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

FORM 10-K

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

For the fiscal year ended December 31, 2016

Commission file number 1-812

UNITED TECHNOLOGIES CORPORATION
(Exact name of registrant as specified in its charter)

DELAWARE	**06-0570975**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
10 Farm Springs Road, Farmington, Connecticut	**06032**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code (860) 728-7000

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

Title of each class	Name of each exchange on which registered
Common Stock ($1 par value) (CUSIP 913017 10 9)	**New York Stock Exchange**
1.250% Notes due 2023 (CUSIP U91301 AD0)	**New York Stock Exchange**
1.125% Notes due 2021 (CUSIP 913017 CD9)	**New York Stock Exchange**
1.875% Notes due 2026 (CUSIP 913017 CE7)	**New York Stock Exchange**
Floating Rate Notes due 2018 (CUSIP 913017 CC1)	**New York Stock Exchange**

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§232.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes ☐ No ☒

The aggregate market value of the voting Common Stock held by non-affiliates at June 30, 2016 was approximately $85,789,321,218, based on the New York Stock Exchange closing price for such shares on that date. For purposes of this calculation, the Registrant has assumed that its directors and executive officers are affiliates.

At January 31, 2017, there were 805,861,740 shares of Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Parts I, II and IV hereof incorporate by reference portions of the United Technologies Corporation 2016 Annual Report to Shareowners. Part III hereof incorporates by reference portions of the United Technologies Corporation Proxy Statement for the 2017 Annual Meeting of Shareowners.

**UNITED TECHNOLOGIES CORPORATION
AND SUBSIDIARIES**

**Index to Annual Report
on Form 10-K for
Year Ended December 31, 2016**

UNITED TECHNOLOGIES CORPORATION

Annual Report on Form 10-K for
Year Ended December 31, 2016

Whenever reference is made in this Form 10-K to specific sections of United Technologies Corporation's 2016 Annual Report to Shareowners (2016 Annual Report), those sections are incorporated herein by reference and are included in Exhibit 13 to this Form 10-K. United Technologies Corporation and its subsidiaries' names, abbreviations thereof, logos, and product and service designators are all either the registered or unregistered trademarks or tradenames of United Technologies Corporation and its subsidiaries. Names, abbreviations of names, logos, and product and service designators of other companies are either the registered or unregistered trademarks or tradenames of their respective owners. As used herein, the terms "we," "us," "our," "the Company," or "UTC," unless the context otherwise requires, mean United Technologies Corporation and its subsidiaries. References to internet web sites in this Form 10-K are provided for convenience only. Information available through these web sites is not incorporated by reference into this Form 10-K.

PART I

Item 1. Business

General

United Technologies Corporation was incorporated in Delaware in 1934. UTC provides high technology products and services to the building systems and aerospace industries worldwide. Growth is attributable primarily to the internal development of our existing businesses and to acquisitions. The following description of our business should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our 2016 Annual Report, including the information contained therein under the heading "Business Overview."

Our operations for the periods presented herein are classified into four segments: Otis, UTC Climate, Controls & Security, Pratt & Whitney, and UTC Aerospace Systems, with each segment comprised of groups of similar operating companies. References to each segment include the various operating companies established worldwide through which the operations for each segment are conducted.

Otis and UTC Climate, Controls & Security (collectively, referred to as the "commercial businesses") serve customers in the commercial, government, infrastructure and residential property sectors and transport and refrigeration businesses worldwide. Pratt & Whitney and UTC Aerospace Systems (collectively referred to as the "aerospace businesses") primarily serve commercial and government customers in both the original equipment and aftermarket parts and services markets of the aerospace industry. For 2016, our commercial and industrial sales (generated principally by the commercial businesses) were approximately 50 percent of our consolidated sales, and our commercial aerospace sales and military aerospace sales (generated exclusively by our aerospace businesses) were approximately 38 percent and 12 percent, respectively, of our consolidated sales. International sales for 2016, including U.S. export sales, were 61 percent of our total segment sales.

This Form 10-K and our quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports are available free of charge through the Investor Relations section of our Internet website (http://www.utc.com) under the heading "SEC Filings" as soon as reasonably practicable after these reports are electronically filed with, or furnished to, the Securities and Exchange Commission (SEC). Our SEC filings are also available for reading and copying at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site (http://www.sec.gov) containing reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

Description of Business by Segment

Each segment's business, including its principal products and services and other material developments and information, is described below. Segment financial data for the years 2014 through 2016, including financial information about foreign and domestic operations and export sales, appears in Note 19 to the Consolidated Financial Statements in our 2016 Annual Report. Segment sales as discussed below include intercompany sales, which are ultimately eliminated within the "Eliminations and other" category as reflected in the segment financial data in Note 19 to the Consolidated Financial Statements in our 2016

Annual Report. Similarly, total segment backlog as discussed below includes intercompany backlog, as well as fully-funded government orders.

Otis

Otis is the world’s largest elevator and escalator manufacturing, installation and service company. Otis designs, manufactures, sells and installs passenger and freight elevators for low-, medium- and high-speed applications, as well as a broad line of escalators and moving walkways. In addition to new equipment, Otis provides modernization products to upgrade elevators and escalators as well as maintenance and repair services for both its products and those of other manufacturers. Otis serves customers in the commercial and residential property industries around the world. Otis sells directly to the end customer and through sales representatives and distributors.

Sales generated by Otis’ international operations were 75 percent and 77 percent of total Otis segment sales in 2016 and 2015, respectively. At December 31, 2016, Otis’ backlog was $14.9 billion as compared to $15.0 billion at December 31, 2015. Of the total Otis backlog at December 31, 2016, approximately $7.9 billion is expected to be realized as sales in 2017.

UTC Climate, Controls & Security

UTC Climate, Controls & Security is a leading provider of heating, ventilating, air conditioning (HVAC) and refrigeration solutions, including controls for residential, commercial, industrial and transportation applications. These products and services are sold under the Carrier name and other brand names to building contractors and owners, homeowners, transportation companies, retail stores and food service companies. UTC Climate, Controls & Security is also a global provider of security and fire safety products and services. UTC Climate, Controls & Security provides electronic security products, such as intruder alarms, access control systems and video surveillance systems, and designs and manufactures a wide range of fire safety products, including specialty hazard detection and fixed suppression products, portable fire extinguishers, and fire detection and life safety systems. Services provided to the electronic security and fire safety industries include design, installation, system integration, repair, maintenance, monitoring and inspection services. In certain markets, UTC Climate, Controls & Security also provides monitoring and response services, to complement its electronic security and fire safety businesses.

UTC Climate, Controls & Security sells directly to end customers and through joint ventures, manufacturer's representatives, distributors, wholesalers, dealers and retail outlets. Through its venture with Watsco, Inc., UTC Climate, Controls & Security distributes Carrier, Bryant, Payne and Totaline residential and light commercial HVAC products in certain parts of the U.S., Canada and certain territories in the Caribbean and Latin America. Certain UTC Climate, Controls & Security HVAC businesses are seasonal and sales and service activity can be impacted by weather. UTC Climate, Controls & Security customarily offers its customers incentives to purchase products to ensure an adequate supply of its products in the distribution channels. The principal incentive program provides reimbursements to distributors for offering promotional pricing on UTC Climate, Controls & Security products. UTC Climate, Controls & Security products and services are used by governments, financial institutions, architects, building owners and developers, security and fire consultants, homeowners and other end-users requiring a high level of security and fire protection for their businesses and residences. UTC Climate, Controls & Security provides its security and fire safety products and services under Chubb, Kidde and other brand names and sells directly to customers as well as through manufacturer's representatives, distributors, dealers and U.S. retail distribution.

Sales generated by UTC Climate, Controls & Security’s international operations, including U.S. export sales, were 55 percent and 56 percent of total UTC Climate, Controls & Security segment sales in 2016 and 2015, respectively. At December 31, 2016, UTC Climate, Controls & Security’s backlog was $3.2 billion as compared to $3.1 billion at December 31, 2015. Substantially all of the backlog at December 31, 2016 is expected to be realized as sales in 2017.

Pratt & Whitney

Pratt & Whitney is among the world’s leading suppliers of aircraft engines for the commercial, military, business jet and general aviation markets. Pratt & Whitney also provides fleet management services and aftermarket maintenance, repair and overhaul services, including the sale of spare parts and auxiliary power units. Pratt & Whitney produces and develops families of large engines for wide- and narrow-body and large regional aircraft in the commercial market and for fighter, bomber, tanker and transport aircraft in the military market. Pratt & Whitney Canada (P&WC) is a world leader in the production of engines powering general and business aviation, as well as regional airline, utility and military, airplanes and helicopters.

In view of the risks and costs associated with developing new engines, Pratt & Whitney has entered into collaboration arrangements in which sales, costs and risks are shared with third parties. At December 31, 2016, the interests of third party participants in Pratt & Whitney-directed commercial jet engine programs ranged from approximately 14 percent to 50 percent. See Note 1 to the Consolidated Financial Statements in our 2016 Annual Report for a description of our accounting for collaborative arrangements. In addition, Pratt & Whitney has interests in other engine programs, including a 50 percent ownership interest in the Engine Alliance (EA), a joint venture with GE Aviation, which markets and manufactures the GP7000 engine for the Airbus A380 aircraft. Pratt & Whitney has entered into risk and revenue sharing arrangements with third parties for 40 percent of the products and services that Pratt & Whitney is responsible for providing to the EA. Pratt & Whitney accounts for its interests in the EA joint venture under the equity method of accounting. Pratt & Whitney continues to pursue additional collaboration partners.

Pratt & Whitney holds a net 61 percent program share interest in the IAE International Aero Engines AG (IAE) collaboration with MTU Aero Engines AG (MTU) and Japanese Aero Engines Corporation (JAEC). As previously reported in June 2012, Rolls-Royce sold its collaboration interest in IAE to Pratt & Whitney, while also entering into an agreement to license its V2500 intellectual property to Pratt & Whitney. Rolls-Royce continues to support the program as a strategic supplier for the V2500 engine and continues to manufacture parts and assemble engines. Pratt & Whitney also holds a 59 percent program share interest in the International Aero Engines, LLC (IAE LLC) collaboration with MTU and JAEC. IAE LLC sells the PW1100G-JM engine for the Airbus A320neo aircraft and the PW1400G-JM engine for the Irkut MC21 aircraft.

Pratt & Whitney is under contract with the U.S. Government's F-35 Joint Program Office to produce, and sustain the F135 engine, a derivative of Pratt & Whitney’s F119 engine, to power the single-engine F-35 Lightning II aircraft (commonly known as the Joint Strike Fighter) being produced by Lockheed Martin. The two F135 propulsion system configurations for the F-35A/F-35C and F-35B jets are certified for production and in use by the U.S. Air Force and the U.S. Marine Corps. F135 engines are also used on F-35 aircraft purchased by Joint Strike Fighter partner countries and foreign military sales countries.

In addition, Pratt & Whitney has developed the PurePower® PW1000G Geared TurboFan engine which entered into service in January 2016 and is intended to enable it to power both currently-proposed and future aircraft. The PurePower® PW1000G engine has demonstrated a significant reduction in fuel burn and noise levels with lower environmental emissions and operating costs than current production engines. Airbus has selected the PW1100G-JM engine, a member of the PurePower® PW1000G engine family, as a new engine option to power its A320neo family of aircraft, which entered into service in January 2016. The PW1100G-JM is being produced and sold as part of a collaboration with MTU and JAEC. Additionally, PurePower® PW1000G engine models have been selected by Bombardier to power the new CSeries passenger aircraft, Mitsubishi Aircraft Corporation to power the new Mitsubishi Regional Jet, Irkut Corporation to power the new Irkut MC-21 passenger aircraft and Embraer to power the next generation of Embraer’s E-Jet family of aircraft. In October 2014, Gulfstream announced the selection of the PurePower® PW 800 engine to exclusively power Gulfstream’s new G500 and G600 business jets scheduled to enter service in 2018. The CSeries (CS100) aircraft, designed to carry 100 to 133 passengers, was certified in December 2015. The larger CSeries (CS300) aircraft, designed to carry up to 160 passengers, was certified in July 2016. The Irkut MC-21 and Embraer’s next generation of E-Jet family aircraft are scheduled to enter service in 2018. The Mitsubishi Regional Jet is scheduled to enter service in 2020. The success of these aircraft and the PurePower® family of engines is dependent upon many factors including technological accomplishments, program execution, aircraft demand, and regulatory approval. Based on these factors, as well as the level of success of aircraft program launches by aircraft manufacturers and other conditions, additional investment in the PurePower® program may be required. P&WC has developed and certified the PW210 engine family for helicopters manufactured by Sikorsky and Leonardo Helicopters. Pratt & Whitney continues to enhance its programs through performance improvement measures and product base expansion.

Pratt & Whitney’s products are sold principally to aircraft manufacturers, airlines and other aircraft operators, aircraft leasing companies and the U.S. and foreign governments. Pratt & Whitney’s products and services must adhere to strict regulatory and market-driven safety and performance standards. The frequently changing nature of these standards, along with the long duration of aircraft engine development, production and support programs, creates uncertainty regarding engine program profitability. Sales to Airbus (Pratt & Whitney’s largest customer by sales) were 34 percent and 39 percent of total Pratt & Whitney segment sales in 2016 and 2015, respectively, before taking into account discounts or financial incentives offered to customers. Sales to the U.S. Government were 21 percent of total Pratt & Whitney segment sales in both 2016 and 2015.

Sales generated by Pratt & Whitney’s international operations, including U.S. export sales, were 63 percent and 60 percent of total Pratt & Whitney segment sales in 2016 and 2015, respectively. At December 31, 2016, Pratt & Whitney’s backlog was $61.8 billion, including $6.4 billion of U.S. Government-funded contracts and subcontracts. At December 31, 2015, these amounts were $52.5 billion and $4.4 billion, respectively. Of the total Pratt & Whitney backlog at December 31, 2016, approximately $10.5 billion is expected to be realized as sales in 2017. Pratt & Whitney’s backlog includes certain contracts for which actual costs may ultimately exceed total sales. Pratt & Whitney’s backlog excludes orders for new commercial engines that have not yet received aviation authority engine certification. The PurePower® PW1100G-JM engine completed Federal Aviation Agency (FAA) certification for the Airbus A320neo platform on December 19, 2014 and entered into service in January 2016. The CSeries (CS100) aircraft was certified in December 2015, and the larger CSeries (CS300) aircraft was certified in July 2016. See Note 1 to the Consolidated Financial Statements in our 2016 Annual Report for a description of our accounting for long-term contracts.

UTC Aerospace Systems

UTC Aerospace Systems is a leading global provider of technologically advanced aerospace products and aftermarket service solutions for aircraft manufacturers, airlines, regional, business and general aviation markets, military, space and undersea operations. UTC Aerospace Systems' product portfolio includes electric power generation, power management and distribution systems, air data and aircraft sensing systems, engine control systems, intelligence, surveillance and reconnaissance systems, engine components, environmental control systems, fire and ice detection and protection systems, propeller systems, engine nacelle systems, including thrust reversers and mounting pylons, interior and exterior aircraft lighting, aircraft seating and cargo systems, actuation systems, landing systems, including landing gear, wheels and brakes, and space products and subsystems. Aftermarket services include spare parts, overhaul and repair, engineering and technical support and fleet management solutions. UTC Aerospace Systems sells aerospace products to aircraft manufacturers, airlines and other aircraft operators, the U.S. and foreign governments, maintenance, repair and overhaul providers, and independent distributors. UTC Aerospace Systems' largest customers are Boeing and Airbus with a combined 34 percent and 31 percent of total UTC Aerospace Systems segment sales in 2016 and 2015, respectively. Sales to the U.S. Government were 17 percent and 19 percent of total UTC Aerospace Systems segment sales in 2016 and 2015, respectively.

In 2016, UTC Aerospace Systems' products supported first flights of the Boeing 737MAX, Embraer E190-E2, Global 7000, Airbus A350-1000, and Gulfstream G600. In addition, UTC Aerospace Systems' products supported the certification of the Bombardier CSeries (CS300), the Dassault Falcon 8X as well as the Initial Operational Capability (IOC) of the F-35.

Significant product development activity continues, including major systems for the Embraer E2, the Airbus A350-1000, the Boeing 777X and 787-10, the COMAC C919, the Mitsubishi Regional Jet, the Bombardier Global 7000 aircraft and the Irkut MC21 aircraft. UTC Aerospace Systems is also the operations support prime contractor for NASA's space suit/life support system and produces environmental monitoring and control, life support, power management and distribution, and thermal control systems for the International Space Station and the Orion crew exploration vehicle.

Sales generated by UTC Aerospace Systems' international operations, including U.S. export sales, were 56 percent and 54 percent of total UTC Aerospace Systems segment sales in 2016 and 2015, respectively. At December 31, 2016, UTC Aerospace Systems' backlog was $13.4 billion, including $2.4 billion of U.S. Government-funded contracts and subcontracts. At December 31, 2015, these amounts were $13.2 billion and $2.6 billion, respectively. The 2015 amounts have been revised to reflect the total projected revenues under the term of existing long-term aftermarket contracts. Of the total UTC Aerospace Systems backlog at December 31, 2016, approximately $7.3 billion is expected to be realized as sales in 2017.

Other Matters Relating to Our Business as a Whole

Competition and Other Factors Affecting Our Businesses

As worldwide businesses, our operations can be affected by a variety of economic, industry and other factors, including those described in this section, in "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our 2016 Annual Report, in Item 1, "Cautionary Note Concerning Factors That May Affect Future Results," and in Item 1A, "Risk Factors" in this Form 10-K. Each business unit is subject to significant competition from a large number of companies in the U.S. and other countries, and each competes on the basis of price, delivery schedule, product performance and service.

Our aerospace businesses are subject to substantial competition from domestic manufacturers, foreign manufacturers (whose governments sometimes provide research and development assistance, marketing subsidies and other assistance for certain of their commercial products beyond the assistance that may be available in the U.S.) and companies that obtain regulatory agency approval to manufacture spare parts. In particular, Pratt & Whitney experiences intense competition for new commercial airframe/engine combinations. Engine suppliers may offer substantial discounts and other financial incentives, performance and operating cost guarantees, and participation in financing arrangements, in an effort to compete for the aftermarket associated with these engines. For information regarding customer financing commitments, participation in guarantees of customer financing arrangements and performance and operating cost guarantees, primarily related to Pratt & Whitney, see Notes 5 and 17 to the Consolidated Financial Statements in our 2016 Annual Report. Customer selections of engines and components can also have a significant impact on later sales of parts and services. In addition, the U.S. Government's and other governments' policies of purchasing parts from suppliers other than the original equipment manufacturer affect military spare parts sales. Significant elements of our aerospace businesses, such as spare parts sales for engines and aircraft in service, have short lead times. Therefore, backlog information may not be indicative of future demand. Pratt & Whitney's major competitors in the sale of engines are GE Aviation, Honeywell, Turbomeca, and CFM International.

Research and Development

Because changes in technology can have a significant impact on our operations and competitive position, we spend substantial amounts of our own funds on research and development. These expenditures, which are charged to expense as incurred, were $2.3 billion or 4.1 percent of total sales in 2016 and 2015, and $2.5 billion or 4.3 percent of total sales in 2014. We also perform research and development work under contracts funded by the U.S. Government and other customers. Costs incurred under this contract research and development, which is performed in our aerospace businesses, amounted to $1.4 billion in 2016, as compared to $1.5 billion in 2015 and $2.0 billion in 2014. These contract research and development costs include amounts that are expensed as incurred, through cost of products sold, and amounts that are capitalized into inventory to be subsequently recovered through production shipments. Total contract research and development costs of $1.4 billion, $1.6 billion and $2.0 billion were expensed through cost of products sold in 2016, 2015 and 2014, respectively.

U.S. Government Contracts

Contracting with the U.S. Government entails certain unique risks. U.S. Government contracts are subject to termination by the government, either for the convenience of the government or for default in the event of our failure to perform under the applicable contract. In the case of a termination for convenience, we would normally be entitled to reimbursement for our allowable costs incurred, plus termination costs and a reasonable profit. If terminated by the government as a result of our default, we could be liable for additional costs the government incurs in acquiring undelivered goods or services from another source and any other damages it suffers. Most of our U.S. Government sales are made under fixed-price type contracts, while approximately $1.6 billion or 3 percent of our total sales for 2016 were made under cost-reimbursement type contracts.

Our contracts with the U.S. Government are also subject to audits. Like many defense contractors, we have received audit reports, which recommend that certain contract prices should be reduced, or that certain payments should be delayed or withheld, to comply with various government regulations, including reports alleging that cost or pricing data we submitted in negotiation of the contract prices or cost accounting practices may not have conformed to government regulations. Some of these audit reports involved substantial amounts. We have made voluntary refunds in those cases we believe appropriate, have settled some allegations and, in some cases, continue to negotiate with the government and/or litigate. For further discussion of risks related to government contracting, Item 1A, "Risk Factors" and Item 3, "Legal Proceedings," in this Form 10-K and Note 18 to the Consolidated Financial Statements in our 2016 Annual Report.

Compliance with Environmental and Other Government Regulations

Our operations are subject to and affected by environmental regulation by federal, state and local authorities in the U.S. and regulatory authorities with jurisdiction over our foreign operations. We have incurred and will likely continue to incur liabilities under various government statutes for the cleanup of pollutants previously released into the environment. We do not anticipate that compliance with current provisions relating to the protection of the environment or that any payments we may be required to make for cleanup liabilities will have a material adverse effect upon our cash flows, competitive position, financial condition or results of operations. Environmental matters are further addressed in "Management’s Discussion and Analysis of Financial Condition and Results of Operations" and Notes 1 and 18 to the Consolidated Financial Statements in our 2016 Annual Report.

Most of the U.S. laws governing environmental matters include criminal provisions. If we were convicted of a violation of the federal Clean Air Act or Clean Water Act, the facility or facilities involved in the violation would be ineligible to be used in performing any U.S. Government contract we are awarded until the Environmental Protection Agency thereafter certifies that the condition giving rise to the violation had been corrected.

In addition, we could be affected by future laws or regulations imposed in response to concerns over climate change. Changes in climate change concerns, or in the regulation of such concerns, including greenhouse gas emissions, could subject us to additional costs and restrictions, including compliance costs and increased energy and raw materials costs.

We conduct our businesses through subsidiaries and affiliates worldwide. Changes in legislation or government policies can affect our worldwide operations. For example, governmental regulation of refrigerants and energy efficiency standards and fire safety regulations are important to our UTC Climate, Controls & Security businesses, and elevator safety codes are important to the businesses of Otis, while government safety and performance regulations, restrictions on aircraft engine noise and emissions and government procurement practices can impact our aerospace businesses.

U.S. laws, regulations, orders, and other measures concerning the export or re-export of products, software, services and technology to, and other trade-related activities involving, non-U.S. countries and parties affect the operations of UTC and its affiliates.

For further discussion of risks related to environmental matters and other government regulations, see Item 1A, "Risk Factors" and Item 3, "Legal Proceedings," in this Form 10-K and Note 18 to the Consolidated Financial Statements in our 2016 Annual Report.

Intellectual Property and Raw Materials and Supplies

We maintain a portfolio of patents, trademarks, copyrights, trade secrets, licenses and franchises related to our businesses. While we believe we have taken reasonable measures to protect this portfolio, our efforts may not be sufficient. See Item 1A "Risk Factors" in this Form 10-K for further discussion of intellectual property matters.

We believe we have adequate sources for our purchases of materials, components, services and supplies used in our manufacturing. We work continuously with our supply base to ensure an adequate source of supply and to reduce costs. We pursue cost reductions through a number of mechanisms, including consolidating our purchases, reducing the number of suppliers, strategic global sourcing and using bidding competitions among potential suppliers. In some instances, we depend upon a single source of supply or participate in commodity markets that may be subject to allocations of limited supplies by suppliers. Like other users in the U.S., we are largely dependent upon foreign sources for certain raw materials requirements, such as cobalt, tantalum, chromium, rhenium and nickel. We have a number of ongoing programs to manage this dependence and the accompanying risk, including long-term agreements and the conservation of materials through scrap reclamation and new manufacturing processes. We believe that our supply management practices are based on an appropriate balancing of the foreseeable risks and the costs of alternative practices. Although at times high prices for some raw materials important to our businesses (for example, steel, copper, aluminum, titanium and nickel) have caused margin and cost pressures, we do not foresee near term unavailability of materials, components or supplies that would have a material adverse effect on our competitive position, results of operations, cash flows or financial condition. For further discussion of the possible effects of the cost and availability of raw materials on our business, see Item 1A, "Risk Factors" in this Form 10-K.

Employees and Employee Relations

At December 31, 2016, our total number of employees was approximately 202,000, of which approximately 68 percent represents employees based outside the U.S. During 2016, we negotiated or concluded eight domestic collective bargaining agreements, the largest of which covered certain workers at Pratt & Whitney’s facilities in East Hartford and Middletown, Connecticut. In 2017, numerous collective bargaining agreements are subject to renegotiation, the largest of which covers certain workers at Otis across the U.S. Although some previous contract renegotiations have had a significant impact on our financial condition or results of operations, we do not anticipate that the renegotiation of these contracts in 2017 will have a material adverse effect on our competitive position, cash flows, financial condition or results of operations. For discussion of the effects of our restructuring actions on employment, see Item 1A, "Risk Factors" in this Form 10-K and under "Management’s Discussion and Analysis of Financial Condition and Results of Operations" and Note 13 to the Consolidated Financial Statements in our 2016 Annual Report.

For a discussion of other matters which may affect our competitive position, cash flows, financial condition or results of operations, including the risks of our international operations, see the further discussion under the headings "General" and "Description of Business by Segment" in this section, Item 1A, "Risk Factors" in this Form 10-K, and under "Management’s Discussion and Analysis of Financial Condition and Results of Operations" in our 2016 Annual Report.

Cautionary Note Concerning Factors That May Affect Future Results

This Form 10-K contains statements which, to the extent they are not statements of historical or present fact, constitute "forward-looking statements" under the securities laws. From time to time, oral or written forward-looking statements may also be included in other information released to the public. These forward-looking statements are intended to provide management's current expectations or plans for our future operating and financial performance, based on assumptions currently believed to be valid. Forward-looking statements can be identified by the use of words such as "believe," "expect," "expectations," "plans," "strategy," "prospects," "estimate," "project," "target," "anticipate," "will," "should," "see," "guidance," "confident" and other words of similar meaning in connection with a discussion of future operating or financial performance. Forward-looking statements may include, among other things, statements relating to future sales, earnings, cash flow, results of operations, uses of cash, share repurchases and other measures of financial performance or potential future plans, strategies or transactions. All forward-looking statements involve risks, uncertainties and other factors that may cause actual results to differ materially from those expressed or implied in the forward-looking statements. For those statements, we claim the protection of the safe harbor for forward-looking statements contained in the U.S. Private Securities Litigation Reform Act of 1995. Such risks, uncertainties and other factors include, without limitation:

- the effect of economic conditions in the industries and markets in which we operate in the U.S. and globally and any changes therein, including financial market conditions, fluctuations in commodity prices, interest rates and foreign currency exchange rates, levels of end market demand in construction and in both the commercial and defense segments of the aerospace industry, levels of air travel, financial condition of commercial airlines, the impact of weather conditions and natural disasters and the financial condition of our customers and suppliers;
- challenges in the development, production, delivery, support, performance and realization of the anticipated benefits of advanced technologies and new products and services;
- future levels of indebtedness and capital spending and research and development spending;
- future availability of credit and factors that may affect such availability, including credit market conditions and our capital structure;
- the timing and scope of future repurchases of our common stock, which may be suspended at any time due to various factors, including market conditions and the level of other investing activities and uses of cash;
- delays and disruption in delivery of materials and services from suppliers;
- company and customer-directed cost reduction efforts and restructuring costs and savings and other consequences thereof;
- the scope, nature, impact or timing of acquisition and divestiture activity, including among other things integration of acquired businesses into our existing businesses and realization of synergies and opportunities for growth and innovation;
- new business opportunities;
- our ability to realize the intended benefits of organizational changes;
- the anticipated benefits of diversification and balance of operations across product lines, regions and industries;
- the outcome of legal proceedings, investigations and other contingencies;
- pension plan assumptions and future contributions;
- the impact of the negotiation of collective bargaining agreements and labor disputes;
- the effect of changes in political conditions in the U.S. and other countries in which we operate, including the effect of changes in U.S. trade policies or the U.K.'s pending withdrawal from the EU, on general market conditions, global trade policies and currency exchange rates in the near term and beyond; and
- the effect of changes in tax, environmental, regulatory (including among other things import/export) and other laws and regulations in the U.S. and other countries in which we operate.

