | | | | |
| Corporate | **1** | **713** | **—** | **313** | **1,027** | — | 795 | — | 305 | 1,100 |
| U.S. government | **401** | **31** | **—** | **69** | **501** | 42 | 24 | — | 68 | 134 |
| Mortgage and asset-backed | **—** | **1** | **—** | **—** | **1** | — | 1 | — | — | 1 |
| Other | **—** | **29** | **3** | **75** | **107** | — | 50 | 3 | — | 53 |
| Cash and cash equivalents | **—** | **47** | **—** | **—** | **47** | — | 82 | — | — | 82 |
| Sub-total | **$ 1,647** | **$ 839** | **$ 3** | **$ 1,049** | **3,538** | $ 1,414 | $ 995 | $ 3 | $ 767 | 3,179 |
| Net receivables related to investment transactions | | | | | **14** | | | | | 7 |
| Total (2) | | | | | **$ 3,552** | | | | | $ 3,186 |

(1) Certain investments measured using the net asset value (NAV) practical expedient have not been classified in the fair value hierarchy.
(2) The Rockwell Collins Pension Plan participates in a securities lending program through its Trustee. Under this program, the Plan's investment securities may be loaned to investment brokers for a fee. Securities so loaned are fully collateralized by cash, letters of credit and securities issued or guaranteed by the U.S. government, its agencies and instrumentalities. At September 30, 2018 and 2017, $424 million and $333 million , respectively, of the Plan's securities were on loan under the Trustee's securities lending program.

The following table presents the fair value of the Company's other retirement benefits plan's assets as of September 30, 2018 and 2017 , by asset category segregated by level within the fair value hierarchy, as described in Note 14:

| | **September 30, 2018** | | | | | September 30, 2017 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Asset category (in millions) | **Level 1** | **Level 2** | **Level 3** | **Not Leveled** | **Total** | Level 1 | Level 2 | Level 3 | Not Leveled | Total |
| Equity securities: | | | | | | | | | | |
| U.S. equity | **$ 11** | **$ —** | **$ —** | **$ —** | **$ 11** | $ 9 | $ — | $ — | $ — | $ 9 |
| Non-U.S. equity | **—** | **—** | **—** | **—** | **—** | — | — | — | — | — |
| Fixed income securities: | | | | | | | | | | |
| Corporate | **—** | **3** | **—** | **—** | **3** | — | 3 | — | — | 3 |
| U.S. government | **2** | **1** | **—** | **—** | **3** | 2 | 1 | — | — | 3 |
| Mortgage and asset-backed | **—** | **1** | **—** | **—** | **1** | — | 1 | — | — | 1 |
| Cash and cash equivalents | **—** | **3** | **—** | **—** | **3** | — | 4 | — | — | 4 |
| Total | **$ 13** | **$ 8** | **$ —** | **$ —** | **$ 21** | $ 11 | $ 9 | $ — | $ — | $ 20 |

*Valuation Techniques*
Level 1 assets for the pension plans and other retirement benefits plan are primarily comprised of equity and fixed income securities. Level 1 equity securities are actively traded on U.S. and non-U.S. exchanges and are valued using the market approach at quoted market prices on the measurement date. Level 1 fixed income securities are valued using quoted market prices.

Level 2 equity securities contain equity funds that hold investments with values based on quoted market prices, but for which the funds are not valued on a quoted market basis. Level 2 fixed income securities are primarily valued using pricing models that use observable market data or bids provided by independent investment brokerage firms.

Cash and cash equivalents includes cash which is used to pay benefits and cash invested in a short-term investment fund that holds securities with values based on quoted market prices, but for which the funds are not valued on a quoted market basis. As such, the cash and cash equivalents in our pension and other retirement plan assets are classified as Level 2 in the tables above.

The Level 3 assets represent general insurance company contracts in the pension plans and are not significant. As described in Note 14, the fair value of a Level 3 asset is derived from unobservable inputs that are based on the Company's own assumptions.

*Contributions*
For the years ended September 30, 2018 and 2017 , the Company made contributions to its pension plans as follows:

| (in millions) | **2018** | 2017 |
|---|---|---|
| Contributions to U.S. qualified plans | **$ 455** | $ 55 |
| Contributions to U.S. non-qualified plan | **8** | 8 |
| Contributions to non-U.S. plans | **4** | 5 |
| Total | **$ 467** | $ 68 |

The Company’s objective with respect to the funding of its pension plans is to provide adequate assets for the payment of future benefits. Pursuant to this objective, the Company will fund its pension plans as required by governmental regulations and may consider discretionary contributions as conditions warrant. The year over year increase in contributions to U.S. qualified pension plans were discretionary in nature and made by the Company to achieve a tax deduction and reduce future Pension Benefit Guaranty Corporation premiums. There is no minimum statutory funding requirement for 2019 and the Company does not currently expect to make any additional discretionary contributions during 2019 to these plans. Any additional future contributions necessary to satisfy minimum statutory funding requirements are dependent upon actual plan asset returns, interest rates and actuarial assumptions.

The Company participates in a multi-employer arrangement that provides postretirement benefits other than pension benefits. This arrangement provides medical benefits to certain bargaining unit active employees and retirees and their dependents. Contributions to this multi-employer arrangement for postretirement benefits were $1 million in 2018 , $1 million in 2017 and $1 million in 2016 .

*Benefit Payments*
The following table reflects estimated benefit payments to be made to eligible participants for each of the next five years and the following five years in the aggregate:

| (in millions) | Pension Benefits | Other Retirement Benefits |
|---|---|---|
| 2019 | $ 245 | $ 15 |
| 2020 | 240 | 15 |
| 2021 | 242 | 16 |
| 2022 | 244 | 16 |
| 2023 | 246 | 16 |
| 2024-2028 | 1,228 | 69 |

Estimated benefit payments for Other Retirement Benefits in the table above are shown net of plan participant contributions and therefore reflect the Company's portion only. Substantially all of the Pension Benefit payments relate to the Company's U.S. qualified funded plans which are paid from the pension trust.

*Defined Contribution Savings Plan*
The Company sponsors defined contribution savings plans that are available to the majority of its employees. The plans allow employees to contribute a portion of their compensation on a pre-tax and/or after-tax basis in accordance with specified guidelines. For most plans, the Company matches a percentage of employee contributions using common stock of the Company up to certain limits. Employees may transfer at any time all or a portion of their balance in Company common stock to any of the other investment options offered within the plans. The Company is authorized to issue 16.8 million shares under the defined contribution savings plans, of which 0.4 million shares are available for future contributions at September 30, 2018 . Additionally, for the majority of the Company's employees, the Company's defined contribution savings plan includes a cash contribution based on an employee's age and service.

The Company's expense related to the defined contribution savings plans for 2018 , 2017 and 2016 was as follows:

| | **2018** | | 2017 | | 2016 | |
|---|---|---|---|---|---|---|
| (in millions) | **Shares** | **Expense** | Shares | Expense | Shares | Expense |
| Contribution in shares | **0.4** | **$ 58** | 0.5 | $ 56 | 0.6 | $ 49 |
| Contribution in cash | | **69** | | 54 | | 46 |
| Total | | **$ 127** | | $ 110 | | $ 95 |

The Company's cash contributions for 2018 and 2017 include $11 million and $5 million respectively to the B/E Aerospace defined contribution savings plan.

*Employee Stock Purchase Plan*
The Company also offered an Employee Stock Purchase Plan (ESPP) which allowed employees to have their base compensation withheld to purchase the Company's common stock each month at 95 percent of the fair market value on the last day of the month. The ESPP is considered a non-compensatory plan and accordingly no compensation expense is recorded in connection with this benefit. During 2018 , 2017 and 2016 , 0.0 million , 0.1 million and 0.1 million shares, respectively, of Company common stock were issued to employees at a value of $0 million , $11 million and $11 million for the respective periods. Further purchases under the ESPP were suspended on September 29, 2017 pursuant to the Merger Agreement. If the UTC Merger is completed, the ESPP will be terminated.

11. **Shareowners' Equity**

*Common Stock*
The Company is authorized to issue one billion shares of common stock, par value $0.01 per share, and 25 million shares of preferred stock, without par value.

*Accumulated Other Comprehensive Loss*
Changes in accumulated other comprehensive loss (AOCL), net of tax, by component are as follows:

| | Foreign Exchange Translation and Other Adjustments | Pension and Other Postretirement Adjustments [1] | Change in the Fair Value of Effective Cash Flow Hedges | Total |
|---|---|---|---|---|
| Balance at September 30, 2015 | $ (56) | $ (1,637) | $ (6) | $ (1,699) |
| Other comprehensive (loss) before reclassifications | (20) | (234) | (2) | (256) |
| Amounts reclassified from accumulated other comprehensive income | — | 53 | 4 | 57 |
| Net current period other comprehensive income (loss) | (20) | (181) | 2 | (199) |
| Balance at September 30, 2016 | (76) | (1,818) | (4) | (1,898) |
| Other comprehensive income before reclassifications | 77 | 180 | 1 | 258 |
| Amounts reclassified from accumulated other comprehensive income | — | 63 | 2 | 65 |
| Net current period other comprehensive income | 77 | 243 | 3 | 323 |
| Balance at September 30, 2017 | 1 | (1,575) | (1) | (1,575) |
| Other comprehensive income (loss) before reclassifications | (39) | 79 | (1) | 39 |
| Amounts reclassified from accumulated other comprehensive income | — | 65 | — | 65 |
| Net current period other comprehensive income (loss) | (39) | 144 | (1) | 104 |
| Balance at September 30, 2018 | $ (38) | $ (1,431) | $ (2) | $ (1,471) |

[1] Reclassifications from AOCL to net income related to the amortization of net actuarial losses and prior service credits for the Company's retirement benefit plans and were $ 89 million ($ 65 million net of tax), $100 million ( $63 million net of tax) and $84 million ( $53 million net of tax) for 2018 , 2017 and 2016 , respectively. The reclassifications are included in the computation of net benefit expense. See Note 10, Retirement Benefits, for additional details.

## 12. Stock-Based Compensation and Earnings Per Share

*Stock-Based Compensation Program Description*
In February 2015, the Company's shareholders approved the Company's 2015 Long-Term Incentives Plan (2015 Plan), replacing the 2006 Long-Term Incentives Plan (2006 Plan). Under the 2015 Plan, up to 11 million shares of common stock may be issued by the Company as non-qualified options, performance units, performance shares, stock appreciation rights, restricted shares and restricted stock units. Each share issued pursuant to an award of restricted shares, restricted stock units, performance shares and performance units counts as 3.55 shares against the authorized limit. Shares available for future grant or payment under these plans were 5 million at September 30, 2018 . No shares are available for future grant under the 2006 Plan.

Options to purchase common stock of the Company have been granted under various incentive plans to directors, officers and other key employees. All of the Company's stock-based incentive plans require options to be granted at prices equal to or above the fair market value of the common stock on the dates the options are granted. The plans provide that the option price for certain options granted under the plans may be paid by the employee in cash, shares of common stock or a combination thereof. Option awards provide for accelerated vesting if there is a termination of employment in connection with a change in control. Stock options generally expire 10 years from the date they are granted and generally vest ratably over three years.

The Company utilizes performance shares, restricted stock and restricted stock units that generally cliff vest at the end of three years. The fair value of restricted stock and restricted stock units is estimated using the closing share price on the day of grant. The number of performance shares that will ultimately be issued is based on achievement of performance targets over a three-year period that consider cumulative sales growth and free cash flow as a percentage of net income or free cash flow with an additional potential adjustment up or down depending on the Company's total return to shareowners compared to a group of peer companies. The fair value of performance shares is estimated using a Monte Carlo model that considers the likelihood of a payout adjustment for the total shareowner return in comparison to the peer group. Up to 240 percent of the performance shares the Company grants can be earned if maximum performance is achieved.

The Company's stock-based compensation awards are designed to align management's interests with those of the Company's shareowners and to reward outstanding Company performance. The Company has an ongoing share repurchase plan and expects to satisfy stock option exercises and stock award issuances from treasury stock.

Stock-based compensation expense is recognized on a straight-line basis over the requisite service period. Total stock-based compensation expense and related income tax benefit included within the Consolidated Statement of Operations for 2018 , 2017 and 2016 is as follows:

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Stock-based compensation expense included in: | | | |
| Product cost of sales | **$ 8** | $ 9 | $ 8 |
| Selling, general and administrative expenses | **27** | 22 | 19 |
| Total | **$ 35** | $ 31 | $ 27 |
| Income tax benefit | **$ 9** | $ 10 | $ 9 |

*General Option Information*
The following summarizes the activity of the Company's stock options for 2018 :

| | Shares (in thousands) | Weighted Average Exercise Price | Weighted Average Remaining Life (in years) | Aggregate Intrinsic Value (in millions) |
|---|---|---|---|---|
| Outstanding at September 30, 2017 | 3,478 | $ 71.67 | | |
| Granted | — | — | | |
| Exercised | (1,057) | 59.82 | | |
| Forfeited or expired | (5) | 87.99 | | |
| Outstanding at September 30, 2018 | 2,416 | $ 76.82 | 5.8 | $ 154 |
| Vested or expected to vest [1] | 2,413 | $ 76.81 | 5.8 | $ 154 |
| Exercisable at September 30, 2018 | 1,782 | $ 72.75 | 5.1 | $ 121 |

[1] Represents outstanding options reduced by expected forfeitures

| | **2018** | 2017 | 2016 |
|---|---|---|---|
| Weighted-average fair value per share of options granted | **$ —** | $ 17.26 | $ 17.75 |
| Intrinsic value of options exercised (in millions) [2] | **$ 80** | $ 49 | $ 13 |

[2] Represents the amount by which the stock price exceeded the exercise price of the options on the date of the exercise

The total fair value of options vested was $11 million , $10 million and $10 million during the years ended September 30, 2018 , 2017 and 2016 , respectively. Total unrecognized compensation expense for options that have not vested as of September 30, 2018 is $2 million and will be recognized over a weighted average period of 0.5 years.

*Stock Option Fair Value Information*
The Company's determination of the fair value of option awards on the date of grant using an option-pricing model is affected by the Company's stock price as well as assumptions regarding a number of subjective variables. These assumptions include: the Company's expected stock price volatility, the projected employee stock option exercise term, the expected dividend yield and the risk-free interest rate. Changes in these assumptions can materially affect the estimated value of the stock options.

The fair value of each option granted by the Company was estimated using a binomial lattice pricing model and the following weighted average assumptions:

| | 2017 Grants | 2016 Grants |
|---|---|---|
| Risk-free interest rate | 1.0% - 2.7% | 0.7% - 2.5% |
| Expected dividend yield | 1.3% - 1.5% | 1.4% - 1.6% |
| Expected volatility | 19.0% | 20.0% |
| Expected life | 7 years | 7 years |

The expected life of employee stock options represents the weighted-average period the stock options are expected to remain outstanding. The binomial lattice model assumes that employees' exercise behavior is a function of the option's remaining expected life and the extent to which the option is in-the-money. The binomial lattice model estimates the probability of exercise as a function of these two variables based on the entire history of exercises and forfeitures on all past option grants made by the Company.

*Performance Shares, Restricted Stock and Restricted Stock Units Information*
The following summarizes the Company's performance shares, restricted stock and restricted stock units for 2018 :

| | Performance Shares | | Restricted Stock | | Restricted Stock Units | |
|---|---|---|---|---|---|---|
| (shares in thousands) | Shares | Weighted Average Grant Date Fair Value | Shares | Weighted Average Grant Date Fair Value | Shares | Weighted Average Grant Date Fair Value |
| Nonvested at September 30, 2017 | 370 | $ 85.44 | 23 | $ 30.24 | 512 | $ 80.56 |
| Granted | 142 | 138.66 | — | — | 265 | 133.60 |
| Vested | (120) | 82.77 | — | — | (113) | 91.28 |
| Forfeited | (9) | 120.03 | — | — | (31) | 111.13 |
| Nonvested at September 30, 2018 | 383 | $ 105.25 | 23 | $ 30.24 | 633 | $ 99.16 |

| (in millions) | Performance Shares | Restricted Stock | Restricted Stock Units |
|---|---|---|---|
| Total unrecognized compensation costs at September 30, 2018 | **$ 17** | **$ —** | **$ 30** |
| Weighted-average life remaining at September 30, 2018, in years | **1.0** | **0** | **1.1** |
| Weighted-average fair value per share granted in 2017 | $ 88.25 | $ — | $ 92.84 |
| Weighted-average fair value per share granted in 2016 | $ 85.13 | $ — | $ 85.85 |

The maximum number of shares of common stock that can be issued in respect of performance shares granted in 2018 based on the achievement of performance targets for 2018 through 2020 is approximately 328,000 . The maximum number of shares of common stock that can be issued in respect of performance shares granted in 2017 based on the achievement of performance targets for 2017 through 2019 is approximately 299,000 . For purposes of determining the maximum number of shares of common stock that can be issued with respect to the performance shares granted in 2017 and 2018 , the maximums have been updated to reflect reductions arising as a result of terminations and retirements. The number of shares of common stock that will be issued in respect of performance shares granted in 2016 based on the achievement of performance targets for 2016 through 2018 is approximately 159,000 .

*Earnings Per Share and Diluted Share Equivalents*
The computation of basic and diluted earnings per share is as follows:

| (in millions, except per share amounts) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Numerator for basic and diluted earnings per share: | | | |
| Income from continuing operations | **$ 1,032** | $ 705 | $ 727 |
| Income from discontinued operations, net of taxes | **—** | — | 1 |
| Net income | **$ 1,032** | $ 705 | $ 728 |
| Denominator: | | | |
| Denominator for basic earnings per share – weighted average common shares | **164.0** | 145.5 | 130.5 |
| Effect of dilutive securities: | | | |
| Stock options | **1.2** | 1.2 | 1.0 |
| Performance shares, restricted stock and restricted stock units | **0.6** | 0.5 | 0.6 |
| Dilutive potential common shares | **1.8** | 1.7 | 1.6 |
| Denominator for diluted earnings per share – adjusted weighted average shares and assumed conversion | **165.8** | 147.2 | 132.1 |
| Earnings per share: | | | |
| Basic | | | |
| Continuing operations | **$ 6.29** | $ 4.85 | $ 5.57 |
| Discontinued operations | **—** | — | 0.01 |
| Basic earnings per share | **$ 6.29** | $ 4.85 | $ 5.58 |
| Diluted | | | |
| Continuing operations | **$ 6.22** | $ 4.79 | $ 5.50 |
| Discontinued operations | **—** | — | 0.01 |
| Diluted earnings per share | **$ 6.22** | $ 4.79 | $ 5.51 |

The Company adopted the new standard on accounting for share-based payments (see Note 2) during 2016. This standard requires excess tax benefits or deficiencies associated with share-based payments to be recorded as a discrete income tax benefit or expense in the period incurred, rather than within Additional paid-in capital. The new standard also requires excess tax benefits and deficiencies to be excluded from assumed future proceeds in the calculation of diluted shares outstanding. The Company adopted the standard prospectively, resulting in a $4 million and $0.02 increase to net income from continuing operations and diluted earnings per share from continuing operations, respectively, in 2016.