In addition, this Form 10-K includes important information as to risks, uncertainties and other factors that may cause actual results to differ materially from those expressed or implied in the forward-looking statements. See the "Notes to Consolidated Financial Statements" under the heading "Note 18: Contingent Liabilities," the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" under the headings "Business Overview," "Results of Operations," "Liquidity and Financial Condition," and "Critical Accounting Estimates," and the section titled "Risk Factors." This Form 10-K also includes important information as to these factors in the "Business" section under the headings "General," "Description of Business by Segment" and "Other Matters Relating to Our Business as a Whole," and in the "Legal Proceedings" section. Additional important information as to these factors is included in our 2016 Annual Report in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" under the headings "Restructuring Costs," "Environmental Matters" and "Governmental Matters." The forward-looking statements speak only as of the date of this report or, in the case of any document incorporated by reference, the date of that document. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law. Additional information as to factors that may cause actual results to differ materially from those expressed or implied in the forward-looking statements is disclosed from time to time in our other filings with the SEC.

Item 1A. Risk Factors

Our business, financial condition, operating results and cash flows can be impacted by the factors set forth below, any one of which could cause our actual results to vary materially from recent results or from our anticipated future results.

Our Global Growth May be Affected by Global Economic, Capital Market and Political Conditions.

Our business, financial condition, operating results and cash flows may be adversely affected by changes in global economic conditions and geopolitical risks, including credit market conditions, levels of consumer and business confidence, commodity prices, exchange rates, levels of government spending and deficits, trade policies, political conditions, actual or anticipated default on sovereign debt and other challenges that could affect the global economy. These economic conditions affect businesses such as ours in a number of ways. Tightening of credit in financial markets could adversely affect the ability of our customers and suppliers to obtain financing for significant purchases and operations and could result in a decrease in or cancellation of orders for our products and services as well as impact the ability of our customers to make payments. Similarly, such tightening of credit may adversely affect our supplier base and increase the potential for one or more of our suppliers to experience financial distress or bankruptcy. Our global business is also adversely affected by decreases in the general level of economic activity, such as decreases in business and consumer spending, air travel, construction activity, the financial strength of airlines and business jet operators, and government procurement.

Our Financial Performance Is Dependent on the Conditions of the Construction and Aerospace Industries.

The results of our commercial and industrial businesses, which generated approximately 50 percent of our consolidated sales in 2016, are influenced by a number of external factors including fluctuations in residential and commercial construction activity, regulatory changes, interest rates, labor costs, foreign currency exchange rates, customer attrition, raw material and energy costs, global credit market conditions, and other global and political factors. For example, a slowdown in building and remodeling activity can adversely affect the financial performance of Otis and UTC Climate, Controls & Security. In addition, the financial performance of UTC Climate, Controls & Security can also be influenced by production and utilization of transport equipment and, particularly in its residential business, weather conditions.

The results of our commercial and military aerospace businesses, which generated approximately 50 percent of our consolidated sales in 2016, are directly tied to the economic conditions in the commercial aviation and defense industries, which are cyclical in nature. Capital spending and demand for aircraft engines, aerospace products and component aftermarket parts and service by commercial airlines, aircraft operators and aircraft manufacturers are influenced by a wide variety of factors, including current and predicted traffic levels, load factors, aircraft fuel pricing, labor issues, worldwide airline profits, airline consolidation, bankruptcies, competition, the retirement of older aircraft, regulatory changes, terrorism and related safety concerns, general economic conditions, corporate profitability, cost reduction efforts and backlog levels. Any of these conditions could reduce the sales and margins of our aerospace businesses. Other factors, including future terrorist actions, pandemic health issues or major natural disasters, could also dramatically reduce the demand for air travel, which could negatively impact the sales and margins of our aerospace businesses. Additionally, because a substantial portion of the backlog for commercial aerospace customers is scheduled for delivery beyond 2017, changes in economic conditions may cause customers to request that firm orders be rescheduled or canceled. At times, our aerospace businesses also enter into firm fixed-price development contracts, which may require us to bear cost overruns related to unforeseen technical and design challenges that arise during the development and early production stages of the program. In addition, our aerospace businesses face intense competition from domestic and foreign manufacturers of new equipment and spare parts. Spare parts sales and aftermarket service trends are affected by similar factors, including usage, pricing, technological improvements, regulatory changes and the retirement of older aircraft. Furthermore, because of the lengthy research and development cycle involved in bringing products in these business segments to market, we cannot predict the economic conditions that will exist when any new product is complete. A reduction in capital spending in the commercial aviation or defense industries could have a significant effect on the demand for our products, which could have a material adverse effect on our competitive position, results of operations, cash flows or financial condition. The defense industry is also affected by a changing U.S. and global political environment, continued pressure on U.S. and global defense spending and U.S. foreign policy and the level of activity in military flight operations. U.S. Government deficit reduction measures, Congressional and executive branch disputes over budgets and debt ceilings and the impact of sequestration have increased market uncertainty and adversely affected our military businesses. Should these factors continue and overall U.S. Government defense spending decline, it could result in significant reductions to revenue, cash flow, profit and backlog for our military businesses. One or more of the programs that we currently support or are currently pursuing could be phased-out, limited or terminated. Reductions in these existing programs, unless offset by other programs and opportunities, could have a material adverse effect on our competitive position, cash flows, results of operations or financial condition.

Our International Operations Subject Us to Economic Risk As Our Results of Operations May Be Adversely Affected by Changes in Foreign Currency Fluctuations, Economic Conditions and Changes in Local Government Regulation.

We conduct our business on a global basis, with approximately 61 percent of our 2016 total segment sales derived from international operations, including U.S. export sales. Changes in local and regional economic conditions, including fluctuations in exchange rates, may affect product demand and reported profits in our non-U.S. operations (especially the commercial businesses and P&W Canada), where transactions are generally denominated in local currencies. In addition, currency fluctuations may affect the prices we pay suppliers for materials used in our products. As a result, our operating margins also may be negatively impacted by worldwide currency fluctuations that result in higher costs for certain cross border transactions. Our financial statements are denominated in U.S. Dollars. Accordingly, fluctuations in exchange rates may also give rise to translation gains or losses when financial statements of non-U.S. operating units are translated into U.S. Dollars. Given that the majority of our sales are non-U.S. based, a strengthening of the U.S. Dollar against other major foreign currencies could adversely affect our results of operations.

The majority of sales in the aerospace businesses are transacted in U.S. Dollars, consistent with established industry practice, while the majority of costs at locations outside the U.S. are incurred in the applicable local currency (principally the Euro, the Canadian Dollar, and the Polish Zloty). For operating units with U.S. Dollar sales and local currency costs, there is foreign currency exposure that could impact our results of operations depending on market changes in the exchange rate of the U.S. Dollar against the applicable foreign currencies. To manage certain exposures, we employ long-term hedging strategies associated with U.S. Dollar sales. See Notes 1 and 14 to the Consolidated Financial Statements in our 2016 Annual Report for further discussion of our hedging strategies.

Our international sales and operations are subject to risks associated with changes in local government laws, regulations and policies, including those related to tariffs and trade barriers, investments, taxation, exchange controls, capital controls, employment regulations, and repatriation of earnings. Government policies on international trade and investments such as import quotas, capital controls, punitive taxes or tariffs, whether adopted by individual governments or addressed by regional trade blocs, can affect demand for our products and services, impact the competitive position of our products or prevent us from being able to manufacture or sell products in certain countries. The implementation of more restrictive trade policies or the renegotiation of existing trade agreements in the U.S. or countries where we sell large quantities of products and services or procure supplies and other materials incorporated into our products could negatively impact our business, results of operations and financial condition. For example, a government's adoption of "buy national" policies or retaliation by another government against such policies could have a negative impact on our results of operations. Our international sales and operations are also sensitive to changes in foreign national priorities, including government budgets, as well as to political and economic instability. International transactions may involve increased financial and legal risks due to differing legal systems and customs in foreign countries. For example, as a condition of sale or award of a contract, some international customers require us to agree to offset arrangements, which may include in-country purchases, manufacturing and financial support arrangements. The contract may provide for penalties in the event we fail to perform in accordance with the offset requirements.

In addition, as part of our globalization strategy, we have invested in certain countries, including Argentina, Brazil, China, India, Indonesia, Mexico, Poland, Russia, South Africa and countries in the Middle East, that carry high levels of currency, political, compliance and economic risk. We expect that sales to emerging markets will continue to account for a significant portion of our sales as our businesses evolve and as these and other developing nations and regions around the world increase their demand for our products. Emerging market operations can present many risks, including cultural differences (such as employment and business practices), volatility in gross domestic product, economic and government instability, and the imposition of exchange controls and capital controls. While these factors and their impact are difficult to predict, any one or more of them could have a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

We Use a Variety of Raw Materials, Supplier-Provided Parts, Components, Sub-Systems and Contract Manufacturing Services in Our Businesses, and Significant Shortages, Supplier Capacity Constraints, Supplier Production Disruptions or Price Increases Could Increase Our Operating Costs and Adversely Impact the Competitive Positions of Our Products.

Our reliance on suppliers (including third party contract manufacturing and logistics) and commodity markets to secure raw materials, parts, components and sub-systems used in our products exposes us to volatility in the prices and availability of these materials. In many instances, we depend upon a single source of supply, manufacturing, logistics support or assembly or participate in commodity markets that may be subject to allocations of limited supplies by suppliers. A disruption in deliveries from our suppliers, supplier capacity constraints, supplier production disruptions, supplier quality issues, closing or bankruptcy of our suppliers, price increases, or decreased availability of raw materials or commodities, could have a material adverse effect on our ability to meet our commitments to customers or increase our operating costs. We believe that our supply management and production practices are based on an appropriate balancing of the foreseeable risks and the costs of alternative practices. Nonetheless, price increases, supplier capacity constraints, supplier production disruptions or the unavailability of some raw materials may have a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

We Engage in Acquisitions and Divestitures, and May Encounter Difficulties Integrating Acquired Businesses with, or Disposing of Divested Businesses From, Our Current Operations; Therefore, We May Not Realize the Anticipated Benefits of these Acquisitions and Divestitures.

We seek to grow through strategic acquisitions in addition to internal growth. In the past several years, we have made various acquisitions and have entered into joint venture arrangements intended to complement and expand our businesses, and expect to continue to do so in the future. Our due diligence reviews may not identify all of the material issues necessary to accurately estimate the cost and potential loss contingencies of a particular transaction, including potential exposure to regulatory sanctions resulting from an acquisition target's previous activities. For example, we may incur unanticipated costs, expenses or other liabilities as a result of an acquisition target's violation of applicable laws, such as the U.S. Foreign Corrupt Practices Act (FCPA) or other anti-bribery and corruption laws in non-U.S. jurisdictions. We may incur unanticipated costs or expenses, including post-closing asset impairment charges, expenses associated with eliminating duplicate facilities, litigation, and other liabilities. We also may encounter difficulties in integrating acquisitions with our operations, applying our internal controls processes to these acquisitions, or in managing strategic investments. Additionally, we may not realize the degree or timing of benefits we anticipate when we first enter into a transaction. Any of the foregoing could adversely affect our business and results of operations. In addition, accounting requirements relating to business combinations, including the requirement to expense certain acquisition costs as incurred, may cause us to incur greater earnings volatility and generally lower earnings during periods in which we acquire new businesses. Furthermore, we make strategic divestitures from time to time. Our divestitures may result in continued financial exposure to the divested businesses, such as through guarantees or other financial arrangements or continued supply and services arrangements, following the transaction. Under these arrangements, nonperformance by those divested businesses could result in obligations being imposed on us that could have a material adverse effect on our competitive position, cash flows, results of operations, or financial condition. The success of future acquisitions and divestitures will depend on the satisfaction of conditions precedent to, and consummation of, the pending transactions, the timing of consummation of these pending transactions, and the ability of the parties to secure any required regulatory approvals in a timely manner, among other things.

Our Debt Levels and Related Debt Service Obligations Could Have Negative Consequences; Our Ability to Access Debt May Be Affected by Changes in Global Capital Markets, Our Financial Performance or Outlook or Our Credit Ratings.

We have outstanding debt and other financial obligations and significant unused borrowing capacity. Our debt level and related debt service obligations could have negative consequences, including, among others:

- requiring us to dedicate significant cash flow from operations to the payment of principal and interest on our debt, which would reduce funds we have available for other purposes, such as acquisitions, reinvestment in our businesses, dividends and repurchases of our common stock;
- reducing our flexibility in planning for or reacting to changes in our business and market conditions; and
- exposing us to interest rate risk because a portion of our debt obligations are at variable rates.

We depend, in part, upon the issuance of debt to fund our operations and contractual commitments. If we require additional funding in order to fund outstanding financing commitments or meet other business requirements, our market liquidity may not be sufficient. A number of factors could cause us to incur increased borrowing costs and to have greater difficulty accessing public and private markets for debt, including disruptions or declines in the global capital markets and/or a decline in our financial performance, outlook or credit ratings.

Quarterly Cash Dividends and Share Repurchases May Be Discontinued or Modified, Are Subject to a Number of Uncertainties and May Affect the Price of Our Common Stock.

Quarterly cash dividends and share repurchases under our share repurchase program constitute components of our capital allocation strategy, which we fund with free operating cash flow, borrowings and divestitures. However, we are not required to declare dividends or make any share repurchases under our share repurchase program. Dividends and share repurchases may be discontinued, accelerated, suspended or delayed at any time without prior notice. Even if not discontinued, the amount of such dividends and repurchases may be changed, and the amount, timing and frequency of such dividends and repurchases may vary from historical practice or from the company’s stated expectations. Decisions with respect to dividends and share repurchases are subject to the discretion of our Board of Directors and will be based on a variety of factors. Important factors that could cause us to discontinue, limit, suspend, increase or delay our quarterly cash dividends or share repurchases include market conditions, the price of our common stock, the nature and timing of other investment opportunities, changes in our business strategy, the terms of our financing arrangements, our outlook as to the ability to obtain financing at attractive rates, the impact on our credit ratings and the availability of domestic cash.

The reduction or elimination of our cash dividend or share repurchase program could adversely affect the market price of our common stock. Additionally, repurchases of our shares will reduce the number of outstanding shares of our common stock. There can be no assurance that any share repurchases will enhance shareholder value because the market price of our common stock may decline below the levels at which we repurchased shares of common stock. Although our share repurchase program is intended to enhance long-term shareholder value, short-term stock price fluctuations could reduce the program's effectiveness.

See Item 5, "Market for Registrants Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities" in this Form 10-K for a description of our share repurchase program and past share repurchases, including our prior accelerated share repurchase (ASR) transactions.

We Design, Manufacture and Service Products that Incorporate Advanced Technologies; The Introduction of New Products and Technologies Involves Risks and We May Not Realize the Degree or Timing of Benefits Initially Anticipated.

We seek to achieve growth through the design, development, production, sale and support of innovative products that incorporate advanced technologies. The product, program and service needs of our customers change and evolve regularly, and we invest substantial amounts in research and development efforts to pursue advancements in a wide range of technologies, products and services. Of particular note, Pratt & Whitney is currently producing the PurePower® PW1000G Geared TurboFan engine to power various aircraft, including the A320neo family of aircraft, which entered into service in January 2016. The level of orders received for the PurePower® family of engines coupled with a requirement to achieve mature production levels in a very short timeframe are necessitating significant additional manufacturing and supply chain capacity. If our production ramp-up efforts are delayed or if suppliers cannot timely deliver or perform to our standards, we may not meet customers’ production schedules, which could result in material additional costs, including penalties that could be assessed under existing contractual provisions. Our ability to realize the anticipated benefits of our technological advancements depends on a variety of factors, including meeting development, production, certification and regulatory approval schedules; execution of internal and external performance plans; availability of supplier and internally-produced parts and materials; performance of suppliers and subcontractors; hiring and training of qualified personnel; achieving cost and production efficiencies; identification of emerging technological trends in our target end-markets; validation of innovative technologies; the level of customer interest in new technologies and products; and customer acceptance of our products and products that incorporate technologies we develop. For example, certain of our aerospace products are incorporated into larger systems and end products manufactured by our customers. These systems and end products may incorporate additional technologies manufactured by third parties and involve additional risks and uncertainties. As a result, the performance and market acceptance of these larger systems and end products could affect the level of customer interest and acceptance of our own products in the marketplace.

Any development efforts divert resources from other potential investments in our businesses, and these efforts may not lead to the development of new technologies or products on a timely basis or meet the needs of our customers as fully as competitive offerings. In addition, the markets for our products or products that incorporate our technologies may not develop or grow as we anticipate. We or our customers, suppliers or subcontractors may encounter difficulties in developing and producing new products and services, and may not realize the degree or timing of benefits initially anticipated or may otherwise suffer significant adverse financial consequences. Due to the design complexity of our products, we may in the future experience delays in completing the development and introduction of new products. Any delays could result in increased development costs or deflect resources from other projects. In particular, we cannot predict with certainty whether, when and in what quantities our aerospace businesses will produce and sell aircraft engines, aircraft systems and components and other products currently in development or pending required certifications. Our contracts are typically awarded on a competitive basis. Our bids are based upon, among other items, the cost to provide the products and services. To generate an acceptable return on our investment in these contracts, we must be able to accurately estimate our costs to provide the services and deliver the products required by the contract and to be able to complete the contracts in a timely manner. If we fail to accurately estimate our costs or the time required to complete a contract, the profitability of our contracts may be materially and adversely affected. Some of our contracts provide for liquidated damages in the event that we are unable to perform and deliver in accordance with the contractual specifications and schedule. In addition, we may face customer directed cost reduction targets that could have a material adverse effect on the profitability of our contracts. Furthermore, we cannot be sure that our competitors will not develop competing technologies which gain market acceptance in advance of or instead of our products. The possibility exists that our competitors might develop new technology or offerings that might cause our existing technology and offerings to become obsolete. In addition, the possibility exists that competitors will develop aftermarket services and aftermarket parts for our products which attract customers and adversely impact our return on investment on new products. Any of the foregoing could have a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

Our Business May Be Affected by Government Contracting Risks.

Most of our government contracts are fixed-price contracts. While fixed price contracts enable us to benefit from performance improvements, cost reductions and efficiencies, they also subject us to the risk of reduced margins or losses if we are unable to achieve estimated costs and revenues. U.S. Government contracts are subject to termination by the government, either for the convenience of the government or for default as a result of our failure to perform under the applicable contract. If terminated by the government as a result of our default, we could be liable for additional costs the government incurs in acquiring undelivered goods or services from another source and any other damages it suffers. We are now, and believe that in light of the current U.S. Government contracting environment we will continue to be, the subject of U.S. Government investigations relating to certain of our U.S. Government contracts. Such U.S. Government investigations often take years to complete and could result in administrative, civil or criminal liabilities, including repayments, fines, treble and other damages, forfeitures, restitution or penalties, or could lead to suspension or debarment of U.S. Government contracting or of export privileges. For instance, if we or one of our business units were charged with wrongdoing as a result of any U.S. Government investigation (including violation of certain environmental or export laws, as further described below), the U.S. Government could suspend us from bidding on or receiving awards of new U.S. Government contracts pending the completion of legal proceedings. If convicted or found liable, the U.S. Government could fine and debar us from new U.S. Government contracting for a period generally not to exceed three years. The U.S. Government also reserves the right to debar a contractor from receiving new government contracts for fraudulent, criminal or other seriously improper conduct. The U.S. Government could void any contracts found to be tainted by fraud. Our contracts with the U.S. Government are also subject to audits. Like many defense contractors, we have received audit reports, which recommend that certain contract prices should be reduced to comply with various government regulations, including because cost or pricing data we submitted in negotiation of the contract prices or cost accounting practices may not have conformed to government regulations, or that certain payments be delayed or withheld. Some of these audit reports involved substantial amounts.

Exports of Certain of Our Products Are Subject to Various Export Control Regulations and May Require Authorization From the U.S. Department of State, the U.S. Department of Commerce, ~~or~~ the U.S. Department of the Treasury or Regulatory Agencies of Other Countries.

As an exporter, we must comply with various laws and regulations relating to the export of products, services and technology from the U.S. and other countries having jurisdiction over our operations. In the U.S., these laws include, among others, the U.S. Export Administration Regulations (EAR) administered by the U.S. Department of Commerce, Bureau of Industry and Security, the International Traffic in Arms Regulations (ITAR) administered by the U.S. Department of State, Directorate of Defense Trade Controls and trade sanctions regulations and embargoes administered by the U.S. Department of the Treasury, Office of Foreign Assets Control. Certain of our products have military or strategic applications and are on the Munitions List of the ITAR and the Commerce Control List of the EAR, or represent so-called "dual use" items governed by the EAR. As a result, these products may require prior authorization to be exported to certain jurisdictions. Any failures by us or our customers or suppliers to comply with these laws and regulations could result in civil or criminal penalties, fines, investigations, adverse publicity or restrictions on our ability to export our products, and repeat failures could carry more significant penalties. Any changes in export or sanctions regulations may further restrict the export of our products. The length of time required by the licensing processes can vary, potentially delaying the shipment of products and the recognition of the corresponding revenue. Any restrictions on the export of our products or product lines could have a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

We Are Subject to Litigation, Environmental, Product Safety and Other Legal and Compliance Risks.

We are subject to a variety of litigation and legal compliance risks. These risks include, among other things, possible liability relating to product safety, personal injuries, intellectual property rights, contract-related claims, government contracts, taxes, environmental matters and compliance with U.S. and foreign laws, competition laws and laws governing improper business practices. We or one of our business units could be charged with wrongdoing as a result of such matters. If convicted or found liable, we could be subject to significant fines, penalties, repayments, other damages (in certain cases, treble damages). As a global business, we are subject to complex laws and regulations in the U.S. and other countries in which we operate. Those laws and regulations may be interpreted in different ways. They may also change from time to time, as may related interpretations and other guidance. Changes in laws or regulations could result in higher expenses and payments, and uncertainty relating to laws or regulations may also affect how we conduct our operations and structure our investments and could limit our ability to enforce our rights. Changes in environmental and climate change laws or regulations, including laws relating to greenhouse gas emissions, could lead to new or additional investment in product designs and could increase environmental compliance expenditures. Changes in climate change concerns, or in the regulation of such concerns, including greenhouse gas emissions, could subject us to additional costs and restrictions, including increased energy and raw materials costs.

At times we are involved in disputes with private parties over environmental issues, including litigation over allocation of cleanup costs, alleged personal injuries and alleged property damage. Personal injury lawsuits may involve individual and purported class actions alleging that contaminants originating from our or our subsidiaries' current or former operating facilities caused or contributed to medical conditions, including cancers incurred by employees, former employees or residents in the area and environmental damage or diminution of real estate values. Even in litigation where we believe our liability is remote, there is a risk that a negative finding or decision in a matter involving multiple plaintiffs or a purported class action could have a material adverse effect on our competitive position, results of operations, cash flows or financial condition, in particular with respect to environmental claims in regions where we have, or previously had, significant operations. Product recalls and product liability claims (including claims related to the safety or reliability of our products) also can result in significant costs, including fines, as well as negative publicity, management distraction and damage to our reputation that could reduce demand for our products and services. For a description of current material legal proceedings, see "Legal Proceedings" in in this Form 10-K and Note 18 to the Consolidated Financial Statements in our 2016 Annual Report.

In addition, the FCPA and other anti-bribery and corruption laws generally prohibit companies and their intermediaries from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. The FCPA applies to companies, individual directors, officers, employees and agents. Under the FCPA, U.S. companies may be held liable for actions taken by strategic or local partners or representatives. The FCPA also imposes accounting standards and requirements on publicly traded U.S. corporations and their foreign affiliates, which are intended to prevent the diversion of corporate funds to the payment of bribes and other improper payments. Certain of our customer relationships outside of the U.S. are with governmental entities and are therefore subject to the FCPA and other anti-bribery and corruption laws. Our policies mandate compliance with these anti-bribery and corruption laws. Despite meaningful measures that we undertake to seek to ensure lawful conduct, which include training and internal control policies, these measures may not always prevent our employees or agents from violating the FCPA or similar laws. As a result, we could be subject to criminal and civil penalties, disgorgement, further changes or enhancements to our procedures, policies and controls, personnel changes or other remedial actions. Violations of these laws, or allegations of such violations, could disrupt our operations, involve significant management distraction and result in a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

Additional Tax Expense or Additional Tax Exposures Could Affect Our Future Profitability.

We are subject to income taxes in the United States and various international jurisdictions. Changes in tax laws and regulations, as well as changes and conflicts in related interpretations and other tax guidance could materially impact our tax receivables and liabilities and our deferred tax assets and deferred tax liabilities. Additionally, in the ordinary course of business we are subject to examinations by various authorities, including tax authorities. In addition to ongoing investigations, there could be additional investigations launched in the future by governmental authorities in various jurisdictions, and existing investigations could be expanded. The global and diverse nature of our operations means that these risks will continue to exist and additional investigations, proceedings and contingencies will arise from time to time. Our competitive position, cash flows, results of operation or financial condition may be affected by the outcome of investigations, proceedings and other contingencies that cannot be predicted with certainty.

See Note 11 to the Consolidated Financial Statements in our 2016 Annual Report for further discussion on income taxes and related contingencies.

Our Defined Benefit Pension Plans are Subject to Financial Market Risk that Could Adversely Affect Our Results.

The performance of the financial markets and interest rates can impact our defined benefit pension plan expenses and funding obligations. Significant decreases in the discount rate or investment losses on plan assets may increase our funding obligations and adversely impact our financial results. See Note 12 to the Consolidated Financial Statements in our 2016 Annual Report for further discussion on pension plans and related obligations and contingencies.

We May Be Unable to Realize Expected Benefits From Our Cost Reduction and Restructuring Efforts and Our Profitability May Be Hurt or Our Business Otherwise Might Be Adversely Affected.

In order to operate more efficiently and control costs, we announce from time to time restructuring plans, which include workforce reductions as well as global facility consolidations and other cost reduction initiatives. These plans are intended to generate operating expense savings through direct cost and indirect overhead expense reductions as well as other savings. We may undertake further workforce reductions or restructuring actions in the future. These types of cost reduction and restructuring activities are complex. If we do not successfully manage our current restructuring activities, or any other restructuring activities that we may undertake in the future, expected efficiencies and benefits might be delayed or not realized, and our operations and business could be disrupted. Risks associated with these actions and other workforce management issues include political responses to such actions, unforeseen delays in implementation of anticipated workforce reductions, additional unexpected costs, adverse effects on employee morale and the failure to meet operational targets due to the loss of employees or work stoppages, any of which may impair our ability to achieve anticipated cost reductions or may otherwise harm our business, which could have a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

Our Business and Financial Performance May Be Adversely Affected By Attacks on Information Technology Infrastructure and Other Cyber-based and Business Disruptions.

Our business may be impacted by disruptions to our own or third party information technology ("IT") infrastructure, which could result from (among other causes) attacks on or failures of such infrastructure, compromises to its physical security, as well as from damaging weather or other acts of nature. Cyber-based risks, in particular, are evolving and include, but are not limited to, both attacks on our IT infrastructure and attacks on the IT infrastructure of third parties (both on premises and in the cloud) in attempts to gain unauthorized access to our confidential or other proprietary information, classified information, or information relating to our employees, customers and other third parties. Cyber-based risks could also include attacks targeting the security, integrity and/or reliability of the hardware, software and information installed, stored or transmitted in our products, including after the purchase of those products and when they are incorporated into third party products, facilities or infrastructure. Such attacks could result in disruptions to systems (our own or those of third parties), unauthorized release of confidential or otherwise protected information and corruption of data (our own or that of third parties). We have experienced cyber-based attacks and may continue to experience them going forward, potentially with more frequency. We believe that we have adopted appropriate measures to mitigate potential risks to our technology, products, services and operations from these potential attacks. However, given the unpredictability of the timing, nature and scope of such attacks or other disruptions, we could potentially be subject to production downtimes, operational delays, other detrimental impacts on our operations or ability to provide products and services to our customers, the compromising of confidential or otherwise protected information, misappropriation, destruction or corruption of data, security breaches, other manipulation or improper use of our or third party systems, networks or products, financial losses from remedial actions, loss of business or potential liability, and/or damage to our reputation, any of which could have a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

We Depend On Our Intellectual Property, and Have Access to Certain Intellectual Property and Information of Our Customers and Suppliers; Infringement or Failure to Protect Our Intellectual Property Could Adversely Affect Our Future Growth and Success.