The average outstanding diluted shares calculation excludes options with an exercise price that exceeds the average market price of shares during the period. Stock options excluded from the average outstanding diluted shares calculation were 0.0 million , 0.0 million and 0.6 million in 2018 , 2017 and 2016 , respectively.

## 13. Income Taxes

On December 22, 2017, the President of the United States signed into law the Tax Cuts and Jobs Act (the Act). The Act amends the Internal Revenue Code to reduce tax rates and modify policies, credits and deductions for individuals and businesses. For businesses, the Act reduces the corporate federal tax rate from a maximum of 35.0 percent to a flat 21.0 percent rate, effective January 1, 2018, and transitions from a worldwide tax system to a modified territorial tax system. The Act also adds many new provisions including changes to bonus depreciation, changes to the deduction for executive compensation and interest expense, a tax on global intangible low-taxed income (GILTI), the base erosion anti-abuse tax (BEAT) and a deduction for foreign-derived intangible income (FDII). Many of these provisions, including the tax on GILTI, the BEAT and the deduction for FDII, do not apply to the Company until 2019 and the Company continues to assess the impact of these provisions. The Company has elected to account for the tax on GILTI as a period cost and thus has not adjusted any of the deferred tax assets/liabilities of its foreign subsidiaries for the new tax. The two material items that impact the Company for 2018 are the reduction in the tax rate and a one-time tax that is imposed on the Company's unremitted foreign earnings.

On December 22, 2017, the SEC issued Staff Accounting Bulletin 118 that provides additional guidance allowing companies to use a one year measurement period, similar to that used in business combinations, to account for the impacts of the Act in their financial statements. As of the end of the fiscal year, the Company has accounted for the impacts of the Act, including the use of reasonable estimates where necessary. The Company may continue to refine its estimates throughout the measurement period.

Due to the Company's fiscal year, the Company's 2018 blended U.S. federal statutory tax rate was 24.6 percent. The Company's U.S. federal statutory tax rate will be 21.0 percent starting in 2019.

The Company completed its analysis of the rate impact on the deferred tax accounts due to the reduction in the U.S. corporate income tax rate from 35.0 percent to 21.0 percent under the Act in prior quarters which resulted in a $ 154 million reduction in deferred tax liabilities.

As of the December 31, 2017 deemed repatriation date, the Company estimates that it had approximately $ 1.1 billion of unremitted foreign earnings that would be subject to the tax imposed under Section 965 of the Internal Revenue Code. The Act imposes a tax on these earnings at either a 15.5 percent rate or an 8.0 percent rate. The higher rate applies to the extent the Company's foreign subsidiaries have cash and cash equivalents at certain measurement dates, whereas the lower rate applies to any earnings that are in excess of the cash and cash equivalents balance. After accounting for foreign tax credits related to the deemed repatriated earnings, the Company estimates the tax liability to be approximately $ 69 million and has recorded $ 24 million of tax expense. Before the purchase price allocation was finalized in the second quarter of 2018, the Company determined that $250 million of certain B/E Aerospace unremitted earnings previously deemed to be permanently reinvested are now available to be repatriated. In connection with this determination, the Company reclassified $ 35 million of its deferred tax liability to its income tax payable. Additionally, as a result of Section 965, the Company reversed $10 million of an uncertain tax liability. The Company's accounting for the tax on unremitted foreign earnings is incomplete due to the complexity of determining the various components of the calculation. Some of the information necessary to determine the amount of the tax includes the analysis of current year earnings and of the cash equivalents of its foreign subsidiaries.

Income tax expense from continuing operations was calculated based on the following components of income before income taxes:

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| U.S. income | **$ 723** | $ 688 | $ 824 |
| Non-U.S. income | **389** | 243 | 111 |
| Total | **$ 1,112** | $ 931 | $ 935 |

The components of income tax expense from continuing operations are as follows:

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Current: | | | |
| U.S. federal | **$ (16)** | $ 97 | $ 120 |
| Non-U.S. | **105** | 68 | 29 |
| U.S. state and local | **4** | 18 | 11 |
| Total current | **93** | 183 | 160 |
| Deferred: | | | |
| U.S. federal | **(9)** | 48 | 47 |
| Non-U.S. | **(16)** | (5) | — |
| U.S. state and local | **12** | — | 1 |
| Total deferred | **(13)** | 43 | 48 |
| Income tax expense | **$ 80** | $ 226 | $ 208 |

The effective income tax rate from continuing operations differed from the U.S. statutory tax rate as detailed below:

| | 2018 | 2017 | 2016 |
|---|---|---|---|
| Statutory tax rate | **24.6 %** | 35.0 % | 35.0 % |
| Impact of International Operations | **(0.7)** | (4.4) | (0.6) |
| State and local income taxes | **0.7** | 1.6 | 1.1 |
| Research and development credit | **(5.6)** | (5.0) | (6.4) |
| Domestic manufacturing deduction | **(0.6)** | (2.1) | (2.0) |
| U.S. Tax Reform | **(10.9)** | — | — |
| Non-deductible goodwill | **1.3** | — | — |
| Tax settlements | **(0.7)** | (0.1) | — |
| Stock compensation - excess tax benefits | **(1.8)** | (1.3) | (0.4) |
| Change in valuation allowance | **(0.1)** | 0.1 | (4.5) |
| Other | **1.0** | 0.5 | — |
| Effective income tax rate | **7.2 %** | 24.3 % | 22.2 % |

The Company's operations in the Philippines have been granted various tax incentives that will begin to expire in 2019. The tax holiday allows for tax-free operations through various dates based on product lines, followed by a reduced income tax rate of 5 percent . Net income for 2018 increased $ 21 million ($ 0.13 per share) as a result of the tax holiday.

Net long-term deferred income tax benefits (liabilities) consist of the tax effects of temporary differences related to the following:

| | September 30 | |
|---|---|---|
| (in millions) | 2018 | 2017 |
| Inventory | **$ (176)** | $ (276) |
| Product warranty costs | **28** | 45 |
| Customer incentives | **31** | 66 |
| Contract reserves | **17** | 49 |
| Retirement benefits | **116** | 400 |
| Intangibles | **(352)** | (602) |
| Capital lease liability | **11** | 19 |
| Property | **(138)** | (196) |
| Stock-based compensation | **20** | 37 |
| Deferred compensation | **17** | 27 |
| Compensation and benefits | **17** | 38 |
| Research and development credit carryforward | **54** | 25 |
| Valuation allowance | **(22)** | (23) |
| Other | **47** | 81 |
| Deferred income taxes, net | **$ (330)** | $ (310) |

Management believes it is more likely than not that the deferred tax assets, except for certain net operating loss carryforwards and tax credit carryforwards, will be realized through the reduction of future taxable income. Significant factors considered by management in its determination of the probability of the realization of the deferred tax assets include: (a) the historical operating results of the Company ( $2.219 billion of U.S. taxable income over the past three years), (b) expectations of future earnings and (c) our ability to implement tax planning strategies.

As of September 30, 2018 , the Company had state net operating loss carryforwards of $ 34 million which begin expiring in 2019, state tax credit carryforwards of $ 55 million which begin expiring in 2022, a foreign tax credit carryforward of $ 27 million which will begin to expire in 2027 and federal R&D credit carryforward of $ 17 million which will begin to expire in 2027.

Changes in the valuation allowance for deferred tax assets are summarized as follows:

| | September 30 | | |
|---|---|---|---|
| (in millions) | **2018** | 2017 | 2016 |
| Balance at beginning of year | **$ 23** | $ — | $ 42 |
| Charged to costs and expenses | **—** | 1 | — |
| B/E Aerospace acquisition | **—** | 22 | — |
| Deductions [1] | **(1)** | — | (42) |
| Balance at September 30 | **$ 22** | $ 23 | $ — |

[1] 2016 deduction of $42 million was primarily due to the creation of a tax planning strategy

The Company's U.S. Federal income tax returns for the tax year ended September 30, 2013 and prior years have been audited by the IRS and are closed to further adjustments. The IRS is currently auditing the Company's tax returns for the years ended September 30, 2014 and 2015. The IRS is currently auditing the legacy tax filings of certain acquired subsidiaries for the 2014 calendar year. The Company is also currently under audit in various U.S. states and non-U.S. jurisdictions. The U.S. states and non-U.S. jurisdictions have statutes of limitations generally ranging from 3 to 5 years. The Company believes it has adequately provided for any tax adjustments that may result from the various audits.

The Company has recorded a $ 14 million liability as of September 30, 2018 for U.S. federal or state income taxes, or additional non-U.S. income taxes related to approximately $ 250 million of undistributed earnings of non-U.S. subsidiaries which are available to be distributed to the United States. No provision has been made as of September 30, 2018 for U.S. federal or state income taxes, or additional non-U.S. income taxes related to approximately $ 1.058 billion of undistributed earnings of non-U.S. subsidiaries which have been or are intended to be permanently reinvested. Because of the complexities and uncertainties associated with the Act, it is not practicable to estimate the amount of tax that might be payable on the undistributed earnings.

The Company had net income tax payments of $28 million , $230 million and $130 million in 2018 , 2017 and 2016 , respectively.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

| | September 30 | | |
|---|---|---|---|
| (in millions) | **2018** | 2017 | 2016 |
| Beginning balance | **$ 201** | $ 45 | $ 39 |
| Additions for tax positions related to the current year | **24** | 73 | 11 |
| Additions for tax positions of prior years | **16** | 1 | 7 |
| Additions for tax positions related to acquisitions | **1** | 86 | — |
| Reductions for tax positions of prior years | **(24)** | (1) | (10) |
| Reductions for tax positions related to settlements with taxing authorities | **(4)** | (3) | (2) |
| Ending balance | **$ 214** | $ 201 | $ 45 |

The total amount of unrecognized tax benefits that, if recognized, would affect the effective income tax rate was $200 million , $169 million and $20 million as of September 30, 2018 , 2017 and 2016 , respectively. Although the timing and outcome of tax settlements are uncertain, it is reasonably possible that during the next 12 months a reduction in unrecognized tax benefits may occur in the range of $0 to $44 million based on the outcome of tax examinations or as a result of the expiration of various statutes of limitations.

The Company includes income tax-related interest and penalties in income tax expense. The total amount of interest and penalties recognized within Other Liabilities in the Consolidated Statement of Financial Position were $9 million and $8 million as of September 30, 2018 and 2017 , respectively. The total amount of interest and penalties recorded as an expense or (income) within Income tax expense in the Consolidated Statement of Operations was not significant for the years ended September 30, 2018 , 2017 and 2016 .

## 14. Fair Value Measurements

The FASB defines fair value as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. The FASB's guidance classifies the inputs used to measure fair value into the following hierarchy:

Level 1 - quoted prices (unadjusted) in active markets for identical assets or liabilities

Level 2 - quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument

Level 3 - unobservable inputs based on the Company's own assumptions used to measure assets and liabilities at fair value

A financial asset or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

*Assets and liabilities*
The fair value of the Company's financial assets and liabilities measured at fair value on a recurring basis as of September 30, 2018 and 2017 are as follows:

| (in millions) | Fair Value Hierarchy | **September 30, 2018** Fair Value Asset (Liability) | September 30, 2017 Fair Value Asset (Liability) |
|---|---|---|---|
| Deferred compensation plan investments | Level 1 | **$ 70** | $ 63 |
| Deferred compensation plan investments | Level 2 | **27** | 24 |
| Interest rate swap assets | Level 2 | **1** | 14 |
| Interest rate swap liabilities | Level 2 | **(3)** | — |
| Foreign currency forward exchange contract assets | Level 2 | **—** | 8 |
| Foreign currency forward exchange contract liabilities | Level 2 | **—** | (7) |
| Acquisition-related contingent consideration | Level 3 | **(14)** | (17) |

There were no transfers between Levels of the fair value hierarchy during 2018 or 2017 .

In addition to assets and liabilities that are recorded at fair value on a recurring basis, the Company records certain assets and liabilities at fair value on a nonrecurring basis, generally as a result of acquisitions or the remeasurement of assets related to certain divestitures to reflect the contracted sales price. See Note 3 for further discussion of the fair value of assets and liabilities associated with acquisitions. See Note 4 for further discussion of the fair value of assets and liabilities associated with held for sale businesses.

*Valuation Techniques*
The Level 1 deferred compensation plan investments consist of investments in marketable securities (primarily mutual funds) and the fair value is determined using the market approach based on quoted market prices of identical assets in active markets. The Level 2 deferred compensation plan investments consist of investments in variable insurance trust funds and the fair value is determined using the market approach and is calculated by a pricing model with observable market inputs.

The fair value of the interest rate swaps is determined using the market approach and is calculated by a pricing model with observable market inputs.

The fair value of foreign currency forward exchange contracts is determined using the market approach and is calculated as the value of the quoted forward currency exchange rate less the contract rate multiplied by the notional amount.

As of September 30, 2018 , there has not been any impact to the fair value of derivative liabilities due to the Company's own credit risk. Similarly, there has not been any impact to the fair value of derivative assets based on the Company's evaluation of counterparties' credit risks.

As of September 30, 2018, contingent consideration represents the estimated fair value of post-closing consideration owed to the sellers associated with the International Communications Group (ICG) acquisition, which occurred on August 6, 2015. The final contingent consideration payment owed to the sellers associated with the Pulse.aero acquisition, which occurred on December 20, 2016, was made during the year ended September 30, 2018. The contingent consideration is categorized as Level 3 in the fair value hierarchy and the fair value is determined using a probability-weighted approach. The liabilities recorded were derived from the estimated probability that certain contingent payment milestones will be met in accordance with the terms of the purchase agreements.

The change in fair value of the Level 3 contingent consideration related to the ICG and Pulse.aero acquisitions is as follows:

| (in millions) | Fair Value (Liability) | |
|---|---|---|
| Balance at September 30, 2017 | $ | (17) |
| Payment of contingent consideration (see Note 3) | | 3 |
| Balance at September 30, 2018 | $ | (14) |

*Financial Instruments*
The carrying amounts and fair values of the Company's financial instruments are as follows:

| | Asset (Liability) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **September 30, 2018** | | | | September 30, 2017 | | | |
| (in millions) | **Carrying Amount** | | **Fair Value** | | Carrying Amount | | Fair Value | |
| Cash and cash equivalents | **$** | **738** | **$** | **738** | $ | 703 | $ | 703 |
| Short-term debt | | **(2,248)** | | **(2,252)** | | (479) | | (479) |
| Long-term debt | | **(5,683)** | | **(5,560)** | | (6,662) | | (6,898) |

The fair value of cash and cash equivalents and the commercial paper portion of short-term debt approximates their carrying value due to the short-term nature of the instruments. These items are within Level 1 of the fair value hierarchy. Fair value information for the current portion of long-term debt and all long-term debt is within Level 2 of the fair value hierarchy. The fair value of these financial instruments is based on current market interest rates and estimates of current market conditions for instruments with similar terms, maturities and degree of risk. The carrying amount and fair value of short-term and long-term debt excludes the interest rate swaps fair value adjustment. These fair value estimates do not necessarily reflect the amounts the Company would realize in a current market exchange.

## 15. Derivative Financial Instruments

*Interest Rate Swaps*
The Company manages its exposure to interest rate risk by maintaining a mix of fixed and variable rate debt, which over time should moderate the costs of debt financing. To help meet this objective, the Company may use financial instruments in the form of interest rate swaps.

In January 2010, the Company entered into two interest rate swap contracts which expire on July 15, 2019 and effectively converted $150 million of the 5.25 percent 2019 Notes to floating rate debt based on six-month LIBOR plus 1.235 percent . In June 2015, the Company entered into two interest rate swap contracts which expire on July 15, 2019 and effectively converted the remaining $150 million of the 5.25 percent 2019 Notes to floating rate debt based on three-month LIBOR plus 3.56 percent (collectively the 2019 Swaps).

In March 2014, the Company entered into three interest rate swap contracts (the 2023 Swaps) which expire on December 15, 2023 and effectively converted $200 million of the 2023 Notes to floating rate debt based on one-month LIBOR plus 0.94 percent .

The Company designated the 2019 and 2023 Swaps (the Swaps) as fair value hedges. The Swaps are recorded within Other Assets at a fair value of $1 million and Other Liabilities at a fair value of $ 3 million , offset by a fair value adjustment to Long-term Debt (Note 9) of $(2) million at September 30, 2018 . At September 30, 2017 , the Swaps were recorded within Other Assets at a fair value of $14 million , offset by a fair value adjustment to Long-term Debt (Note 9) of $14 million . Cash payments or receipts between the Company and the counterparties to the Swaps are recorded as an adjustment to interest expense.

*Foreign Currency Forward Exchange Contracts*
The Company transacts business in various foreign currencies which subjects the Company's cash flows and earnings to exposure related to changes in foreign currency exchange rates. These exposures arise primarily from purchases or sales of products and services from third parties and intercompany transactions. Foreign currency forward exchange contracts provide for the purchase or sale of foreign currencies at specified future dates at specified exchange rates and are used to offset changes in the fair value of certain assets or liabilities or forecasted cash flows resulting from transactions denominated in foreign currencies. As of September 30, 2018 and September 30, 2017 , the Company had outstanding foreign currency forward exchange contracts with notional amounts of $0 million and $1.312 billion , respectively. The decrease in the notional amount of outstanding foreign currency contracts is primarily due to the maturation of certain foreign currency contracts entered into to offset remeasurement of certain intercompany loans that matured in the current fiscal year. The 2017 notional values consist primarily of contracts for the British pound sterling and European euro, and are stated in U.S. dollar equivalents at spot exchange rates at September 30, 2017.

*Fair Value of Derivative Instruments*
Fair values of derivative instruments in the Consolidated Statement of Financial Position as of September 30, 2018 and 2017 are as follows:

| | | Asset Derivatives | |
|---|---|---|---|
| (in millions) | Classification | **September 30, 2018** | September 30, 2017 |
| Foreign currency forward exchange contracts | Other current assets | **$ —** | $ 8 |
| Interest rate swaps | Other assets | **1** | 14 |
| Total | | **$ 1** | $ 22 |

| | | Liability Derivatives | |
|---|---|---|---|
| (in millions) | Classification | **September 30, 2018** | September 30, 2017 |
| Foreign currency forward exchange contracts | Other current liabilities | **$ —** | **$ 7** |
| Interest rate swaps | Other liabilities | **3** | — |
| Total | | **$ 3** | **$ 7** |

The fair values of derivative instruments are presented on a gross basis as the Company does not have any derivative contracts which are subject to master netting arrangements. As of September 30, 2018 , there were no undesignated foreign currency forward exchange contracts classified within Other current assets or Other current liabilities.

The effect of derivative instruments on the Consolidated Statement of Operations for the fiscal years ended September 30, 2018 and 2017 is as follows:

| (in millions) | Location of Gain (Loss) | Amount of Gain (Loss) September 30, 2018 | Amount of Gain (Loss) September 30, 2017 |
|---|---|---|---|
| Derivatives Designated as Hedging Instruments: | | | |
| *Fair Value Hedges* | | | |
| Interest rate swaps | Interest expense | **$ 4** | $ 8 |
| *Cash Flow Hedges* | | | |
| Foreign currency forward exchange contracts: | | | |
| Amount of gain (loss) recognized in AOCL (effective portion, before deferred tax impact) | AOCL | **(2)** | 1 |
| Amount of (loss) reclassified from AOCL into income | Cost of sales | **(1)** | (2) |
| *Derivatives Not Designated as Hedging Instruments:* | | | |
| Foreign currency forward exchange contracts | Cost of sales | **(16)** | (1) |
| Foreign currency forward exchange contracts | Transaction and integration costs | **(6)** | — |

There was no significant impact to the Company's earnings related to the ineffective portion of any hedging instruments during the fiscal year ended September 30, 2018 . In addition, there was no significant impact to the Company's earnings when a hedged firm commitment no longer qualified as a fair value hedge or when a hedged forecasted transaction no longer qualified as a cash flow hedge during the fiscal year ended September 30, 2018 .