We rely on a combination of patents, trademarks, copyrights, trade secrets, nondisclosure agreements, information technology security systems, internal controls and compliance systems and other measures to protect our proprietary intellectual property. We also rely on nondisclosure agreements, information technology security systems and other measures to protect certain customer and supplier information and intellectual property that we have in our possession or to which we have access. Our efforts to protect intellectual property and proprietary rights may not be sufficient. We cannot be sure that our pending patent applications will result in the issuance of patents to us, that patents issued to or licensed by us in the past or in the future will not be challenged or circumvented by competitors, or that these patents will be found to be valid or sufficiently broad to preclude our competitors from introducing technologies similar to those covered by our patents and patent applications. Our ability to protect and enforce our intellectual property rights may be limited in certain countries outside the U.S. In addition, we may be the target of competitor or other third party patent enforcement actions seeking substantial monetary damages or seeking to prevent our sale and marketing of certain of our products or services. We may also be subject to disruptions, losses and liability resulting from various cybersecurity attacks or information technology failures, as described above. Any of these events or factors could have a material adverse effect on our competitive position, subject us to judgments, penalties and significant litigation costs or temporarily or permanently disrupt our sales and marketing of the affected products or services. Any of the foregoing could have a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

	Number of Facilities - Owned					
Location	Otis	UTC Climate, Controls & Security	Pratt & Whitney	UTC Aerospace Systems	Other	Total
Manufacturing & Aftermarket Services:						
North America	1	8	27	37	—	73
Europe & Middle East	7	14	2	21	—	44
Asia	—	1	7	4	—	12
Emerging Markets*	10	19	6	13	—	48
	18	42	42	75	—	177
Non-Manufacturing & Aftermarket Services:						
North America	2	15	27	8	13	65
Europe & Middle East	9	8	—	4	—	21
Asia	1	4	—	—	—	5
Central and Latin America	—	1	—	—	—	1
Emerging Markets*	1	5	—	2	—	8
	13	33	27	14	13	100

	Number of Facilities - Leased					
Location	Otis	UTC Climate, Controls & Security	Pratt & Whitney	UTC Aerospace Systems	Other	Total
Manufacturing & Aftermarket Services:						
North America	—	4	14	27	—	45
Europe & Middle East	—	2	3	5	—	10
Asia	—	—	2	2	—	4
Emerging Markets*	4	5	2	8	—	19
	4	11	21	42	—	78
Non-Manufacturing & Aftermarket Services:						
North America	4	32	8	10	7	61
Europe & Middle East	9	34	—	4	—	47
Asia	2	6	1	1	—	10
Emerging Markets*	11	14	—	2	—	27
	26	86	9	17	7	145

* For purposes of this table, our definition of emerging markets is developed using the countries included in the MSCI Emerging Markets Index℠.

Our fixed assets as of December 31, 2016 include manufacturing facilities and non-manufacturing facilities such as warehouses set forth in the tables above and a substantial quantity of machinery and equipment, most of which are general purpose machinery and equipment using special jigs, tools and fixtures and in many instances having automatic control features and special adaptations. The facilities, warehouses, machinery and equipment in use as of December 31, 2016 are in good operating condition, are well-maintained and substantially all are generally in regular use.

Item 3. Legal Proceedings

Export Violations

As previously disclosed, on June 28, 2012, we entered into a four-year Consent Agreement (CA) with the U.S. State Department's Office of Defense Trade Controls Compliance (DTCC) to resolve violations of the U.S. Arms Export Control Act (AECA) and International Traffic in Arms Regulations (ITAR) that we had voluntarily disclosed to DTCC. DTCC officially closed the CA on October 11, 2016.

As previously disclosed, in June 2012, DTCC imposed a partial statutory debarment on P&WC with respect to obtaining new or renewed ITAR license privileges following P&WC's guilty plea to criminal violation of the AECA and ITAR. The debarment does not affect ITAR licenses/authorizations existing at the time of the partial debarment, nor does it extend to programs supporting: (1) the U.S. Government; (2) NATO allies; or (3) "major non-NATO allies" (as defined in the ITAR). P&WC may seek and has received "transaction exception" approvals on a case-by-case basis for new or renewed ITAR licensing in other cases during the period of debarment. In February 2015, P&WC applied for full reinstatement of its ITAR privileges. DTCC's decision on P&WC's application is pending. UTC expects DTCC to terminate the debarment and reinstate P&WC's full ITAR privileges, and we are awaiting formal action.

Pratt & Whitney Grand Jury Subpoena

As previously disclosed, Pratt & Whitney received a subpoena in May 2012 issued by a federal grand jury in Connecticut, requesting documents related to Pratt & Whitney's use in certain military engines of titanium procured from suppliers that potentially did not conform to underlying contract specifications. In January 2017, the U.S. Attorney's office in Connecticut informed the Company that the grand jury investigation was closed and that the matter was referred to its civil division for further review. In connection with that review, Pratt & Whitney received a civil subpoena from the Department of Defense, Office of Inspector General, seeking the documents requested by the grand jury subpoena. We cannot reasonably estimate the range of loss, if any, that may result from this matter given the current procedural status of the matter.

Telephone Consumer Protection Act

As previously disclosed, UTC Fire & Security Americas Corporation, Inc. (UTCFS) was named as a defendant in numerous putative class actions that were filed on behalf of purported classes of persons who alleged that third-party entities placed "robocalls" and/or placed calls to numbers listed on the "Do Not Call Registry" on behalf of UTCFS in contravention of the Telephone Consumer Protection Act (TCPA). In each putative class action suit, plaintiffs sought injunctive relief and monetary damages. Each violation under the TCPA provides for $500 in statutory damages or up to $1,500 for any willful violation. In August 2016, UTCFS moved for summary judgment in the Northern District of West Virginia, the court in which all of the pending TCPA cases has been consolidated, arguing that the third parties who placed the calls in alleged violation of the TCPA were not acting as UTCFS' agents and, therefore, UTCFS could not be vicariously liable for those calls under the TCPA. On December 22, 2016, the district court granted UTCFS' summary judgment motion and dismissed the claims against UTCFS. Plaintiffs have not yet filed an appeal.

DOJ/SEC Investigations

As previously disclosed, in December 2013 and January 2014, UTC made voluntary disclosures to the United States Department of Justice (DOJ), the Securities and Exchange Commission (SEC) Division of Enforcement and the United Kingdom's Serious Fraud Office to report the status of its internal investigation regarding a non-employee sales representative retained by United Technologies International Operations, Inc. (UTIO) and IAE for the sale of Pratt & Whitney and IAE engines and aftermarket services, respectively, in China. On April 7, 2014, the SEC notified UTC that it was conducting a formal investigation and issued a subpoena to UTC. The DOJ and SEC also continue to request information, and the SEC issued a second subpoena on March 9, 2015 seeking documents related to internal allegations of alleged violations of anti-bribery laws from UTC's aerospace and commercial businesses, including but not limited to Otis businesses in China. UTC continues to cooperate fully with the investigations and respond to requests for documents and information. Because the investigations are ongoing, we cannot predict the outcome or the consequences thereof at this time.

At the outset of the internal investigation, UTIO and IAE suspended all commission payments to the sales representative, and UTIO and IAE have not resumed making any payments. This led to two claims by the sales representative for unpaid commissions: a civil lawsuit filed against UTIO and UTC and an arbitration claim against IAE. In December 2014, the sales representative voluntarily dismissed the lawsuit and agreed to withdraw the arbitration claim, each without prejudice to allow the sales representative to re-assert the claims, but only on or after January 1, 2016. We anticipate that we would contest any future claim, and do not believe that the resolution of a future lawsuit or arbitration by the sales representative would have a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

Mos Otis FAS Investigation

As previously disclosed, following inspections carried out by the Russian Federal Anti-monopoly Service (FAS) at the offices of Mos Otis and the production of documents by Mos Otis, in October 2014 FAS notified Mos Otis that it had found indications of violations of Russian competition law in the market for maintenance of unified dispatch systems, which remotely monitor elevators and dispatch service technicians in Moscow. Mos Otis is an indirectly owned and controlled joint venture between Otis and the City of Moscow. FAS has not pursued an administrative action against Mos Otis to date. At this time, we cannot reasonably estimate the range of any potential loss or impact to the business that may result.

In addition, we are subject to a number of other lawsuits, investigations and claims (some of which involve substantial amounts). For a discussion of contingencies related to certain other legal proceedings, see Note 18 to the Consolidated Financial Statements in our 2016 Annual Report. Except as indicated herein or in Note 18 to the Consolidated Financial Statements in our 2016 Annual Report, we do not believe that these matters will have a material adverse effect upon our competitive position, results of operations, cash flows or financial condition.

A further discussion of government contracts and related investigations, as well as a discussion of our environmental liabilities, can be found under the heading "Other Matters Relating to Our Business as a Whole – Compliance with Environmental and Other Government Regulations" in Item 1, "Business," and in Item 1A, "Risk Factors," in this Form 10-K.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

The Performance Graph and Comparative Stock Data appearing in our 2016 Annual Report, filed as Exhibit 13 to this Form 10-K, containing the following data relating to our common stock: total shareholder return, principal market, quarterly high and low sales prices, approximate number of shareowners and frequency and amount of dividends, are incorporated herein by reference. The information required by Item 5 with respect to securities authorized for issuance under equity compensation plans is incorporated herein by reference to Part III, Item 12 of this Form 10-K.

Issuer Purchases of Equity Securities

The following table provides information about our purchases during the quarter ended December 31, 2016 of equity securities that are registered by us pursuant to Section 12 of the Exchange Act.

2016	Total Number of Shares Purchased (000's)	Average Price Paid per Share	Total Number of Shares Purchased as Part of a Publicly Announced Program (000's)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program (dollars in millions)
October 1 - October 31	12,017	$ 100.58	12,017	$ 4,106
November 1 - November 30	3,178	104.72	3,178	$ 3,773
December 1 - December 31	249	107.73	249	$ 3,746
Total	15,444	$ 101.55	15,444	

On October 14, 2015, our Board of Directors authorized a share repurchase program for up to $12 billion of our common stock. At December 31, 2016, the maximum dollar value of shares that may yet be purchased under this program was approximately $3,746 million. Under this program, shares may be purchased on the open market, in privately negotiated transactions, under accelerated share repurchase (ASR) programs and under plans complying with Rules 10b5-1 and 10b-18 under the Securities Exchange Act of 1934, as amended. We may also reacquire shares outside of the program from time to time in connection with the surrender of shares to cover taxes on vesting of restricted stock. No shares were reacquired in transactions outside the program during the quarter ended December 31, 2016.

On November 11, 2015, we entered into ASR agreements to repurchase an aggregate of $6 billion of our common stock utilizing the net after-tax proceeds from the sale of Sikorsky. The ASR agreements provide for the repurchase of our common stock based on the average of the daily volume-weighted average prices of our common stock during the term of such ASR agreement, less a discount and subject to adjustments pursuant to the terms and conditions of the ASR agreement. Under the terms of the ASR agreements, we made the aggregate payments and received an initial delivery of approximately 51.9 million shares of our common stock, representing approximately 85% of the shares expected to be repurchased. The shares associated with the remaining portion of the aggregate purchase price have been settled over six tranches. In January 2016, the shares associated with the remaining portion of the first tranche of the aggregate purchase were settled upon final delivery to us of approximately 2,078 thousand shares of common stock. In September 2016, the shares associated with the remaining portion of the remaining five tranches of the aggregate purchase were settled upon final delivery to us of approximately 8,042 thousand additional shares of common stock. Including the remaining shares associated with the six tranches settled in 2016, the final price under the November 11, 2015 ASR was $96.74 per share.

Item 6. Selected Financial Data

The Five-Year Summary appearing in our 2016 Annual Report, filed as Exhibit 13 to this Form 10-K, is incorporated herein by reference. See "Notes to Consolidated Financial Statements" in our 2016 Annual Report for a description of any accounting changes and acquisitions or dispositions of businesses materially affecting the comparability of the information reflected in the Five-Year Summary.

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

The information set forth in the section entitled "Management’s Discussion and Analysis of Financial Condition and Results of Operations" in our 2016 Annual Report, filed as Exhibit 13 to this Form 10-K, is incorporated herein by reference.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

For information concerning market risk sensitive instruments, see discussion under the heading "Market Risk and Risk Management" in "Management’s Discussion and Analysis of Financial Condition and Results of Operations" in our 2016 Annual Report, filed as Exhibit 13 to this Form 10-K, and under the heading "Foreign Exchange and Hedging Activity" and "Financial Instruments" in Note 1 and in Note 14, respectively, to the Consolidated Financial Statements in our 2016 Annual Report, filed as Exhibit 13 to this Form 10-K.

Item 8. Financial Statements and Supplementary Data

The 2016 and 2015 Consolidated Balance Sheet, and other consolidated financial statements for the years ended 2016, 2015 and 2014, together with the report thereon of PricewaterhouseCoopers LLP dated February 9, 2017 in our 2016 Annual Report, filed as Exhibit 13 to this Form 10-K, are incorporated herein by reference. The 2016 and 2015 unaudited Selected Quarterly Financial Data appearing in our 2016 Annual Report, filed as Exhibit 13 to this Form 10-K, is incorporated herein by reference.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

As required by Rule 13a-15 under the Securities Exchange Act of 1934, as amended, we carried out an evaluation under the supervision and with the participation of our management, including the Chairman, President and Chief Executive Officer (CEO), the Executive Vice President & Chief Financial Officer (CFO) and the Corporate Vice President, Controller (Controller), of the effectiveness of the design and operation of our disclosure controls and procedures. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based upon our evaluation, our CEO, CFO and Controller concluded that our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the applicable rules and forms, and that it is accumulated and communicated to our management, including our CEO, CFO and Controller, as appropriate, to allow timely decisions regarding required disclosure.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. 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 reporting purposes in accordance with accounting principles generally accepted in the U.S. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Our management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2016. In making its assessment, management has utilized the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in its 2013 Internal Control – Integrated Framework. Our management has concluded that based on its assessment, our internal control over financial reporting was effective as of December 31, 2016. The effectiveness of our internal control over financial reporting as of December 31, 2016 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in its report which appears in our 2016 Annual Report.

Item 9B. Other Information

Section 13(r)(1)(D)Disclosures

The following activities are disclosed as required by Section 13(r)(1)(D) of the Securities Exchange Act of 1934, as amended (Exchange Act):

In the Company’s Form 10-Q report for the quarterly period ended on March 31, 2016, the Company disclosed, under the heading "Other" in the "Business Overview" section in Management’s Discussion and Analysis of Financial Condition and Results of Operations in each such report, activities as required by Section 13(r)(1)(D) of the Securities Exchange Act of 1934, as amended (Exchange Act). Such disclosures are incorporated herein by reference.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by Item 10 with respect to directors, the Audit Committee of the Board of Directors and audit committee financial experts is incorporated herein by reference to the sections of our Proxy Statement for the 2017 Annual Meeting of Shareowners titled "Election of Directors" (under the subheading "Nominees") and "Corporate Governance" (including under the subheadings "Board Committees," "Audit Committee" and "Governance and Public Policy Committee").

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Executive Officers of the Registrant

The following persons are executive officers of United Technologies Corporation:

Name	Title	Other Business Experience Since 1/1/2012	Age as of 2/9/2017
Elizabeth B. Amato	Executive Vice President & Chief Human Resources Officer, United Technologies Corporation (since August 2012)*	Senior Vice President, Human Resources and Organization, United Technologies Corporation; Vice President, Human Resources, UTC Climate, Controls & Security	60
Robert J. Bailey	Corporate Vice President, Controller, United Technologies Corporation (since September 2016)	Vice President & Chief Financial Officer, Pratt & Whitney; Vice President & Chief Financial Officer, Hamilton Sundstrand	52
Philippe Delpech	President, Otis Elevator (since September 2015)	Chief Operating Officer, Intercontinental Operations, UTC Building & Industrial Systems; Chief Operating Officer for UTC Climate, Controls & Security; President, EMEA, UTC Climate, Controls & Security	54
Michael R. Dumais	Executive Vice President, Operations & Strategy, United Technologies Corporation (since January 2017)	Senior Vice President, Strategic Planning, United Technologies Corporation: President, Power, Controls & Sensing Systems, UTC Aerospace Systems; President, Hamilton Sundstrand	50
Charles D. Gill	Executive Vice President & General Counsel, United Technologies Corporation (since 2007)*	Senior Vice President and General Counsel, United Technologies Corporation	52
David L. Gitlin	President, UTC Aerospace Systems (since January 2015)	President, Aircraft Systems, UTC Aerospace Systems; Vice President of Integration - UTC Propulsion & Aerospace Systems	47
Gregory J. Hayes	Chairman (since September 2016), President and Chief Executive Officer, United Technologies Corporation (since November 2014)	Senior Vice President and Chief Financial Officer, United Technologies Corporation	56
Akhil Johri	Executive Vice President & Chief Financial Officer, United Technologies Corporation (since January 2015)*	Senior Vice President and Chief Financial Officer, United Technologies Corporation; Chief Financial Officer, Pall Corporation; Vice President of Finance and Chief Financial Officer of UTC Propulsion & Aerospace Systems	55
Robert F. Leduc	President, Pratt & Whitney (since January 2016)	President, Sikorsky Aircraft; Operating Partner, Advent International; President, Boeing Programs and Space, UTC Aerospace Systems	60
Robert J. McDonough	President, UTC Climate, Controls & Security (since September 2015)	Chief Operating Officer, Americas, UTC Building & Industrial Systems; Chief Operating Officer, Americas, UTC Climate, Controls & Security; President, UTC Climate, Controls & Security, Americas	57
David R. Whitehouse	Corporate Vice President, Treasurer, United Technologies Corporation (since April 2015)*	Vice President, Treasurer, United Technologies Corporation; Director, Capital Markets, United Technologies Corporation; Senior Vice President & Treasurer, Frontier Communications	50

*Certain executive officers' titles changed in November 2015 without any change in his or her responsibilities.

All of the officers serve at the pleasure of the Board of Directors of United Technologies Corporation or the subsidiary designated.

Information concerning Section 16(a) compliance is incorporated herein by reference to the section of our Proxy Statement for the 2017 Annual Meeting of Shareowners titled "Other Information" under the heading "Section 16(a) Beneficial Ownership Reporting Compliance." We have adopted a code of ethics that applies to all our directors, officers, employees and representatives. This code is publicly available on our website at http://www.utc.com/How-We-Work/Ethics-And-Compliance/

Pages/Default.aspx. Amendments to the code of ethics and any grant of a waiver from a provision of the code requiring disclosure under applicable SEC rules will be disclosed on our website. Our Corporate Governance Guidelines and the charters of our Board of Directors' Audit Committee, Finance Committee, Governance and Public Policy Committee and Committee on Compensation and Executive Development are available on our website at http://www.utc.com/Who-We-Are/Corporate-Governance/Pages/default.aspx. These materials may also be requested in print free of charge by writing to our Investor Relations Department at United Technologies Corporation, 10 Farm Springs Road, Investor Relations, Farmington, CT 06032.

Item 11. Executive Compensation

The information required by Item 11 is incorporated herein by reference to the sections of our Proxy Statement for the 2017 Annual Meeting of Shareowners titled "Executive Compensation," "Compensation of Directors" and "Report of Committee on Compensation and Executive Development."

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information relating to security ownership of certain beneficial owners and management is incorporated herein by reference to the sections of our Proxy Statement for the 2017 Annual Meeting of Shareowners titled "Stock Ownership Information."

Equity Compensation Plan Information

The following table provides information as of December 31, 2016 concerning Common Stock issuable under UTC's equity compensation plans.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by shareowners	13,639,000 (1)	$ 86.76	40,545,000 (2)
Equity compensation plans not approved by shareowners	—	—	—
Total	13,639,000	$ 86.76	40,545,000

(1) Consists of: (i) shares of Common Stock issuable upon the exercise of outstanding stock options awarded under the United Technologies Corporation Long-Term Incentive Plan, as amended (LTIP); (ii) shares of Common Stock issuable upon the exercise of outstanding Stock Appreciation Rights (SARs) awarded under the LTIP, (iii) shares of Common Stock issuable upon the vesting of outstanding deferred stock units and restricted stock units awarded under the United Technologies Corporation Board of Directors Deferred Stock Unit Plan, as amended and restated effective December 23, 2014 and (iv) shares of Common Stock issuable pursuant to outstanding restricted stock unit and performance share unit awards, assuming performance at the target level, except for the 2014 performance share unit awards which reflect actual performance achieved. Under the LTIP, each SAR referred to in clause (ii) is exercisable for a number of shares of Common Stock having a value equal to the increase in the market price of a share of such stock from the date the SAR was granted. For purposes of determining the total number of shares to be issued in respect of outstanding SARs as reflected in Column (a) above, we have used the NYSE closing price for a share of Common Stock on December 31, 2016 of $109.62. The amount of shares of Common Stock referred to in clause (iv) above includes 2,033,000 restricted shares and restricted share units and 1,323,000 performance share units. Up to an additional 1,323,000 shares of Common Stock could be issued if performance goals are achieved above target. The weighted average exercise price of outstanding options, warrants and rights shown in column (b) takes into account only the shares identified in clause (i) and (ii).

(2) Represents the maximum number of shares of Common Stock available to be awarded under the LTIP as of December 31, 2016. Performance share units and restricted stock units (Full Share Awards) will result in a reduction in the number of shares of Common Stock available for delivery under the LTIP in an amount equal to 4.03 times the number of shares to which the award corresponds. Stock options and stock appreciation rights do not constitute Full Share Awards and will result in a reduction in the number of shares of Common Stock available for delivery under the LTIP on a one-for-one basis.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by Item 13 is incorporated herein by reference to the sections of our Proxy Statement for the 2017 Annual Meeting of Shareowners titled "Election of Directors" (under the subheading "Nominees"), "Corporate Governance" (under the subheading "Director Independence") and "Other Information" (under the subheading "Transactions with Related Persons").

Item 14. Principal Accounting Fees and Services

The information required by Item 14 is incorporated by reference to the section of our Proxy Statement for the 2017 Annual Meeting of Shareowners titled "Appointment of a Firm of Independent Registered Public Accountants to Serve as Independent Auditor for 2017," including the information provided in that section with regard to "Audit Fees," "Audit-Related Fees," "Tax Fees" and "All Other Fees."

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) Financial Statements, Financial Statement Schedules and Exhibits

(1) Financial Statements (incorporated herein by reference to the 2016 Annual Report):

(2) Financial Statement Schedule for the three years ended December 31, 2016:

All other schedules are omitted because they are not applicable or the required information is shown in the financial statements or the notes thereto.

(3) Exhibits:

The following list of exhibits includes exhibits submitted with this Form 10-K as filed with the SEC and those incorporated by reference to other filings.

Exhibit Number	
2.1	Stock Purchase Agreement, dated as of July 19, 2015, by and among United Technologies Corporation, the other Sellers identified therein and Lockheed Martin Corporation, incorporated by reference to Exhibit 2.1 to UTC's Current Report on Form 8-K (Commission file number 1-812) filed with the SEC on July 20, 2015.
3(i)	Restated Certificate of Incorporation, restated as of April 25, 2016, incorporated by reference to Exhibit 3.1 to UTC's Current Report on Form 8-K (Commission file number 1-812) filed with the SEC on April 25, 2016.
3(ii)	Bylaws as amended and restated effective April 25, 2016, incorporated by reference to Exhibit 3.2 to UTC's Current Report on Form 8-K (Commission file number 1-812) filed with the SEC on April 25, 2016.
4.1	Amended and Restated Indenture, dated as of May 1, 2001, between UTC and The Bank of New York, as trustee, incorporated by reference to Exhibit 4(a) to UTC's Registration Statement on Form S-3 (Commission file number 333-60276) filed with the SEC on May 4, 2001. UTC hereby agrees to furnish to the Commission upon request a copy of each other instrument defining the rights of holders of long-term debt of UTC and its consolidated subsidiaries and any unconsolidated subsidiaries.
10.1	United Technologies Corporation Annual Executive Incentive Compensation Plan, incorporated by reference to Exhibit A to UTC's Proxy Statement for the 1975 Annual Meeting of Shareowners, Amendment No. 1 thereto, effective January 1, 1995, incorporated by reference to Exhibit 10.2 to UTC's Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 1995, and Amendment No. 2 thereto, effective January 1, 2009, incorporated by reference to Exhibit 10.1 to UTC's Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2008.
10.2	United Technologies Corporation Pension Preservation Plan, as amended and restated, effective December 31, 2009, incorporated by reference to Exhibit 10.3 to UTC's Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2009.
10.3	United Technologies Corporation Senior Executive Severance Plan, incorporated by reference to Exhibit 10(vi) to UTC's Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 1992, as amended by Amendment thereto, effective December 10, 2003, incorporated by reference to Exhibit 10.4 of UTC's Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2003, and Amendment thereto, effective June 11, 2008, incorporated by reference to Exhibit 10.4 of UTC's Quarterly Report on Form 10-Q (Commission file number 1-812) for the quarterly period ended June 30, 2008, and Amendment thereto, dated February 4, 2011, incorporated by reference to Exhibit 10.4 to UTC's Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2010.
10.4	United Technologies Corporation Deferred Compensation Plan, as amended and restated, effective January 1, 2005, incorporated by reference to Exhibit 10.5 of UTC's Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2008.
10.5	United Technologies Corporation Long Term Incentive Plan, incorporated by reference to Exhibit 10.11 to UTC's Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 1989, as amended by Amendment No. 1, incorporated by reference to Exhibit 10.11 to UTC's Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 1995, and Amendment No. 2, incorporated by reference to Exhibit 10.6 to UTC's Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2003.
10.6	United Technologies Corporation Executive Leadership Group Program, as amended and restated, effective October 15, 2013, incorporated by reference to Exhibit 10.11 to UTC's Quarterly Report on Form 10-Q (Commission file number 1-812) for the quarterly period ended September 30, 2013.
10.7	Schedule of Terms for Restricted Share Unit Retention Awards relating to the United Technologies Corporation Executive Leadership Group Program (referred to above in Exhibit 10.6), incorporated by reference to Exhibit 10.12 to UTC's Quarterly Report on Form 10-Q (Commission file number 1-812) for the quarterly period ended September 30, 2013.

10.8	Form of Award Agreement for Restricted Share Unit Retention Awards relating to the United Technologies Corporation Executive Leadership Group Program (referred to above in Exhibit 10.6), incorporated by reference to Exhibit 10.13 to UTC’s Quarterly Report on Form 10-Q (Commission file number 1-812) for the quarterly period ended September 30, 2013.
10.9	United Technologies Corporation Board of Directors Deferred Stock Unit Plan, as Amended and Restated, effective as of April 24, 2017.*
10.10	Retainer Payment Election Form for United Technologies Corporation Board of Directors Deferred Stock Unit Plan (referred to above in Exhibit 10.9).*
10.11	Form of Deferred Restricted Stock Unit Award relating to the United Technologies Corporation Board of Directors Deferred Stock Unit Plan (referred to above in Exhibit 10.9).*
10.12	United Technologies Corporation Long-Term Incentive Plan, as amended and restated effective April 28, 2014, incorporated by reference to Exhibit 10.1 to UTC’s Current Report on Form 8-K (Commission file number 1-812) filed with the SEC on May 2, 2014, as further amended by Amendment No. 1, effective as of February 5, 2016, incorporated by reference to Exhibit 10.12 to UTC's Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2015.
10.13	Schedule of Terms for restricted stock awards relating to the United Technologies Corporation Long-Term Incentive Plan (referred to above in Exhibit 10.12) (Rev. January 2016), incorporated by reference to Exhibit 10.13 to UTC’s Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2015.
10.14	Schedule of Terms for non-qualified stock option awards relating to the United Technologies Corporation Long-Term Incentive Plan (referred to above in Exhibit 10.12) (Rev. January 2016), incorporated by reference to Exhibit 10.15 to UTC’s Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2015.
10.15	Form of Award Agreement for non-qualified stock option awards relating to the United Technologies Corporation Long-Term Incentive Plan (referred to above in Exhibit 10.12)*
10.16	Schedule of Terms for performance share unit awards relating to the United Technologies Corporation Long-Term Incentive Plan (referred to above in Exhibit 10.12) (Rev. January 2016), incorporated by reference to Exhibit 10.17 to UTC’s Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2015.
10.17	Schedule of Terms for stock appreciation rights awards relating to the United Technologies Corporation 2005 Long-Term Incentive Plan (referred to above in Exhibit 10.12) (Rev. January 2016), incorporated by reference to Exhibit 10.18 to UTC’s Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2015.
10.18	Form of Award Agreement for restricted stock unit, performance share unit and stock appreciation rights awards relating to the United Technologies Corporation Long-Term Incentive Plan (referred to above in Exhibit 10.12)*
10.19	United Technologies Corporation LTIP Performance Share Unit Deferral Plan, relating to the Long-Term Incentive Plan (referred to above in Exhibit 10.12), incorporated by reference to Exhibit 10.36 of UTC’s Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2008.
10.20	United Technologies Corporation International Deferred Compensation Replacement Plan, effective January 1, 2005, incorporated by reference to Exhibit 10.35 of UTC’s Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2008.
10.21	United Technologies Corporation Company Automatic Excess Plan, effective January 1, 2010, incorporated by reference to Exhibit 10.30 to UTC’s Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2009.
10.22	United Technologies Corporation Savings Restoration Plan, effective January 1, 2010, incorporated by reference to Exhibit 10.31 to UTC’s Annual Report on Form 10-K (Commission file number 1-812) for the fiscal year ended December 31, 2009.
10.23	Director Agreement between Otis Elevator Worldwide SPRL and Mr. Philippe Delpech entered into on September 1, 2016.*
11	Statement Re: Computation of Per Share Earnings*
12	Statement Re: Computation of Ratios.*
13	Excerpts from UTC’s 2016 Annual Report to Shareowners for the year ended December 31, 2016.*

14	Code of Ethics. The UTC Code of Ethics may be accessed via UTC's website at http://www.utc.com/How-We-Work/Ethics-And-Compliance/Pages/Default.aspx
21	Subsidiaries of the Registrant.*
23	Consent of PricewaterhouseCoopers LLP.*
24	Powers of Attorney of Lloyd J. Austin III, Diane M. Bryant, John V. Faraci, Jean-Pierre Garnier, Edward A. Kangas, Ellen J. Kullman, Marshall O. Larsen, Harold W. McGraw III, Richard B. Myers, Fredric G. Reynolds, Brian C. Rogers, H. Patrick Swygert, André Villeneuve and Christine Todd Whitman.*
31	Rule 13a-14(a)/15d-14(a) Certifications.*
32	Section 1350 Certifications.*
101.INS	XBRL Instance Document.* (File name: utx-20161231.xml)
101.SCH	XBRL Taxonomy Extension Schema Document.* (File name: utx-20161231.xsd)
101.CAL	XBRL Taxonomy Calculation Linkbase Document.* (File name: utx-20161231_cal.xml)
101.DEF	XBRL Taxonomy Definition Linkbase Document.* File name: : utx-20161231_def.xml)
101.LAB	XBRL Taxonomy Label Linkbase Document.* (File name: utx-20161231_lab.xml)
101.PRE	XBRL Taxonomy Presentation Linkbase Document.* (File name: utx-20161231_pre.xml)

Notes to Exhibits List:

* Submitted electronically herewith.

Exhibits 10.1 through 10.23 are contracts, arrangements or compensatory plans filed as exhibits pursuant to Item 15(b) of the requirements for Form 10-K reports.

Attached as Exhibit 101 to this report are the following formatted in XBRL (Extensible Business Reporting Language): (i) Consolidated Statement of Operations for the three years ended December 31, 2016, (ii) Consolidated Statement of Comprehensive Income for the three years ended December 31, 2016, (iii) Consolidated Balance Sheet as of December 31, 2016 and 2015, (iv) Consolidated Statement of Cash Flows for the three years ended December 31, 2016, (v) Consolidated Statement of Changes in Equity for the three years ended December 31, 2016, (vi) Notes to Consolidated Financial Statements, and (vii) Financial Schedule of Valuation and Qualifying Accounts.

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.

UNITED TECHNOLOGIES CORPORATION
(Registrant)

By: /s/ AKHIL JOHRI
Akhil Johri
Executive Vice President & Chief Financial Officer

By: /s/ ROBERT J. BAILEY
Robert J. Bailey
Corporate Vice President, Controller

Date: February 9, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ GREGORY J. HAYES **(Gregory J. Hayes)**	Director, Chairman, President and Chief Executive Officer (Principal Executive Officer)	February 9, 2017
/s/ AKHIL JOHRI **(Akhil Johri)**	Executive Vice President & Chief Financial Officer (Principal Financial Officer)	February 9, 2017
/s/ ROBERT J. BAILEY **(Robert J. Bailey)**	Corporate Vice President, Controller (Principal Accounting Officer)	February 9, 2017
/s/ LLOYD J. AUSTIN III * **(Lloyd J. Austin III)**	Director	
/s/ DIANE M. BRYANT * **(Diane M. Bryant)**	Director	
/s/ JOHN V. FARACI * **(John V. Faraci)**	Director	
/s/ JEAN-PIERRE GARNIER * **(Jean-Pierre Garnier)**	Director	
/s/ EDWARD A. KANGAS * **(Edward A. Kangas)**	Director	
/s/ ELLEN J. KULLMAN * **(Ellen J. Kullman)**	Director	
/s/ MARSHALL O. LARSEN * **(Marshall O. Larsen)**	Director	
/s/ HAROLD W. MCGRAW III * **(Harold W. McGraw III)**	Director	
/s/ RICHARD B. MYERS * **(Richard B. Myers)**	Director	
/s/ FREDRIC G. REYNOLDS * **(Fredric G. Reynolds)**	Director	
/s/ BRIAN C. ROGERS * **(Brian C. Rogers)**	Director	
/s/ H. PATRICK SWYGERT * **(H. Patrick Swygert)**	Director	
/s/ ANDRÉ VILLENEUVE * **(André Villeneuve)**	Director	
/s/ CHRISTINE TODD WHITMAN * **(Christine Todd Whitman)**	Director	

*By: /s/ CHARLES D. GILL

Charles D. Gill
Executive Vice President &
General Counsel, as Attorney-in-Fact

Date: February 9, 2017

SCHEDULE I

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON

FINANCIAL STATEMENT SCHEDULE

To the Board of Directors and Shareowners
of United Technologies Corporation:

Our audits of the consolidated financial statements and of the effectiveness of internal control over financial reporting referred to in our report dated February 9, 2017 appearing in the 2016 Annual Report to Shareowners of United Technologies Corporation (which report and consolidated financial statements are incorporated by reference in this Annual Report on Form 10-K) also included an audit of the financial statement schedule listed in Item 15(a)(2) of this Form 10-K. In our opinion, this financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

/s/ PricewaterhouseCoopers LLP

Hartford, Connecticut
February 9, 2017

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SCHEDULE II

UNITED TECHNOLOGIES CORPORATION AND SUBSIDIARIES
Valuation and Qualifying Accounts
Three years ended December 31, 2016
(Millions of Dollars)

Allowances for Doubtful Accounts and Other Customer Financing Activity:		
Balance, December 31, 2013	$	538
Provision charged to income		93
Doubtful accounts written off (net)		(91)
Other adjustments		(46)
Balance, December 31, 2014		494
Provision charged to income		137
Doubtful accounts written off (net)		(59)
Other adjustments		(19)
Balance, December 31, 2015		553
Provision charged to income		**64**
Doubtful accounts written off (net)		**(105)**
Other adjustments		**(45)**
Balance, December 31, 2016	**$**	**467**
Future Income Tax Benefits—Valuation allowance:		
Balance, December 31, 2013	$	942
Additions charged to income tax expense		91
Reductions credited to income tax expense		(55)
Other adjustments [1]		(366)
Balance, December 31, 2014		612
Additions charged to income tax expense		42
Additions charged to goodwill, due to acquisitions		7
Reductions credited to income tax expense		(41)
Other adjustments [1]		(29)
Balance, December 31, 2015		591
Additions charged to income tax expense		**32**
Reductions credited to income tax expense		**(61)**
Other adjustments		**(17)**
Balance, December 31, 2016	**$**	**545**

Note 1: Included in Other adjustments in the table above are adjustments to valuation allowances associated with an agreement with a state taxing authority for the monetization of tax credits.

Exhibit 10.9

UNITED TECHNOLOGIES CORPORATION

BOARD OF DIRECTORS

DEFERRED STOCK UNIT PLAN

As Amended and Restated Effective April 24, 2017

UNITED TECHNOLOGIES CORPORATION BOARD OF DIRECTORS
DEFERRED STOCK UNIT PLAN

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ARTICLE I
INTRODUCTION AND PURPOSE

1.01 Purpose of Plan

The United Technologies Corporation Board of Directors Deferred Stock Unit Plan (the “Plan”) has been established to provide an arrangement for non-employee directors to receive an annual Deferred Stock Unit Award and a New Director Restricted Stock Unit Award and to defer their Annual Retainer in the form of deferred stock units equal in value to shares of the Corporation’s common stock for the purpose of aligning the interests of non-employee directors with those of the Corporation’s shareowners.

1.02 Effective Date of Plan and Amendments

(a) The Plan as originally adopted on January 1, 1996 was amended and restated effective January 1, 2005 for the purpose of complying with Section 409A of the Internal Revenue Code with respect to deferrals that were earned or vested after December 31, 2004. Amounts that were earned or vested (within the meaning of Section 409A) prior to January 1, 2005, and any subsequent increases in these amounts that are permitted to be treated as grandfathered benefits under Section 409A, are generally subject to and shall continue to be governed by the terms of the Prior Plan set forth in Appendix A.

(b) The Plan was amended and restated in 2010 for the purposes of: (i) revising the retainer structure; (ii) establishing share ownership guidelines for non-employee directors; and (iii) providing that distributions from this Plan and the Prior Plan will be comprised of shares of UTC Common Stock rather than cash. Changes effected by this amendment and restatement were generally effective as of October 13, 2010.

(c) The Plan was amended effective February 1, 2013, for the purpose of revising the retainer fee and annual deferred stock unit award amounts.

(d) The Plan was amended and restated for the purposes of: (i) revising the retainer fee and annual deferred stock unit award amounts as integrated into this Plan effective April 27, 2015; and (ii) establishing a retainer fee and deferred stock unit award for the position of non-executive Chairman of the Board effective November 23, 2014.

e) The Plan is hereby amended and restated for the purposes of: (i) revising the retainer fee and annual deferred stock unit award amounts as integrated into this Plan effective April 24, 2017; (ii) establishing that non-employee directors serving in multiple leadership roles shall receive the additional awards specified for each role; and (iii) certain other changes related to the administration of the Plan.

ARTICLE II
DEFINITIONS

Unless the context clearly indicates otherwise, the following terms, when used in capitalized form in the Plan, shall have the meanings set forth below:

Account means a bookkeeping account established for a Participant under Article IV that is credited with Deferred Stock Units representing compensation earned or vested after 2004. Any compensation earned and vested before 2005 shall be credited to a Participant's account(s) under the Prior Plan and shall be subject to the provisions set forth in Appendix A.

Annual Meeting means the Corporation's Annual Meeting of Shareowners.

Annual Retainer means the annual retainer fee payable to a Participant under Section 3.01 for services to the Company in the capacities indicated.

Annual Deferred Stock Unit Award means the annual grant of Deferred Stock Units made to Participants in accordance with Section 3.02.

Board Cycle means the period beginning as of the Annual Meeting and ending at the start of the next Annual Meeting.

Beneficiary means a Participant's beneficiary, designated in writing in a form and manner satisfactory to the Committee, or if a Participant fails to designate a beneficiary, or if all of the Participant's designated Beneficiaries predecease the Participant, the Participant's estate.

Board means the Board of Directors of the Corporation.

Closing Price means, with respect to any date specified by the Plan, the closing price of UTC Common Stock on the composite tape of New York Stock Exchange on such date (or if there was no reported sale of UTC Common Stock on such date, on the next following day on which there was such a reported sale).

Code means the Internal Revenue Code of 1986, as amended from time to time, and any successor thereto. References to any section of the Internal Revenue Code shall include any final regulations or other published guidance interpreting that section.

Committee means the Committee on Nominations and Governance of the Board.

Conversion Date means the date Deferred Stock Units are converted to shares of UTC Common Stock immediately prior to the delivery of such shares to a Participant or Beneficiary in accordance with Article V herein.

Corporation means United Technologies Corporation.

Deferred Annual Retainer means any portion of a Participant's Annual Retainer deferred in accordance with Article V.

Deferred Stock Unit means a hypothetical share of UTC Common Stock convertible into an actual share of UTC Common Stock following a Separation from Service and immediately prior to a distribution to be made in accordance with Article V. Each Deferred Stock Unit is equal in value to a share of UTC Common Stock. Deferred Stock Units are "restricted stock units" awarded under the LTIP and distributed and administered in accordance with the terms of this Plan.

Distribution Anniversary Date means an anniversary of the Distribution Commencement Date.

Distribution Commencement Date means the first business day of the first month following the month in which the Participant has a Separation from Service.

Election means an irrevocable election by a Participant either to defer all or a portion of the Annual Retainer otherwise payable in cash or to specify how an Account will be distributed (i.e., as a lump sum, in 10 annual installments, or in 15 annual installments).

LTIP means the 2005 United Technologies Corporation Long Term Incentive Plan, as amended from time to time.

Participant means a non-employee member of the Board.

Plan means this United Technologies Corporation Board of Directors Deferred Stock Unit Plan, as amended and restated herein, effective December 23, 2014 and as it may be subsequently amended from time to time.

Plan Year means the calendar year.

Prior Plan means the United Technologies Corporation Board of Directors Deferred Stock Unit Plan as in effect on October 3, 2004, and as modified thereafter from time to time in a manner that does not constitute a "material modification" for purposes of Section 409A, as set forth in Appendix A hereto.

New Director Restricted Stock Unit Award means the one-time Deferred Stock Unit award granted to a Participant upon election to the Board as provided in Section 3.03.

Separation from Service means a Participant's resignation, removal, or retirement from the Board (for a reason other than death) that constitutes a good-faith, complete termination of the Participant's relationship with the Corporation and that also qualifies as a "separation from service" for purposes of Section 409A of the Code.

UTC Common Stock shall mean the common stock of the Corporation.

ARTICLE III
ELIGIBLE COMPENSATION

3.01 Annual Retainer

(a) *Annual Retainer Amount.* Effective April 24, 2017, subject to subsection (b) of this Section 3.01, each Participant will receive a base Annual Retainer of $120,000. In addition to the base Annual Retainer, Participants serving in leadership roles on the Board and/or its committees shall receive the following additional Annual Retainer amounts: $32,000 for the Lead Director; $16,000 for the Audit Committee Chair; $12,000 for members of the Audit Committee; $10,000 for the Chair of the Committee on Compensation and Executive Development, the Chair of the Finance Committee, and the Chair of the Committee on Governance and Public Policy. In the event that a Participant serves in more than one role listed above, the Participant will receive the additional amounts specified for each role. The Annual Retainer is subject to change from time to time at the discretion of the Committee.

(b) *New Participants.* If a Participant is elected to the Board before September 30 of a Board Cycle, the Participant will receive the full amount of the then applicable Annual Retainer. Such amount will be eligible for deferral in accordance with Article V. If a Participant is elected to the Board after September 30 of a Board Cycle, the Participant will receive 50% of the applicable Annual Retainer Amount set forth in subsection (a) above.

3.02 Annual Deferred Stock Unit Award

(a) *Annual Deferred Stock Unit Award.* Effective April 24, 2017, subject to subsection (b) of this Section 3.02, each Participant will receive a base annual Deferred Stock Unit Award of $180,000, valued at the time of issuance, credited to the Participant's Account. In addition to the base annual Deferred Stock Unit Award, Participants serving in leadership roles on the Board and/or its committees shall receive the following additional annual Deferred Stock Units: $48,000 for the Lead Director; $24,000 for the Audit Committee Chair; $18,000 for members of the Audit Committee; $15,000 for the Chair of the Committee on Compensation and Executive Development, the Chair of the Finance Committee, and the Chair of the Committee on Governance and Public Policy. In the event that a Participant serves in more than one role listed above, the Participant shall receive the additional Deferred Stock Units awards specified for each role. The Annual Deferred Stock Unit Award is subject to change from time to time at the discretion of the Committee.

(b) *New Participants.* If a Participant is elected to the Board before September 30 of a Board Cycle, the Participant will receive an Annual Deferred Stock Unit Award equal in value to the amounts specified in sub-section (a) above. If a Participant is elected to the Board after September 30 of a Board Cycle, the Participant will receive an Annual Deferred Stock Unit Award equal to 50% of the value specified in subsection (a).

3.03 New Director Restricted Stock Unit Award

Effective as of the date of the Participant's election to the Board, the Participant shall receive an unvested award of restricted Deferred Stock Units, equal in value to $100,000 as of such date. The amount of a New Director Restricted Stock Unit Award is subject to change at the discretion of the Committee.

ARTICLE IV
ACCOUNTS AND CREDITS

4.01 Annual Deferred Stock Unit Award

The Annual Deferred Stock Unit Award shall be credited automatically to an Account established for the Participant, effective as of the date of the Annual Meeting. Participants may not elect to receive the Annual Deferred Stock Unit Award as current cash compensation.

4.02 Elective Annual Retainer

The Annual Retainer will be paid on the date of the Annual Meeting unless the Participant makes a timely irrevocable election in accordance with Article V to defer the receipt of the Annual Retainer as Deferred Stock Units subject to the terms of this Plan in lieu of a current cash payment.

4.03 New Director Restricted Stock Unit Award

Effective as of the date of the Participant's election to the Board, the Corporation will credit the amount of the New Director Restricted Stock Unit Award to a New Director Restricted Stock Unit Account established for the Participant. The New Director Restricted Stock Unit Account will consist of restricted Deferred Stock Units awarded under the LTIP and may not be settled prior to the Participant's Separation from Service. The value of the New Director Restricted Stock Unit Account is subject to forfeiture if a Separation from Service occurs before the first Annual Meeting following the date of election to the Board. Thereafter, the percentage of the New Director Restricted Stock Unit Award subject to forfeiture will be reduced by 20 percentage points as of the date of each succeeding Annual Meeting until the fifth annual meeting when 100% of the value of the New Director Restricted Stock Unit Award will be vested. There will be no forfeiture of interest in the New Director Restricted Stock Unit Account in the event the Separation of Service occurs by reason of the Participant's death, Disability, or for any reason following a "Change in Control" as such terms are defined in the LTIP while the Participant is a member of the Board, or in the event of the Participant's resignation or retirement from the Board for the purpose of accepting full-time employment in public or charitable service. A Participant's New Director Restricted Stock Unit Account will be credited with dividend equivalents in the form of additional Deferred Stock Units, which will vest immediately, but will otherwise be subject to the same restrictions applicable to the Deferred Stock Units credited to the Account.

4.04 Accounts

(a) *Post-December 31, 2004 Credits.* All (i) Annual Retainer deferrals, (ii) Annual Deferred Stock Unit Awards and (iii) New Director Restricted Stock Unit Awards earned or vested after December 31, 2004, shall be maintained in a Participant's Account established under and subject to the terms and conditions of the Plan, as amended and restated effective January 1, 2005 and as amended from time to time. Separate Accounts for post-December 31, 2004 Deferred Stock Units will be maintained for each Participant. Sub-accounts may be maintained within Participants' Accounts to the extent the Committee determines such an arrangement to be necessary or useful in the administration of the Plan.

(b) *Pre-January 1, 2005 Credits.* All Deferred Stock Unit and New Director Restricted Stock Unit Awards earned and vested prior to January 1, 2005, and any subsequent increases in these amounts that are permitted to be treated as grandfathered benefits under Section 409A of the Code (e.g., increases in unit value and dividend equivalents), shall be maintained in separate account(s) under the Prior Plan and shall remain subject to the terms and conditions of the Prior Plan as in effect on October 3, 2004. Prior Plan accounts shall be equal to the value earned and vested on December 31, 2004, as subsequently adjusted in accordance with the terms of the Prior Plan. The Prior Plan and Prior Plan accounts are not intended to be subject to Section 409A of the Code. No amendment to Appendix A that would constitute a "material modification" for purposes of Section 409A shall be effective unless the amending instrument states that it is intended to materially modify Appendix A and to cause the Prior Plan to become subject to Section 409A.

4.05 Deferred Stock Unit Accounts

Calculation of Deferred Stock Units. A Participant's Account (including his or her New Director Restricted Stock Unit Account) shall be credited with the number of Deferred Stock Units in accordance with the following rules:

(a) *Initial Crediting of Deferred Stock Units.* The New Director Restricted Stock Unit Award, the Annual Deferred Stock Unit Award and Deferred Annual Retainer (if any) credited to a Participant's Account for a Plan Year under Sections 4.01, 4.02 and 4.03 shall result in a number of Deferred Stock Units (including fractional Deferred Stock Units) credited to Participant's Account equal to the sum of the dollar amounts of the Annual Deferred Stock Unit Award, the New Director Restricted Stock Unit Award (if applicable) and the Deferred Annual Retainer (if any) divided by the Closing Price on the date of the Annual Meeting or the date a Participant is elected to the Board, if applicable.

(b) *Deemed Reinvestment of Dividends.* The number of Deferred Stock Units credited to a Participant's Account shall be increased on each date on which a dividend is paid on UTC Common Stock. The number of additional Deferred Stock Units credited to a Participant's Account as a result of such dividend payment shall be determined by (i) multiplying the total number of Deferred Stock Units (including fractional Deferred Stock Units) credited to the Participant's Account on the dividend payment date by the amount of the dividend paid per share of UTC Common Stock on the dividend payment date, and (ii) dividing the product so determined by the Closing Price on the dividend payment date.

(c) *Effect of Recapitalization.* In the event of a transaction or event described in this subparagraph (c) (a "Recapitalization Event"), the number of Deferred Stock Units credited to a Participant's Account shall be adjusted in the same manner as outstanding shares of UTC Common Stock. A Recapitalization Event includes a dividend (other than regular quarterly dividends) or other extraordinary distribution to holders of UTC Common Stock (whether in the form of cash, shares, other securities, or other property), extraordinary cash dividend, recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, repurchase, or exchange of shares or other securities, the issuance or exercisability of stock purchase rights, the issuance of warrants or other rights to purchase shares or other securities, or other similar corporate transaction or event that has a material effect on the shares of UTC Common Stock and requires conforming adjustment to the value and/or number of Deferred Stock Units to prevent dilution or enlargement of the value of Participants' Accounts.

4.06 Hypothetical Nature of Accounts and Investments

Each Account established under this Article IV shall be maintained for bookkeeping purposes only. Neither the Plan nor any of the Accounts established under the Plan shall hold any actual funds, shares or other assets. The Deferred Stock Units established hereunder shall be used solely to determine the amounts to be distributed hereunder, shall not be or represent an equity security of the Company, shall not be convertible into or otherwise entitle a Participant to acquire an equity security of the Company prior to a Conversion Date as provided for under the terms of this Plan and shall not carry any voting or dividend rights. Deferred Stock Units awarded under this Plan shall be evidenced by a certificate substantially in the form set forth in Appendix B.

ARTICLE V
ELECTION PROCEDURES AND DISTRIBUTIONS

5.01 Annual Retainer Deferral Election

Participants who elect to defer the receipt of the Annual Retainer as Deferred Stock Units for any year must make a written deferral election for that year on an Election form provided by the Committee.

5.02 Annual Retainer Deferral Election Deadline

A written Election form must be completed and submitted to the Office of the Corporate Secretary no later than December 31st of the calendar year prior to the year for which the Annual Retainer will be earned or, for new Participants, no later than 30 days after their election to the Board. If a Participant fails to timely submit a properly completed Election form, the Participant's Annual Retainer earned in the next succeeding year shall be paid in cash as provided in Section 4.02. The Participant's deferral election shall be irrevocable following the Election deadline.

5.03 Distribution Commencement Date

Conversion of Deferred Stock Units into shares of UTC Common Stock and distribution from a Participant's Account shall occur as of the Participant's Distribution Commencement Date, or, if the Participant has changed his or her distribution election as provided in Section 5.05, on the fifth anniversary of the Participant's elected Distribution Date. If a Participant dies at any time before distribution to the Participant commences, distribution of the entire value of the Participant's Account shall be made to the Participant's Beneficiary on the first business day of the third month following the month of the Participant's death.

A distribution is treated as being made on the date when it is due under the Plan if the distribution occurs on the date specified by the Plan, or on a later date that is either (a) in the same calendar year (for a distribution whose specified due date is on or before September 30), or (b) by the 15th day of the third calendar month following the date specified by the Plan (for a distribution with a specified due date that is on or after October 1). A distribution is also treated as having been made on the date when it is due under the Plan if the distribution is made not more than 30 days before the due date specified by the Plan. A Participant may not, directly or indirectly, designate the taxable year of a distribution made in reliance on the administrative rules in this Section 5.03.

5.04 Election of Form and Amount of Distribution

(a) *Full Distribution.* Following a Separation from Service, a Participant shall receive a number of shares of UTC Common Stock equal to the of the number of whole Deferred Stock Units credited to his or her Account unless the Participant timely elected to receive distributions from his or her Account in 10 or 15 annual installments in accordance with subsection (b), below. A distribution of shares of UTC Common Stock shall occur as provided in Section 5.03. Fractional Deferred Stock Units will be paid in cash.

(b) *10 or 15 Annual Installments.* A Participant may elect to receive distributions from his or her Account in 10 or 15 installments in lieu of a full distribution of shares under subsection (a) above. Annual installment distributions shall be in shares of UTC Common Stock unless the Participant has allocated the value of all or any portion of his or her Account into the fixed income option in accordance with Section

5.06 in which case distributions shall be payable to the Participant in cash. Installment distributions shall commence as of the Distribution Commencement Date and continue as of each Distribution Anniversary Date thereafter until all installments have been paid. The first annual installment shall equal one-tenth (1/10) (if Participant elects 10 installment payments) or one-fifteenth (1/15th) (if Participant elects 15 installment payments) of the value of the Participant's Account, determined as of the Distribution Commencement Date. Each successive annual installment shall equal the value of the Participant's Account, determined as of the Distribution Anniversary Date, multiplied by a fraction, the numerator of which is one, and the denominator of which shall be the number of remaining annual installments. If a Participant dies after the Distribution Commencement Date but before all installments have been made, the entire remaining value of the Participant's Account shall be distributed to the Participant's Beneficiary on the first business day of the third month following the month of the Participant's death.

(c) *Form of Distribution Election.* A valid election to receive annual distributions under subsection (b) shall be made in writing on an Election form, completed and submitted to the Office of the Corporate Secretary no later than December 31st of the calendar year prior to the year for which the Annual Retainer or Deferred Stock Unit Award is earned, or for new Participants, prior to the date the Participant is elected to the Board, and in no event later than 30 days after such election. A valid distribution Election for a New Director Restricted Stock Unit Award under subsection (b) shall be made in writing on an Election form, completed and submitted to the Office of the Corporate Secretary prior to the date Participant is elected to the Board, and in no event later than 30 days after such election. If a Participant does not make a valid distribution Election, the Participant shall be deemed to have elected to receive his or her Account in a full and immediate distribution as provided in subsection (a). Except as provided below in Section 5.05 (Change in Payment Election), a Participant's distribution Election shall become irrevocable on the Election deadline date.

5.05 Change in Distribution Election

A Participant may make a one-time irrevocable Election to change the form of distribution that the Participant elected under Section 5.04. A change to the form of distribution must meet the following requirements:

i. The new Election must be made at least twelve months prior to the Distribution Commencement Date (and the new election shall be ineffective if the Distribution Commencement Date occurs within twelve months after the date of the new Election);

ii. The new Election will not take effect until twelve months after the date when the Participant submits a new Election form to the Office of the Corporate Secretary;

iii. The new Distribution Commencement Date must be five years later than the date on which the distribution would otherwise have commenced; and

iv. The new form of distribution must be one of the forms of payment provided under Section 5.04(a) or (b).