The Company did not have any hedges with credit-risk-related contingent features or that required the posting of collateral as of September 30, 2018 . The cash flows from derivative contracts are recorded in operating activities in the Consolidated Statement of Cash Flows.

The Company has no AOCL gains from cash flow hedges to reclassify into earnings over the next 12 months.

## 16. Guarantees and Indemnifications

*Product Warranty Costs*
Accrued liabilities are recorded to reflect the Company's contractual obligations relating to warranty commitments to customers. Warranty coverage of various lengths and terms is provided to customers depending on standard offerings and negotiated contractual agreements. An estimate for warranty expense is recorded at the time of sale based on the length of the warranty and historical warranty return rates and repair costs.

Changes in the carrying amount of accrued product warranty costs are summarized as follows:

| (in millions) | September 30 2018 | September 30 2017 | September 30 2016 |
|---|---|---|---|
| Balance at beginning of year | **$ 186** | $ 87 | $ 89 |
| Warranty costs incurred | **(87)** | (61) | (42) |
| Product warranty accrual | **106** | 59 | 46 |
| Changes in estimates for prior years | **(9)** | (16) | (6) |
| Reclassification of business to held for sale (see Note 4) | **(2)** | — | — |
| Increase from acquisitions | — | 117 | — |
| Balance at September 30 | **$ 194** | $ 186 | $ 87 |

*Letters of credit*
The Company has contingent commitments in the form of letters of credit. Outstanding letters of credit are issued by banks on the Company’s behalf to support certain contractual obligations to its customers. If the Company fails to meet these contractual obligations, these letters of credit may become liabilities of the Company. Total outstanding letters of credit at September 30, 2018 were $ 364 million . These commitments are not reflected as liabilities on the Company’s Consolidated Statement of Financial Position.

*Indemnifications*
The Company enters into indemnifications with lenders, counterparties in transactions, such as administration of employee benefit plans, and other customary indemnifications with third parties in the normal course of business. The following are other than customary indemnifications based on the judgment of management:

In connection with agreements for the sale of portions of its business, the Company at times retains various liabilities of a business that relate to events occurring prior to its sale, such as tax, environmental, litigation and employment matters. The Company at times indemnifies the purchaser of a Rockwell Collins business in the event a third party asserts a claim that relates to a liability retained by the Company.

The Company also provides indemnifications of varying scope and amounts to certain customers against claims of product liability or intellectual property infringement made by third parties arising from the use of Company or customer products or intellectual property. These indemnifications generally require the Company to compensate the other party for certain damages and costs incurred as a result of third party product liability or intellectual property claims arising from these transactions.

Under a 2014 Tax Sharing and Indemnification Agreement entered into by B/E Aerospace prior to its acquisition by the Company, the Company assumes certain potential tax liabilities related to the 2014 KLX spin-off from B/E Aerospace. If it is determined that the KLX spin-off by B/E Aerospace fails to qualify for certain tax-free treatment as a result of the Company's merger with B/E Aerospace (for example, if the merger is viewed as part of a plan or series of related transactions that includes the KLX spin-off or the KLX spin-off is found to have been used principally as a device for the distribution of earnings and profits), or because of the failure of the KLX spin-off to initially qualify for the tax-free treatment, the B/E Aerospace subsidiary could incur significant tax liabilities pursuant to the Tax Sharing and Indemnification Agreement or otherwise. During the three months ended December 31, 2017, the Company received notification of the resolution of a competent authority filing between the U.K. and U.S. related to 2010 pre-acquisition U.K. tax adjustments. Pursuant to the Tax Sharing and Indemnification Agreement the Company accrued a $9 million payable to KLX through purchase accounting during the three months ended December 31, 2017.

The amount the Company could be required to pay under its indemnification agreements is generally limited based on amounts specified in the underlying agreements, or in the case of some agreements, the maximum potential amount of future payments that could be required is not limited. When a potential claim is asserted under these agreements, the Company considers such factors as the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of loss. A liability is recorded when a potential claim is both probable and estimable. The nature of these agreements prevents the Company from making a reasonable estimate of the maximum potential amount it could be required to pay should counterparties to these agreements assert a claim; however, the Company currently has no material claims pending related to such agreements.

## 17. Contractual Obligations and Other Commitments

The following table reflects certain of the Company's non-cancelable contractual commitments as of September 30, 2018 :

| | Payments Due By Period | | | | | | |
|---|---|---|---|---|---|---|---|
| (in millions) | 2019 | 2020 | 2021 | 2022 | 2023 | Thereafter | Total |
| Non-cancelable operating leases | $ 89 | $ 75 | $ 59 | $ 49 | $ 38 | $ 196 | $ 506 |
| Purchase contracts | 35 | 33 | 25 | 15 | 5 | 20 | 133 |
| Long-term debt | 750 | 331 | — | 1,350 | — | 4,050 | 6,481 |
| Interest on long-term debt | 231 | 200 | 192 | 173 | 153 | 1,600 | 2,549 |
| Total | $ 1,105 | $ 639 | $ 276 | $ 1,587 | $ 196 | $ 5,866 | $ 9,669 |

*Non-cancelable Operating Leases*
The Company leases certain office and manufacturing facilities as well as certain machinery and equipment under various lease contracts with terms that meet the accounting definition of operating leases. Some leases include renewal options, which permit extensions of the expiration dates at rates approximating fair market rental rates. Rent expense for the years ended September 30, 2018 , 2017 and 2016 was $94 million , $84 million and $77 million , respectively. The Company's commitments under these operating leases, in the form of non-cancelable future lease payments, are not reflected as a liability on the Consolidated Statement of Financial Position.

*Purchase Contracts*
The Company may enter into purchase contracts with suppliers under which there is a commitment to buy a minimum amount of products or pay a specified amount. These commitments are not reflected as a liability on the Company's Consolidated Statement of Financial Position. Amounts purchased under these agreements for the years ended September 30, 2018 , 2017 and 2016 were $38 million , $41 million and $57 million , respectively.

*Interest on Long-term Debt*
Interest payments under long-term debt obligations exclude the potential effects of the related interest rate swap contracts.

**18. Environmental Matters**

The Company is subject to federal, state and local regulations relating to the discharge of substances into the environment, the disposal of hazardous wastes and other activities affecting the environment that have had and will continue to have an impact on the Company’s manufacturing operations. These environmental protection regulations may require the investigation and remediation of environmental impairments at current and previously owned or leased properties. In addition, lawsuits, claims and proceedings have been asserted on occasion against the Company alleging violations of environmental protection regulations, or seeking remediation of alleged environmental impairments, principally at previously owned or leased properties. As of September 30, 2018 , the Company is involved in the investigation or remediation of ten sites under these regulations or pursuant to lawsuits asserted by third parties. Management estimates that the total reasonably possible future costs the Company could incur for nine of these sites is not significant. Management estimates that the total reasonably possible future costs the Company could incur from one of these sites to be approximately $12 million . The Company has recorded environmental reserves for this site of $6 million as of September 30, 2018 , which represents management’s best estimate of the probable future cost for this site.

To date, compliance with environmental regulations and resolution of environmental claims has been accomplished without material effect on the Company’s liquidity and capital resources, competitive position or financial condition. Management believes that expenditures for environmental capital investment and remediation necessary to comply with present regulations governing environmental protection and other expenditures for the resolution of environmental claims will not have a material effect on the Company’s business or financial position.

**19. Legal Matters**

The Company is subject to various lawsuits, claims and proceedings that have been or may be instituted or asserted against the Company relating to the conduct of the Company's business, including those pertaining to product liability, antitrust, intellectual property, safety and health, exporting and importing, contract, employment and regulatory matters. Although the outcome of these matters cannot be predicted with certainty and some lawsuits, claims or proceedings may be disposed of unfavorably to the Company, management believes there are no material pending legal proceedings.

Related to the acquisition and post-closing compliance review of B/E Aerospace, as previously disclosed, the Company identified and is investigating the circumstances surrounding an employee's submission of certain expense reports for customer entertainment and gifts that preceded the acquisition and do not appear to have complied with applicable company policy. In March 2018, the Company voluntarily notified the Department of Justice (DOJ) and SEC Division of Enforcement of its investigation. The Company's investigation into this and other customer related expenditures is ongoing, and the outcome or the consequences thereof cannot be predicted at this time.

As of September 30, 2018, the Company employs approximately 3,100 employees under eight collective bargaining agreements. Five of the collective bargaining agreements, representing approximately 2,200 employees were negotiated in 2018. These new agreements have terms varying between 3 and 5 years.

## 20. Restructuring and Impairment Charges and Settlement of a Contract Matter

During the year ended September 30, 2018 the Company recorded corporate charges of $39 million as follows:

| (in millions) | Cost of Sales | Other Income, Net | Total |
|---|---|---|---|
| Settlement of a contract matter | $ 25 | $ — | $ 25 |
| Asset impairment charges | — | 9 | 9 |
| Employee separation costs | 5 | — | 5 |
| Total | $ 30 | $ 9 | $ 39 |

The $25 million charge for the settlement of a contract matter was triggered by the anticipated divestiture of the ElectroMechanical Systems business and included impairment of $7 million and $4 million of Commercial Systems Pre-production engineering costs and Property, net, respectively (see Note 4). Asset impairment charges were due to the planned sale of SMR Technologies (see Note 4). The employee separation costs primarily resulted from the Company's decision to close a facility. At September 30, 2018, the $5 million employee separation costs were unpaid and included in Compensation and benefits on the Consolidated Statement of Financial Position.

There were no corporate restructuring or asset impairment charges recorded during the year ended September 30, 2017. During the first quarter of 2016, the Company recorded corporate restructuring and asset impairment charges of $45 million as follows:

| (in millions) | Cost of Sales | Selling, General and Administrative Expenses | Total |
|---|---|---|---|
| Employee separation costs | $ 31 | $ 8 | $ 39 |
| Asset impairment charges | 2 | 4 | 6 |
| Total | $ 33 | $ 12 | $ 45 |

The employee separation costs primarily resulted from the Company's execution of a voluntary separation incentive program in response to certain challenging market conditions, particularly in business aviation. All employee separation costs were paid in 2016. Asset impairment charges primarily relate to the write-down to fair market value of a corporate asset, as well as the write-off of certain long-lived assets.

## 21. Business Segment Information

Rockwell Collins designs, produces and supports cabin interior, communications and aviation systems and products for commercial and military customers and provides information management services through voice and data communication networks and solutions worldwide. The Company currently has four operating segments consisting of the Interior Systems, Commercial Systems, Government Systems and Information Management Services (IMS) businesses. In October 2018, the Company announced that IMS will become part of the Commercial Systems segment. This reorganization will enable the Company to further capitalize on customers' increasing need for aviation connectivity solutions. This change will require the Company to revise its segment reporting beginning in the first quarter of fiscal 2019 to report the IMS business within the Commercial Systems segment.

Interior Systems manufactures cabin interior products for the commercial aircraft and business aviation markets. The Company sells products and provides services directly to virtually all of the world’s major airlines and aerospace manufacturers.

Commercial Systems supplies aviation electronics systems, products and services to customers located throughout the world. The customer base is comprised of OEMs of commercial air transport, business and regional aircraft, commercial airlines and business aircraft operators.

Government Systems provides communication and navigation products and avionics to the U.S. Department of Defense, state and local governments, other government agencies, civil agencies, defense contractors and foreign ministries of defense around the world.

Information Management Services enables mission-critical data and voice communications throughout the world to customers using high-performance, high-quality and high-assurance proprietary radio and terrestrial networks, enhancing customer efficiency, safety and connectivity.

Direct and indirect sales to the U.S. Government were 23 percent , 25 percent and 33 percent of total sales for the years ended September 30, 2018 , 2017 and 2016 , respectively. Sales to The Boeing Company represented 16 percent and 15 percent of total sales for the years ended September 30, 2018 and 2017, respectively.

The Company evaluates performance and allocates resources based upon, among other considerations, segment operating earnings. The Company's definition of segment operating earnings excludes income taxes, stock-based compensation, unallocated general corporate expenses, interest expense, transaction and integration costs, restructuring and impairment charges and other special items as identified by management from time to time. Intersegment sales are not material and have been eliminated. The accounting policies used in preparing the segment information are consistent with the policies described in Note 2.

The sales and earnings of continuing operations of the Company's operating segments are summarized as follows:

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Sales: | | | |
| Interior Systems | **$ 2,709** | $ 1,302 | $ — |
| Commercial Systems | **2,580** | 2,418 | 2,395 |
| Government Systems | **2,631** | 2,384 | 2,206 |
| Information Management Services | **745** | 718 | 658 |
| Total sales | **$ 8,665** | $ 6,822 | $ 5,259 |
| | | | |
| Segment operating earnings: | | | |
| Interior Systems | **$ 406** | $ 168 | $ — |
| Commercial Systems | **557** | 519 | 531 |
| Government Systems | **515** | 502 | 477 |
| Information Management Services | **138** | 137 | 107 |
| Total segment operating earnings | **1,616** | 1,326 | 1,115 |
| | | | |
| Interest expense [(1)] | **(262)** | (187) | (64) |
| Stock-based compensation | **(35)** | (31) | (27) |
| General corporate, net | **(56)** | (57) | (44) |
| Restructuring and impairment charges and settlement of a contract matter (see Note 20) | **(39)** | — | (45) |
| Transaction and integration costs [(1)] | **(112)** | (120) | — |
| Income from continuing operations before income taxes | **1,112** | 931 | 935 |
| Income tax expense | **(80)** | (226) | (208) |
| Income from continuing operations | **$ 1,032** | $ 705 | $ 727 |

[(1)] During the year ended September 30, 2018 , the Company incurred $78 million of transaction and integration costs related to the B/E Aerospace acquisition and $34 million of transaction costs related to the proposed acquisition of Rockwell Collins by UTC. During the year ended September 30, 2017 , the Company incurred $96 million of transaction and integration costs related to the B/E Aerospace acquisition and $24 million of transaction costs related to the proposed acquisition of Rockwell Collins by UTC. During this period, the Company also incurred $29 million of bridge facility fees related to the B/E Aerospace acquisition, which are included in Interest expense. Therefore, total transaction, integration and financing costs during this period were $149 million .

The following tables summarize the identifiable assets and investments in equity affiliates at September 30, 2018 , 2017 and 2016 , as well as the provision for depreciation and amortization, the amount of capital expenditures for property and earnings from equity affiliates for each of the three years ended September 30, for each of the operating segments and Corporate:

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Identifiable assets: | | | |
| Interior Systems | **$ 9,534** | $ 9,896 | $ — |
| Commercial Systems | **3,817** | 3,124 | 3,050 |
| Government Systems | **2,802** | 2,156 | 2,052 |
| Information Management Services | **1,854** | 1,917 | 1,906 |
| Corporate | **1,019** | 904 | 691 |
| Total identifiable assets | **$ 19,026** | $ 17,997 | $ 7,699 |
| Investments in equity affiliates: | | | |
| Interior Systems | **$ —** | $ — | $ — |
| Commercial Systems | **—** | 1 | 4 |
| Government Systems | **5** | 6 | 6 |
| Information Management Services | **—** | — | — |
| Total investments in equity affiliates | **$ 5** | $ 7 | $ 10 |
| Depreciation and amortization: | | | |
| Interior Systems | **$ 129** | $ 129 | $ — |
| Commercial Systems | **160** | 132 | 125 |
| Government Systems | **93** | 80 | 74 |
| Information Management Services | **67** | 58 | 54 |
| Total depreciation and amortization | **$ 449** | $ 399 | $ 253 |
| Capital expenditures for property: | | | |
| Interior Systems | **$ 79** | $ 41 | $ — |
| Commercial Systems | **61** | 72 | 74 |
| Government Systems | **67** | 70 | 69 |
| Information Management Services | **50** | 57 | 50 |
| Total capital expenditures for property | **$ 257** | $ 240 | $ 193 |
| Earnings (loss) from equity affiliates: | | | |
| Interior Systems | **$ —** | $ — | $ — |
| Commercial Systems | **(1)** | (2) | (3) |
| Government Systems | **—** | — | 2 |
| Information Management Services | **—** | — | — |
| Total (loss) from equity affiliates | **$ (1)** | $ (2) | $ (1) |

The Company's operating segments share many common resources, infrastructures and assets in the normal course of business. Certain assets have been allocated between the operating segments primarily based on occupancy or usage, principally property, plant and equipment. Identifiable assets at Corporate consist principally of cash, tax assets and deferred compensation plan investments for all years presented.

The following table summarizes sales by product category for the years ended September 30, 2018 , 2017 and 2016 :

| (in millions) | **2018** | 2017 | 2016 |
|---|---|---|---|
| Interior Systems sales categories: | | | |
| Interior products and services | **$ 1,472** | $ 717 | $ — |
| Aircraft seating | **1,237** | 585 | — |
| Interior Systems sales | **2,709** | 1,302 | — |
| | | | |
| Commercial Systems sales categories: | | | |
| Air transport aviation electronics | **1,573** | 1,470 | 1,430 |
| Business and regional aviation electronics | **1,007** | 948 | 965 |
| Commercial Systems sales | **2,580** | 2,418 | 2,395 |
| | | | |
| Government Systems sales categories: | | | |
| Avionics | **1,503** | 1,472 | 1,483 |
| Communication and navigation | **1,128** | 912 | 723 |
| Government Systems sales | **2,631** | 2,384 | 2,206 |
| | | | |
| Information Management Services sales | **745** | 718 | 658 |
| | | | |
| Total sales | **$ 8,665** | $ 6,822 | $ 5,259 |

The Interior Systems interior products and services and aircraft seating sales categories are delineated based on the nature of underlying products. The Commercial Systems air transport and business and regional aviation electronics sales categories are delineated based on the difference in underlying customer base, size of aircraft and markets served. For the years ended September 30, 2018 , 2017 and 2016 , sales for air transport aviation electronics include revenue from wide-body in-flight entertainment products and services of $ 15 million , $ 19 million and $38 million , respectively. The Government Systems avionics and communication and navigation sales categories are delineated based upon underlying product technologies.

The following table reflects sales for the years ended September 30, 2018 , 2017 and 2016 by location of the Company's customers and property at September 30, 2018 , 2017 and 2016 by geographic region:

| | Sales | | | Property | | |
|---|---|---|---|---|---|---|
| (in millions) | **2018** | 2017 | 2016 | **2018** | 2017 | 2016 |
| U.S. [1] | **$ 4,666** | $ 3,873 | $ 3,292 | **$ 1,131** | $ 1,134 | $ 921 |
| Europe / Africa / Middle East | **2,315** | 1,607 | 937 | **153** | 152 | 86 |
| Asia-Pacific | **1,064** | 787 | 545 | **129** | 94 | 17 |
| Americas, excluding U.S. | **620** | 555 | 485 | **16** | 18 | 11 |
| Non U.S. | **3,999** | 2,949 | 1,967 | **298** | 264 | 114 |
| Total | **$ 8,665** | $ 6,822 | $ 5,259 | **$ 1,429** | $ 1,398 | $ 1,035 |

[1] For the years ended September 30, 2018 , 2017 and 2016 , U.S. sales include revenue from foreign military sales of $163 million , $139 million and $171 million , respectively.

Sales are attributable to geographic region based on the location of the Company's customers.

## 22. Quarterly Financial Information (Unaudited)

Quarterly financial information for the years ended September 30, 2018 and 2017 is summarized as follows:

| | **2018 Quarters** | | | | |
|---|---|---|---|---|---|
| (in millions, except per share amounts) | **First** | **Second** | **Third** | **Fourth** | **Total** |
| Sales | **$ 2,011** | **$ 2,180** | **$ 2,208** | **$ 2,266** | **$ 8,665** |
| Gross profit (total sales less product and service cost of sales) | **548** | **582** | **583** | **570** | **2,283** |
| Net income | **280** | **237** | **275** | **240** | **1,032** |
| | | | | | |
| Earnings per share: | | | | | |
| Basic earnings per share | **$ 1.71** | **$ 1.44** | **$ 1.67** | **$ 1.46** | **$ 6.29** |
| Diluted earnings per share | **$ 1.69** | **$ 1.43** | **$ 1.66** | **$ 1.44** | **$ 6.22** |

Net income includes $17 million , $24 million , $23 million and $14 million of pre-tax transaction and integration costs associated with the B/E Aerospace acquisition for the first, second, third and fourth quarters of 2018, respectively. In addition, Net income includes $10 million , $11 million , $6 million and $7 million of pre-tax transaction and integration costs associated with the pending acquisition of the Company by UTC for the first, second, third and fourth quarters of 2018, respectively. Net income includes $62 million , $(18) million , $70 million and $16 million of discrete tax benefit/(expense) associated with enactment of the Tax Cuts and Jobs Act.

| | 2017 Quarters | | | | |
|---|---|---|---|---|---|
| (in millions, except per share amounts) | First | Second | Third | Fourth | Total |
| Sales | $ 1,193 | $ 1,342 | $ 2,094 | $ 2,193 | $ 6,822 |
| Gross profit (total sales less product and service cost of sales) | 377 | 412 | 570 | 595 | 1,954 |
| Net income | 145 | 168 | 179 | 213 | 705 |
| | | | | | |
| Earnings per share: | | | | | |
| Basic earnings per share | $ 1.11 | $ 1.28 | $ 1.13 | $ 1.31 | $ 4.85 |
| Diluted earnings per share | $ 1.10 | $ 1.27 | $ 1.12 | $ 1.29 | $ 4.79 |

Net income includes $14 million , $13 million , $82 million and $16 million of pre-tax transaction, integration and financing costs associated with the B/E Aerospace acquisition for the first, second, third and fourth quarters of 2017, respectively. In addition, Net income in the fourth quarter of 2017 includes $24 million of pre-tax transaction costs associated with the pending acquisition of the Company by UTC.

Earnings per share amounts are computed independently each quarter. As a result, the sum of each quarter's per share amount may not equal the total per share amount for the respective year.

## 23. Subsequent Events

On November 1, 2018, the Board of Directors declared a quarterly cash dividend of $0.33 per share on its common stock, payable December 10, 2018, to shareholders of record at the close of business on November 16, 2018.

On November 23, 2018, UTC announced that the final regulatory approval required to close its acquisition of Rockwell Collins had been received and that the acquisition was expected to close within three business days.

**Item 9.** ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.***

None.

**Item 9A.** ***Controls and Procedures.***

**Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)) that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to our management, including our Chairman, President and Chief Executive Officer and our Senior Vice President and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Management necessarily applied its judgment in assessing the costs and benefits of such controls and procedures, which, by their nature, can provide only reasonable assurance regarding management's disclosure control objectives.

We have carried out an evaluation, under the supervision and with the participation of our management, including our Chairman, President and Chief Executive Officer and our Senior Vice President and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this Annual Report (the "Evaluation Date"). Based upon that evaluation, our Chairman, President and Chief Executive Officer and our Senior Vice President and Chief Financial Officer concluded that our disclosure controls and procedures were effective at a reasonable assurance level as of the Evaluation Date.

**Evaluation of Internal Control Over Financial Reporting**

Management's report on internal control over financial reporting as of September 30, 2018 is included within Item 8 of this Annual Report on Form 10-K. The report of Deloitte & Touche LLP on the effectiveness of internal control over financial reporting is included within Item 9A of this Annual Report on Form 10-K.

**Changes in Internal Control Over Financial Reporting**

There were no changes in our internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f)) that occurred during our last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Shareowners and Board of Directors of Rockwell Collins, Inc.:

**Opinion on Internal Control over Financial Reporting**

We have audited the internal control over financial reporting of Rockwell Collins, Inc. and subsidiaries (the "Company") as of September 28, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 28, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended September 28, 2018, of the Company and our report dated November 26, 2018 expressed an unqualified opinion on those financial statements.

**Basis for Opinion**

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

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

**Definition and Limitations of Internal Control over Financial Reporting**

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

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

/s/ Deloitte & Touche LLP

Chicago, Illinois

November 26, 2018

**Item 9B.** ***Other Information.***

None.

PART III

**Item 10.** ***Directors, Executive Officers and Corporate Governance.***

See the information under the captions ***Election of Directors, Information as to Nominees for Directors and Continuing Directors, Audit Committee Report*** and ***Section 16(a) Beneficial Ownership Reporting Compliance*** in the 2019 Proxy Statement. See also the information with respect to executive officers of the Company under Item 4A of Part I.

We have adopted a handbook entitled Rockwell Collins Standards of Business Conduct, and we have supporting policies covering standards of business conduct and conflicts of interest (collectively, the "code of ethics"). The code of ethics applies to our Chief Executive Officer, Chief Financial Officer, Vice President, Finance & Controller (who serves as our principal accounting officer), as well as to all of our other employees and to the members of our Board of Directors. The code of ethics is publicly available on our website at www.rockwellcollins.com . If we make any amendments to the code of ethics or grant any waiver, including any implicit waiver, from a provision of the code applicable to our Chief Executive Officer, Chief Financial Officer or principal accounting officer requiring disclosure under applicable SEC rules, we intend to disclose the nature of such amendment or waiver on our website.

**Item 11.** ***Executive Compensation.***

See the information under the captions ***Compensation of Directors, Compensation Discussion and Analysis, Compensation Committee Report, Summary Compensation Table, Grants of Plan-Based Awards, Outstanding Equity Awards at Fiscal Year End, Option Exercises and Stock Vested, Pension Benefits, Non-Qualified Deferred Compensation*** and ***Potential Payments Upon Termination of Change of Control*** in the 2019 Proxy Statement.

**Item 12.** ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.***

See the information under the captions ***Voting Securities*** *and* ***Equity Ownership of Certain Beneficial Owners and Management*** in the 2019 Proxy Statement.

## Equity Compensation Plan Information

The following table gives information as of September 30, 2018 about our Common Stock that may be issued upon the exercise of options, warrants and rights under all of our existing equity compensation plans:

| Plan Category | (a) Number Of Securities To Be Issued Upon Exercise Of Outstanding Options, Warrants And Rights | (b) Weighted-Average Exercise Price Of Outstanding Options, Warrants And Rights | (c) Number Of Securities Remaining Available For Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected In Column (a)) |
|---|---|---|---|
| Equity Compensation Plans Approved By Security Holders [1] | 3,834,234 [2][5] | $ 76.83 | 5,198,335 [3][4] |
| Equity Compensation Plans Not Approved By Security Holders | 0 | 0 | 0 |
| Total | 3,834,234 | $ 76.83 | 5,198,335 |

[1] Consists of the 2015 Long Term Incentives Plan.
[2] Includes 785,538 performance shares, which is the maximum number of shares that can be issued in the future if maximum performance is achieved under performance agreements granted in November 2016 and 2017. Of these performance shares, 159,097 will be issued in November 2018 based on performance shares granted in November 2015. Also includes 633,249 restricted stock units (RSUs). Such performance shares and RSUs are not included in the weighted average price calculation.
[3] Excludes 2,400,772 shares available under our ESPP. Further purchases under the ESPP were suspended on September 29, 2017 pursuant to the UTC Merger Agreement. If the UTC Merger is completed, the ESPP will be terminated.
[4] Of the 5,198,335 shares available for future grant under the 2015 Long-Term Incentives Plan, each share issued pursuant to an award of restricted stock, restricted stock units, performance shares and performance units counts as 3.55 shares against this limit in accordance with the terms of the plan.
[5] Concurrent with the B/E Aerospace acquisition that occurred in April 2017, Rockwell Collins assumed the B/E Aerospace restricted stock units granted under the B/E Aerospace 2005 Long-Term Incentive Plan. There will be 111,198 Rockwell Collins shares that will be issued when the B/E Aerospace restricted stock units are vested. Rockwell Collins did not assume the B/E Aerospace 2005 Long-Term Incentive Plan and no further awards will be made under this plan.

### Item 13. *Certain Relationships and Related Transactions, and Director Independence.*

See the information under the caption ***Governance: Board of Directors and Committees*** and ***Certain Transactions and Other Relationships*** in the 2019 Proxy Statement.

### Item 14. *Principal Accounting Fees and Services.*

See the information under the caption ***Proposal to Approve the Selection of Independent Registered Public Accounting Firm*** in the 2019 Proxy Statement.

PART IV

**Item 15.** ***Exhibits and Financial Statement Schedules.***

(a) Financial Statements, Financial Statement Schedules and Exhibits.

(1) Financial Statements

The financial statements are included under Item 8 of this Annual Report on Form 10-K:


Consolidated Statement of Financial Position, as of September 30, 2018 and 2017

Consolidated Statement of Operations, years ended September 30, 2018, 2017 and 2016

Consolidated Statement of Comprehensive Income, years ended September 30, 2018, 2017 and 2016

Consolidated Statement of Cash Flows, years ended September 30, 2018, 2017 and 2016

Consolidated Statement of Equity, years ended September 30, 2018, 2017 and 2016

Notes to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm


All other schedules not filed herewith are omitted because of the absence of conditions under which they are required or because the information called for is shown in the financial statements or notes thereto.

Exhibits

| | |
|---|---|
| 3-a-1 | Restated Certificate of Incorporation of the Company, as amended, filed as Exhibit 3-a-1 to the Company's Form 10-K for year ended September 30, 2001, is incorporated herein by reference. |
| 3-a-2 | Certificate of Merger effecting name change of the Company from "New Rockwell Collins, Inc." to "Rockwell Collins, Inc.", filed as Exhibit 3-a-2 to the Company's Form 10-K for year ended September 30, 2001, is incorporated herein by reference. |
| 3-b-1 | By-Laws of the Company, as amended and restated effective April 20, 2016, filed as Exhibit 3-b-1 to the Company's Form 8-K dated April 20, 2016, is incorporated herein by reference. |
| 4-a-1 | Indenture dated as of November 1, 2001 between the Company and Citibank, N.A., as Trustee, filed as Exhibit 4.b.1 to the Company's Registration Statement on Form S-3 (No. 333-72914), is incorporated herein by reference. |
| 4-a-2 | Form of Supplemental Indenture dated as of December 4, 2006 between the Company and The Bank of New York Trust Company, N.A. (as incoming trustee), filed as Exhibit 4-a-4 to the Company's Form 8-K dated November 9, 2006, is incorporated herein by reference. |
| 4-a-3 | Second Supplemental Indenture, dated as of April 10, 2017, between the Company, as Issuer, and The Bank of New York Mellon Trust Company, N.A., as Trustee, filed as Exhibit 4.1 to the Company’s Form 8-K dated April 10, 2017, is incorporated herein by reference. |
| 4-a-4 | Form of certificate for the Company's 5.25% Notes due July 15, 2019, filed as Exhibit 4 to the Company's Form 8-K dated May 1, 2009, is incorporated herein by reference. |
| 4-a-5 | Form of certificate for the Company's 3.100% notes due November 15, 2021, filed as Exhibit 4 to the Company's Form 8-K dated November 16, 2011, is incorporated herein by reference. |
| 4-a-6 | Underwriting Agreement, dated December 11, 2013, between the Company and Citigroup Global Markets Inc., J.P. Morgan Securities LLC, Merrill Lynch, Pierce, Fenner & Smith Incorporated and Wells Fargo Securities, LLC, as representatives of the several Underwriters named in Schedule 1 to the Underwriting Agreement, filed as Exhibit 1 to the Company's Form 8-K dated December 17, 2013, is incorporated herein by reference. |
| 4-a-7 | Form of certificate for the Company's Floating Rate Notes due 2016, filed as Exhibit 4.1 to the Company's Form 8-K dated December 17, 2013, is incorporated herein by reference. |
| 4-a-8 | Form of certificate for the Company's 3.700% Notes due 2023, filed as Exhibit 4.2 to the Company's Form 8-K dated December 17, 2013, is incorporated herein by reference. |
| 4-a-9 | Form of certificate for the Company's 4.800% Notes due 2043, filed as Exhibit 4.3 to the Company's Form 8-K dated December 17, 2013, is incorporated herein by reference. |
| 4-a-10 | Underwriting Agreement, dated March 28, 2017, between the Company and J.P. Morgan Securities LLC, Citigroup Global Markets Inc. and Wells Fargo Securities, LLC, as representatives of the several Underwriters named in Schedule 1 to the Underwriting Agreement, filed as Exhibit 1 to the Company's Form 8-K dated March 28, 2017, is incorporated herein by reference. |

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| 4-a-11 | Form of certificate for the Company’s 1.950% Notes due July 15, 2019, filed as Exhibit 4.2 to the Company’s Form 8-K dated April 10, 2017, is incorporated herein by reference. |
| 4-a-12 | Form of certificate for the Company’s 2.800% Notes due March 15, 2022, filed as Exhibit 4.3 to the Company’s Form 8-K dated April 10, 2017, is incorporated herein by reference. |
| 4-a-13 | Form of certificate for the Company’s 3.200% Notes due March 15, 2024, filed as Exhibit 4.4 to the Company’s Form 8-K dated April 10, 2017, is incorporated herein by reference. |
| 4-a-14 | Form of certificate for the Company’s 3.500% Notes due March 15, 2027, filed as Exhibit 4.5 to the Company’s Form 8-K dated April 10, 2017, is incorporated herein by reference. |
| 4-a-15 | Form of certificate for the Company’s 4.350% Notes due April 15, 2047, filed as Exhibit 4.6 to the Company’s Form 8-K dated April 10, 2017, is incorporated herein by reference. |
| *10-a-1 | The Company's 2006 Long-Term Incentives Plan, as amended, filed as Appendix A to the Company's Notice and Proxy Statement dated December 18, 2009, is incorporated herein by reference . |
| *10-a-2 | The Company's First Amendment to the Amended and Restated 2006 Long-Term Incentives Plan, as amended, filed as Exhibit 10-a-1 to the Company's Form 10-Q for the quarter ended June 30, 2012, is incorporated herein by reference. |
| *10-a-3 | Form of Restricted Stock Unit Award under the Company's 2006 Long-Term Incentives Plan, filed as Exhibit 10.1 to the Company's Form 8-K dated February 7, 2006, is incorporated herein by reference. |
| *10-a-4 | Forms of Stock Option Agreements under the Company's 2006 Long-Term Incentives Plan filed as Exhibit 10-a-8 to the Company's Form 10-K for year ended September 30, 2006, is incorporated herein by reference. |
| *10-a-5 | The Company's 2006 Annual Incentive Compensation Plan for Senior Executives, as amended and restated, filed as Exhibit 10-a-1 to the Company's Form 10-Q for quarter ended December 31, 2015, is incorporated herein by reference. |
| *10-a-6 | Forms of Stock Option Agreements, adopted November 20, 2009, under the Company's 2006 Long-Term Incentives Plan, filed as Exhibit 10-a-9 to the Company's Form 10-K for year ended September 30, 2009, is incorporated herein by reference. |
| *10-a-7 | The Company’s 2015 Long-Term Incentives Plan filed as Appendix B to the Company’s Notice and Proxy Statement dated December 17, 2014, is incorporated herein by reference. |
| *10-a-8 | Form of Stock Option Agreement under the Company’s 2006 and 2015 Long-Term Incentives Plans, filed as Exhibit 10-a-1 to the Company’s Form 10-Q for the quarter ended December 31, 2014, is incorporated herein by reference. |
| *10-a-9 | Form of Three-Year Performance Share Agreement filed as Exhibit 10-q-1 to the Company's Form 10-Q for the quarter ended December 31, 2015, is incorporated herein by reference. |
| *10-a-10 | Form of Performance Share Agreement under the Company’s 2015 Long-Term Incentives Plan, filed as Exhibit 10-a-1 to the Company’s Form 10-Q for the quarter ended March 31, 2017, is incorporated herein by reference. |
| *10-a-11 | Form of Performance Share Agreement under the Company’s 2015 Long-Term Incentives Plan, filed as Exhibit 10-a-1 to the Company’s Form 10-Q for the quarter ended December 31, 2017, is incorporated herein by reference. |
| *10-a-12 | Form of Restricted Stock Unit Agreement under the Company’s 2015 Long-Term Incentives Plan, filed as Exhibit 10-a-2 to the Company’s Form 10-Q for the quarter ended December 31, 2017, is incorporated herein by reference. |
| *10-a-13 | Form of Restricted Stock Unit Award for Non-Employee Directors under the Company’s 2015 Long-Term Incentives Plan, filed as Exhibit 10-a-13 to the Company’s Form 10-K for the year ended September 30, 2015, is incorporated herein by reference. |
| *10-a-14 | Restricted Stock Unit Agreement for Werner Lieberherr dated November 15, 2016, filed as Exhibit 10-a-1 to the Company’s Form 10-Q for the quarter ended June 30, 2017, is incorporated herein by reference . |
| *10-a-15 | Restricted Stock Unit Cash Replacement Letter for Werner Lieberherr dated April 17, 2017, filed as Exhibit 10-a-2 to the Company’s Form 10-Q for the quarter ended June 30, 2017, is incorporated herein by reference. |
| *10-b-1 | The Company's Directors Stock Plan, adopted by the Company's Board of Directors on June 1, 2001 and approved by the Company's shareowners at the 2002 Annual Meeting of Shareowners, filed as Exhibit 10.2 to the Company's Registration Statement on Form 10 (File No. 001-16445) (the "Form 10"), is incorporated herein by reference. |
| *10-b-2 | Form of Restricted Stock Agreement under the Company's Directors Stock Plan, filed as Exhibit 10-b-3 to the Company's Form 10-K for year ended September 30, 2001, is incorporated herein by reference. |
| *10-c-1 | Compensation Recovery Policy acknowledgment and agreement filed as Exhibit 10-c-1 to the Company's Form 10-Q for the quarter ended December 31, 2012, is incorporated herein by reference. |