5.06 Investment of Annual Retainer Account Election

A Participant may elect, prior to the Distribution Commencement Date or subsequent Distribution Anniversary Date, to convert all or any portion of the Deferred Stock Units in his or her Account to a hypothetical fixed interest investment for the remaining portion of the installment distribution period by making a written election on the Election form provided by the Committee. If a Participant makes such election to have his or her Account treated as if the Account were invested in cash during the remainder of the distribution period, the Account will be credited with a hypothetical interest at a rate equal to the average interest rate on 10-Year Treasury Bonds during the January through October period in the calendar year prior to the Plan Year in which the interest is credited, plus 1%.

ARTICLE VI
ADMINISTRATION

6.01 In General

The Committee shall have the discretionary authority to interpret the Plan and to decide any and all matters arising under the Plan, including without limitation the right to determine eligibility for participation, benefits, and other rights under the Plan; the right to determine whether any Election or notice requirement or other administrative procedure under the Plan has been adequately observed; the right to determine the proper recipient of any distribution under the Plan; the right to remedy possible ambiguities, inconsistencies, or omissions by general rule or particular decision; and the right otherwise to interpret the Plan in accordance with its terms. Except as otherwise provided in Section 6.04, the Committee's determination on any and all questions arising out of the interpretation or administration of the Plan shall be final, conclusive, and binding on all parties.

6.02 Plan Amendment and Termination

(a) The Committee may amend, suspend, or terminate the Plan at any time; provided that no amendment, suspension, or termination of the Plan shall, without a Participant's consent, reduce the Participant's benefits accrued under the Plan before the date of such amendment, suspension, or termination.

(b) In the event of suspension of the Plan, no additional deferrals shall be made under the Plan, but all previous deferrals shall accumulate and be distributed in accordance with the otherwise applicable provisions of this Plan, the Prior Plan and the applicable Elections on file.

(c) Upon the termination of the Plan with respect to all Participants, and termination of all arrangements sponsored by the Corporation or its affiliates that would be aggregated with the Plan under Section 409A of the Code, the Corporation shall have the right, in its sole discretion, and notwithstanding any Elections made by the Participant, to distribute the Participant's vested Account in full, to the extent permitted under Section 409A. All distributions that may be made pursuant to this Section 6.02(c) shall be made no earlier than the thirteenth month and no later than the twenty-fourth month after the termination of the Plan. The Corporation may not accelerate distributions pursuant to this Section 6.02(c) if the termination of the Plan is proximate to a downturn in the Corporation's financial health within the meaning of Treas. Reg. section 1.409A-3(j)(4)(ix)(C)(1). If the Corporation exercises its discretion to accelerate distributions under this Section 6.02(c), it shall not adopt any new arrangement that would have been aggregated with the Plan under Section 409A within three years following the date of the Plan's termination.

6.03 Reports to Participants

The Committee shall furnish an annual statement to each Participant reporting the value of the Participant's Account and his or her account(s) under the Prior Plan as of the end of the most recent Plan Year.

6.04 Delegation of Authority

The Committee may delegate to officers of the Corporation any and all authority with which it is vested under the Plan, and the Committee may allocate its responsibilities under the Plan among its members.

6.05 Distribution of Shares

The Deferred Stock Units granted under the Plan shall be issued under the LTIP, but subject to administration and distribution in accordance with the terms of this Plan. All shares of UTC Common Stock so distributed in accordance with the terms of the Plan shall be transferred to a brokerage account designated by the Participant entitled to receive the shares.

6.06 Share Ownership Requirements

Participants are expected to own shares of UTC Common Stock and have Deferred Stock Units equal in aggregate value to at least five times the then applicable base Annual Retainer amount set forth in Section 3.01 no later than the 5^{th} Annual Meeting following a Participant's election to the Board. In the event such ownership requirement is not achieved by such date, Annual Retainer fees shall be deferred until combined holdings satisfy this Section 6.06.

ARTICLE VII
MISCELLANEOUS

7.01 Rights Not Assignable

No payment due under the Plan shall be subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, or charge in any other way. Any attempt to anticipate, alienate, sell, transfer, assign, pledge, encumber, or charge such payment in any other way shall be void. No such payment or interest therein shall be liable for or subject to the debts, contracts, liabilities, or torts of any Participant or Beneficiary. If any Participant or Beneficiary becomes bankrupt or attempts to anticipate, alienate, sell, transfer, assign, pledge, encumber, or charge in any other way any payment under the Plan, the Committee may direct that such payment be suspended and that all future payments to which such Participant or Beneficiary otherwise would be entitled be held and applied for the benefit of such person, the person's children or other dependents, or any of them, in such manner and in such proportions as the Committee may deem proper.

7.02 Certain Rights Reserved

Nothing in the Plan shall confer upon any person the right to continue to serve as a member of the Board or to participate in the Plan other than in accordance with its terms.

7.03 Withholding Taxes

The Committee may make any appropriate arrangements to deduct from all credits and payments under the Plan any taxes that the Committee determines to be required by law to be withheld from such credits and payments.

7.04 Compliance with Section 409A

This Paragraph 7.04 shall apply notwithstanding any other provision of this Plan. To the extent that rights or payments under this Plan are subject to Section 409A of the Internal Revenue Code, the Plan shall be construed and administered in compliance with the conditions of Section 409A and regulations and other guidance issued pursuant to Section 409A for deferral of income taxation until the time the compensation is paid. Any distribution election that would not comply with Section 409A of the Code shall not be effective for purposes of this Plan. To the extent that a provision of this Plan does not comply with Section 409A of the Code, such provision shall be void and without effect. The Corporation does not warrant that the Plan will comply with Section 409A of the Code with respect to any Participant or with respect to any payment, however. In no event shall the Corporation; any director, officer, or employee of the Corporation (other than the Participant); or any member of the Committee be liable for any additional tax, interest, or penalty incurred by a Participant or Beneficiary as a result of the Plan's failure to satisfy the requirements of Section 409A of the Code, or as a result of the Plan's failure to satisfy any other requirements of applicable tax laws.

7.05 Incompetence

If the Committee determines, upon evidence satisfactory to the Committee, that any Participant or Beneficiary to whom a distribution is due under the Plan is unable to care for his or her affairs because of illness or accident or otherwise, any distribution is due under the Plan (unless prior claim therefore shall have been made by a duly authorized guardian or other legal representative) may be distributed, upon appropriate indemnification of the Committee and the Company, to the spouse of the Participant or Beneficiary or other person deemed by the Committee to have incurred expenses for the benefit of and on behalf of such Participant or Beneficiary. Any such distribution of shares or cash payment (as the case may be) shall be a complete discharge of any liability under the Plan with respect to the amount so distributed or paid.

7.06 Inability to Locate Participants and Beneficiaries

Each Participant and Beneficiary entitled to receive a distribution under the Plan shall keep the Committee advised of his or her current address. If the Committee is unable to locate a Participant or Beneficiary to whom a distribution is due under the Plan, the total amount payable to such Participant or Beneficiary shall be forfeited as of the last day of the calendar year in which the distribution first becomes due.

7.07 Successors

The provisions of the Plan shall bind and inure to the benefit of the Corporation and its successors and assigns. The term "successors" as used in the preceding sentence shall include any corporation or other business entity that by merger, consolidation, purchase, or otherwise acquires all or substantially all of the business and assets of the Corporation, and any successors and assigns of any such corporation or other business entity.

7.08 Usage

(a) *Titles and Headings.* The titles to Articles and the headings of Sections, subsections, and paragraphs in the Plan are placed herein for convenience of reference only and shall be of no force or effect in the interpretation of the Plan.

(b) *Number.* The singular form shall include the plural, where appropriate.

7.09 Severability

If any provision of the Plan is held unlawful or otherwise invalid or unenforceable in whole or in part, such unlawfulness, invalidity, or unenforceability shall not affect any other provision of the Plan or part thereof, each of which shall remain in full force and effect. If the making of any payment or the provision of any other benefit required under the Plan is held unlawful or otherwise invalid or unenforceable, such unlawfulness, invalidity or unenforceability shall not prevent any other payment or benefit from being made or provided under the Plan, and if the making of any payment in full or the provision of any other benefit required under the Plan in full would be unlawful or otherwise invalid or unenforceable, then such unlawfulness, invalidity, or unenforceability shall not prevent such payment or benefit from being made or provided in part, to the extent that it would not be unlawful, invalid, or unenforceable, and the maximum payment or benefit that would not be unlawful, invalid, or unenforceable shall be made or provided under the Plan.

7.10 Governing Law

The Plan and all determinations made and actions taken under the Plan shall be governed by and construed in accordance with the laws of the State of Connecticut.

UNITED TECHNOLOGIES CORPORATION

By ____

Attest: __________________________________

Date: __________________________________

APPENDIX A

This Appendix A sets forth the United Technologies Corporation Board of Directors Deferred Stock Unit Plan as in effect on October 3, 2004 (“Prior Plan”), and as modified thereafter from time to time in a manner that does not constitute a "material modification" for purposes of Section 409A. Amounts that were earned or vested (within the meaning of Section 409A) prior to January 1, 2005, and any subsequent increases in these amounts that are permitted to be treated as grandfathered benefits under Section 409A, are generally subject to and shall continue to be governed by the terms of this Prior Plan.

Effective October 13, 2010, Stock Units credited to Participants under this Prior Plan shall be convertible into shares of UTC Common Stock that will be issued under the LTIP. Notwithstanding any provision of this Prior Plan to the contrary, all distributions with respect to Stock Units under this Prior Plan shall be distributed in shares of Common Stock. The settlement of Stock Units in shares of Common Stock in lieu of cash shall in no event: (i) increase the value of any Participant’s Account; (ii) modify any Participant’s distribution election; or (iii) alter the procedures in effect under this Prior Plan with respect to elections and distributions other than the substitution of shares for cash.

UNITED TECHNOLOGIES CORPORATION

BOARD OF DIRECTORS

DEFERRED STOCK UNIT PLAN

Effective January 1, 1996

UNITED TECHNOLOGIES CORPORATION
BOARD OF DIRECTORS
DEFERRED STOCK UNIT PLAN
Table of Contents

ARTICLE I
INTRODUCTION

1.01 Purpose of Plan

The purpose of the Plan is to enhance the Company's ability to attract and retain non-employee members of the Board whose training, experience and ability will promote the interests of the Company and to directly align the interests of such non-employee Directors with the interests of the Company's shareowners by providing compensation based on the value of UTC Common Stock. The Plan is designed to permit such non-employee directors to defer the receipt of all or a portion of the cash compensation otherwise payable to them for services to the Company as members of the Board.

1.02 Effective Date of Plan

Except as otherwise provided by Section 3.01, the Plan shall apply only to a Participant's annual Director's retainer Fees with respect to service on and after January 1, 1996.

ARTICLE II
DEFINITIONS

Unless the context clearly indicates otherwise, the following terms, when used in capitalized form in the Plan, shall have the meanings set forth below:

Account shall mean a bookkeeping account established for a Participant under Section 4.01.

Article shall mean an article of the Plan.

Beneficiary shall mean a Participant's beneficiary, designated in writing and in a form and manner satisfactory to the Committee, or if a Participant fails to designate a beneficiary, or if the Participant's designated Beneficiary predeceases the Participant, the Participant's estate.

Board shall mean the Board of Directors of the Company.

Closing Price shall mean, with respect to any date specified by the Plan, the closing price of UTC Common Stock on the composite tape of New York Stock Exchange issues (or if there was no reported sale of UTC Common Stock on such date, on the next preceding day on which there was such a reported sale).

Committee shall mean the Nominating Committee of the Board.

Company shall mean United Technologies Corporation.

Director's Fees shall mean the annual retainer fee payable to a Participant for services to the Company as a member of the Board. Director's Fees do not include special meeting fees.

Participant shall mean each member of the Board (other than a member of the Board who is also an employee of the Company or a subsidiary thereof) who is or becomes a member of the Board on or after January 1, 1996.

Payment Anniversary Date shall mean an anniversary of the Payment Commencement Date.

Payment Commencement Date shall mean the first business day of the first month following the month in which the Participant terminates service as a member of the Board.

Plan shall mean this United Technologies Corporation Board of Directors Deferred Stock Unit Plan, as set forth herein and as amended from time to time.

Plan Year shall mean the calendar year.

Section shall mean a section of the Plan.

Stock Unit shall mean a hypothetical share of UTC Common Stock as described in Section 4.02.

UTC Common Stock shall mean the common stock of the Company.

ARTICLE Ill
CREDITS

3.01 Transition Credits

As soon as practicable on or after January 1, 1996, the Company shall credit to the Account of each Participant a number of Stock Units determined in accordance with the schedules set forth in Appendix I and Appendix II to the Plan. The credits set forth in Appendix I shall be provided in lieu of any benefits to which the Participant otherwise would have been entitled under the United Technologies Corporation Directors Retirement Plan as of its termination on December 31, 1995. The credits set forth in

Appendix II shall be provided in lieu of any benefits to which the Participant otherwise would be entitled under certain deferred compensation arrangements entered into prior to January 1, 1996. The number of units set forth in Appendix II shall equal the number of tax deferred stock units (if any) credited to the Participant under any such prior deferred compensation arrangement, determined as of December 31, 1995.

3.02 Automatic Credits

As of the beginning of each Plan Year, the Company shall credit Stock Units to each Participant's Account equal in value to 60% of the Participant's Director's Fees for the Plan Year, as determined in accordance with Section 4.02(a)(1).

3.03 Elective Credits

A Participant may elect, with respect to each Plan Year, to defer the entire portion (but not a partial portion) of the 40% of the Participant's Director's Fees that are not automatically deferred in accordance with Section 3.02 and that otherwise would be paid to the Participant in cash. If the Participant makes such an election, the Company shall credit Stock Units to the Participant's Account equal in value to 40% of the Participant's Director's Fees for the Plan Year, as determined in accordance with Section 4.02(a)(I), as of the beginning of the Plan Year with respect to which the election is made (or, if later, as of the first day in the Plan Year on which the individual becomes a Participant). An election under this Section 3.03 shall be made in a form and manner satisfactory to the Committee and shall be effective for a Plan Year only if made before the beginning of the Plan Year; provided that an individual who becomes a Participant after the first day of a Plan Year may make the election for that Plan Year within 30 days of becoming a Participant.

ARTICLE IV
ACCOUNTS AND INVESTMENTS

4.01 Accounts

A separate Account under the Plan shall be established for each Participant. Such Account shall be (a) credited with the amounts credited in accordance with Article Ill, (b) credited (or charged, as the case may be) with the investment results determined in accordance with Section 4.02, and (c) charged with the amounts paid by the Plan to or on behalf of the Participant in accordance with Article V. Within each Participant's Account, separate subaccounts shall be maintained to the extent the Committee determines them to be necessary or useful in the administration of the Plan.

4.02 Stock Units

(a) **Deemed Investment in UTC Common Stock.** Except as provided in subsection (b), below, a Participant's Account shall be treated as if it were invested in Stock Units that are equivalent in value to the fair market value of shares of UTC Common Stock in accordance with the following rules:

(1) *Conversion into Stock Units.* Any Director's Fees credited to a Participant's Account for a Plan Year under Section 3.02 or 3.03 shall be converted into Stock Units (including fractional Stock Units) by dividing the amount credited by the Closing Price on the first business day of the Plan Year; provided that in the case of an individual who becomes a Participant after the first day of a Plan Year, the Closing Price shall be determined as of the day on which the individual becomes a Participant.

(2) *Deemed Reinvestment Of Dividends.* The number of Stock Units credited to a Participant's Account shall be increased on each date on which a dividend is paid on UTC Common Stock. The number of additional Stock Units credited to a Participant's Account as a result of such increase shall be determined by (i) multiplying the total number of Stock Units (excluding fractional Stock Units) credited to the Participant's Account immediately before such increase by the amount of the dividend paid per share of UTC Common Stock on the dividend payment date, and (ii) dividing the product so determined by the Closing Price on the dividend payment date.

(3) *Conversion Out of Stock Units.* The dollar value of the Stock Units credited to a Participant's Account on any date shall be determined by multiplying the number of Stock Units (including fractional Stock Units) credited to the Participant's Account by the Closing Price on that date.

(4) *Effect of Recapitalization.* In the event of a transaction or event described in this paragraph (4), the number of Stock Units credited to a Participant's Account shall be adjusted in such manner as the Committee, in its sole discretion, deems equitable. A transaction or event is described in this paragraph (4) if (i) it is a dividend (other than regular quarterly dividends) or other distribution (whether in the form of cash, shares, other securities, or other property), extraordinary cash dividend, recapitalization, stock split, reverse stock split reorganization, merger, consolidation, split-up, spin-off, repurchase, or exchange of shares or other securities, the issuance or exercisability of stock purchase rights, the issuance of warrants or other rights to purchase shares or other securities, or other similar corporate transaction or event and (ii) the Committee determines that such transaction or event affects the shares of UTC Common Stock, such that an adjustment pursuant to this paragraph (4) is appropriate to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under

the Plan.

(b) *Change in Deemed Investment Election.* A Participant who elects to receive distribution of his or her Accounts in annual installments will continue to have such Account credited with Stock Units during the installment period unless the Participant irrevocably elects to have his or her Account treated, as of the Payment Commencement Date, as if the Account were invested in cash. If a Participant makes such election, the Account will be credited with a rate of interest equal to the average interest rate on 10-Year Treasury Bonds as of the January through October Period in the calendar year prior to the Plan Year in which the interest is credited, plus I %. An election under this subsection (b) shall be made in a form and manner satisfactory to the Committee and shall be effective only if made before the Payment Commencement Date.

4.03 Hypothetical Nature of Accounts and Investments

Each Account established under this Article IV shall be maintained for bookkeeping purposes only. Neither the Plan nor any of the Accounts established under the Plan shall hold any actual funds or assets. The Stock Units established hereunder shall be used solely to determine the amounts to be paid hereunder, shall not be or represent an equity security of the Company, shall not be convertible into or otherwise entitle a Participant to acquire an equity security of the Company and shall not carry any voting or dividend rights.

ARTICLE V
PAYMENTS

5.01 Entitlement to Payment

Credits to a Participant's Account under Section 3.02 or 3.03 shall be in lieu of payment to the Participant of the related Director's Fees. Any payment under the Plan with respect to an Account shall be made solely in cash and as further provided in this Article V. The right of any person to receive one or more payments under the Plan shall be an unsecured claim against the general assets of the Company.

5.02 Payment Commencement Date

Payments to a Participant with respect to the Participant's Account shall begin as of the Participant's Payment Commencement Date; provided that if a Participant dies before the Participant's Payment Commencement Date, payment of the entire value of the Participant's Account shall be made in a lump sum to the Participant's Beneficiary as soon as practicable after the Committee receives all documents and other information that it requests in connection with the payment.

5.03 Form and Amount of Payment

(a) *Fifteen Annual Installments.* A Participant shall receive his or her benefits in 15 annual installments unless the Participant elects to receive his or her benefits under the Plan in the form of a lump-sum payment or in less than 15 annual installments in accordance with subsection (b), below. Annual installments shall be payable to the Participant in cash beginning as of the Payment Commencement Date and continuing as of each Payment Anniversary Date thereafter until all installments have been paid. The first annual installment shall equal one- fifteenth (1/15th) of the value of the Stock Units credited to the Participant's Account, determined as of the Payment Commencement Date. Each successive annual installment shall equal the value of the Stock Units credited to the Participant's Account, determined as of the Payment Anniversary Date, multiplied by a fraction, the numerator of which is one, and the denominator of which is the excess of 15 over the number of installment payments previously made (i.e., 1/14th, 1/13th, etc.). If the Participant dies after the Participant's Payment Commencement Date but before all 15 installments have been paid, the remaining installments shall be paid to the Participant's Beneficiary in accordance with the schedule in this subsection (a).

(b) *Lump Sum, or Less Than 15 Annual Installments.* A Participant may elect to receive his or her benefits under the Plan in the form of a lump-sum payment or in two to fourteen installments in lieu of the fifteen installment payments determined under subsection (a), above. The lump sum shall be payable to the Participant in cash as of the Payment Commencement Date and shall equal the value of the Stock Units credited to the Participant's Account, determined as of the Payment Commencement Date. Installments shall be paid in the manner set forth in subsection (a) above, except that for purposes of determining the amount of the first annual installment, the denominator of the fraction shall equal the number of scheduled annual installments. An election under this subsection (b) shall be made in a form and manner satisfactory to the Committee and shall be effective only if made at least two years before the Participant's Payment Commencement Date.

ARTICLE VI
ADMINISTRATION

6.01 In General

The Committee shall have the discretionary authority to interpret the Plan and to decide any and all matters arising under the Plan, including without limitation the right to determine eligibility for participation, benefits, and other rights under the Plan; the right to determine whether any election or notice requirement or other administrative procedure under the Plan has been adequately observed; the right to determine the proper recipient of any distribution under the Plan; the right to remedy possible ambiguities, inconsistencies, or omissions by general rule or particular decision; and the right otherwise to interpret the Plan in accordance with its terms. Except as otherwise provided in Section 6.03, the Committee's determination on any and all questions arising out of the interpretation or administration of the Plan shall be final, conclusive, and binding on all parties.

6.02 Plan Amendment and Termination

The Committee may amend, suspend, or terminate the Plan at any time; provided that no amendment, suspension, or termination of the Plan shall, without a Participant's consent, reduce the Participant's benefits accrued under the Plan before the date of such amendment, suspension, or termination. If the Plan is terminated in accordance with this Section 6.02, the terms of the Plan as in effect immediately before termination shall determine the right to payment in respect of any amounts that remain credited to a Participant's or Beneficiary's Account upon termination.

6.03 Reports to Participants

The Committee shall furnish an annual statement to each Participant (or Beneficiary) reporting the value of the Participant's (or Beneficiary's) Account as of the end of the most recent Plan Year.

6.04 Delegation of Authority

The Committee may delegate to officers of the Company any and all authority with which it is vested under the Plan, and the Committee may allocate its responsibilities under the Plan among its member.

ARTICLE VII
MISCELLANEOUS

7.01 Rights Not Assignable

No payment due under the Plan shall be subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, or charge in any other way. Any attempt to anticipate, alienate, sell, transfer, assign, pledge, encumber, or charge such payment in any other way shall be void. No such payment or interest therein shall be liable for or subject to the debts, contracts, liabilities, or torts of any Participant or Beneficiary. If any Participant or Beneficiary becomes bankrupt or attempts to anticipate, alienate, sell, transfer, assign, pledge, encumber, or charge in any other way any payment under the Plan, the Committee may direct that such payment be suspended and that all future payments to which such

Participant or Beneficiary otherwise would be entitled be held and applied for the benefit of such person, the person's children or other dependents, or any of them, in such manner and in such proportions as the Committee may deem proper.

7.02 Certain Rights Reserved

Nothing in the Plan shall confer upon any person the right to continue to serve as a member of the Board or to participate in the Plan other than in accordance with its terms.

7.03 Withholding Taxes

The Committee may make any appropriate arrangements to deduct from all credits and payments under the Plan any taxes that the Committee reasonably determines to be required by law to be withheld from such credits and payments.

7.04 Incompetence

If the Committee determines, upon evidence satisfactory to the Committee, that any Participant or Beneficiary to whom a benefit is payable under the Plan is unable to care for his or her affairs because of illness or accident or otherwise, any payment due under the Plan (unless prior claim therefore shall have been made by a duly authorized guardian or other legal representative) may be paid, upon appropriate indemnification of the Committee and the Company, to the spouse of the Participant or Beneficiary or other person deemed by the Committee to have incurred expenses for the benefit of and on behalf of such Participant or Beneficiary. Any such payment shall be a complete discharge of any liability under the Plan with respect to the amount so paid.

7.05 Inability to Locate Participants and Beneficiaries

Each Participant and Beneficiary entitled to receive a payment under the Plan shall keep the Committee advised of his or her current address. If the Committee is unable for a period of 36 months to locate a Participant or Beneficiary to whom a payment is due under the Plan, commencing with the first day of the month as of which such payment first comes due, the total amount payable to such Participant or Beneficiary shall be forfeited. Should such a Participant or Beneficiary subsequently contact the Committee requesting payment, the Committee shall, upon receipt of all documents and other information that it might request in connection with the payment, restore and pay the forfeited payment in a lump sum, the value of which shall not be adjusted to reflect any interest or other type of investment earnings or gains for the period of forfeiture.

7.06 Successors

The provisions of the Plan shall bind and inure to the benefit of the Company and its successors and assigns. The term "successors" as used in the preceding sentence shall include any corporation or other business entity that by merger, consolidation, purchase, or otherwise acquires all or substantially all of the business and assets of the Company, and any successors and assigns of any such corporation or other business entity.

7.07 Usage

(a) *Titles and Headings.* The titles to Articles and the headings of Sections, subsections, and paragraphs in the Plan are placed herein for convenience of reference only and shall be of no force or effect in the interpretation of the Plan

(b) *Number.* The singular form shall include the plural, where appropriate.

7.08 Severability

If any provision of the Plan is held unlawful or otherwise invalid or unenforceable in whole or in part, such unlawfulness, invalidity, or unenforceability shall not affect any other provision of the Plan or part thereof, each of which shall remain in full force and effect. If the making of any payment or the provision of any other benefit required under the Plan is held unlawful or otherwise invalid or unenforceable, such unlawfulness, invalidity or unenforceability shall not prevent any other payment or benefit from being made or provided under the Plan, and if the making of any payment in full or the provision of any other benefit required under the Plan in full would be unlawful or otherwise invalid or unenforceable, then such unlawfulness, invalidity, or unenforceability shall not prevent such payment or benefit from being made or provided in part, to the extent that it would not be unlawful, invalid, or unenforceable, and the maximum payment or benefit that would not be unlawful, invalid, or unenforceable shall be made or provided under the Plan.

7.09 Governing Law

The Plan and all determinations made and actions taken under the Plan shall be governed by and construed in accordance with the laws of the State of Connecticut.

UNITED TECHNOLOGIES CORPORATION

By ____

Attest:

____

Date:

____

APPENDIX B

UNITED TECHNOLOGIES CORPORATION
2005 LONG TERM INCENTIVE PLAN
STATEMENT OF AWARD

Effective _____________, ________________________________ has been awarded ____________ Deferred Stock Units ("DSUs") under the United Technologies Corporation Board of Directors Deferred Stock Unit Plan (the "Deferred Stock Unit Plan"). DSUs awarded hereunder constitute long term incentive awards under the United Technologies Corporation 2005 Long Term Incentive Plan, as amended (the "LTIP"). DSUs are convertible into shares of UTC Common Stock that will be issued under the LTIP. The conversion of DSUs into shares and the distribution of such shares shall be subject to and in accordance with the terms of the Deferred Stock Unit Plan.

Exhibit 10.10

UNITED TECHNOLOGIES CORPORATION
BOARD OF DIRECTORS
2017 ANNUAL COMPENSATION DISTRIBUTION ELECTION FORM

Non-employee members of the Board of Directors receive annual compensation comprised of an Annual Retainer and an Annual Award of Deferred Stock Units ("DSUs"). The compensation arrangements for non-employee Directors shall be as follows:

	Total Combined Award	Annual Retainer Award	Annual DSU Award
Base Compensation	300,000	120,000	180,000

In addition to the Base Compensation detailed above, non-employee Directors serving in leadership roles on the Board and/or its committees shall receive the following awards:

	Total Combined Award	Annual Retainer Award	Annual DSU Award
Lead Director	80,000	32,000	48,000
Audit Chair	40,000	16,000	24,000
Audit Members	30,000	12,000	18,000
Compensation Chair	25,000	10,000	15,000
Finance Chair	25,000	10,000	15,000
Governance Chair	25,000	10,000	15,000

Directors serving in multiple leadership roles will receive the additional awards applicable to each role.

I hereby elect to receive my entire 2017 Annual Retainer Award as follows **(please check one)**:

☐ Cash payable as of the date of the 2017 Annual Meeting

☐ Deferred Stock Units issued as of the date of the 2017 Annual Meeting

Upon retirement or termination from the Board, I elect to receive distribution of my total 2017 DSUs in **(please check one):**

☐ 15 annual installments

☐ 10 annual installments

☐ A full and immediate distribution of all shares

The number of DSUs will be determined by dividing your Annual DSU Award (including your Annual Retainer Award if you so elect above) by the closing price of UTC common stock on the date of the Annual Meeting. Fractional DSUs will be credited to your account. All whole or partial DSUs will be eligible for dividend equivalents equal to UTC's declared dividend and will be credited to your account as additional DSUs on the date the dividend is paid.