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| *10-d-1 | The Company's Incentive Compensation Plan, as amended, filed as Exhibit 10-a-1 to the Company's Form 10-Q for the quarter ended December 31, 2015, is incorporated herein by reference. |
| *10-e-1 | Employment Agreement for Werner Lieberherr dated as of October 21, 2016, filed as Exhibit 10-e-1 to the Company’s Form 10-Q for the quarter ended June 30, 2017, is incorporated herein by reference. |
| *10-e-2 | Death Benefit Agreement dated November 30, 2012, between B/E Aerospace, Inc. and Werner Lieberherr, filed as Exhibit 10-e-2 to the Company’s Form 10-Q for the quarter ended June 30, 2017, is incorporated herein by reference. |
| *10-f-1 | The Company's Deferred Compensation Plan, as amended, filed as Exhibit 10-f-2 to the Company's Form 10-K for year ended September 30, 2007, is incorporated herein by reference. |
| *10-f-2 | Amendment No. 1 to the Company’s Deferred Compensation Plan, as amended. |
| *10-f-3 | The Company's 2005 Deferred Compensation Plan, as amended and restated, filed as Exhibit 10-f-1 to the Company's Form 10-Q for quarter ended March 31, 2014, is incorporated herein by reference. |
| *10-f-4 | The Company’s 2005 Deferred Compensation Plan, as amended and restated as of June 27, 2017, filed as Exhibit 10-f-1 to the Company’s Form 10-Q for quarter ended June 30, 2017, is incorporated herein by reference. |
| *10-f-5 | Amendment No. 1 to the Company’s 2005 Deferred Compensation Plan filed as Exhibit 10-f-1 to the Company’s Form 10-Q for the quarter ended December 31, 2017, is incorporated herein by reference. |
| *10-f-6 | Amendment No. 2 to Company’s 2005 Deferred Compensation Plan, as amended. |
| *10-g-1 | The Company's Non-Qualified Savings Plan, as amended, filed as Exhibit 10-g-2 to the Company's Form 10-K for year ended September 30, 2007, is incorporated herein by reference. |
| *10-g-2 | Amendment No.1 to the Company’s Non-Qualified Savings Plan. |
| *10-g-3 | The Company's 2005 Non-Qualified Retirement Savings Plan, as amended, filed as Exhibit 10-g-3 to the Company's Form 10-Q for quarter ended December 31, 2010, is incorporated herein by reference. |
| *10-g-4 | Amendment No. 1 to the Company's 2005 Non-Qualified Retirement Savings Plan as amended, filed as Exhibit 10-h-2 to the Company's Form 10-Q for the quarter ended December 31, 2015, is incorporated herein by reference. |
| *10-g-5 | Amendment No. 2 to the Company's 2005 Non-Qualified Retirement Savings Plan as amended, filed as Exhibit 10-g-1 to the Company's Form 10-Q for the quarter ended December 31, 2017, is incorporated herein by reference . |
| *10-g-6 | The Company’s 2005 Non-Qualified Retirement Savings Plan, as amended and restated as of July 17, 2018. |
| *10-h-1 | The Company's 2005 Non-Qualified Pension Plan, as amended, filed as Exhibit 10-h-1 to the Company's Form 10-Q for quarter ended June 30, 2012, is incorporated herein by reference. |
| *10-h-2 | Amendment No. 1 to the Company's 2005 Non-Qualified Pension Plan, as amended, filed as Exhibit 10-h-1 to the Company's Form 10-Q for the quarter ended December 31, 2015, incorporated herein by reference. |
| *10-h-3 | Amendment No.2 to the Company’s 2005 Non-Qualified Pension Plan, as amended. |
| *10-h-4 | The Company's Non-Qualified Pension Plan, as amended, filed as Exhibit 10-h-3 to the Company's Form 10-K for the year ended September 30, 2008, is incorporated herein by reference. |
| *10-h-5 | Amendment No. 1 to the Company’s Non-Qualified Pension Plan, as amended, filed as Exhibit 10-h-1 to the Company’s Form 10-Q for the quarter ended March 31, 2017, is incorporated herein by reference. |
| *10-h-6 | Amendment No.2 to the Company’s Non-Qualified Pension Plan, as amended. |
| *10-i-1 | The Company's Master Trust, as amended, filed as Exhibit 10-i-2 to the Company's Form 10-K for year ended September 30, 2007, is incorporated herein by reference. |
| *10-i-2 | Amendment No. 1 to the Company’s Master Trust, as amended. |
| *10-j-1 | Short-term Relocation Benefit to the Company’s CEO, CFO and two other executive officers, filed as Exhibit 10-e-1 to the Company’s Form 10-Q for the quarter ended March 31, 2018, is incorporated herein by reference. |
| *10-j-2 | Description of the Extension to the Short-Term Relocation Benefit for the Company’s CEO, CFO and two other executive officers. |
| 10-k-1 | Distribution Agreement dated as of June 29, 2001 by and among Rockwell International Corporation, the Company and Rockwell Scientific Company LLC, filed as Exhibit 2.1 to the Company's Form 8-K dated July 11, 2001, is incorporated herein by reference. |
| 10-l-1 | Employee Matters Agreement dated as of June 29, 2001 by and among Rockwell International Corporation, the Company and Rockwell Scientific Company LLC, filed as Exhibit 2.2 to the Company's Form 8-K dated July 11, 2001, is incorporated herein by reference. |

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| 10-m-1 | Tax Allocation Agreement dated as of June 29, 2001 by and between Rockwell International Corporation and the Company, filed as Exhibit 2.3 to the Company's Form 8-K dated July 11, 2001, is incorporated herein by reference. |
| *10-n-1 | Form of Change of Control Agreement between the Company and certain executives of the Company (Three-Year Agreement), as amended, filed as Exhibit 10-n-1 to the Company's Form 8-K dated April 21, 2009, is incorporated herein by reference. |
| *10-n-2 | Schedule identifying executives of the Company who are party to a Change of Control Agreement, filed as Exhibit 10-n-2 to the Company's Form 10-K for the year ended September 30, 2017, is incorporated herein by reference. |
| 10-o-1 | Bridge Credit Agreement dated as of December 16, 2016, among us, the lenders listed therein and JPMorgan Chase Bank, N.A., as administrative agent, filed as Exhibit 10.1 to the Company's Form 8-K dated December 16, 2016, is incorporated herein by reference. |
| 10-o-2 | Term Loan Credit Agreement dated as of December 16, 2016, among us, the lenders listed therein and JPMorgan Chase Bank, N.A., as administrative agent, filed as Exhibit 10.2 to the Company's Form 8-K dated December 16, 2016, is incorporated herein by reference. |
| 10-o-3 | Five-Year Credit Agreement dated as of December 16, 2016, among us, the lenders listed therein and JPMorgan Chase Bank, N.A., as administrative agent, filed as Exhibit 10.3 to the Company's Form 8-K dated December 16, 2016, is incorporated herein by reference. |
| *10-s-1 | Non-Employee Director Compensation Summary, filed as Exhibit 10-s-1 to the Company's Form 10-K for the year ended September 30, 2016, is incorporated herein by reference. |
| *10-s-2 | Non-Employee Director Deferral Election Forms, filed as Exhibit 10-s-2 to the Company's Form 10-K for the year ended September 30, 2016, is incorporated herein by reference. |
| 10-t-1 | Agreement and Plan of Merger, dated as of October 23, 2016, by and among Rockwell Collins, Inc., Quarterback Merger Sub Corp., and B/E Aerospace, Inc., filed as Exhibit 2.1 to the Company's Form 8-K dated October 23, 2016, is incorporated herein by reference. |
| 10-t-2 | Agreement and Plan of Merger, dated as of September 4, 2017, by and among United Technologies Corporation, Riveter Merger Sub Corp. and Rockwell Collins, Inc., filed as Exhibit 2.1 to the Company's Form 8-K dated September 6, 2017, is incorporated herein by reference. |
| 21 | List of subsidiaries of the Company. |
| 23 | Consent of Independent Registered Public Accounting Firm. |
| 24 | Powers of Attorney authorizing certain persons to sign this Annual Report on Form 10-K on behalf of certain directors and officers of the Company. |
| 31.1 | Section 302 Certification of Chief Executive Officer. |
| 31.2 | Section 302 Certification of Chief Financial Officer. |
| 32.1 | Section 906 Certification of Chief Executive Officer. |
| 32.2 | Section 906 Certification of Chief Financial Officer. |
| 101.INS | XBRL Instance Document. |
| 101.SCH | XBRL Taxonomy Extension Schema. |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase. |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase. |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase. |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase. |

* Management contract or compensatory plan or arrangement.

## SIGNATURES

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

ROCKWELL COLLINS, INC.

By /s/ ROBERT J. PERNA

Robert J. Perna
Senior Vice President, General Counsel and Secretary

Dated: November 26, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below on the 26th day of November 2018 by the following persons on behalf of the registrant and in the capacities indicated.

| | |
|---|---|
| /s/ ROBERT K. ORTBERG<br>Robert K. Ortberg | Chairman, President and Chief Executive Officer (principal executive officer) |
| ANTHONY J. CARBONE* | Director |
| CHRIS A. DAVIS* | Director |
| RALPH E. EBERHART* | Director |
| JOHN A. EDWARDSON* | Director |
| RICHARD G. HAMERMESH* | Director |
| DAVID LILLEY* | Director |
| ANDREW J. POLICANO* | Director |
| CHERYL L. SHAVERS* | Director |
| JEFFREY L. TURNER* | Director |
| /s/ PATRICK E. ALLEN<br>Patrick E. Allen | Senior Vice President and Chief Financial Officer (principal financial officer) |
| /s/ TATUM J. BUSE<br>Tatum J. Buse | Vice President, Finance and Corporate Controller (principal accounting officer) |

*By /s/ ROBERT J. PERNA

Robert J. Perna, Attorney-in-fact**

** By authority of the powers of attorney filed herewith.

**Exhibit 10.f.2**

# ROCKWELL COLLINS, INC.

# APPROVAL OF

# AMENDMENT #1

# to the

# ROCKWELL COLLINS

# DEFERRED COMPENSATION PLAN

# (as Amended and Restated effective January 1, 2005)

The undersigned, Laura A. Patterson, Vice President, Global Total Rewards & Labor Strategy, Rockwell Collins, Inc. (the "Company"), for and on behalf of the Company and pursuant to the authority provided to me by the Company's Senior Vice President of Human Resources and the Company's Compensation Committee hereby approves Amendment #1 to the Rockwell Collins Deferred Compensation Plan (as Amended and Restated effective January 1, 2005) in the form attached hereto.

Dated this 17th day of July, 2018.

/s/ Laura A. Patterson

Laura A. Patterson
Vice President
Global Total Rewards & Labor Strategy

**AMENDMENT #1**
**to the**
**ROCKWELL COLLINS DEFERRED COMPENSATION PLAN**

**(as Amended and Restated effective January 1, 2005)**

The Rockwell Collins Deferred Compensation Plan, as amended and restated January 1, 2005 (the "Plan"), is hereby amended, effective July 17, 2018, unless stated otherwise, in the following respects.

1. Section 1.310 is hereby amended and restated in its entirety, effective as of April 22, 2011, to read as follows:

   1.310 Measurement Funds means the investment vehicles offered under the Plan from time to time.

2. Section 1.320 is hereby amended in its entirety to read as follows:

   **1.320** **Named Fiduciary** means the Committee, its delegates and the Trustee.

3. Section 1.470 is hereby amended in its entirety to read as follows:

   **1.470** [Reserved]

4. Section 4.020(c) of the Plan is hereby amended, effective as of April 22, 2011, by deleting the words "in favor of whatever short-term, money market vehicle is available under the Plan at the time" appearing in the last sentence of such section and replacing those words with "in the Fidelity Freedom Fund with a target retirement date that is closest to the date the Participant will turn age 65 or such other Measurement Fund as may be designated by the Vice President of Compensation and Total Remuneration, or his or her successor, from time to time."

5. The second paragraph of Section 12.010 is hereby amended to read as follows:

   If the Plan is terminated with respect to all of its Participants, the Company will have the right, in its sole discretion, and notwithstanding any elections made by the Participant, to pay such benefits in a lump sum or pursuant to an Annual Installment Method of up to 15 years, with amounts credited and debited during the installment period as provided herein. If the Plan is terminated with respect to less than all of its Participants, the Company or the Affiliate employing an affected Participant will be required to pay such benefits in a lump sum.

6. Section 13.020 is hereby amended in its entirety to read as follows:

   **13.020** [Reserved]

7. Section 16.010 is hereby amended in its entirety to read as follows:

   **16.010** **Establishment of the Trust** . The Company shall establish the Trust (which may be referred to herein as a "Rabbi Trust"). Upon the establishment of the Trust, the Company shall provide for the funding of the Trust in accordance with the terms of the Trust.

8. Section 16.040 is hereby amended in its entirety to read as follows:

   **16.040** **Rabbi Trust** . The Rabbi Trust shall:

   (a) be a non-qualified grantor trust which satisfies in all material respects the requirement of Revenue Procedure 92-64, 1992-2 CB 122 (or any successor Revenue Procedure or other applicable authority);

   (b) be revocable; and

   (c) provide that any successor trustee shall be a bank trust department or other party that may be granted corporate trustee powers under state law.

9. Section 17.160(a) is hereby amended in its entirety to read as follows:

(a) In General . If, for any reason, all or any portion of a Participant's benefit under this Plan becomes taxable to the Participant prior to receipt, a Participant may petition the Committee or its delegate for a distribution of that portion of his benefit that has become taxable. Upon the grant of such a petition, which grant should not be unreasonably withheld, the Company or, as applicable, its Affiliate will distribute to the Participant immediately available funds in an amount equal to the taxable portion of his benefit (which amount will not exceed a Participant's unpaid Account Balance under the Plan). If the petition is granted, the tax liability distribution will be made within 90 days of the date when the Participant's petition is granted. Such a distribution will affect and reduce the benefits to be paid under this Plan.

10. Section III of Appendix A is hereby deleted

11. Appendix B is hereby deleted in its entirety effective as of April 22, 2011.

**Exhibit 10.f.6**

# ROCKWELL COLLINS, INC.

# APPROVAL OF

# AMENDMENT #2

# to the

# ROCKWELL COLLINS

# 2005 DEFERRED COMPENSATION PLAN

# (as Amended and Restated effective June 27, 2017)

The undersigned, Laura A. Patterson, Vice President, Global Total Rewards & Labor Strategy, Rockwell Collins, Inc. (the "Company"), for and on behalf of the Company and pursuant to the authority provided to me by the Company's Senior Vice President of Human Resources and the Company's Compensation Committee hereby approves Amendment #2 to the Rockwell Collins 2005 Deferred Compensation Plan (as Amended and Restated effective June 27, 2017) in the form attached hereto.

Dated this 17th day of July, 2018.

/s/ Laura A. Patterson

Laura A. Patterson
Vice President
Global Total Rewards & Labor Strategy

**AMENDMENT #2**
**to the**
**ROCKWELL COLLINS**

**2005 DEFERRED COMPENSATION PLAN**

**(as Amended and Restated effective June 27, 2017)**

The Rockwell Collins 2005 Deferred Compensation Plan, as amended and restated effective June 27, 2017 (the "Plan"), is hereby amended, effective as of July 17, 2018, in the following respects.

1. Section 1.290 is hereby amended in its entirety to read as follows:

   **1.290** **Named Fiduciary** means the Committee, its delegates and the Trustee.

2. Section 1.310 is hereby amended by deleting the text that reads "Notwithstanding any other provision of this Plan to the contrary, no Eligible Employee or any other person, individual or entity shall become a Participant in this Plan on or after the day on which a Change of Control occurs."

3. Section 1.450 is hereby amended in its entirety to read as follows:

   **1.450** [Reserved]

4. Section 14.020 is hereby amended in its entirety to read as follows:

   **14.020** [Reserved]

5. Section 17.010 is hereby amended in its entirety to read as follows:

   **17.010** **Establishment of the Trust**. The Company shall establish the Trust (which may be referred to herein as a "Rabbi Trust"). Upon the establishment of the Trust, the Company shall provide for the funding of the Trust in accordance with the terms of the Trust.

6. Section 17.040 is hereby amended in its entirety to read as follows:

   **17.040** **Rabbi Trust**. The Rabbi Trust shall:

   (a) be a non-qualified grantor trust which satisfies in all material respects the requirement of Revenue Procedure 92-64, 1992-2 CB 122 (or any successor Revenue Procedure or other applicable authority);

   (b) be revocable; and

   (c) provide that any successor trustee shall be a bank trust department or other party that may be granted corporate trustee powers under state law.

7. Section 18.160(a) is hereby amended in its entirety to read as follows:

   (a) In General. Subject to and in accordance with Section 409A, if, for any reason, all or any portion of a Participant's benefit under this Plan becomes taxable to the Participant under Section 409A prior to receipt, a Participant may petition the Committee or its delegate for a distribution of that portion of his benefit that has become taxable under Section 409A. Upon the grant of such a petition, which grant should not be unreasonably withheld, the Company or, as applicable, its Affiliate will distribute to the Participant immediately available funds in an amount equal to the taxable portion of his benefit (which amount will not exceed a Participant's unpaid Account Balance under the Plan). If the petition is granted, the tax liability distribution will be made within 90 days of the date when the Participant's petition is granted. Such a distribution will affect and reduce the benefits to be paid under this Plan.

**Exhibit 10.g.2**

# ROCKWELL COLLINS, INC.

## APPROVAL OF

## AMENDMENT #1

## to the

## ROCKWELL COLLINS

## NON-QUALIFIED SAVINGS PLAN

## (as Amended and Restated effective January 1, 2005)

The undersigned, Laura A. Patterson, Vice President, Global Total Rewards & Labor Strategy, Rockwell Collins, Inc. (the "Company"), for and on behalf of the Company and pursuant to the authority provided to me by the Company's Senior Vice President of Human Resources and the Company's Compensation Committee hereby approves Amendment #1 to the Rockwell Collins Non-Qualified Savings Plan (as Amended and Restated effective January 1, 2005) in the form attached hereto.

Dated this 17th day of July, 2018.

/s/ Laura A. Patterson

Laura A. Patterson
Vice President
Global Total Rewards & Labor Strategy

**AMENDMENT #1**
**to the**
**ROCKWELL COLLINS NON-QUALIFIED SAVINGS PLAN**

**(as Amended and Restated effective January 1, 2005)**

The Rockwell Collins Non-Qualified Savings Plan, as amended and restated effective January 1, 2005 (the "Plan"), is hereby amended, effective July 17, 2018, in the following respects.

1. Section 1.230 is hereby amended in its entirety to read as follows:

**1.230** [Reserved]

2. Section 4.020 is hereby amended in its entirety to read as follows:

**4.020** This Plan shall be interpreted and administered by the Committee; provided that interpretations by the Plan Administrator of those provisions of the Qualified Savings Plan which are also applicable to this Plan shall be binding on the Committee.

3. Section 5.010 is hereby amended in its entirety to read as follows:

**5.010** **Establishment of the Trust**. The Company shall establish the Trust (which may be referred to herein as a "Rabbi Trust"). Upon the establishment of the Trust, the Company shall provide for the funding of the Trust in accordance with the terms of the Trust.