Upon retirement or termination from the Board, DSUs held in your account will be converted into shares of UTC common stock and distributed to you, unless you elected 10 or 15 annual installments, in which case DSUs will be converted to shares of stock in accordance with the installment schedule. During the installment period, the balance in your account will continue to be held and valued as DSUs unless you elect to convert the units to a fixed interest account credited at the 10 year U.S. Treasury bill rate plus 1%. During the installment period, the value of your account will not be taxable until each installment distribution is received. In the event of your death before distribution, the full value of your account will be distributed to your estate unless a Beneficiary

Designation form is on file. DSUs will be governed by the terms and conditions of the United Technologies Corporation Board of Directors Deferred Stock Unit Plan.

Signature **Print Name** **Date**

Please return by December 21, 2016 to: Office of the Corporate Secretary, United Technologies Corporation
Fax: (860) 660-0250 or Email: christina.monteith@utc.com

Exhibit 10.11

UTC BOARD OF DIRECTORS
DEFERRED STOCK UNIT PLAN
Deferred Restricted Stock Unit Award

INSERT NAME

Under the UTC Board of Directors Deferred Stock Unit Plan, each non-employee Director of the Company receives, as of the effective date of election to the Board, a non-recurring award of deferred restricted stock units having a grant date value of $100,000, based on the closing price of UTC common stock on that date (the “Units”). This award is intended to promote a closer identity of interests between Non-Employee Directors and shareowners by providing non-employee Directors with an equity-based interest in the Company’s future performance.

The Units are subject to a restriction on transferability and may not be sold, assigned, pledged or transferred while such restriction remains in effect. However, once vested, you are the owner of such Units on the records of the Company. Please note that the restriction on transferability continues in effect on vested Units while you remain a Director of UTC. Accordingly, by your acceptance of the Units, you agree that your vested Units will not be sold, assigned, pledged or transferred by you prior to your retirement or resignation as a Director of UTC. Your Unit balance will be credited with additional Units equivalent in value to the dividend paid on the corresponding number of shares of UTC Common Stock. The dividend equivalent Units will vest immediately but will otherwise be subject to the same transfer restrictions applicable to the initial Units.

The Units will vest in increments of 20 percent per year. The effective date of the grant of your Units will be January 3, 2017. The first 20 percent will vest on the date of UTC’s next Annual Shareowner Meeting. An additional 20 percent will vest on the date of UTC’s Annual Meeting each succeeding year while you continue on the Board. At the time you retire or resign from the Board, your vested Units will be converted into shares of UTC Common Stock and distributed to you. As an alternative to full distribution of your shares following retirement, you may elect to receive the value of your vested units following retirement or resignation in 10 or 15 annual installment distributions by checking one of the two boxes below:

☐ 15 annual installments

☐ 10 annual installments

In compliance with IRS rules, if you make or alter such election after you join the Board, you must do so at least one year prior to retiring or resigning from the Board, and your distribution will begin five years from the date the award would otherwise be scheduled for distribution.

Any Units not vested as of the date you resign or retire from the Board will be forfeited without payment of any compensation to you. However, in the event of a “change of control” or a “restructuring event” as defined by the United Technologies Corporation Long Term Incentive Plan, or upon your death or your resignation from the Board due to disability, or if you retire or resign to accept full-time employment in public or charitable service, all Units that have not previously vested will immediately vest and convert into shares of UTC Common Stock and be distributed in accordance with your election on file.

Deferred Restricted Stock Unit Award
(Continued)

Recognition of Ordinary Income Under U.S. Tax Law

For federal income tax purposes, you will be required to include as income the value of any shares of UTC Common Stock distributed to you following your departure from the Board. Additional Units credited as a result of dividend payments are not included in your income until they are distributed to you.

The foregoing is only a brief summary of the federal income tax consequences of the Units. You are urged to consult with your tax advisor for advice regarding your individual circumstances. UTC will report and withhold such income as required by state, federal, or other applicable laws.

Please confirm your agreement by returning a signed and dated copy of this award statement by facsimile to (860) 660-0250 or email to christina.monteith@utc.com.

I acknowledge receipt of this Deferred Restricted Stock Unit Award. I accept this Award subject to the terms detailed herein, and the United Technologies Corporation Board of Directors Deferred Stock Unit Plan.

____
Signature

____
Printed Name

____
Date

Please Return by
December 21, 2016 to: Office of the Corporate Secretary
United Technologies Corporation
Fax: (860) 660-0250
or
Email: christina.monteith@utc.com

Exhibit 10.16

Your Stock Option ("Options") Award

Performance. Results. Rewards.

Name:

Grant Date:

About This Statement

This personalized statement shows your Stock Option Award under the United Technologies Corporation Long-Term Incentive Plan, as amended (the "LTIP"). The award shown in this statement is subject to the terms and conditions of the LTIP.

Your Stock Option Award

Type	Number of Units	Grant Price	Estimated Present Value	Vesting Date*	Expiration Date
Options					

**Note: The Award will vest according to this schedule provided you are employed by the Company on these dates.*

Stock Options ("Options")

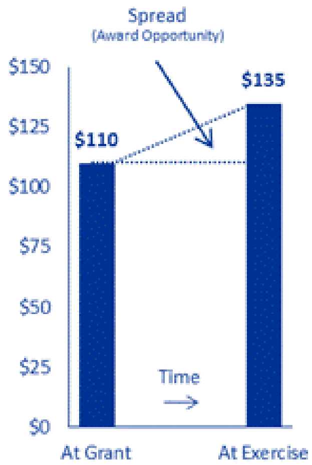
How Do Options Work?

A stock option is similar to a Stock Appreciation Right ("SAR") and delivers equivalent value when exercised.

- Provides gain equal to the difference in UTC stock price from grant date to exercise date
- Vests three years after grant date
- Expires ten years from the grant date, unless exercised
- No dividend equivalents
- At exercise, value is delivered in shares of UTC Common Stock that can be:
  -- Converted to cash, or
  -- Held as shares with dividend rights

An Example

Number of Options granted	1,000
UTC stock price at grant	$100 per share
UTC stock price at exercise	$125 per share
Increase in UTC stock price from grant date to exercise date:	$125 per share -$100 per share = $25 per share
Total gain from Option exercise:	1,000 options X $25 per share = $25,000
Conversion into shares of UTC stock:	$25,000 ÷$125 per share = 200 shares



You may view your award online at the UBS *One Source* website. You can access the UBS One Source website from any computer at http://www.ubs.com/onesource/utx (you will need a User ID and PIN).

HOW TO ACCEPT YOUR AWARD - WITHIN 150 DAYS

You will receive an email from UBS alerting you that your award has posted to your UBS account. You must acknowledge and accept the terms and conditions of your award electronically via UBS *One Source*.

If you do not accept your award on-line at UBS *One Source* within 150 days of the Grant Date, your award will be forfeited.

The award shown in this statement is nontransferable and is subject to the terms and conditions of the United Technologies Corporation Long-Term Incentive Plan, as amended. I acknowledge this statement of award, the 20XX Schedule of Terms describing my award. I understand that I am accepting this award subject to the 20XX Schedule of Terms and the LTIP. In accepting this award, I accept responsibility for any tax liabilities associated with this award at the time of grant, lapse, exercise and/or sale. I authorize the Company, its Affiliates and its third party administrators to collect, use, process, transfer, and hold my personal data, in electronic or other form, as required for the implementation, administration and management of this award and the LTIP within or outside the country in which I reside or work.

Exhibit 10.19

Your 20XX Long-Term Incentive Award

Performance. Results. Rewards.

Name:
Grant Date:

About This Statement

This personalized statement shows your 20XX Award under the United Technologies Corporation Long-Term Incentive Plan, as amended (the "LTIP"). The Award shown in this statement is subject to the terms and conditions of the LTIP.

As an __ executive, you receive your Long-Term Incentive Plan award value in three parts:
- «SAR_»% in Stock Appreciation Rights ("SARs")
- «RSU_»% in Restricted Stock Units ("RSUs")
- «PSU_»% in Performance Share Units ("PSUs")

Your 20XX Long-Term Incentive Plan Award

How the Award Is Distributed:

Type	Number of Units	Grant Price	Estimated Present Value	Vesting Date	Expiration Date
SARs					
RSUs[1]					
PSUs[2]					
Total Estimated Present Value:					

1-RSUs include any RSUs received as a result of an LTI Choice election. 20XX LTIP RSUs will earn dividends reinvested as additional RSUs during the vesting period.
2-PSU vesting occurs following approval of the performance score by the Committee on Compensation & Executive Development of the UTC Board of Directors in early 20XX.

Performance Targets:
- Three-year Earnings Per Share ("EPS") Compound Annual Growth Rate ("CAGR")[3]
- Three-year quarterly average Return on Invested Capital ("ROIC")[3]
- Relative three-year cumulative Total Shareholder Return ("TSR") vs. the S&P 500 Index

PSU Performance Metrics[4]	Weighting	UTC Achievement			PSU Vesting		
		Threshold	Target	Maximum	Threshold	Target	Maximum
EPS Growth							
ROIC							
Relative TSR							

3-Diluted EPS and ROIC are based on continuing operations adjusted for restructuring, nonrecurring and other significant defined non-operational items when necessary to preserve the validity of measured performance. Refer to the PSU Schedule of Terms for details on how Diluted EPS and ROIC are calculated.
4-Measurement Period: January 1, 20XX through December 31, 20XX.

How to Accept Your Award

You will receive an email from UBS in early March 20XX alerting you that your Award has posted to your UBS account. You must acknowledge and accept the terms and conditions of your Award electronically via UBS *One Source*. You can access the UBS *One Source* site from any computer (using your UBS Participant ID and PIN) at http://www.ubs.com/onesource/utx.

First time Award recipients will receive their UBS Participant ID from UTC's Stock Plan Administrator and their temporary password from UBS.

If you do not accept your Award on-line at UBS *One Source* by June 1, 20XX, your Award will be forfeited.

The award shown in this statement is nontransferable and is subject to the terms and conditions of the United Technologies Corporation Long-Term Incentive Plan, as amended. I acknowledge this statement of award, the 2017 Schedule of Terms and the LTIP. I understand that I am accepting this award subject to the 2017 Schedule of Terms and the LTIP. In accepting this award, I accept responsibility for any tax liabilities associated with this award at the time of grant, lapse, exercise and/or sale. I authorize the Company, its Affiliates and its third party administrators to collect, use, process, transfer, and hold my personal data, in electronic or other form, as required for the implementation, administration and management of this award and the LTIP within or outside the country in which I reside or work.

Exhibit 10.23

DIRECTOR AGREEMENT

<u>**BETWEEN:**</u> **OTIS ELEVATOR WORLDWIDE SPRL**, a Belgian Company having its registered seat at Avenue des Arts, 58, 1000 Brussels, Belgium;

Here represented by Christian Meisner, acting in his capacity of Director;

Hereinafter referred to as "**the Company**";

<u>**AND:**</u> **Mr. Philippe Delpech**, domiciled at [Intentionally omitted];

Hereinafter referred to as "**the Director**";

Hereinafter jointly referred to as "**the Parties**";

WHEREAS the Director will be appointed as a member of the Board of Directors of the Company as from 1 September 2016;

WHEREAS the Board of Directors of the Company has decided to remunerate the Director for his activities as Director and President, Otis Elevator Worldwide as from 1 September 2016;

WHEREAS the Parties acknowledge that the Director, given the nature of his mission and large scope of responsibilities, is expected to be subject to the Belgian social security scheme for self-employed workers and the principle of independence is considered to be essential to this agreement;

WHEREAS the Director declares that he is able and willing to fulfil this position, pursuant to the terms and conditions set out below;

WHEREAS the Parties expect furthermore that the Director will be eligible for the Belgian special expatriate tax status in consideration of the temporary nature of his position in Belgium linked to the likelihood of a transfer to other regions in the future.

THE FOLLOWING HAS BEEN AGREED TO:

<u>**Article 1 – Functions**</u>

1.1. The Director has been nominated as a member of the Board of Directors of the Company. Within the Board of Directors, the Director has been assigned to act as President, Otis Elevator Worldwide.

1.2. The Director is held to exercise personally his mandate as Director. He is not allowed to transfer or delegate this mandate in whole or in part to a third party without the express prior permission of the Company.

1.3. In his capacity of President, the Director is entrusted with:

1.3.1. the responsibilities assigned to the Board of Directors by the applicable provisions of the Belgian Corporate Law Code (as a member of the Board of Directors);

1.3.2. His duties shall include amongst others:

- Provide overall strategic direction, leadership, and management to the worldwide operations of Otis Elevator, including all required management reporting to UTC Group related thereto;
- Respond to changing market dynamics to assure the continuing competitiveness of the business;
- Direct the development of plans and policies;
- Work with and advise the worldwide business to establish short and long-term operating financial objectives;
- Continually appraise and evaluate results of each business and their consolidated performance to assure attainment of objectives;
- Provide leadership and direction to support and ensure compliance with the UTC Code of Ethics, UTC Corporate Policy Manual, and UTC Financial Manual throughout the worldwide operations of Otis Elevator; and
- Work as a key member of the Company's team and alongside colleagues around the world for companies belonging to the UTC Group.

1.4. The Director shall fulfill his duties and responsibilities during the necessary time in order to meet the needs of his areas of responsibility as Director and President of the Company.

1.5. The Director shall report to the Board of Directors of the Company and if required provide information to the shareholders in connection with the status of the operations of the Company and the exercise of his functions under this Agreement. He shall supply the Shareholders' Meeting with all information or explanations, which it may reasonably request from him.

1.6. The Director shall for the exercise of his functions under this Agreement act along the general lines of strategy set out by the Board of Directors and the shareholders and actively contribute to the realization of the strategy.

1.7. The Director agrees that he may be assigned by the Board of Directors to perform activities which relate to the business of other companies of UTC.

1.8. In the event the duties and/or the responsibilities of the Director, as described under section 1.3 of this Agreement, would change substantially in the future following a decision of the Board of Directors, the terms and conditions of this Agreement will be adjusted and the remuneration as determined in Article 2 will be aligned. The changes will be described in an addendum to this Agreement, which will be signed by the Company and by the Director.

Article 2 – Remuneration and Benefits

2.1. The Company pays the Director an annual fee amounting to 762.000 EUR gross per year for his activities under this Agreement. The Director's remuneration has been determined taking into account the benefits of the special expatriate tax status.

The Company will make an application under the special tax regulations for expatriates and specialists who are performing professional activities in Belgium on a temporary basis. In order to facilitate obtaining cover under the special tax regulations, the Director will submit whatever information and documents without delay at the request of the Company.

Tax in Belgium is calculated in accordance with the special tax regulations for expatriates (circular of 8 August 1983).

The annual fee shall be paid in twelve equal installments at the end of each month and shall be subject to the statutory income tax withholdings at source. The Director shall pay the quarterly bill of social security contributions to the social insurance fund to which he will be affiliated.

2.2. The Company provides the Director a target bonus of 100% of the annual fee in accordance with the Key Performance Indicators as determined annually between both Parties.

2.3. The Company shall provide a leased company car per Company policy and a fuel card to the Director, for business and private use, along with a driver for the business use of such car. All income taxes and social security charges relating to the private use of the car shall be at the expense of the Director.

2.4. The Company shall put a mobile phone at the Director's disposal, for business and private use. All communication costs shall be at the expense of the Company.

2.5. The Company shall pay for the actual costs of the Director's children's schooling fees, excluding post-secondary or tertiary school education (e.g. college/university schooling fees), in accordance with Company policies.

2.6. The Company shall reimburse housing rental by the Director of 9,000 EUROS per month.

2.7. The Director will be eligible to participate in the UTC long-term incentive plan.

2.8. The Company will contribute 20% of the Director's annual fee of 762.000 EUR to a Belgium Pension Savings Plan, providing a retirement lump sum. The Director will participate in the additional insurance coverage plans of the Company or of UTC applicable to directors.

2.9. The Company reserves the right to withhold applicable taxes from any amounts paid pursuant to this Agreement to the extent required by country and provincial/state laws. The Director shall be responsible for any and all tax liabilities imposed on any amounts paid hereunder.

Article 3 – Expenses

In due consideration of his duties, the Director will incur a number of expenses, which relate to duties performed outside the premises of the Company and also to representation towards business relationships of the Company and UTC.

All reasonable professional expenses may be claimed back from the Company by means of an expense claim report in such form as directed by the Company.

Article 4 - Place of Activities and Mobility

4.1 The Director will execute his obligations under this Agreement at the Company's registered office in Belgium or any other offices of UTC as agreed by the Company. In view of the fact that the Director is allowed to use the infrastructure of the Company, he agrees to respect all instructions in relation to the access to the premises, safety and health that are applicable at the Company's premises.

4.2 The Director acknowledges that, in the framework of his functions as described under Section 1.3 of this Agreement, he may be requested to perform short-term business trips on a different location, either in Belgium or abroad.

Article 5 - Non-Disclosure of Confidential Information

During and after the execution of this Agreement, the Director shall not directly or indirectly disclose to any third person or entity, except as required directly in connection with the performance of his duties hereunder, any confidential information (as defined below) learned or obtained by him, concerning the business and affairs of the Company or any Company of UTC,

As used herein, the term "Confidential Information" means information disclosed to the Director or known by him as a consequence of his activities for the Company and not generally known in the industry in which the Company is engaged and which in any way relates to the Company or UTC, its affiliates, customers, suppliers, products, financial statements, processes, services, inventions (whether patentable or not), formulas, techniques or know-how, including, but not limited to, information relating to research, development, manufacturing, purchasing, accounting, engineering, marketing, merchandising and selling.

This Article 5 shall not apply to information which is (i) properly and lawfully in the public domain otherwise than by breach of this Agreement or any other obligation of confidence, (ii) lawfully obtained from a third party which is free to divulge such information or (iii) independently developed by the receiving party.

Upon termination of this Agreement, the Director shall return to the Company all documents, originals and copies, in any form, in his possession or under his control, which reflect any Confidential Information or which otherwise are the property of the Company or any of its affiliates, at the request of the Company. The Director shall not retain any copies, duplicates, reproductions, or excerpts thereof.

Article 6 – Other Activities

6.1. The Director acknowledges that the scope of the duties and responsibilities as described under section 1.3 of this Agreement requires his full commitment, attention and dedication and that the proper performance of these duties and responsibilities can be jeopardized by performing other professional activities.

In this respect, the Director will inform the Company of his intention to engage in other activities, prior to committing himself to the engagement in other activities.

6.2. The Parties will subsequently determine the potential impact of the intended engagement in other activities on the performance of the duties and responsibilities under this Agreement. If the impact is deemed substantial by the Company, the Parties agree that the conditions of the present Agreement will be adjusted accordingly. The Company has the right to refuse the performance of activities in case these are deemed to be of a competitive nature towards the activities of the Company or its affiliates or in case the activities would no longer allow the Director to sufficiently devote his professional dedication to the Company.

6.3. This Article 6 applies to all other activities, irrespectively whether these are performed directly or indirectly or whether they are remunerated or not.

Article 7 - Responsibilities

7.1. In his capacity of Director of the Company, the professional liability of the Director is determined by the applicable articles of the Belgian Corporate Law Code. In this respect, the Company will conclude a director's liability insurance on behalf of the Director.

7.2. In addition to the responsibilities and duties delineated in Article 1, the Director shall:

7.2.1. Indemnify the Company for any damage caused as a result of a breach of Article 5 and/or Article 6 of this Agreement; and

7.2.2. Execute his obligations under this Agreement in strict compliance with the laws of the Kingdom of Belgium, and in adherence with the UTC Code of Ethics, UTC Corporate Policy Manual, and the UTC Financial Manual.

Article 8 – Date of Commencement, Term and Termination

8.1. The Parties enter into this Agreement effective as of 1 September 2016.

8.2. This Agreement shall remain effective for the entire duration of the Director's mandate and will automatically come to an end upon termination of the mandate.

8.3. The Director's nomination as a member of the Board of Directors is subject to the revocation *ad nutum* of the General Shareholder's Meeting of the Company.

Article 9 – Independent Parties

9.1. The Parties acknowledge that the principle of independence, as defined by Belgian social legislation, constitutes an essential element of this Agreement in absence of which this Agreement would not have been concluded.

9.2. The Director shall determine himself how to carry out his duties and shall receive no direct instructions regarding how the work should be organized, except for the general guidelines justified by the necessities of the collaboration between the Parties. Furthermore, the Director shall not be required to provide justification with regard to the time spent, the detailed methods of work or the organization of his work.

9.3. The Director shall comply with all tax, social security and legal formalities and obligations, which are imposed on persons performing a self-employed professional activity. In this regard, the Director shall pay the quarterly bill of social security contributions, which will be issued to him by the social insurance fund to which he is affiliated and shall provide the Company with proof of the payment of said contributions during the quarter following the quarter in which the contributions become due.

9.4. The Director shall be entitled to bind and represent the Company to the extent authorised under his mandate as Director of the Company.

Article 10 - Governing Law

This Agreement shall be governed by and interpreted in accordance with the laws of the Kingdom of Belgium.

Article 11 - Severability

If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions shall remain in full force and effect and shall in no way be affected, impaired or invalidated. It is hereby stipulated and declared to be the intention of the Parties that they would have executed such remaining terms, provisions, covenants and restrictions without including any of such which may be declared invalid, void or unenforceable.

Article 12 – Miscellaneous

12.1. This Agreement contains the entire understanding of the Parties with respect to its subject matter and supersedes all prior written and oral understandings between the Parties with respect to its subject matter.

12.2. This Agreement may not be amended, modified or supplemented except upon the execution and delivery of a written agreement executed by the Parties hereto.

12.3. Parties both confirm that neither are under any impediment, whether by law, contractual agreement or otherwise, to entering into this Agreement and fully performing their obligations hereunder.

This Agreement has been signed in Belgium on 1 September 2016 in the English language, in two counterparts, each party acknowledging receipt of an original, duly signed by both Parties.

For the COMPANY

/s/ Christian E. Meisner /s/ Philippe Delpech

____________________________ ____________________________

Mr. Christian E. Meisner Mr. Philippe Delpech

In his capacity of Director

Exhibit 11

UNITED TECHNOLOGIES CORPORATION
AND SUBSIDIARIES

STATEMENT RE: COMPUTATION OF PER SHARE EARNINGS

(dollars in millions, except per share amounts, shares in thousands)	Full year 2016	2015	2014	2013	2012
Net income from continuing operations	**$ 5,065**	$ 3,996	$ 6,066	$ 5,265	$ 4,337
Net (loss) income from discontinued operations	**(10)**	3,612	154	456	793
Net income attributable to common shareowners	**$ 5,055**	$ 7,608	$ 6,220	$ 5,721	$ 5,130
Net income from continuing operations	**$ 5,065**	$ 3,996	$ 6,066	$ 5,265	$ 4,337
Basic earnings for period	**$ 5,065**	$ 3,996	$ 6,066	$ 5,265	$ 4,337
Diluted earnings for period	**$ 5,065**	$ 3,996	$ 6,066	$ 5,265	$ 4,337
Basic average number of shares outstanding during the period	**818,200**	872,700	898,300	901,000	895,200
Stock awards (thousands)	**7,900**	10,500	13,300	14,100	11,400
Diluted average number of shares outstanding during the period	**826,100**	883,200	911,600	915,100	906,600
Basic earnings per common share - continuing operations	**$ 6.19**	$ 4.58	$ 6.75	$ 5.84	$ 4.84
Diluted earnings per common share - continuing operations	**$ 6.13**	$ 4.53	$ 6.65	$ 5.75	$ 4.78
Net income attributable to common shareowners	**$ 5,055**	$ 7,608	$ 6,220	$ 5,721	$ 5,130
Basic earnings for period	**$ 5,055**	$ 7,608	$ 6,220	$ 5,721	$ 5,130
Diluted earnings for period	**$ 5,055**	$ 7,608	$ 6,220	$ 5,721	$ 5,130
Basic average number of shares outstanding during the period	**818,200**	872,700	898,300	901,000	895,200
Stock awards	**7,900**	10,500	13,300	14,100	11,400
Diluted average number of shares outstanding during the period	**826,100**	883,200	911,600	915,100	906,600
Basic earnings per common share	**$ 6.18**	$ 8.72	$ 6.92	$ 6.35	$ 5.73
Diluted earnings per common share	**$ 6.12**	$ 8.61	$ 6.82	$ 6.25	$ 5.66

Exhibit 12

UNITED TECHNOLOGIES CORPORATION
AND SUBSIDIARIES

STATEMENT RE: COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES

	Full year				
(dollars in millions)	**2016**	2015	2014	2013	2012
Fixed Charges:					
Interest expense [1]	**$ 1,161**	$ 945	$ 1,099	$ 1,032	$ 893
Interest capitalized	**34**	27	25	22	19
One-third of rents [2]	**129**	129	145	142	143
Total fixed charges	**$ 1,324**	$ 1,101	$ 1,269	$ 1,196	$ 1,055
Earnings:					
Income from continuing operations before income taxes	**$ 7,133**	$ 6,467	$ 8,712	$ 7,654	$ 6,172
Fixed charges per above	**1,324**	1,101	1,269	1,196	1,055
Less: capitalized interest	**(34)**	(27)	(25)	(22)	(19)
	1,290	1,074	1,244	1,174	1,036
Amortization of interest capitalized	**9**	12	12	11	11
Total earnings	**$ 8,432**	$ 7,553	$ 9,968	$ 8,839	$ 7,219
Ratio of earnings to fixed charges	**6.37**	6.86	7.86	7.39	6.84

[1] Pursuant to the guidance in the Income Taxes Topic of the Financial Accounting Standards Board Accounting Standards Codification, interest related to unrecognized tax benefits recorded was approximately $41 million, $34 million, $179 million, $50 million and $39 million for the years 2016, 2015, 2014, 2013 and 2012, respectively. The ratio of earnings to fixed charges would have been 6.18, 6.65, 6.88, 7.09 and 6.60 for the years 2016, 2015, 2014, 2013 and 2012, respectively, if such interest were excluded from the calculation.

[2] Reasonable approximation of the interest factor.

Exhibit 13

Five-Year Summary

(dollars in millions, except per share amounts)	**2016**	2015	2014	2013	2012
For The Year					
Net sales	**$ 57,244**	$ 56,098	$ 57,900	$ 56,600	$ 51,101
Research and development	**2,337**	2,279	2,475	2,342	2,193
Restructuring costs	**290**	396	354	431	537
Net income from continuing operations [1]	**5,436**	4,356	6,468	5,655	4,692
Net income from continuing operations attributable to common shareowners [1]	**5,065**	3,996	6,066	5,265	4,337
Basic earnings per share—Net income from continuing operations attributable to common shareowners	**6.19**	4.58	6.75	5.84	4.84
Diluted earnings per share—Net income from continuing operations attributable to common shareowners	**6.13**	4.53	6.65	5.75	4.78
Cash dividends per common share	**2.62**	2.56	2.36	2.20	2.03
Average number of shares of Common Stock outstanding:					
Basic	**818**	873	898	901	895
Diluted	**826**	883	912	915	907
Cash flows provided by operating activities of continuing operations	**6,412**	6,755	6,979	7,341	5,990
Capital expenditures [2, 3]	**1,699**	1,652	1,594	1,569	1,295
Acquisitions, including debt assumed	**712**	556	530	151	18,620
Repurchases of Common Stock [4]	**2,254**	10,000	1,500	1,200	—
Dividends paid on Common Stock (excluding ESOP)	**2,069**	2,184	2,048	1,908	1,752
At Year End					
Working capital [3, 5]	**$ 6,644**	$ 4,088	$ 5,921	$ 5,733	$ 3,948
Total assets [3]	**89,706**	87,484	86,338	85,029	83,499
Long-term debt, including current portion [3, 6]	**23,300**	19,499	19,575	19,744	22,603
Total debt [3, 6]	**23,901**	20,425	19,701	20,132	23,106
Total debt to total capitalization [6]	**45%**	41%	38%	38%	46%
Total equity [6, 7]	**29,169**	28,844	32,564	33,219	27,069
Number of employees [8]	**201,600**	197,200	211,500	212,400	218,300

Note 1 2016 amounts include a $423 million pre-tax pension settlement charge resulting from defined benefit plan de-risking actions. 2015 amounts include pre-tax charges of: $867 million as a result of a settlement with the Canadian government, $295 million from customer contract negotiations at UTC Aerospace Systems, and $237 million related to pending and future asbestos claims.

Note 2 Capital expenditures increased from 2012 through 2016 as we expanded capacity to meet expected demand within our aerospace businesses for the next generation engine platforms.

Note 3 Excludes assets and liabilities of discontinued operations held for sale, for all periods presented.

Note 4 Share repurchases in 2015 include share repurchases under accelerated repurchase agreements of $2.6 billion in the first quarter of 2015 and $6.0 billion in the fourth quarter of 2015. In connection with the acquisition of Goodrich, repurchases of common stock under our share repurchase program were suspended for 2012. We resumed our share repurchase program in 2013.

Note 5 Working capital in 2015 includes approximately $2.4 billion of taxes payable related to the gain on the sale of Sikorsky, which were paid in 2016. As compared with 2014, 2015 working capital also reflects the reclassification of current deferred tax assets and liabilities to non-current assets and liabilities in connection with the adoption of Accounting Standards Update 2015-17.

Note 6 The increase in the 2016 debt to total capitalization ratio primarily reflects additional borrowings in 2016 to fund share repurchases and for general corporate purposes. The decrease in the 2013 debt to total capitalization ratio, as compared to 2012, reflects the repayment of approximately $2.9 billion of long-term debt, most of which was used to finance the acquisition of Goodrich.

Note 7 The decrease in total equity in 2015, as compared with 2014, reflects the sale of Sikorsky and the share repurchase program. The decrease in total equity in 2014, as compared with 2013, reflects unrealized losses of approximately $2.9 billion, net of taxes, associated with the effect of market conditions on our pension plans.

Note 8 The decrease in employees in 2015, as compared with 2014, primarily reflects the 2015 divestiture of Sikorsky.

Management's Discussion and Analysis of Financial Condition and Results of Operations

BUSINESS OVERVIEW

We are a global provider of high technology products and services to the building systems and aerospace industries. Our operations for the periods presented herein are classified into four principal business segments: Otis, UTC Climate, Controls & Security, Pratt & Whitney, and UTC Aerospace Systems. Otis and UTC Climate, Controls & Security are referred to as the "commercial businesses," while Pratt & Whitney and UTC Aerospace Systems are referred to as the "aerospace businesses." On November 6, 2015, we completed the sale of the Sikorsky Aircraft business (Sikorsky) to Lockheed Martin Corp. for approximately $9.1 billion in cash. The results of operations and the related cash flows of Sikorsky have been reclassified to Discontinued Operations in our Consolidated Statements of Operations and Cash Flows for all periods presented.

The commercial businesses generally serve customers in the worldwide commercial and residential property industries, with UTC Climate, Controls & Security also serving customers in the commercial and transport refrigeration industries. The aerospace businesses serve commercial and government aerospace customers in both the original equipment and aftermarket parts and services markets. Our consolidated net sales were derived from the commercial and aerospace businesses as follows:

	2016	2015	2014
Commercial and industrial	**50%**	52%	52%
Military aerospace and space	**12%**	12%	13%
Commercial aerospace	**38%**	36%	35%
	100%	100%	100%

Our consolidated net sales were derived from original equipment manufacturing (OEM) and aftermarket parts and services as follows:

	2016	2015	2014
OEM	**54%**	56%	56%
Aftermarket parts and services	**46%**	44%	44%
	100%	100%	100%

Our worldwide operations can be affected by industrial, economic and political factors on both a regional and global level. To limit the impact of any one industry, or the economy of any single country on our consolidated operating results, our strategy has been, and continues to be, the maintenance of a balanced and diversified portfolio of businesses. Our operations include OEM and extensive related aftermarket parts and services in both our commercial and aerospace businesses. Our business mix also reflects the combination of shorter cycles at UTC Climate, Controls & Security and in our commercial aerospace spares businesses, and longer cycles at Otis and in our aerospace OEM and aftermarket maintenance businesses. Our customers include companies in both the public and private sectors, and our businesses reflect an extensive geographic diversification that has evolved with the continued globalization of world economies. The composition of net sales from outside the U.S., including U.S. export sales, as a percentage of total segment sales, is as follows:

(dollars in millions)	**2016**	2015	2014	**2016**	2015	2014
Europe	**$ 11,151**	$ 10,945	$ 12,587	**19%**	19%	22%
Asia Pacific	**8,260**	8,425	8,746	**14%**	15%	15%
Other Non-U.S.	**5,479**	5,584	5,511	**9%**	10%	9%
U.S. Exports	**10,827**	9,741	10,276	**19%**	17%	18%
International segment sales	**$ 35,717**	$ 34,695	$ 37,120	**61%**	61%	64%

As part of our growth strategy, we invest in businesses in certain countries that carry high levels of currency, political and/or economic risk, such as Argentina, Brazil, China, India, Indonesia, Mexico, Poland, Russia, South Africa and countries in the Middle East. As of December 31, 2016, the net assets in any one of these countries did not exceed 7% of consolidated shareowners' equity.

In a referendum on June 23, 2016, voters in the United Kingdom (the U.K.) voted in favor of the U.K.'s exiting the European Union (the EU). Since the vote, the pound sterling has weakened significantly, but most financial markets have recovered to the levels prior to the vote. However, the manner in which the U.K. decides to exit the EU could have negative macroeconomic consequences. Our 2016 full year sales in the U.K. were approximately $3 billion and represented less than 5 percent of our overall sales, and we do not believe the U.K.'s withdrawal from the EU will significantly impact our businesses in the near term.

Organic sales growth was 2% in 2016 representing:

- higher commercial aftermarket sales at Pratt & Whitney

- higher commercial OEM and aftermarket sales volume at UTC Aerospace Systems

- higher service sales in the Americas and Asia and higher new equipment sales in North America, partially offset by lower new equipment sales in China at Otis

- lower commercial HVAC sales in the Middle East, lower fire products sales, and lower transport refrigeration sales partially offset by higher North America residential HVAC sales at UTC Climate, Controls & Security

Despite an uncertain global macro environment, we expect organic sales growth in 2017 to be 2% to 4%, with foreign exchange expected to have an unfavorable impact of approximately 1%. We continue to invest in new platforms and new markets to position the Company for long-term growth, while remaining focused on innovation for growth, structural cost reduction, disciplined capital allocation and the execution of customer and shareowner commitments.

As discussed below in "Results of Operations," operating profit in both 2016 and 2015 includes the impact from activities that are not expected to recur often or that are not otherwise reflective of the underlying operations, such as the adverse impact of asset impairment charges, unfavorable impact of contract negotiations with customers, the beneficial impact of net gains from business divestiture activities, and other significant non-recurring and non-operational items discussed within the Results of Operations section, below. Our earnings growth strategy contemplates earnings from organic sales growth, including growth from new product development and product improvements, structural cost reductions, operational improvements, and incremental earnings from our investments in acquisitions.

Our investments in businesses in 2016 and 2015 totaled $712 million (including debt assumed of $2 million) and $556 million (including debt assumed of $18 million), respectively. Acquisitions completed in 2016 include the acquisition of a majority interest in an Italian-based heating products and services company by UTC Climate, Controls & Security, the acquisition of a Japanese services company by Otis and a number of small acquisitions primarily in our commercial businesses. Our investment in businesses in 2015 consisted of the acquisition of the majority interest in a UTC Climate, Controls & Security business, the acquisition of an imaging technology company by UTC Aerospace Systems, and a number of small acquisitions, primarily in our commercial businesses.

Both acquisition and restructuring costs associated with business combinations are expensed as incurred. Depending on the nature and level of acquisition activity, earnings could be adversely impacted due to acquisition and restructuring actions initiated in connection with the integration of businesses acquired. For additional discussion of acquisitions and restructuring, see "Liquidity and Financial Condition," "Restructuring Costs" and Notes 2 and 13 to the Consolidated Financial Statements.

Discontinued Operations

On November 6, 2015, we completed the sale of Sikorsky to Lockheed Martin Corp. for approximately $9.1 billion in cash. As noted above, the results of operations and the related cash flows of Sikorsky have been reclassified to Discontinued Operations in our Consolidated Statements of Operations, Comprehensive Income and Cash Flows for all periods presented. Proceeds from the sale were used to fund $6 billion of share repurchases through accelerated share repurchase (ASR) agreements entered into on November 11, 2015. In connection with the sale of Sikorsky, we have made tax payments of approximately $2.5 billion in 2016.

Net income from discontinued operations attributable to common shareowners for the year ended December 31, 2016 reflects the final purchase price adjustment for the sale of Sikorsky, and the net effects of filing Sikorsky's 2015 tax returns. Net income from discontinued operations attributable to common shareowners for the year ended December 31, 2015 includes the gain on the sale of Sikorsky, net of tax expense, of $3.4 billion and includes $122 million of costs incurred in connection with the sale. Net income from discontinued operations attributable to common shareowners also includes income from Sikorsky's operations, net of tax expense, of $169 million, including pension curtailment charges associated with our domestic pension plans. Net income from discontinued operations attributable to common shareowners for 2014 includes a previously disclosed cumulative adjustment related to a contract with the Canadian government for the development by Sikorsky of the CH-148 derivative of the H-92 helicopter, a military variant of the S-92 helicopter. The cumulative adjustment resulted in the recognition of losses, net of tax benefit, of $277 million in 2014.

RESULTS OF OPERATIONS

Net Sales

(dollars in millions)		2016		2015		2014
Net sales	**$**	**57,244**	$	56,098	$	57,900
Percentage change year-over-year		**2.0%**		(3.1)%		2.3%

The factors contributing to the total percentage change year-over-year in total net sales are as follows:

	2016	2015
Organic volume	**2 %**	1 %
Foreign currency translation	**(1)%**	(4)%
Acquisitions and divestitures, net	**1 %**	1 %
Other	**—**	(1)%
Total % Change	**2 %**	(3)%

Three of our four segments experienced organic sales growth during 2016, as organic sales growth at Pratt & Whitney (6%), UTC Aerospace Systems (2%), and Otis (1%), was partially offset by a decline at UTC Climate, Controls & Security (1%). The organic sales growth at Pratt & Whitney primarily reflects higher commercial aftermarket sales. The organic sales growth at UTC Aerospace Systems was primarily due to an increase in commercial OEM and aftermarket sales volume. The organic sales growth at Otis was primarily driven by higher service sales in the Americas and Asia and higher new equipment sales in North America partially offset by lower new equipment sales in China. The decline in sales at UTC Climate, Controls & Security was primarily driven by declines in commercial HVAC sales in the Middle East and lower fire products and transport refrigeration sales, partially offset by growth in North America residential HVAC. The sales increase from net acquisitions and divestitures was primarily a result of sales from newly acquired businesses at UTC Climate, Controls & Security.

Three of our four segments experienced organic sales growth during 2015, led by UTC Climate, Controls & Security (3%), UTC Aerospace Systems (3%), and Otis (1%). Pratt & Whitney experienced an organic sales decline (1%) during 2015. Organic sales growth at UTC Climate, Controls & Security was driven by the U.S. commercial and residential HVAC and transport refrigeration businesses. Organic sales growth at UTC Aerospace Systems was primarily due to growth in commercial aerospace OEM sales, while the organic sales growth at Otis was primarily due to higher new equipment sales in North America and Asia outside of China. The decline in sales at Pratt & Whitney was due to lower commercial and military engine sales. The sales increase from net acquisitions and divestitures was primarily a result of sales from newly acquired businesses at UTC Climate, Controls & Security, while the decrease in sales from Other is due to the unfavorable impact of significant customer contract negotiations at UTC Aerospace Systems.

Cost of Products and Services Sold

(dollars in millions)		2016		2015		2014
Cost of products sold	**$**	**30,325**	$	29,771	$	30,367
Percentage of product sales		**74.4%**		74.8 %		73.1%
Cost of services sold	**$**	**11,135**	$	10,660	$	10,531
Percentage of service sales		**67.4%**		65.4 %		64.4%
Total cost of products and services sold	**$**	**41,460**	$	40,431	$	40,898
Percentage change year-over-year		**2.5%**		(1.1)%		1.1%

The factors contributing to the total percentage change year-over-year in total cost of products and services sold are as follows:

	2016	2015
Organic volume	**3 %**	3 %
Foreign currency translation	**(1)%**	(5)%
Acquisitions and divestitures, net	**1 %**	1 %
Restructuring	**—**	—
Other	**—**	—
Total % Change	**3 %**	(1)%

The organic increase in total cost of products and services sold in 2016 was driven by the organic sales increase noted above, as well as unfavorable year-over-year contract performance, contract termination benefits and settlements at Pratt & Whitney, along with unfavorable commercial OEM mix at UTC Aerospace Systems. This adverse impact was partially offset by the impact of lower pension expense across all of the segments and lower commodity costs at UTC Climate, Controls & Security.

The organic increase in total cost of products and services sold of 3% in 2015 is attributable to the organic sales increase noted above and the unfavorable OEM sales mix and the related losses on OEM engine shipments, within Pratt & Whitney.

Gross Margin

(dollars in millions)	2016	2015	2014
Gross margin	**$ 15,784**	$ 15,667	$ 17,002
Percentage of net sales	**27.6%**	27.9%	29.4%

The 30 basis point decrease in gross margin as a percentage of sales in 2016, as compared with 2015, is primarily due to lower gross margin at Pratt & Whitney (60 basis points) driven by unfavorable year-over-year contract performance and contract termination benefits and settlements, and an increase in negative engine margin, partially offset by an increase in gross margin at UTC Aerospace Systems (30 basis points) primarily attributable to the absence of the prior year unfavorable impact of significant customer contract negotiations. Lower gross margin at Otis resulting from unfavorable pricing, was offset by higher gross margin at UTC Climate, Controls & Security primarily driven by lower commodities cost.

Gross margin as a percentage of sales declined 150 basis points in 2015, as compared with 2014, driven by lower gross margin at Pratt & Whitney related to a decline in the amount of favorable contract performance adjustments (20 basis points) and an increase in unfavorable OEM sales mix and the related losses on OEM engine sales (40 basis points), along with the unfavorable impact of significant customer contract negotiations at UTC Aerospace Systems (40 basis points). The remaining decline is primarily driven by higher pension expense in 2015.

Research and Development

(dollars in millions)	2016	2015	2014
Company-funded	**$ 2,337**	$ 2,279	$ 2,475
Percentage of net sales	**4.1%**	4.1%	4.3%
Customer-funded	**$ 1,389**	$ 1,589	$ 1,997
Percentage of net sales	**2.4%**	2.8%	3.4%

Research and development spending is subject to the variable nature of program development schedules and, therefore, year-over-year variations in spending levels are expected. The majority of the company-funded spending is incurred by the aerospace businesses and relates largely to the next generation engine product family at Pratt & Whitney and the Embraer E-Jet E2, Bombardier CSeries, Mitsubishi Regional Jet, Airbus A320neo and Airbus A350 programs at UTC Aerospace Systems. The year-over-year increase in company-funded research and development (3%) is primarily driven by higher research and development costs within Pratt & Whitney (2%) as development programs progress towards certification, and higher spending at Otis (2%). These increases were partially offset by lower spend within UTC Aerospace Systems related to several commercial aerospace programs (1%). Customer-funded research and development declined (13%) due primarily to lower spending on U.S. Government and commercial engine programs at Pratt & Whitney (4%), and lower spend within UTC Aerospace Systems related to several commercial and military aerospace programs (9%).

The year-over-year decrease in company-funded research and development (8%) in 2015, compared with 2014, reflects lower research and development within Pratt & Whitney (5%) primarily related to lower development costs of multiple Geared TurboFan platforms as development is completed and certain of these engines enter into service, and within UTC Aerospace Systems related to several commercial aerospace programs (3%). Customer-funded research and development declined (20%) due to lower spending on U.S. Government and commercial engine programs at Pratt & Whitney.

Selling, General and Administrative

(dollars in millions)		**2016**		2015		2014
Selling, general and administrative	**$**	**6,060**	$	5,886	$	6,172
Percentage of net sales		**10.6%**		10.5%		10.7%

Selling, general and administrative expenses increased 3% in 2016 largely driven by a pension settlement charge resulting from pension de-risking actions (6%) and increased selling, general and administrative expenses at Otis (2%) reflecting higher labor and information technology costs. These increases were partially offset by lower spend at UTC Aerospace Systems (2%) and at UTC Climate, Controls & Security (1%) primarily driven by lower pension expense. Pratt & Whitney selling, general and administrative expenses were flat relative to the prior year as lower pension expense was largely offset by higher employee compensation related expenses driven by increased hiring.

The decrease in selling, general and administrative expenses in 2015, as compared with 2014 (5%), is due to the benefit of foreign exchange (5%), particularly within the commercial businesses. Higher pension costs (1%) were offset by lower employee compensation related expenses. The 20 basis point decrease in selling, general and administrative expense as a percentage of sales reflects the impact of organic sales growth, partially offset by higher pension expense across our business units.

Other Income, Net

(dollars in millions)		**2016**		2015		2014
Other (expense) income, net	**$**	**785**	$	(211)	$	1,238

Other (expense) income, net includes the operational impact of equity earnings in unconsolidated entities, royalty income, foreign exchange gains and losses as well as other ongoing and infrequently occurring items including the following:

(dollars in millions)		**2016**		2015		2014
Joint venture income	**$**	**230**	$	207	$	284
Licensing and royalty income		**98**		122		158
Gain on sale of marketable equity securities		**101**		55		31
Charge related to a Canadian government settlement		**—**		(867)		—
Charge for pending and future asbestos claims		**—**		(237)		—
Impairment of certain UTC Aerospace System assets held for sale		**(8)**		(61)		—
Gain on re-measurement to fair value of previously held equity interest in UTC Climate, Controls & Security joint venture investments		**—**		126		—
(Charge) gain from a state taxing authority agreement for monetization of tax credits		**—**		(27)		220
Net gain primarily from fair value adjustments related to acquisition of majority interest in a Pratt & Whitney joint venture		**—**		—		83
Charge to adjust the fair value of a Pratt & Whitney joint venture investment		**—**		—		(60)
UTC Climate, Controls, & Security portfolio transformation gain		**—**		—		30
Other activity, net		**364**		471		492
	$	**785**	$	(211)	$	1,238

See Note 8 "Accrued Liabilities" of our Consolidated Financial Statements for further discussion of the charge related to a Canadian government settlement and Note 18 "Contingent Liabilities" for further discussion of the charge for pending and future asbestos claims.

Interest Expense, Net

(dollars in millions)	2016	2015	2014
Interest expense	**$ 1,161**	$ 945	$ 1,099
Interest income	**(122)**	(121)	(218)
Interest expense, net	**$ 1,039**	$ 824	$ 881
Average interest expense rate - average outstanding borrowings during the year:			
Short-term borrowings	**1.3%**	0.6%	0.8%
Total debt	**4.1%**	4.1%	4.3%
Average interest expense rate - outstanding borrowings as of December 31:			
Short-term borrowings	**0.6%**	0.8%	5.7%
Total debt	**3.7%**	4.4%	4.6%

The increase in interest expense during 2016, as compared with 2015, was primarily driven by a net extinguishment loss of approximately $164 million related to the December 1, 2016 redemption of certain outstanding notes. See Note 9 "Borrowings and Lines of Credit" of our Consolidated Financial Statements for further discussion. The increase also includes additional interest expense on higher average outstanding long-term debt, primarily driven by debt issued in 2016, partially offset by lower average commercial paper balances and related interest expense.

Interest expense was lower in 2015, as compared with 2014, primarily due to the absence of approximately $143 million of unfavorable pre-tax interest accruals in 2014 related to the ongoing dispute with German tax authorities concerning a 1998 reorganization of the corporate structure of Otis operations in Germany. Interest income declined in 2015, as compared with 2014, reflecting the absence of $132 million favorable pre-tax interest adjustments in 2014 related to the settlement of outstanding tax matters. See Note 11 "Income Taxes" of our Consolidated Financial Statements for further discussion.

The increase in the weighted-average interest rates for short-term borrowings for 2016 was primarily due to lower average commercial paper borrowings as compared to 2015.

Income Taxes

	2016	2015	2014
Effective income tax rate	**23.8%**	32.6%	25.8%

The effective income tax rates for 2016, 2015, and 2014 reflect tax benefits associated with lower tax rates on international earnings for which we intend to permanently reinvest outside the United States. The 2016 effective tax rate reflects $206 million of favorable adjustments related to the conclusion of the review by the Examination Division of the Internal Revenue Service of both the UTC 2011 and 2012 tax years and the Goodrich Corporation 2011 and 2012 tax years through the date of its acquisition as well as the absence of 2015 items described below. In addition, at the end of 2016 France enacted a tax law change reducing its corporate income tax rate which resulted in a tax benefit of $25 million.

The effective tax rate for 2015 includes a charge of approximately $274 million related to the repatriation of certain foreign earnings, the majority of which were current year earnings. It further includes a favorable impact of approximately $45 million related to a non-taxable gain recorded in the first quarter. France, the U.K. and certain U.S. states enacted tax law changes in the fourth quarter which resulted in a net incremental cost of approximately $68 million in 2015.

The effective income tax rate for 2014 includes the favorable settlement of certain tax matters during 2014 and the adverse impact of an approximately $265 million income tax accrual related to the ongoing dispute with German tax authorities concerning a 1998 reorganization of the corporate structure of Otis operations in Germany, offset by the benefit from repatriation of highly taxed earnings. See Note 18 to the Consolidated Financial Statements for further discussion of the German tax litigation.

We estimate our full year annual effective income tax rate in 2017 will be approximately 27%. This rate may be impacted by restructuring and non-operational non-recurring items. We anticipate some variability in the tax rate quarter to quarter in 2017 from potential discrete items.

For additional discussion of income taxes and the effective income tax rate, see "Critical Accounting Estimates—Income Taxes" and Note 11 to the Consolidated Financial Statements.

Net Income Attributable to Common Shareowners from Continuing Operations

(dollars in millions, except per share amounts)	**2016**	2015	2014
Net income attributable to common shareowners from continuing operations	**$ 5,065**	$ 3,996	$ 6,066
Diluted earnings per share from continuing operations	**$ 6.13**	$ 4.53	$ 6.65

To help mitigate the volatility of foreign currency exchange rates on our operating results, we maintain foreign currency hedging programs, the majority of which are entered into by Pratt & Whitney Canada (P&WC). In 2016, foreign currency, including hedging at P&WC, had a favorable impact on our consolidated operational results of $0.05 per diluted share. In 2015, foreign currency generated a net adverse impact on our consolidated operational results of $0.19 per diluted share and did not result in a material impact on earnings per diluted share in 2014. For additional discussion of foreign currency exposure, see "Market Risk and Risk Management—Foreign Currency Exposures."

Net income from continuing operations attributable to common shareowners for the year ended December 31, 2016 includes restructuring charges, net of tax benefit, of $192 million as well as a net charge for significant non-operational and/or non-recurring items, net of tax, of $203 million. The effect of restructuring charges and non-recurring items on diluted earnings per share for the year ended December 31, 2016 was $0.48 per share.

Net income attributable to common shareowners from continuing operations in 2015 includes restructuring charges, net of tax benefit, of $274 million as well as a net charge from significant non-recurring and non-operational items, net of tax benefit, of $1,293 million, which have been discussed above. The effect of restructuring charges on diluted earnings per share for 2015 was a charge of $0.31 per share, while the effect of significant non-operational items on diluted earnings per share for 2015 was a charge of $1.46 per share.

Net income attributable to common shareowners from continuing operations in 2014 includes restructuring charges, net of tax benefit, of $247 million as well as a net benefit from infrequently occurring items, net of tax expense, of $122 million. The effect of restructuring charges on diluted earnings per share for 2014 was a charge of $0.27 per share, which was offset by a net benefit from infrequently occurring items of $0.13 per share.

Net (Loss) Income Attributable to Common Shareowners from Discontinued Operations

(dollars in millions, except per share amounts)	**2016**	2015	2014
Net (loss) income attributable to common shareowners from discontinued operations	**$ (10)**	$ 3,612	$ 154
Diluted earnings per share from discontinued operations	**$ (0.01)**	$ 4.09	$ 0.17

Net loss from discontinued operations attributable to common shareowners for the year ended December 31, 2016 reflects the final purchase price adjustment for the sale of Sikorsky, and the net effects of filing Sikorsky's 2015 tax returns. Net income from discontinued operations attributable to common shareowners for the year ended December 31, 2015 includes the gain on the sale of Sikorsky, net of tax expense, of $3.4 billion and $122 million of costs incurred in connection with the sale, as well as income from Sikorsky's operations, net of tax expense, of $169 million, including pension curtailment charges associated with our domestic pension plans. Net income from discontinued operations attributable to common shareowners for 2014 includes a previously disclosed cumulative adjustment related to a contract with the Canadian government for the development by Sikorsky of the CH-148 derivative of the H-92 helicopter, a military variant of the S-92 helicopter. The cumulative adjustment resulted in the recognition of losses, net of tax benefit, of $277 million in 2014.

RESTRUCTURING COSTS

(dollars in millions)	**2016**	2015	2014
Restructuring costs included within continuing operations	**$ 290**	$ 396	$ 354
Restructuring costs included within discontinued operations	**—**	139	14
Restructuring costs	**$ 290**	$ 535	$ 368

Restructuring actions are an essential component of our operating margin improvement efforts and relate to both existing operations and those recently acquired. Charges generally relate to severance incurred on workforce reductions and facility exit and lease termination costs associated with the consolidation of field and manufacturing operations. We expect to incur additional restructuring costs in 2017 of approximately $300 million, including trailing costs related to prior actions associated with our continuing cost reduction efforts and the integration of acquisitions. We continue to closely monitor the economic environment and may undertake further restructuring actions to keep our cost structure aligned with the demands of the prevailing market conditions. In 2015, restructuring costs included within discontinued operations included approximately $109 million of net settlement and curtailment losses for pension benefits.

2016 Actions. During 2016, we recorded net pre-tax restructuring charges of $242 million relating to ongoing cost reduction actions initiated in 2016. We are targeting to complete in 2017 and 2018 the majority of the remaining workforce and facility related cost reduction actions initiated in 2016. Approximately 64% of the total pre-tax charge will require cash payments, which we have funded and expect to continue to fund with cash generated from operations. During 2016, we had cash outflows of approximately $69 million related to the 2016 actions. We expect to incur additional restructuring and other charges of $112 million to complete these actions. We expect recurring pre-tax savings to increase over the two-year period subsequent to initiating the actions to approximately $170 million annually, of which, approximately $42 million was realized in 2016.

2015 Actions. During 2016 and 2015, we recorded net pre-tax restructuring charges of $40 million and $326 million, respectively, for actions initiated in 2015. We are targeting to complete in 2017 the majority of the remaining workforce and all facility related cost reduction actions initiated in 2015. Approximately 71% of the total pre-tax charge will require cash payments, which we have and expect to continue to fund with cash generated from operations. During 2016, we had cash outflows of approximately $165 million related to the 2015 actions. We expect to incur additional restructuring charges of $42 million to complete these actions. We expect recurring pre-tax savings to increase over the two-year period subsequent to initiating the actions to approximately $395 million annually.

For additional discussion of restructuring, see Note 13 to the Consolidated Financial Statements.

SEGMENT REVIEW

	Net Sales			Operating Profits			Operating Profit Margin		
(dollars in millions)	**2016**	2015	2014	**2016**	2015	2014	**2016**	2015	2014
Otis	**$ 11,893**	$ 11,980	$ 12,982	**$ 2,147**	$ 2,338	$ 2,640	**18.1%**	19.5%	20.3%
UTC Climate, Controls & Security	**16,851**	16,707	16,823	**2,956**	2,936	2,782	**17.5%**	17.6%	16.5%
Pratt & Whitney	**14,894**	14,082	14,508	**1,545**	861	2,000	**10.4%**	6.1%	13.8%
UTC Aerospace Systems	**14,465**	14,094	14,215	**2,298**	1,888	2,355	**15.9%**	13.4%	16.6%
Total segment	**58,103**	56,863	58,528	**8,946**	8,023	9,777	**15.4%**	14.1%	16.7%
Eliminations and other	**(859)**	(765)	(628)	**(368)**	(268)	304			
General corporate expenses	**—**	—	—	**(406)**	(464)	(488)			
Consolidated	**$ 57,244**	$ 56,098	$ 57,900	**$ 8,172**	$ 7,291	$ 9,593	**14.3%**	13.0%	16.6%

Commercial Businesses

The financial performance of our commercial businesses can be influenced by a number of external factors including fluctuations in residential and commercial construction activity, regulatory changes, interest rates, labor costs, foreign currency exchange rates, customer attrition, raw material and energy costs, credit markets and other global and political factors. UTC Climate, Controls & Security's financial performance can also be influenced by production and utilization of transport equipment, and weather conditions for its residential business. Geographic and industry diversity across the commercial businesses help to balance the impact of such factors on our consolidated operating results, particularly in the face of uneven economic growth. At constant currency and excluding the effect of acquisitions and divestitures, UTC Climate, Controls & Security equipment orders for 2016 declined 3% in comparison to 2015 as declines in transport refrigeration (18%) and the commercial HVAC business in the Middle East (40%)were partially offset by an increase in residential HVAC orders (10%). Within the Otis segment, new equipment orders were flat in comparison to the prior year as order growth in Europe (13%), the Asia region excluding China (10%) and the Americas (2%) were offset by order declines in China (9%) and the Middle East (28%).