4. Section 5.040 is hereby amended in its entirety to read as follows:

**5.040** **Rabbi Trust**. The Rabbi Trust shall:

(a) be a non-qualified grantor trust which satisfies in all material respects the requirement of Revenue Procedure 92-64, 1992-2 CB 122 (or any successor Revenue Procedure or other applicable authority);

(b) be revocable; and

(c) provide that any successor trustee shall be a bank trust department or other party that may be granted corporate trustee powers under state law.

**Exhibit 10.g.6**

# ROCKWELL COLLINS, INC.

# APPROVAL OF

# AMENDED AND RESTATED

# ROCKWELL COLLINS

# 2005 NON-QUALIFIED RETIREMENT SAVINGS PLAN

# (as Amended and Restated effective July 17, 2018)

The undersigned, Laura A. Patterson, Vice President, Global Total Rewards & Labor Strategy, Rockwell Collins, Inc. (the "Company"), for and on behalf of the Company and pursuant to the authority provided to me by the Company's Senior Vice President of Human Resources and the Company's Compensation Committee hereby approves the Amended and Restated Rockwell Collins 2005 Non-Qualified Retirement Savings Plan (as Amended and Restated effective July 17, 2018) in the form attached hereto.

Dated this 17th day of July, 2018.

/s/ Laura A. Patterson

Laura A. Patterson
Vice President
Global Total Rewards & Labor Strategy

# AMENDED AND RESTATED
**(as of July 17, 2018)**

# ROCKWELL COLLINS 2005

# NON-QUALIFIED RETIREMENT SAVINGS PLAN

# ROCKWELL COLLINS 2005

# NON-QUALIFIED RETIREMENT SAVINGS PLAN

The purpose of this Plan is to provide benefits in excess of the Annual Additions Limitation (only for periods prior to January 1, 2019) to a group of employees and to provide benefits in excess of the Compensation Limit to a select group of management or highly compensated employees of Rockwell Collins, Inc. and its affiliates. This Plan is unfunded for tax purposes and for purposes of Title I of ERISA.

This Plan is established effective as of January 1, 2005 for account balances that were earned and vested after December 31, 2004 under the Rockwell Collins Non-Qualified Retirement Savings Plan and for new account balances subsequent to the date this Plan is established. The Plan was amended and restated on July 17, 2018 to incorporate amendments one and two and further changes.

## ARTICLE I

## DEFINITIONS

**1.010** ***Account*** means the account or accounts established for a Participant pursuant to Article II hereof.

**1.020** ***Affiliate*** means:

(a) any corporation incorporated under the laws of one of the United States of America of which the Company owns, directly or indirectly, eighty percent (80%) or more of the combined voting power of all classes of stock or eighty percent (80%) or more of the total value of the shares of all classes of stock (all within the meaning of Code Section 1563);

(b) any partnership or other business entity organized under such laws, of which the Company owns, directly or indirectly, eighty percent (80%) or more of the voting power or eighty percent (80%) or more of the total value (all within the meaning of Code Section 414(c)); and

(c) any other company deemed to be an Affiliate by the Board of Directors.

**1.030** ***Annual Additions Limitation*** means the limitation on the annual additions to the account of a participant in the Qualified Retirement Savings Plan imposed by Section 415(c) of the Code.

**1.040** ***Base Compensation*** means Base Compensation, as that term is defined in the Qualified Retirement Savings Plan.

**1.050** ***Base Compensation Deferral*** means (i) for periods prior to January 1, 2019, the amount of compensation a Participant defers under the Plan pursuant to such Participant's election under Section 2.010(d) after the date the Participant reaches the earlier of the Compensation Limit or the date the Participant would have reached the Annual Additional Limit based on such Participant's contribution elections under the Qualified Retirement Savings Plan on December 31st of the immediately preceding year and (ii) for periods on and after January 1, 2019, the amount of compensation a Participant defers under the Plan pursuant to such Participant's election under Section 2.010(d) after the date the Participant reaches the Compensation Limit.

**1.060** ***Board of Directors*** means the Company's Board of Directors.

**1.070** ***Change of Control*** means any of the following:

(a) The acquisition by any individual, entity or group (within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") (a "Person") of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 20% or more of either (1) the then outstanding shares of common stock of the Company (the "Outstanding Company Common Stock") or (2) the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (the "Outstanding Company Voting Securities"); provided, however, that for purposes of this subsection (a), the following acquisitions shall not constitute a Change of Control: (w) any acquisition directly from the Company, (x) any acquisition by the Company, (y) any acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company or (z) any acquisition pursuant to a transaction which complies with clauses (1), (2) and (3) of subsection (c) of this Section 1.070; or

(b) Individuals who, as of the date hereof, constitute the Board of Directors of the Company (the "Incumbent Board") cease for any reason to constitute at least a majority of the Board of Directors; provided, however, that any individual becoming a director subsequent to that date whose election, or nomination for election by the Company's shareowners, was approved by a vote of at least a majority of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board of Directors; or

(c) Consummation of a reorganization, merger or consolidation or sale or other disposition of all or substantially all of the assets of the Company or the acquisition of assets of another entity (a "Company Transaction"), in each case, unless, following such Company Transaction, (1) all or substantially all of the individuals and entities who were the beneficial owners, respectively, of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Company Transaction beneficially own, directly or indirectly, more than 50% of, respectively, the then outstanding shares of common stock and the combined voting power of the then outstanding voting securities entitled to vote generally in the election of directors, as the case may be, of the corporation resulting from such Company Transaction (including, without limitation, a corporation which as a result of such transaction owns the Company or all or substantially all of the Company's assets either directly or through one or more subsidiaries) in substantially the same proportions as their ownership, immediately prior to such Company Transaction of the Outstanding Company Common Stock and Outstanding Company Voting Securities, as the case may be, (2) no Person (excluding any employee benefit plan (or related trust) of the Company or of such corporation resulting from such Company Transaction) beneficially owns, directly or indirectly, 20% or more of, respectively, the then outstanding shares of common stock of the corporation resulting from such Company Transaction or the combined voting power of the then outstanding voting securities of such corporation except to the extent that such ownership existed prior to the Company Transaction and (3) at least a majority of the members of the board of directors of the corporation resulting from such Company Transaction were members of the Incumbent Board at the time of the execution of the initial agreement, or of the action of the Board of Directors, providing for such Company Transaction; or

(d) Approval by the Company's shareowners of a complete liquidation or dissolution of the Company.

**1.080** ***Code*** means the Internal Revenue Code of 1986, as amended.

**1.090** ***Committee*** means the Compensation Committee of the Board of Directors.

**1.100** ***Company*** means Rockwell Collins, Inc., a Delaware corporation.

**1.110** ***Company Matching Contribution Credits*** means an amount to be credited to the Plan by the Company, which shall be equal to the applicable Company Matching Contribution percentage applied to a Participant's contribution under the Qualified Retirement Savings Plan.

**1.120** ***Company Retirement Contribution Credits*** means an amount to be credited to the Plan by the Company, which shall be equal to the applicable Company Retirement Contribution percentage applied to a Participant's Eligible Compensation under the Qualified Retirement Savings Plan.

**1.130** ***Compensation Limit*** means the limitation imposed by Section 401(a)(17) of the Code on the amount of compensation which can be considered in determining the amount of contributions to the Qualified Retirement Savings Plan.

**1.140** ***Employee*** means any person who is employed by the Company or by an Affiliate, including, to the extent permitted by Section 406 of the Code, any United States citizen regularly employed by a foreign Affiliate of the Company.

**1.150** ***ERISA*** means the Employee Retirement Income Security Act of 1974, as amended.

**1.160** ***409A Change of Control*** means a "Change of Control Event" as defined in Treasury Regulation Section 1.409A-3(i)(5)(i) and set forth in Treasury Regulation Section 1.409A-3(i)(5)(v)-(vii), applying the default rules and percentages set forth in such Treasury Regulation.

**1.170** ***Participant*** means (1) for periods prior to January 1, 2019, an individual who is a participant in the Qualified Retirement Savings Plan whose Participant Contributions to that Plan are restricted by the Compensation Limit or the Annual Additions Limitation and who (a) has elected or is deemed to have elected in the Plan Year immediately preceding the current Plan Year to have one or more Base Compensation Deferrals credited to his or her Account pursuant to Article II, or (b) if hired during the current Plan Year, becomes a Participant on the first day of the payroll period during which he or she exceeds the Annual Additions Limitation or the Compensation Limit during such Plan Year and (2) for periods on or after January 1, 2019, an individual who is a participant in the Qualified Retirement Savings Plan whose Participant Contributions to that Plan are restricted by the Compensation Limit and who (a) has elected or is deemed to have elected in the Plan Year immediately preceding the current Plan Year to have one or more Base Compensation Deferrals credited to his or her Account pursuant to Article II, or (b) if hired during the current Plan Year, becomes a Participant on the first day of the payroll period during which he or she exceeds the Compensation Limit during such Plan Year.

**1.180** ***Plan*** means this Amended and Restated Rockwell Collins 2005 Non-Qualified Retirement Savings Plan.

**1.190** ***Plan Administrator*** means the person from time to time so designated by name or corporate office by the Board of Directors.

**1.200** ***Plan Year*** means each twelve-month period ending December 31st.

**1.210** ***Pre-2005 Plan*** means the Rockwell Collins Non-Qualified Savings Plan.

**1.220** ***Retirement*** means "separation from service" from the Company and all of its Affiliates, within the meaning of Section 409A, on or after attainment of age 55 other than for reason of death.

**1.230** ***Qualified Retirement Savings Plan*** means for periods (i) on or prior to December 31, 2015, the Rockwell Collins Retirement Savings Plan and (ii) on or after January 1, 2016, the following two sub-plans of such plan: The Rockwell Collins Retirement Savings Plan for Salaried and Certain Hourly Employees and the Rockwell Collins Retirement Savings Plan for IMS Non-Union Employees.

**1.240** ***Section 409A*** means Section 409A of the Code and any regulations and other guidance issued thereunder.

**1.250** ***Securities Exchange Act*** means the Securities Exchange Act of 1934, as amended.

**1.260** ***Separation from Service*** means a "separation from service" from the Company and all of its Affiliates, within the meaning of Section 409A, other than for reasons of Retirement or death.

**1.270** ***Specified Employee*** has the meaning set forth in Section 409A, as determined each year in accordance with procedures established by the Company.

**1.280** ***Sub-Accounts*** refers to one of this Plan's investment vehicles (corresponding to the Qualified Retirement Savings Plan investment funds) to which a Participant's Base Compensation Deferrals, Company's Matching Contribution Credits, and Company Retirement Contribution Credits are assigned.

**1.290** [ **Reserved]**

**1.300** ***Trust*** means the master trust established by agreement between the Company and the Trustee, which trust will be a grantor trust.

**1.310** ***Trustee*** means Wells Fargo Bank, N.A., or any successor trustee of the Trust described in Section 1.300 of this Plan.

Terms which are not otherwise defined in this Article I shall have the meanings set forth in the Qualified Retirement Savings Plan document.

## ARTICLE II

## CREDITING, VALUATION AND DISTRIBUTION OF ACCOUNTS

**2.010** The Company will establish on its books a Non-Qualified Retirement Savings Plan Account for each Participant who elects a Base Compensation Deferral.

(a) The amount of such Base Compensation Deferral shall be credited to such Account and allocated to one or more of this Plan's Sub-Accounts in the manner set forth in this Section.

(1) Each such credit shall be made to such Account no later than the date on which the corresponding contribution to the Qualified Retirement Savings Plan is made or would have been made, but for imposition of the Compensation Limit (or before 2019, the Annual Additions Limitation); provided, however, that any such credits made as a result of any retroactive amendment to the Plan shall be made upon adoption thereof, but in amounts which reflect the value such credits would have had if that amendment had been in effect on its effective date and such contributions had been made on the respective dates of the corresponding contributions to the Qualified Retirement Savings Plan.

(2) The Base Compensation Deferral shall, in increments of one percent (1%) and with the total of the percentage increments equaling one hundred percent (100%), be allocated to the Sub-Account or Sub-Accounts under this Plan pursuant to separate Participant elections made in a method identical to the method in which the Participant's elections are made among Investment Funds under the Qualified Retirement Savings Plan.

(3) A Participant may change any previous election he has made regarding deemed investment of his Base Compensation Deferrals under this Plan in the same manner as he may change his previous elections regarding investment of his Participant Contributions in the Qualified Retirement Savings Plan.

(4) If a Participant fails to make a deemed investment election with respect to his Base Compensation Deferrals under this Plan, the Participant will be deemed to have elected to have his Base Compensation Deferrals under this Plan invested in accordance with the default investment fund option under the Qualified Retirement Savings Plan.

(5) Notwithstanding any other provision of this Plan to the contrary, any deemed investment elections made by the Participant with respect to Sub-Accounts under this Plan shall be considered recommendations as to the investment of such Sub-Accounts and the Company reserves the right in it sole discretion to choose whether to honor such deemed investment elections.

(b) At the time each Base Compensation Deferral is credited to a Participant's Account, a Company Matching Contribution Credit shall also be made to such Account. Such Company Matching Contribution Credit shall be allocated to the Sub-Accounts under this Plan in the same manner in which Company Matching Contributions are allocated under the Qualified Retirement Savings Plan.

(c) Notwithstanding any other provision of this Plan to the contrary, this Plan is limited to Base Compensation Deferrals and Company Matching Contribution Credits that are earned and vested after December 31, 2004 (and any earnings deemed credited thereon), and Company Retirement Contribution Credits earned after October 1, 2006. Upon the establishment of this Plan, any Accounts under the Pre-2005 Plan that were not earned and vested as of December 31, 2004, and all liabilities associated therewith, were transferred to Accounts under this Plan. No Base Compensation Deferrals or Company Matching

Contribution Credits that were earned and vested as of December 31, 2004 (or any earnings deemed credited thereon) shall be credited to any Account under this Plan.

(d)(1) For Plan Years beginning on and after January 1, 2005 and before January 1, 2008, for purposes of determining any Base Compensation Deferrals or Company Matching Contribution Credits with respect to a Participant for such Plan Year, the Participant's written or electronic election to make Participant Contributions to the Qualified Retirement Savings Plan in effect on December 31st of the year immediately preceding such Plan Year shall be deemed to be fixed and irrevocable except for decreases permitted in accordance with good faith operational compliance with Section 409A and shall be deemed to be the election to defer compensation under this Plan for purposes of Section 409A.

(2) Before January 1, 2018, for purposes of determining any Base Compensation. Deferrals or Company Matching Contribution Credits with respect to a Participant described in Section 1.170 (other than a new hire) for any Plan Year, the Participant's written or electronic election to make Participant Contributions to the Qualified Retirement Savings Plan in effect on December 31st of the year immediately preceding such Plan Year shall be deemed to be fixed and shall be deemed to be the election to defer compensation under this Plan for purposes of Section 409A.

(3) After December 31, 2017, for purposes of determining any Base Compensation Deferrals or Company Matching Contribution Credits with respect to a Participant described in Section 1.170 (other than a new hire) for any Plan Year, the Participant's written or electronic election (including any default election if no timely election is received) to make Base Compensation Deferrals to the Plan made before the Plan Year is the election to defer compensation under this Plan for purposes of Section 409A. The Participant's election shall remain in effect until the Participant makes a new Base Compensation Deferral election pursuant to this paragraph. The Participant's written or electronic election to make Participant Contributions to the Qualified Retirement Savings Plan in effect on December 31st of the year immediately preceding such Plan Year shall be deemed to be fixed and shall be used to determine when the Participant reaches the Annual Additions Limitation.

(4) Effective for Plan Years beginning on and after January 1, 2008, no change to the Participant's written or electronic election to make Participant Contributions to the Qualified Retirement Savings Plan during such Plan Year shall be effective for purposes of determining Base Compensation Deferrals or Company Matching Contribution Credits under this Plan for such Plan Year.

(e) (1) Notwithstanding any other provision of this Plan to the contrary for Plan Years before January 1, 2018, each new hire Participant described in Section 1.170 shall automatically have Base Compensation Deferrals deferred to this Plan for the Plan Year of his or her hire as described in this paragraph. For purposes of determining Base Compensation Deferrals or Company Matching Contribution Credits with respect to such Participant for such Plan Year for Plan Years before January 1, 2018, the Participant's written or electronic election to make Participant Contributions to the Qualified Retirement Savings Plan for the first pay date for which an election is in effect for such Participant shall be deemed to be fixed and the election to defer compensation under this Plan for purposes of Section 409A; provided, however, that no Base Compensation Deferrals or Company Matching Contributions Credits shall be made to this Plan unless such election occurs prior to or within 30 days after he is eligible to become a Participant in this Plan or any similar deferred compensation plan required to be aggregated with this Plan in accordance with the plan aggregation rules set forth in Section 409A.

No change to such new Participant’s election to make Participant Contributions to the Qualified Retirement Savings Plan after the date of such deemed election shall be effective for purposes of determining Base Compensation Deferrals or Company Matching Contribution Credits under this Plan for such Plan Year.

(2) For Plan Years after December 31, 2017, each new hire Participant described in Section 1.170 shall have Based Compensation Deferrals deferred to this Plan of 8 percent of compensation. Such election shall remain in effect until the Participant makes a new election pursuant to Section 2.010(d)(3). The Participant’s written or electronic election to make Participant Contributions to the Qualified Retirement Savings Plan in effect on December 31st of the year immediately preceding such Plan Year shall be deemed to be fixed and shall be used to determine when the Participant reaches the Annual Additions Limitation.

(f) Effective October 1, 2006, for each pay period that the employee is a Participant in this Plan, the Company will make a Company Retirement Contribution Credit in accordance with the Company Retirement Contribution the employee would have received in the Qualified Retirement Savings Plan. Subject to Section 2.010(a)(5), such contributions shall be allocated to the Sub-Account or Sub-Accounts under this Plan pursuant to separate deemed Participant elections made in the same manner in which the Participant’s elections are made among Investment Funds under the Qualified Retirement Savings Plan.

**2.020** With respect to Base Compensation Deferrals, a Participant may elect to make the Sub-Account deemed investment transfers in the same manner as is described in the Qualified Retirement Savings Plan and, in such case, the value of the Participant's interest in the Sub-Accounts hereunder shall be similarly transferred (in one percent (1%) increments, in number of units or in specified dollar amounts) to one or more of the other Sub-Accounts.

**2.030** Each of a Participant's Sub-Accounts shall be accounted for in the manner and valued at the times and pursuant to the method provided in the Qualified Retirement Savings Plan for the Qualified Retirement Savings Plan Investment Fund corresponding to such Sub-Account. A Participant's rights in and to his Sub-Accounts shall be governed by the provisions of the Qualified Retirement Savings Plan which are applicable to the Investment Fund corresponding to such Sub-Account.

**2.040** The distribution and withdrawal provisions of the Qualified Retirement Savings Plan shall have no application to this Plan. Distribution to a Participant of his Sub-Accounts hereunder shall only be made upon the Participant's Separation from Service, Retirement, death or, subject to the terms and conditions set forth in Section 2.050, 409A Change of Control. All such distributions to Participants, as well as distributions made to beneficiaries hereunder, shall be made in the form of lump sum payments, subject to the following:

(a) Effective for Plan Years beginning on or after January 1, 2008, except as otherwise provided in Section 2.040(b) below, a Participant may make a one-time, irrevocable election to have the value of such interest paid in no more than ten (10) annual installments commencing upon Retirement, such installments to be equal to the value of the Participant's Sub-Accounts divided by the number of installments remaining at the time of distribution; provided, however, that such election must be made by the Participant no later than December 31st of the calendar year immediately preceding the Plan Year to which such Base Compensation Deferrals, Company Matching Contribution Credits, and Company Retirement Contribution Credits relate. Except as otherwise provided in Section 6.020, such election shall be irrevocable.

(b) Notwithstanding the foregoing, effective for Plan Years beginning on or after January 1, 2008, any Accounts deferred on behalf of the Participant for the first Plan Year in which a Participant becomes eligible to participate in the Plan (taking into account the plan aggregation rules set forth in Section 409A) will be paid in a lump sum, unless the Participant has made a distribution election (either in writing or filed electronically) on or before December 31 of the calendar year immediately preceding the Plan Year to which such Base Compensation Deferrals, Company Matching Contribution Credits, and Company Retirement Contribution Credits relate.

**2.050** A Participant may elect to have his Accounts hereunder paid in a lump sum, in the event of the occurrence of a 409A Change of Control, subject to the following:

(a) To be effective, the election of a Participant pursuant to this Section 2.050 must be made in writing and filed with the Committee or filed electronically on or before December 31st of the calendar year immediately preceding the Plan Year in which such Base Contribution Deferrals, Company Matching Contribution Credits, and Company Retirement Contribution Credits relating to such installment payment were earned. Once an election is made pursuant to this Section 2.050 it shall remain in effect for all future years unless an election is made before December 31st of the calendar year immediately preceding such future Plan Year. Except as otherwise provided in Section 6.020, such election shall become irrevocable. Notwithstanding the foregoing, a Participant may elect to make the election described in this Section 2.050 with respect to his interest in and to Sub-Accounts hereunder that were earned prior to January 1, 2009 no later than December 31, 2008 (or such other date as is permitted under Section 409A and approved by the Senior Vice President, Human Resources of Rockwell Collins).

(b) Notwithstanding the foregoing, if the Participant does not file a timely written or electronic election in accordance with Section 2.050(a) to receive or not receive his or her Accounts under the Plan in a lump sum upon a 409A Change of Control, then such Participant’s Accounts under the Plan will automatically be paid in a lump sum upon a 409A Change of Control.

**2.060** With respect to distributions which are payable to a Participant or, in the event of the Participant's death, to his beneficiary:

(a) Subject to Section 6.030, any lump sum payments shall be paid within the sixty (60) day period following the close of the calendar year which includes the Participant's Separation from Service, Retirement or, if applicable, death.

(b) Subject to Section 6.030, each annual installment payable shall be paid within the sixty (60) day period following the close of each calendar year during the payment period, commencing with the calendar year following the year which includes the Participant's Retirement or, if applicable, death.

(c) Any lump sum payments which are to be made on account of the occurrence of a 409A Change of Control shall be made within forty-five (45) days following such 409A Change of Control.

(d) All distributions from the Stock Fund Sub-Accounts, whether in the form of lump sum or installment payments, shall be made in cash.

**2.070** A Participant shall have the right, at any time, to designate any person or persons and/or charity or charities as his beneficiary or beneficiaries (both principal as well as contingent) to whom distribution under this Plan shall be made in the event of his death prior to distribution of his Account. In the absence of such designation, the beneficiary designation filed by him under the Qualified Retirement Savings Plan shall be controlling, except that if the Participant has a spouse and his beneficiary designation under the Qualified Retirement Savings Plan specifies a beneficiary other than such spouse, such designation, to the extent permitted by applicable law, shall be effective under this Plan notwithstanding the fact that such spouse may not have consented to such designation as required by the Qualified Retirement Savings Plan.

**2.080** Each Participant shall receive a statement of his Account at the times and in the form in which his Qualified Retirement Savings Plan statement is provided.

**2.090** Notwithstanding any other provision of this Plan to the contrary, if a Participant dies prior to commencement of distribution of his Accounts under the Plan, such Accounts will be paid in a lump sum to his designated beneficiary within the sixty (60) day period following the close of the calendar year which includes the Participant’s death.

**2.100** Notwithstanding any other provision of this Plan to the contrary, if a Participant dies after the commencement of distribution of his Accounts under the Plan, such Accounts will be paid in the form elected by the Participant pursuant to Section 2.040.

## ARTICLE III

## CLAIMS PROCEDURE

**3.010** Any person claiming a right to participate in this Plan, claiming a benefit under this Plan or requesting information under this Plan shall present the claim or request in writing to the Committee or the person or entity designated by the Committee, who shall respond in writing within ninety (90) days following receipt of such request.

**3.020** If the claim or request is denied, the written notice of denial shall state:

(a) the reasons for denial;

(b) a description of any additional material or information required and an explanation of why it is necessary; and

(c) an explanation of this Plan's claim review procedure.

**3.030** Any person whose claim or request is denied may make a request for review by notice given in writing to the Committee.

**3.040** A decision on a request for review shall normally be made within ninety (90) days after the date of such request. If an extension of time is required for a hearing or other special circumstances, the claimant shall be notified and the time limit shall be extended by an additional sixty (60) days from the date of such request. The decision shall be in writing and shall be final and binding on all parties concerned.

## ARTICLE IV

## MISCELLANEOUS PROVISIONS

**4.010** The Board of Directors shall have the power to amend, suspend or terminate this Plan at any time, except that no such action shall adversely affect rights with respect to any Account without the consent of the person affected. Notwithstanding the foregoing, except as otherwise permitted by Section 409A, in the event of any termination of the Plan, any amounts payable under the Plan shall continue to be paid in accordance with the terms of the Plan in effect on the date of Plan termination.

**4.020** This Plan shall be interpreted and administered by the Committee; provided that interpretations by the Plan Administrator of those provisions of the Qualified Retirement Savings Plan which are also applicable to this Plan shall be binding on the Committee.

**4.030** This Plan is an unfunded employee benefit plan primarily for providing deferred compensation to a select group of management or highly compensated employees of the Company pursuant to the Compensation Limitation and is also, with respect to periods prior to January 1, 2019, an excess benefit plan (as defined by Section 3(36) of ERISA) with respect to the Annual Additions Limitation. This Plan is intended to be unfunded for tax purposes and for purposes of Title I of ERISA. Participants and their beneficiaries, estates, heirs, successors and assigns shall have no legal or equitable rights, interest or claims in any property or assets of the Company or any of its Affiliates. Any and all of the assets of the Company and its Affiliates shall be, and remain, the general, unpledged, unrestricted assets of the Company and its Affiliates. The Company’s and any Affiliate’s sole obligation under this Plan shall be merely that of an unfunded and unsecured promise of the Company or such Affiliate to pay money in the future.

**4.040** Neither a Participant nor any other person shall have any right to commute, sell, assign, transfer, pledge, anticipate, mortgage or otherwise encumber, transfer, hypothecate or convey, in advance of actual receipt, any interest in an Account. Each Account and all rights therein are and shall be nonassignable and nontransferable prior to actual distribution as provided by this Plan. Any such attempted assignment or transfer shall be ineffective with respect to the Company and with respect to any Affiliate, and the Company’s and any Affiliate’s sole obligation shall be to distribute Accounts to Participants, their beneficiaries or estates as appropriate. No part of any Account shall, prior to actual payment as provided by this Plan, be subject to seizure or sequestration for the payment of any debts, judgments, alimony or separate maintenance owed by a Participant or any other person, nor shall any Account be transferable by operation of law in the event of a Participant's or any other persons bankruptcy or insolvency, except as otherwise required by law.

**4.050** This Plan shall not be deemed to constitute a contract of employment between the Company or any of its Affiliates and any Participant, and no Participant, beneficiary or estate shall have any right or claim against the Company or any of its Affiliates under this Plan except as may otherwise be specifically provided in this Plan. Nothing in this Plan shall be deemed to give a Participant the right to be retained in the service of the Company or any Affiliate or to interfere with the right of the Company or any Affiliate to discipline, discharge or change the status of a Participant at any time.

**4.060** A Participant will cooperate with the Committee by furnishing any and all information requested by the Committee or its delegates in order to facilitate the distribution of his Accounts under this Plan and by taking such other action as may be reasonably requested by the Committee or its delegates.

**4.070** Subject to ERISA, the provisions of this Plan shall be construed and interpreted according to the laws of the State of Iowa. In the event that any provision of this Plan shall be held illegal or invalid for any reason, said illegality or invalidity shall not affect the remaining provisions of this Plan, which shall be construed and enforced as if such illegal or invalid provision were not included in this Plan. The provisions of this Plan shall bind and obligate the Company and its Affiliates and their successors, including, but not limited to, any corporate or other business entity which shall, whether by merger, consolidation, purchase or otherwise, acquire all or substantially all of the business and assets of the Company or its Affiliates and the successors of any such company or other business entity.

**4.080** The Company shall bear all expenses and costs in connection with the operation and administration of this Plan. The Company, its Affiliates, the Committee and any employee of the Company or any of its Affiliates shall be fully protected in relying in good faith on the computations and reports made pursuant to or in connection with this Plan by the independent certified public accountants who audit the Company's accounts.

**4.090** All words used in this Plan in the masculine gender shall be construed as if used in the feminine gender where appropriate. All words used in this Plan in the singular or plural shall be construed as if used in the plural or singular where appropriate.

## ARTICLE V

## TRUST

**5.010** **Establishment of the Trust** . The Company shall establish the Trust (which may be referred to herein as a "Rabbi Trust"). Upon the establishment of the Trust, the Company shall provide for the funding of the Trust in accordance with the terms of the Trust.

**5.020** **Interrelationship of the Plan and the Trust** . The provisions of the Plan will govern the rights of a Participant to receive distributions pursuant to the Plan. The provisions of the Trust will govern the rights of the Company and its Affiliates, Participants and the creditors of the Company and its Affiliates to the assets transferred to the Trust. The Company and each of its Affiliates employing any Participant will at all times remain liable to carry out their obligations under the Plan.

**5.030** **Distributions From the Trust** . The Company's and each of its Affiliate's obligations under the Plan may be satisfied with Trust assets distributed pursuant to the terms of the Trust, and any such distribution will reduce their obligations under this Plan.

**5.040** **Rabbi Trust** . The Rabbi Trust shall:

(a) be a non-qualified grantor trust which satisfies in all material respects the requirement of Revenue Procedure 92-64, 1992-2 CB 122 (or any successor Revenue Procedure or other applicable authority);

(b) be revocable; and

(c) provide that any successor trustee shall be a bank trust department or other party that may be granted corporate trustee powers under state law.

## ARTICLE VI

## SECTION 409A

**6.010** **Section 409A Generally**. This Plan is intended to comply with Section 409A. Notwithstanding any other provision of this Plan to the contrary, the Company makes no representation that this Plan or any amounts payable or benefits provided under this Plan will be exempt from or comply with Section 409A and makes no undertaking to preclude Section 409A from applying to this Plan.

**6.020** **Changes in Elections**. Notwithstanding any other provision of this Plan to the contrary, once an election is made pursuant to this Plan it shall be irrevocable unless all of the following conditions are met:

(a) the election to change the time or form of payment will not become effective until the date that is one year after the date on which the election to make the change is made;

(b) except with respect to any payment to be made upon the death of a Participant, the form of payment, as changed, will defer payment of the Participant's Account Balances until five (5) years later than the date that payment of such Participant's Accounts would otherwise have been made under this Plan; and

(c) with respect to a payment that is to be made upon a fixed date or schedule of dates, the election to change the form of payment is made no less than twelve (12) months before the date that payment of the Accounts was otherwise scheduled to be paid.

For purposes of Section 6.020(b) and (c), all payments scheduled to be made in the form of installments that are attributable to a particular Plan Year will be treated as scheduled to be made on the date that the first installment of such series of payments is otherwise scheduled to be made (that is, the installments will be treated as an entitlement to a single payment for purposes of Section 409A).

Once a change in election is made and recorded pursuant to the Plan, such election will be irrevocable unless all of the conditions of this Section 6.020 are met. Notwithstanding any other provision of this Plan to the contrary, a Participant will be permitted to make only one change in election pursuant to this Section 6.020 with respect to the Accounts to which such election relates.

**6.030** **Six Month Wait for Specified Employees**. Notwithstanding any other provision of this Plan to the contrary, to the extent that any Accounts payable under the Plan constitute an amount payable upon Separation from Service or Retirement to any Participant under the Plan who is deemed to be a Specified Employee, then such amount will not be paid during the six (6) month period following such Separation from Service or Retirement. If the provisions of this Section 6.030 apply to a Participant who incurs a Separation from Service or Retirement, within the first six (6) months of the calendar year, then such amount will be paid within the first sixty (60) days following the close of the calendar year which includes the Participant's Separation from Service or Retirement. If the provisions of this Section 6.030 apply to a Participant who incurs a Separation from Service or Retirement within the last six (6) months of the calendar year, then such amount will be paid within the first sixty (60) days after June 30th of the calendar year following the year in which includes the Participant's Separation from Service or Retirement.

**Exhibit 10.h.3**

# ROCKWELL COLLINS, INC.

## APPROVAL OF

## AMENDMENT #2

## to the

## ROCKWELL COLLINS

## 2005 NON-QUALIFIED PENSION PLAN

## (as Amended and Restated on May 18, 2012)

The undersigned, Laura A. Patterson, Vice President, Global Total Rewards & Labor Strategy, Rockwell Collins, Inc. (the "Company"), for and on behalf of the Company and pursuant to the authority provided to me by the Company's Senior Vice President of Human Resources and the Company's Compensation Committee hereby approves Amendment #2 to the Rockwell Collins 2005 Non-Qualified Pension Plan (as Amended and Restated on May 18, 2012) in the form attached hereto.

Dated this 17 th day of July, 2018.

/s/ Laura A. Patterson

Laura A. Patterson
Vice President
Global Total Rewards & Labor Strategy

**AMENDMENT #2**
**to the**
**ROCKWELL COLLINS**

**2005 NON-QUALIFIED PENSION PLAN**

**(as Amended and Restated on May 18, 2012)**

The Rockwell Collins 2005 Non-Qualified Pension Plan, as amended and restated on May 18, 2012 (the "Plan"), is hereby amended, effective July 17, 2018, in the following respects.

1. Section 1.170 is hereby amended in its entirety to read as follows:

**1.170** [Reserved]

2. Section 4.005 is hereby amended in its entirety to read as follows:

**4.005** This Plan shall be interpreted and administered by the Committee. All interpretations and decisions by the Committee in connection with the administration of the Plan shall be final, conclusive and binding on all Participants and any Beneficiary or other person claiming under or through any Participant, in the absence of clear and convincing evidence that the Committee acted arbitrarily and capriciously; provided that interpretations by the Plan Administrator of those provisions of the Company Pension Plan which are also applicable to this Plan shall be binding on the Committee.

The Committee shall have the authority to deviate from the literal terms of the Plan to the extent it shall determine necessary or appropriate to operate the Plan in compliance with the provisions of applicable law. Any individual serving on the Committee, or as Plan Administrator, who is a Participant will not vote or act on any matter relating solely to himself or herself.

3. Section 5.000 is hereby amended in its entirety to read as follows:

**5.000** **Establishment of the Trust** . The Company shall establish the Trust (which may be referred to herein as a "Rabbi Trust"). Upon the establishment of the Trust, the Company shall provide for the funding of the Trust in accordance with the terms of the Trust.

4. Section 5.040 is hereby amended in its entirety to read as follows:

**5.015** **Rabbi Trust** . The Rabbi Trust shall:

(a) be a non-qualified grantor trust which satisfies in all material respects the requirement of Revenue Procedure 92-64, 1992-2 CB 122 (or any successor Revenue Procedure or other applicable authority);

(b) be revocable; and

(c) provide that any successor trustee shall be a bank trust department or other party that may be granted corporate trustee powers under state law.

Exhibit 10.h.6

# ROCKWELL COLLINS, INC.

# APPROVAL OF

# AMENDMENT #2

# to the

# ROCKWELL COLLINS

# NON-QUALIFIED PENSION PLAN

# (as Amended and Restated effective January 1, 2005)

The undersigned, Laura A. Patterson, Vice President, Global Total Rewards & Labor Strategy, Rockwell Collins, Inc. (the "Company"), for and on behalf of the Company and pursuant to the authority provided to me by the Company's Senior Vice President of Human Resources and the Company's Compensation Committee hereby approves Amendment #2 to the Rockwell Collins Non-Qualified Pension Plan (as Amended and Restated effective January 1, 2005) in the form attached hereto.

Dated this 17 th day of July, 2018.

/s/ Laura A. Patterson

Laura A. Patterson
Vice President
Global Total Rewards & Labor Strategy

**AMENDMENT #2**
**to the**
**ROCKWELL COLLINS NON-QUALIFIED PENSION PLAN**

**(as Amended and Restated effective January 1, 2005)**

The Rockwell Collins Non-Qualified Pension Plan, as amended and restated effective January 1, 2005 (the "Plan"), is hereby amended, effective as of July 17, 2018, unless specified otherwise below, in the following respects.

1. Effective January 20, 2017, the amendment to the Plan that was mistakenly referred to as the Second Amendment, shall be amended to be the First Amendment to the Plan.

2. Section 1.180 is hereby amended in its entirety to read as follows:

   **1.180** [Reserved]

3. Section 4.020 is hereby amended in its entirety to read as follows:

   **4.020** This Plan shall be interpreted and administered by the Committee; provided that interpretations by the Plan Administrator of those provisions of the Company Pension Plan which are also applicable to this Plan shall be binding on the Committee.

4. Section 5.010 is hereby amended in its entirety to read as follows:

   **5.010** **Establishment of the Trust**. The Company shall establish the Trust (which may be referred to herein as a "Rabbi Trust"). Upon the establishment of the Trust, the Company shall provide for the funding of the Trust in accordance with the terms of the Trust.

5. Section 5.040 is hereby amended in its entirety to read as follows:

   **5.040** **Rabbi Trust**. The Rabbi Trust shall:

   (a) be a non-qualified grantor trust which satisfies in all material respects the requirement of Revenue Procedure 92-64, 1992-2 CB 122 (or any successor Revenue Procedure or other applicable authority);

   (b) be revocable; and

   (c) provide that any successor trustee shall be a bank trust department or other party that may be granted corporate trustee powers under state law.

**Exhibit 10.i.2**

# ROCKWELL COLLINS, INC.

# APPROVAL OF

# AMENDMENT #1

# to the

# ROCKWELL COLLINS MASTER TRUST -

# DEFERRED COMPENSATION AND NON-QUALIFIED SAVINGS AND NON-QUALIFIED PENSION PLANS

# (as Amended and Restated effective October 11, 2007)

The undersigned, Laura A. Patterson, Vice President, Global Total Rewards & Labor Strategy, Rockwell Collins, Inc. (the "Company"), for and on behalf of the Company and pursuant to the authority provided to me by the Company's Compensation Committee hereby approves Amendment #1 to the Rockwell Collins Master Trust - Deferred Compensation and Non-Qualified Savings and Non-Qualified Pension Plans (as Amended and Restated effective October 11, 2007) in the form attached hereto.

Dated this 18th day of July, 2018.

/s/ Laura A. Patterson

Laura A. Patterson
Vice President
Global Total Rewards & Labor Strategy

**WELLS FARGO BANK, N.A.**

**APPROVAL OF**

**AMENDMENT #1**

**to the**

**ROCKWELL COLLINS MASTER TRUST -**

**DEFERRED COMPENSATION AND NON-QUALIFIED SAVINGS AND NON-QUALIFIED PENSION PLANS**

**(as Amended and Restated effective October 11, 2007)**

The undersigned, Steven J. Gaglione, Vice President, Wells Fargo Bank, N.A. (the "Trustee"), for and on behalf of the Trustee and pursuant to the authority provided to me, hereby approves the Amendment #1 to the Rockwell Collins Master Trust - Deferred Compensation and Non-Qualified Savings and Non-Qualified Pension Plans (as Amended and Restated effective October 11, 2007) in the form attached hereto.

Dated this 18th day of July, 2018.

/s/ Steven J. Gaglione

Steven J. Gaglione
Vice President

**AMENDMENT #1**
**to the**
**ROCKWELL COLLINS MASTER TRUST -**

**DEFERRED COMPENSATION AND NON-QUALIFIED SAVINGS AND NON-QUALIFIED PENSION PLANS**

**(As Amended and Restated effective October 11, 2007)**

The Rockwell Collins Master Trust **-** Deferred Compensation and Non-Qualified Savings and Non-Qualified Pension Plans, as amended and restated effective October 11, 2007 (the "Trust"), is hereby amended, effective July 18, 2018, in the following respects.

1. Section 1(c) is amended in its entirety to read as follows:

(c) The Trust hereby established is revocable by the Company.

2. Section 1(f) is deleted and Section 1(g) is re-labelled accordingly.

3. Section 2(a) is amended by deleting the last sentence thereof.

4. Section 2(c) is amended by deleting the text ", prior to a Change of Control".

5. Section 5(e) is deleted.

6. Section 10 is amended in its entirety to read as follows:

Section 10. Resignation and Removal of the Trustee .

(a) The Trustee may resign at any time by written notice to the Company, which shall be effective ninety (90) days after receipt of such notice unless the Company and the Trustee agree otherwise.

(b) The Trustee may be removed by the Company on thirty (30) days' notice or upon shorter notice accepted by the Trustee.

(c) Upon resignation or removal of the Trustee and appointment of a successor Trustee, all assets shall subsequently be transferred to the successor Trustee. The transfer shall be completed within sixty (60) days after receipt of notice of resignation, removal or transfer, unless the Company extends the time limit.

(d) If the Trustee resigns or is removed, a successor shall be appointed, in accordance with Section 11 hereof, by the effective date of resignation or removal under paragraphs (a) or (b) of this section. If no such appointment has been made, the Trustee may apply to a court of competent jurisdiction for appointment of a successor or for instructions. All expenses of the Trustee in connection with the proceeding shall be allowed as administrative expenses of the Trust.

7. Section 11(b) is deleted and Section 11(c) is re-labelled accordingly.

8. Section 12(a) is amended in its entirety to read as follows:

(a) This Trust Agreement may be amended by a written instrument executed by the Trustee and the Company. Notwithstanding the foregoing, no such amendment shall conflict with the terms of any Plan, as determined by the Company. Notwithstanding any other provision of this Trust Agreement to the contrary, no amendment may be made to this Trust Agreement that would (i) result in the imposition of penalty taxes or other adverse tax consequences under Section 409A to any participant or beneficiary in any Plan, (ii) result in a "material modification" within the meaning of Section 409A with respect to any Pre-2005 Plan, (iii) otherwise cause any Pre-2005 Plan to become subject to Section 409A, or (iv) add any other plan that is not listed on Appendix A hereto.

9. Section 12(b) is deleted and Sections 12(c) and (d) are re-labelled accordingly.

10. Section 12(c) (after giving effect to the foregoing) is amended in its entirety to read as follows:

(c) The Company may terminate this Trust prior to the time all benefit payments under the Plan have been made. All assets in the Trust at termination shall be returned to the Company.

11. The term “Rockwell Collins Non-Qualified Retirement Plan” is hereby replaced with “Rockwell Collins Non-Qualified Pension Plan” where the former appears in Appendix A of the Trust.

12. The term “Rockwell Collins 2005 Non-Qualified Retirement Plan” is hereby replaced with “Rockwell Collins 2005 Non-Qualified Pension Plan” where the former appears in Appendix A of the Trust.

**Exhibit 10.j.2**

**Description of Short-Term Relocation Benefit Extension**

The Short-Term Relocation Benefit for the Company’s CEO, CFO and Two Other Executive Officers, which was filed as an Exhibit to the Company’s Form 10-Q for the period ending March 31, 2018, was extended in August for the CEO, CFO and one other executive officer. The extension covered up to an additional 4 months of relocation to December 2018 at a maximum monthly cost of $10,000 per month with a tax equalization calculated in the same manner as in detailed in the filed exhibit.

**Exhibit 21**

List of Subsidiaries of Rockwell Collins, Inc.

| Name | State/Country of Incorporation |
|---|---|
| ACCEL (Tianjin) Flight Simulation Co. Ltd. | China |
| ADARI Aviation Technology Company Limited | China |
| ADB Industries | California |
| Advanced Thermal Sciences Corporation | Delaware |
| Advanced Thermal Sciences Taiwan Corp. | Taiwan |
| Aeronautical Radio, Inc. | Delaware |
| Aerospace Lighting Corporation | New York |
| Air Routing International, L.P. | Texas |
| Air Routing LP, LLC | Delaware |
| AKS Aerospace, Inc. | Delaware |
| Altis Aero Systems LLC | Delaware |
| AO Rockwell Collins | Russia |
| AR Group GP, L.L.C. | Texas |
| ARINC (Asia Pacific) Pte. Ltd. | Singapore |
| ARINC (Barbados) Ltd. | Barbados |
| ARINC (Malaysia) SDN. BHD. | Malaysia |
| ARINC (Singapore) Pte. Ltd. | Singapore |
| ARINC (St.Lucia) Limited | St. Lucia |
| ARINC (Thailand) Limited | Thailand |
| ARINC Aeronautical Radio of Canada, Ltd. | Canada |
| ARINC Albania SHPK | Albania |
| ARINC Antigua Limited | Antigua & Barbuda |
| ARINC Aviation Technology Company Ltd. | China |
| ARINC Bulgaria EOOD | Bulgaria |
| ARINC Control and Information Systems, LLC | Delaware |
| ARINC Costa Rica S.R.L. | Costa Rica |
| ARINC de Colombia Ltda. | Colombia |
| ARINC de Mexico, S.A. de C.V. | Mexico |
| ARINC de Venezuela, S.A. | Venezuela |
| ARINC Direct, LLC | Delaware |
| ARINC do Brasil Servicos de Tecnologia em Sistemas Ltda. | Brazil |
| ARINC Incorporated | Delaware |
| ARINC Incorporated N.V. | St. Maarten |
| ARINC India Private Limited | India |
| ARINC Information Managment Services Tanzania Limited | Tanzania |
| ARINC International of Canada ULC | Canada |
| ARINC International, Inc. | Delaware |
| ARINC IRELAND LIMITED | Ireland |
| ARINC Kosovo SH.P.K. | Kosovo |
| ARINC Managed Services, LLC | Delaware |
| ARINC MAROC SARLAU | Morocco |
| ARINC New Zealand Limited | New Zealand |
| ARINC Overseas, LLC | Delaware |
| ARINC Peru S.A.C. | Peru |

| | |
|---|---|
| ARINC Republica Dominicana, S.R.L. | Dominican Republic |
| ARINC Romania S.R.L. | Romania |
| ARINC Saudi Arabia, LLC | Saudi Arabia |
| ARINC Servicos de Comunicacao e Gestao da Informacao Ltda. | Brazil |
| ARINC SISTEMAS AEROPORTAURIOS DE COLOMBIA S.A.S. | Colombia |
| ARINC solucije d.o.o. za trgovincu i usluge | Croatia |
| ARINC South Africa Proprietary Limited | South Africa |
| ARINC Trinidad and Tobago Limited | Trinidad And Tobago |
| ARINC Turkey Bilgi Yönetim Hizmetleri ve Ticaret Limited Şirketi | Turkey |
| ARINC Turks & Caicos Ltd. | Turks And Caicos Islands |
| ARINC Vietnam Co., Ltd. | Vietnam |
| ATS Japan Corp. | Japan |
| ATS Korea Co., Ltd. | Korea |
| AVIC Leihua Rockwell Collins Avionics Company | China |
| B E Aerospace (Hong Kong) Limited | Hong Kong |
| B E Aerospace DAe Systems Hispania S.L. | Spain |
| B/E Aerospace (Germany) GmbH | Germany |
| B/E Aerospace (UK) Limited | United Kingdom |
| B/E Aerospace Australia Pty Limited | Australia |
| B/E Aerospace B.V. | Netherlands |
| B/E Aerospace Canada Company | Canada |
| B/E Aerospace Fischer GmbH | Germany |
| B/E Aerospace Holdings GmbH | Germany |
| B/E Aerospace Limited | Canada |
| B/E Aerospace Machined Products, Inc. | Delaware |
| B/E Aerospace Pte. Ltd. | Singapore |
| B/E Aerospace S.r.l. | Italy |
| B/E Aerospace Shanghai Co., Ltd. | China |
| B/E Aerospace Systems GmbH | Germany |
| B/E Aerospace Thermal and Power Management Finance LLC | Delaware |
| B/E Aerospace, Inc. | Delaware |
| BE Aerospace (Netherlands) B.V. | Netherlands |
| BE Aerospace (UK) Europe Holdings Limited | United Kingdom |
| BE Aerospace Australia, Inc. | Delaware |
| BE Aerospace Canada, Inc. | Delaware |
| BE Aerospace El Salvador, Inc. | Delaware |
| BE Aerospace Global Holding B.V. | Netherlands |
| BE Aerospace Global Holdings Limited | United Kingdom |
| BE Aerospace Holdings (UK) Limited | United Kingdom |
| BE Aerospace International Holdings Limited | United Kingdom |
| BE Aerospace International Holdings, LLC | Delaware |
| BE Aerospace Investments Holdings II S.a r.l. | Luxembourg |
| BE Aerospace Investments Holdings Ltd. | Cayman Islands |
| BE Aerospace Thermal and Power Management Holdings (UK) Limited | United Kingdom |
| BE Aircraft Mexico, LLC | Delaware |
| BE Engineering Services India Private Limited | India |
| BE Intellectual Property, Inc. | Delaware |
| BEA (Barbados) DRE SRL | Barbados |
| BEA (Barbados) Global Holdings SRL | Barbados |
| BEA (Barbados) International Holdings SRL | Barbados |

| | |
|---|---|
| BEA Europe Holding LLC | Delaware |
| BEA Holding (USA) LLC | Delaware |
| BEA Jersey Limited | Jersey |
| Brazonics, Inc. | Delaware |
| Burns Aerospace Europe SARL | France |
| CGR/Thompson Industries, Inc. | California |
| Collins Aviation Maintenance Services (Shanghai) Limited | China |
| Collins Radio Company | Iowa |
| Data Link Solutions L.L.C. | Delaware |
| Emteq Corporate LLC | Delaware |
| Emteq Engineering LLC | Delaware |
| Emteq Enterprises, LLC | Delaware |
| EMTEQ Europe GmbH | Switzerland |
| Emteq International LLC | Delaware |
| Emteq LLC | Delaware |
| Ensambladores Electronicos de Mexico, S. de. R.L. de C.V. | Mexico |
| Flight Structures, Inc. | Washington |
| Intertrade, Limited | Iowa |
| J. A. Reinhardt & Co., Inc. | Pennsylvania |
| JAR Realty Holding, LLC | Delaware |
| Koninklijke Fabriek Inventum B.V. | Netherlands |
| Macrolink, Inc. | Delaware |
| Maine Electronics, Inc. | Delaware |
| NLX Holding Corporation | Delaware |
| Nordskog Industries, Inc. | California |
| Orion Defense Systems, Inc. | Delaware |
| Performance Metal Fabricators, Inc. | Illinois |
| PMI Enterprises, Inc. | Delaware |
| Pulse.Aero Limited | United Kingdom |
| Quest Flight Training Limited | United Kingdom |
| Radio Holdings, Inc. | Delaware |
| RICOMP Claims Management Corporation | Delaware |
| Rockwell Collins - ESA Vision Systems, LLC | Delaware |
| Rockwell Collins (India) Enterprises Private Limited | India |
| Rockwell Collins (Shanghai) Avionics Trading Company Limited | China |
| Rockwell Collins Asia-PAC Holdings LLC | Delaware |
| Rockwell Collins Australia Pty Limited | Australia |
| Rockwell Collins Business Services, LLC | Delaware |
| Rockwell Collins Canada, Inc. | Canada |
| Rockwell Collins CETC Avionics Co., Ltd. | China |
| Rockwell Collins Control Technologies, Inc. | Delaware |
| Rockwell Collins de Colombia SAS | Colombia |
| Rockwell Collins Deutschland GmbH | Germany |
| Rockwell Collins Deutschland Holdings GmbH | Germany |
| Rockwell Collins do Brasil Ltda. | Brazil |
| Rockwell Collins EUMEA Holdings SAS | France |
| Rockwell Collins France S.A.S | France |
| Rockwell Collins Global Logistics Solutions LLC | Delaware |
| Rockwell Collins India Private Limited | India |
| Rockwell Collins In-Flight Network Company | Delaware |

| | |
|---|---|
| Rockwell Collins Information Management Services (Cayman) Ltd. | Cayman Islands |
| Rockwell Collins International Financing S.a r.l. | Luxembourg |
| Rockwell Collins International Holdings S.á r.l. | Luxembourg |
| Rockwell Collins International, Inc. | Texas |
| Rockwell Collins Latin America Holdings S.a r.l. | Luxembourg |
| Rockwell Collins Leasing LLC | Delaware |
| Rockwell Collins Mexico Holdings LLC | Delaware |
| Rockwell Collins Network Enabling Software, Inc. | Pennsylvania |
| Rockwell Collins Optronics, Inc. | California |
| Rockwell Collins Prescription Center, Inc. | Delaware |
| Rockwell Collins Public Safety Solutions, Inc. | Delaware |
| Rockwell Collins Saudi Arabia Limited | Saudi Arabia |
| Rockwell Collins Services Company | Delaware |
| Rockwell Collins Simulation & Training Solutions LLC | Delaware |
| Rockwell Collins Southeast Asia Pte. Ltd. | Singapore |
| Rockwell Collins Support Company | Delaware |
| Rockwell Collins Sweden AB | Sweden |
| Rockwell Collins Systems International, Inc. | Delaware |
| Rockwell Collins Technologies LLC | Delaware |
| Rockwell Collins UK Limited | United Kingdom |
| Rockwell Collins Vision Systems, Inc. | California |
| Rockwell Collins, Inc. | Nevada |
| Sandy Bay Machine, Inc. | Delaware |
| Sonic.Aero Limited | United Kingdom |
| SWAP | United Kingdom |
| SWAP (One) Limited | United Kingdom |
| Thermal Solutions LLC | Delaware |
| TSI Group, Inc. | Delaware |
| Vision Systems International LLC | California |
| WASP Membranes Limited | United Kingdom |
| Wessex Advanced Switching Products Limited | United Kingdom |
| Woven Electronics, LLC | South Carolina |

**Exhibit 23**

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in Registration Statement Nos. 333-63100, 333-63120, 333-102047, 333-132764, 333-160384, 333-165235, 333-186532, 333-201892 and 333-222843 on Form S-8 and Nos. 333-63142 and 333-216736 on Form S-3 of our reports dated November 26, 2018, relating to the consolidated financial statements of Rockwell Collins, Inc. and subsidiaries (the "Company"), and the effectiveness of the Company's internal control over financial reporting, appearing in this Annual Report on Form 10-K of the Company for the year ended September 28, 2018.

/s/ Deloitte & Touche LLP

Chicago, Illinois
November 26, 2018

**Exhibit 24**

POWER OF ATTORNEY

I, the undersigned Director of Rockwell Collins, Inc., a Delaware corporation (the "Company"), hereby constitute ROBERT J. PERNA **,** PATRICK E. ALLEN and TATUM J. BUSE, and each of them singly, my true and lawful attorneys with full power to them and each of them to sign for me, and in my name and in the capacity or capacities indicated below, the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2018, and any amendments thereto.

| Signature | Title | Date |
|---|---|---|
| /s/ Robert K. Ortberg<br>Robert K. Ortberg | Chairman, President and Chief Executive Officer | November 26, 2018 |
| /s/ Anthony J. Carbone<br>Anthony J. Carbone | Director | November 26, 2018 |
| /s/ Chris A Davis<br>Chris A. Davis | Director | November 26, 2018 |
| /s/ Ralph E. Eberhart<br>Ralph E. Eberhart | Director | November 26, 2018 |
| /s/ John A. Edwardson<br>John A. Edwardson | Director | November 26, 2018 |
| /s/ Richard G. Hamermesh<br>Richard G. Hamermesh | Director | November 26, 2018 |
| /s/ David Lilley<br>David Lilley | Director | November 26, 2018 |
| /s/ Andrew J. Policano<br>Andrew J. Policano | Director | November 26, 2018 |
| /s/ Cheryl L. Shavers<br>Cheryl L. Shavers | Director | November 26, 2018 |
| /s/ Jeffrey L. Turner<br>Jeffrey L. Turner | Director | November 26, 2018 |

**Exhibit 31.1**

CERTIFICATION

I, Robert K. Ortberg, Chairman, President and Chief Executive Officer of Rockwell Collins, Inc., certify that:

1. I have reviewed the annual report on Form 10-K for the fiscal year ended September 30, 2018 of Rockwell Collins, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: November 26, 2018

/s/ Robert K. Ortberg

Robert K. Ortberg

Chairman, President and Chief Executive Officer

**Exhibit 31.2**

CERTIFICATION

I, Patrick E. Allen, Senior Vice President and Chief Financial Officer of Rockwell Collins, Inc., certify that:

1. I have reviewed the annual report on Form 10-K for the fiscal year ended September 30, 2018 of Rockwell Collins, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: November 26, 2018

/s/ Patrick E. Allen

Patrick E. Allen
Senior Vice President and
Chief Financial Officer

**Exhibit 32.1**

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

In connection with the Annual Report of Rockwell Collins, Inc. (the Company) on Form 10-K for the fiscal year ended September 30, 2018 (the Report) filed with the Securities and Exchange Commission, I, Robert K. Ortberg, Chairman, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Company’s Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

| | | |
|---|---|---|
| Date: | November 26, 2018 | /s/ Robert K. Ortberg |
| | | Robert K. Ortberg |
| | | Chairman, President and Chief Executive Officer |

**Exhibit 32.2**

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

In connection with the Annual Report of Rockwell Collins, Inc. (the Company) on Form 10-K for the fiscal year ended September 30, 2018 (the Report) filed with the Securities and Exchange Commission, I, Patrick E. Allen, Senior Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Company's Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 26, 2018

/s/ Patrick E. Allen

Patrick E. Allen
Senior Vice President and
Chief Financial Officer