Total commercial business sales generated outside the U.S., including U.S. export sales were 63% and 65% in 2016 and 2015, respectively. The following table shows sales generated outside the U.S., including U.S. export sales, for each of the commercial business segments:

	2016	2015
Otis	**75%**	77%
UTC Climate, Controls & Security	**55%**	56%

Otis is the world's largest elevator and escalator manufacturing, installation and service company. Otis designs, manufactures, sells and installs a wide range of passenger and freight elevators for low-, medium- and high-speed applications, as well as a broad line of escalators and moving walkways. In addition to new equipment, Otis provides modernization products to upgrade elevators and escalators, as well as maintenance and repair services for both its products and those of other manufacturers. Otis serves customers in the commercial and residential property industries around the world. Otis sells directly to the end customer and through sales representatives and distributors.

(dollars in millions)	2016	2015	2014	Total Increase (Decrease) Year-Over-Year for: 2016 Compared with 2015		2015 Compared with 2014	
Net Sales	**$ 11,893**	$ 11,980	$ 12,982	**$ (87)**	**(1)%**	$ (1,002)	(8)%
Cost of Sales	**8,072**	8,122	8,756	**(50)**	**(1)%**	(634)	(7)%
	3,821	3,858	4,226				
Operating Expenses and Other	**1,674**	1,520	1,586				
Operating Profits	**$ 2,147**	$ 2,338	$ 2,640	**$ (191)**	**(8)%**	$ (302)	(11)%

Factors Contributing to Total % Increase (Decrease) Year-Over-Year in:	2016 Net Sales	2016 Cost of Sales	2016 Operating Profits	2015 Net Sales	2015 Cost of Sales	2015 Operating Profits
Organic / Operational	**1 %**	**2 %**	**(7)%**	1 %	3 %	(2)%
Foreign currency translation	**(2)%**	**(3)%**	**(2)%**	(9)%	(10)%	(9)%
Acquisitions and divestitures, net	**—**	**—**	**—**	—	—	—
Restructuring costs	**—**	**—**	**—**	—	—	1 %
Other	**—**	**—**	**1 %**	—	—	(1)%
Total % change	**(1)%**	**(1)%**	**(8)%**	(8)%	(7)%	(11)%

2016 Compared with 2015

The organic sales increase of 1% primarily reflects higher service sales (1%), driven by growth in the Americas and Asia. New equipment sales growth in the Americas (2%) was offset by a decline in China (2%).

The operational profit decrease of 7% was driven by unfavorable price and mix (12%), primarily in China and Europe; higher selling, general and administrative expenses (5%), driven by higher labor and information technology costs; and higher research and development spending (2%); partially offset by favorable productivity and commodity costs (combined 8%) and higher volume (4%).

2015 Compared with 2014

Organic sales increased 1% primarily due to higher new equipment sales (2%), with growth in North America (2%) and Asia outside of China (1%), partially offset by a decline in China (1%), which was primarily driven by new equipment pricing headwind and volume declines. Service sales growth in the Americas and Asia (combined 1%) was offset by declines in Europe (1%), on lower volumes and unfavorable pricing and mix.

Operational profit decreased 2% primarily due to lower service contribution (3%) predominantly in Europe and higher selling, general and administrative expenses (1%), primarily due to sales growth in Americas and Asia outside of China, partially offset by higher new equipment contribution (3%).

UTC Climate, Controls & Security is a leading provider of HVAC and refrigeration solutions, including controls for residential, commercial, industrial and transportation applications. These products and services are sold under the Carrier name and other brand names to building contractors and owners, homeowners, transportation companies, retail stores and food service companies. UTC Climate, Controls & Security is also a global provider of security and fire safety products and services. UTC Climate, Controls & Security provides electronic security products such as intruder alarms, access control systems and video surveillance systems, and designs and manufactures a wide range of fire safety products including specialty hazard detection and fixed suppression products, portable fire extinguishers, fire detection and life safety systems, and other firefighting equipment. Services provided to the electronic security and fire safety industries include systems integration, video surveillance, installation, maintenance, and inspection. In certain markets, UTC Climate, Controls & Security also provides monitoring and response services to complement its electronic security and fire safety businesses. Through its venture with Watsco, Inc., UTC Climate, Controls & Security distributes Carrier, Bryant, Payne and Totaline residential and light commercial HVAC products in the U.S. and selected territories in the Caribbean and Latin America. UTC Climate, Controls & Security sells directly to end customers and through manufacturers' representatives, distributors, wholesalers, dealers and retail outlets. Certain of UTC Climate, Controls & Security's HVAC businesses are seasonal and can be impacted by weather. UTC Climate, Controls & Security customarily offers its customers incentives to purchase products to ensure an adequate supply in the distribution channels. The principal incentive program provides reimbursements to distributors for offering promotional pricing on UTC Climate, Controls & Security products. We account for incentive payments made as a reduction in sales. UTC Climate, Controls & Security products and services are used by governments, financial institutions, architects, building owners and developers, security and fire consultants, homeowners and other end-users requiring a high level of security and fire protection for their businesses and residences. UTC Climate, Controls & Security provides its security and fire safety products and services under Chubb, Kidde and other brand names, and sells directly to customers as well as through manufacturer representatives, distributors, dealers and U.S. retail distribution.

				Total Increase (Decrease) Year-Over-Year for:			
(dollars in millions)	**2016**	2015	2014	**2016 Compared with 2015**		2015 Compared with 2014	
Net Sales	**$ 16,851**	$ 16,707	$ 16,823	**$ 144**	**1%**	$ (116)	(1)%
Cost of Sales	**11,700**	11,611	11,707	**89**	**1%**	(96)	(1)%
	5,151	5,096	5,116				
Operating Expenses and Other	**2,195**	2,160	2,334				
Operating Profits	**$ 2,956**	$ 2,936	$ 2,782	**$ 20**	**1%**	$ 154	6 %

	Factors Contributing to Total % Increase (Decrease) Year-Over-Year in:					
	2016			2015		
	Net Sales	**Cost of Sales**	**Operating Profits**	Net Sales	Cost of Sales	Operating Profits
Organic / Operational	**(1)%**	**(1)%**	**5 %**	3 %	3 %	6 %
Foreign currency translation	**(1)%**	**(1)%**	**(1)%**	(6)%	(6)%	(5)%
Acquisitions and divestitures, net	**3 %**	**3 %**	**1 %**	2 %	2 %	—
Restructuring costs	**—**	**—**	**1 %**	—	—	—
Other	**—**	**—**	**(5)%**	—	—	5 %
Total % change	**1 %**	**1 %**	**1 %**	(1)%	(1)%	6 %

2016 Compared with 2015

Organic sales decreased by 1% driven by declines in commercial HVAC sales in Europe and the Middle East, fire products, and transport refrigeration (combined 1%), partially offset by growth in North America HVAC (1%).

The 5% operational profit increase was driven by lower commodities cost (5%) and productivity and restructuring savings (combined 4%), partly offset by the impact of lower sales volume and adverse sales mix (combined 4%). The 5% decrease in "Other" is driven by the absence of a prior year gain as a result of a fair value adjustment related to acquisitions of a controlling interest in joint venture investments (5%). "Other" also includes current year gains related to the acquisition of a controlling interest in a joint venture investment in the Middle East and from the sale of an investment in Australia (combined 1%), which were offset by a prior year gain from an acquisition of a controlling interest in another joint venture investment.

2015 Compared with 2014

The organic sales increase (3%) primarily reflects growth in Americas (2%) driven by the U.S. commercial and residential HVAC businesses, and growth in refrigeration (1%) driven by the transport refrigeration business.

The 6% operational profit increase was primarily driven by favorable volume and price (combined 2%) on the sales increase noted above. The beneficial impact from lower commodity costs (2%) and net restructuring and cost productivity (2%) was partially offset by lower joint venture income (1%). The 5% increase in "Other" was primarily driven by a gain as a result of a fair value adjustment related to the acquisition of a controlling interest in a joint venture investment (5%) and a gain as a result of a fair value adjustment related to a separate acquisition of a controlling interest in another joint venture investment (1%), partially offset by the absence of a gain from UTC Climate, Controls & Security's portfolio transformation in 2014 (1%).

Aerospace Businesses

The financial performance of Pratt & Whitney and UTC Aerospace Systems is directly tied to the economic conditions of the commercial aerospace and defense aerospace industries. In particular, Pratt & Whitney experiences intense competition for new commercial airframe/engine combinations. Engine suppliers may offer substantial discounts and other financial incentives, performance and operating cost guarantees, and participate in financing arrangements, in an effort to compete for the aftermarket associated with these engine sales. These OEM engine sales may result in losses on the engine sales, which economically are recovered through the sales and profits generated over the engine's maintenance cycle. At times, the aerospace businesses also enter into development programs and firm fixed-price development contracts, which may require the company to bear cost overruns related to unforeseen technical and design challenges that arise during the development stage of the program. Customer selections of engines and components can also have a significant impact on later sales of parts and service. Predicted traffic levels, load factors, worldwide airline profits, general economic activity and global defense spending have been reliable indicators for new aircraft and aftermarket orders within the aerospace industry. Spare part sales and aftermarket service trends are affected by many factors, including usage, technological improvements, pricing, regulatory changes and the retirement of older aircraft. Our commercial aftermarket businesses continue to evolve as an increasing proportion of our aerospace businesses' customers are covered under Fleet Management Programs (FMPs). FMPs are comprehensive long-term spare part and maintenance agreements with our customers. We expect a continued shift to FMPs in lieu of transactional spare part sales as new engines enter customers' fleets on FMP and legacy fleets are retired. Performance in the general aviation sector is closely tied to the overall health of the economy. In 2016, as compared with 2015, total commercial aerospace aftermarket sales increased 10% at Pratt & Whitney and 2% at UTC Aerospace Systems.

Our long-term aerospace contracts are subject to strict safety and performance regulations which can affect our ability to estimate costs precisely. Contract cost estimation for the development of complex projects, in particular, requires management to make significant judgments and assumptions regarding the complexity of the work to be performed, availability of materials, the performance by subcontractors, the timing of funding from customers and the length of time to complete the contract. As a result, we review and update our cost estimates on significant contracts on a quarterly basis, and no less frequently than annually for all others, and when circumstances change and warrant a modification to a previous estimate. Changes in estimates relate to the current period impact of revisions to total estimated contract sales and costs at completion. We record changes in contract estimates primarily using the cumulative catch-up method. Operating profits included significant net unfavorable changes in aerospace contract estimates of approximately $157 million in 2016 primarily the result of unexpected increases in estimated costs related to Pratt & Whitney long term aftermarket contracts. In accordance with our revenue recognition policy, losses, if any, on long-term contracts are provided for when anticipated. There were no material loss provisions recorded on OEM contracts in continuing operations in 2016 or 2015.

We continue to see growth in a strong commercial airline industry which is benefiting from traffic growth and lower fuel costs. Airline traffic, as measured by revenue passenger miles (RPMs), grew approximately 6% in the first eleven months of 2016, while jet fuel costs have declined approximately 18% relative to prices one year ago. Pratt & Whitney has developed the Geared TurboFan engine that will power currently-proposed and future aircraft and is building capacity to meet demand for orders of the new engines which are fuel efficient and have reduced noise levels and exhaust emissions. The PurePower® PW1100G-JM engine completed Federal Aviation Agency (FAA) certification for the Airbus A320neo platform on December 19, 2014, and entered into service in January 2016.

Our military sales are affected by U.S. Department of Defense spending levels. However, the sale of Sikorsky during 2015 reduced our U.S. Government defense-spending exposure. Excluding Sikorsky, total sales to the U.S. Government were $5.6 billion in 2016, $5.6 billion in 2015, and $5.9 billion in 2014, and were 10% of total UTC sales in each year. The defense portion of our aerospace business is also affected by changes in market demand and the global political environment. Our participation in long-term production and development programs for the U.S. Government has contributed positively to our results in 2016 and is expected to continue to benefit results in 2017.

As previously disclosed, Pratt & Whitney's PurePower PW1500G engine models have been selected by Bombardier to power the new CSeries passenger aircraft, which entered into service on July 15, 2016. There have been multi-year delays in the development of the CSeries aircraft. Notwithstanding these delays, Bombardier reports that they have received over 300 orders for the aircraft, have certified the initial aircraft model and expect to close the certification process for all aircraft models in early 2017. We have made various investments in support of the production and delivery of our PW1500G engines and systems for the CSeries program, which we currently expect to recover through future deliveries of PW1500G powered CSeries aircraft. We will continue to monitor the progress of the program and our ability to recover our investments.

Pratt & Whitney is among the world’s leading suppliers of aircraft engines for the commercial, military, business jet and general aviation markets. Pratt & Whitney also provides fleet management services and aftermarket maintenance, repair and overhaul services, including the sale of spare parts and auxiliary power units. Pratt & Whitney produces and develops families of large engines for wide- and narrow-body and large regional aircraft in the commercial market and for fighter, bomber, tanker and transport aircraft in the military market. Pratt & Whitney Canada (P&WC) is a world leader in the production of engines powering general and business aviation, as well as regional airline, utility and military, airplanes and helicopters. Pratt & Whitney's products are sold principally to aircraft manufacturers, airlines and other aircraft operators, aircraft leasing companies, and the U.S. and foreign governments. Pratt & Whitney's products and services must adhere to strict regulatory and market-driven safety and performance standards. The frequently changing nature of these standards, along with the long duration of aircraft engine development, production and support programs, creates uncertainty regarding engine program profitability.

The development of new engines and improvements to current production engines present important growth opportunities. Pratt & Whitney is under contract with the U.S. Government's F-35 Joint Program Office to develop, produce and sustain the F135 engine, a derivative of Pratt & Whitney's F119 engine, to power the single-engine F-35 Lightning II aircraft (commonly known as the Joint Strike Fighter) being developed and produced by Lockheed Martin. The two F135 propulsion system configurations for the F-35A/F-35C and F-35B jets are certified for production and in use by the U.S. Air Force and the U.S. Marine Corps. F135 engines are also used on F-35 aircraft purchased by Joint Strike Fighter partner countries and foreign military sales countries.

In addition, Pratt & Whitney has developed the PurePower® PW1000G Geared TurboFan engine which entered into service in January 2016 and is intended to enable it to power both currently-proposed and future aircraft. The PurePower® PW1000G engine has demonstrated a significant reduction in fuel burn and noise levels with lower environmental emissions and operating costs than current production engines. Airbus has selected the PW1100G engine, a member of the PurePower® PW1000G engine family, as a new engine option to power its A320neo family of aircraft. The PW1100G-JM entered into service in January 2016, and is being developed as part of a collaboration with MTU Aero Engines (MTU) and Japanese Aero Engines Corporation (JAEC). Additionally, PurePower® PW1000G engine models have been selected by Bombardier to power the new CSeries passenger aircraft, Mitsubishi Aircraft Corporation to power the new Mitsubishi Regional Jet, Irkut Corporation to power the proposed new Irkut MC-21 passenger aircraft and Embraer to power the next generation of Embraer's E-Jet family of aircraft. In October 2014, Gulfstream announced the selection of the PurePower® PW800 engine to exclusively power Gulfstream's new G500 and G600 business jets scheduled to enter service in 2018. The CSeries passenger aircraft entered into service on July 15, 2016. The Irkut MC-21 and Embraer's next generation of E-Jet family aircraft are scheduled to enter into service in 2018. The Mitsubishi Regional Jet is scheduled to enter into service in 2020. The success of these aircraft and the PurePower® family of engines is dependent upon many factors including technological accomplishments, program execution, aircraft demand, and regulatory approval. Based on these factors, as well as the level of success of aircraft program launches by aircraft manufacturers and other conditions, additional investment in the PurePower® program may be required.

In view of the risks and costs associated with developing new engines, Pratt & Whitney has entered into collaboration arrangements in which sales, costs and risks are shared. At December 31, 2016, the interests of third party participants in Pratt & Whitney-directed commercial jet engine programs ranged from 14% to 50%. In addition, Pratt & Whitney has interests in other engine programs, including a 50% ownership interest in the Engine Alliance (EA), a joint venture with GE Aviation, which markets and manufactures the GP7000 engine for the Airbus A380 aircraft. Pratt & Whitney has entered into risk and revenue sharing arrangements with third parties for 40% of the products and services that Pratt & Whitney is responsible for providing to the EA. Pratt & Whitney accounts for its interests in the EA joint venture under the equity method of accounting. Pratt & Whitney holds a 61% net program share interest in the IAE International Aero Engines AG (IAE) collaboration with MTU and JAEC and a 49.5% ownership interest in IAE. Additionally, Pratt & Whitney holds a 59% net program interest in the International Aero Engines, LLC (IAE LLC) collaboration, and a 59% ownership interest in IAE LLC. Pratt & Whitney continues to pursue additional collaboration partners.

				Total Increase (Decrease) Year-Over-Year for:			
(dollars in millions)	**2016**	2015	2014	**2016 Compared with 2015**		2015 Compared with 2014	
Net Sales	**$ 14,894**	$ 14,082	$ 14,508	**$ 812**	**6%**	$ (426)	(3)%
Cost of Sales	**11,805**	10,910	10,926	**895**	**8%**	(16)	—
	3,089	3,172	3,582				
Operating Expenses and Other	**1,544**	2,311	1,582				
Operating Profits	**$ 1,545**	$ 861	$ 2,000	**$ 684**	**79%**	$ (1,139)	(57)%

	Factors Contributing to Total % Increase (Decrease) Year-Over-Year in:					
	2016			2015		
	Net Sales	**Cost of Sales**	**Operating Profits**	Net Sales	Cost of Sales	Operating Profits
Organic* / Operational*	**6%**	**9 %**	**(28)%**	(1)%	2 %	(12)%
Foreign currency (including P&WC net hedging)*	**—**	**(1)%**	**10 %**	(1)%	(2)%	3 %
Acquisitions and divestitures, net	**—**	**—**	**—**	—	1 %	1 %
Restructuring costs	**—**	**—**	**(1)%**	—	—	(2)%
Other	**—**	**—**	**98 %**	(1)%	(1)%	(47)%
Total % change	**6%**	**8 %**	**79 %**	(3)%	—	(57)%

* As discussed further in the "Business Overview" and "Results of Operations" sections, for Pratt & Whitney only, the transactional impact of foreign exchange hedging at P&WC has been netted against the translational foreign exchange impact for presentation purposes in the above table. For all other segments, these foreign exchange transactional impacts are included within the organic sales/operational operating profit caption in their respective tables. Due to its significance to Pratt & Whitney's overall operating results, we believe it is useful to segregate the foreign exchange transactional impact in order to clearly identify the underlying financial performance.

2016 Compared with 2015

The organic sales increase of 6% primarily reflects higher commercial aftermarket sales (8%), and higher military engine and aftermarket sales (2%), partially offset by unfavorable year-over-year contract performance, contract termination benefits and contract settlements (2%) and lower commercial engine sales volume (1%).

Pratt & Whitney's operating profit includes lower pension cost and restructuring savings across its businesses. The operational profit decrease of 28% was primarily driven by:

- unfavorable year-over-year contract adjustments, contract termination benefits and contract settlements (38%)
- higher research and development spending (6%)
- lower large commercial engine profit contribution (8%) primarily driven by higher negative engine margin
- lower profit contribution at Pratt & Whitney Canada (3%) primarily driven by lower volume
- the absence of prior year licensing arrangements (5%)
- lower military engine profit contribution (1%) driven by adverse engine mix, partially offset by profit contribution from higher military aftermarket sales

These decreases were partially offset by:

- profit contribution from strong commercial aftermarket volume (33%)
- sales of legacy hardware (3%)

“Other” primarily reflects the absence of a prior year charge resulting from amendments to research and development support arrangements previously entered into with federal and provincial Canadian government agencies (101%) partially offset by the year-over-year profit impact associated with customer contract negotiations (2%).

2015 Compared with 2014

The organic sales decrease (1%) reflects lower military engine volume (1%) and lower commercial engine volume (2%), offset by higher commercial engine aftermarket sales (2%). "Other" reflects a sales reduction in connection with customer contract negotiations (1%).

Pratt & Whitney's operating profit includes higher pension cost partially offset by restructuring savings across its business. The operational profit decrease (12%) was due to:

- higher negative engine margin within the Large Commercial Engine business and lower volume within P&WC (15%)
- lower engine volume and unfavorable mix within the Military Engine business (2%)
- unfavorable aftermarket mix and a decline in the amount of favorable contract performance adjustments within the Military Engine business (4%)

- lower commercial developmental profit (2%)

These decreases were partially offset by:

- lower research and development spending (5%)
- higher aftermarket profits at P&WC (4%)
- an increase in favorable contract termination benefits (3%)

Operating profit increased 1% as a result of the acquisition of a majority interest in a joint venture in the third quarter of 2014. The "Other" operating profit decline reflects a charge resulting from amendments to research and development support arrangements previously entered into with federal and provincial Canadian government agencies (43%) and a charge resulting from customer contract negotiations (4%).

UTC Aerospace Systems is a leading global provider of technologically advanced aerospace products and aftermarket service solutions for aircraft manufacturers, airlines, regional, business and general aviation markets, military, space and undersea operations. UTC Aerospace Systems’ product portfolio includes electric power generation, power management and distribution systems, air data and aircraft sensing systems, engine control systems, intelligence, surveillance and reconnaissance systems, engine components, environmental control systems, fire and ice detection and protection systems, propeller systems, engine nacelle systems, including thrust reversers and mounting pylons, interior and exterior aircraft lighting, aircraft seating and cargo systems, actuation systems, landing systems, including landing gear, wheels and brakes, and space products and subsystems. Aftermarket services include spare parts, overhaul and repair, engineering and technical support and fleet management solutions. UTC Aerospace Systems sells aerospace products to aircraft manufacturers, airlines and other aircraft operators, the U.S. and foreign governments, maintenance, repair and overhaul providers, and independent distributors.

				Total Increase (Decrease) Year-Over-Year for:			
(dollars in millions)	**2016**	2015	2014	**2016 Compared with 2015**		2015 Compared with 2014	
Net Sales	**$ 14,465**	$ 14,094	$ 14,215	**$ 371**	**3%**	$ (121)	(1)%
Cost of Sales	**10,607**	10,533	10,192	**74**	**1%**	341	3 %
	3,858	3,561	4,023				
Operating Expenses and Other	**1,560**	1,673	1,668				
Operating Profits	**$ 2,298**	$ 1,888	$ 2,355	**$ 410**	**22%**	$ (467)	(20)%

	Factors Contributing to Total % Increase (Decrease) Year-Over-Year in:					
	2016			2015		
	Net Sales	**Cost of Sales**	**Operating Profits**	Net Sales	Cost of Sales	Operating Profits
Organic / Operational	**2%**	**3 %**	**(3)%**	3 %	6 %	(6)%
Foreign currency translation	**—**	**(1)%**	**3 %**	(2)%	(3)%	2 %
Acquisitions and divestitures, net	**—**	**—**	**—**	(1)%	(1)%	—
Restructuring costs	**—**	**—**	**3 %**	—	—	(1)%
Other	**1%**	**(1)%**	**19 %**	(1)%	1 %	(15)%
Total % change	**3%**	**1 %**	**22 %**	(1)%	3 %	(20)%

2016 Compared with 2015

The organic sales growth of 2% primarily reflects an increase in commercial aerospace OEM and commercial aftermarket sales volume (3%), partially offset by lower military OEM and military aftermarket sales volume (1%). "Other" represents the absence of the prior year unfavorable impact of significant customer contact negotiations (1%).

The organic decrease in operational profit of 3% primarily reflects:

- the absence of the favorable impact from prior year customer contract negotiations, dispute resolution, contract terminations and other settlements (8%)
- lower military profit contribution (4%) driven primarily by lower sales volume
- lower commercial aerospace OEM profit contribution (4%), primarily due to adverse mix

These decreases were partially offset by:

- lower pension costs (8%)
- higher commercial aftermarket profit contribution (5%)
- lower research and development costs (1%)

"Other" primarily represents the absence of the prior year unfavorable impact from significant customer contract negotiations (16%) and the absence of a prior year impairment of certain assets held for sale (3%).

2015 Compared with 2014

The organic sales growth (3%) primarily reflects an increase in commercial aerospace OEM and commercial aftermarket sales volume (3%) and a benefit from a change in a customer relationship (2%), partially offset by the absence of the favorable impact of a prior year customer contract settlement (1%) and lower military OEM sales volume (1%). "Other" represents the unfavorable impact of significant customer contract negotiations (1%).

The organic decrease in operational profit (6%) primarily reflects:

- lower commercial aerospace OEM profit contribution (6%) primarily due to adverse mix
- higher pension costs (5%)
- lower military profit contribution (4%)
- the absence of the favorable impact of a prior year customer contract settlement (2%), partially offset by
- the favorable impact of several customer contract negotiations, dispute resolutions and other settlements (4%)
- lower research and development costs (3%)
- lower selling, general and administrative expenses (3%)
- the favorable impact of a contract termination (2%)

"Other" primarily represents the unfavorable impact of significant customer contract negotiations (13%) and the impairment of certain assets held for sale (2%).

Eliminations and other

	Net Sales			Operating Profits		
(dollars in millions)	**2016**	2015	2014	**2016**	2015	2014
Eliminations and other	**$ (859)**	$ (765)	$ (628)	**$ (368)**	$ (268)	$ 304
General corporate expenses	**—**	—	—	**(406)**	(464)	(488)

Eliminations and other reflects the elimination of sales, other income and operating profit transacted between segments, as well as the operating results of certain smaller businesses. The year-over-year increase in the amount of sales eliminations in 2016 as compared with 2015 reflects an increase in the amount of inter-segment sales eliminations, principally between our aerospace businesses. The year-over-year decrease in operating profit for 2016 as compared with 2015 is largely driven by a $423 million pension settlement charge resulting from pension de-risking actions, partially offset by the absence of a $237 million charge taken in 2015 for pending and future asbestos claims and higher proceeds from the sale of marketable securities of $47 million. The year-over-year decline in general corporate expenses for 2016, as compared with 2015 primarily reflects lower expenses related to salaries, wages and employee benefits.

The change in sales in 2015, as compared with 2014, reflects an increase in the amount of inter-segment sales eliminations between our aerospace business segments. The decline in operating profit in 2015, as compared with 2014, reflects a $237 million charge for pending and future asbestos claims through 2059, a $27 million charge related to an agreement with a state taxing authority for the monetization of tax credits, and the absence of a $220 million gain on an agreement with a state taxing authority for the monetization of tax credits in 2014.

LIQUIDITY AND FINANCIAL CONDITION

(dollars in millions)	2016	2015
Cash and cash equivalents	**$ 7,157**	$ 7,075
Total debt	**23,901**	20,425
Net debt (total debt less cash and cash equivalents)	**16,744**	13,350
Total equity	**29,169**	28,844
Total capitalization (total debt plus total equity)	**53,070**	49,269
Net capitalization (total debt plus total equity less cash and cash equivalents)	**45,913**	42,194
Total debt to total capitalization	**45%**	41%
Net debt to net capitalization	**36%**	32%

We assess our liquidity in terms of our ability to generate cash to fund our operating, investing and financing activities. Our principal source of liquidity is operating cash flows from continuing operations, which, after netting out capital expenditures, we target to equal or exceed net income attributable to common shareowners from continuing operations. For 2017, we expect this to approximate 90% to 100% of net income attributable to common shareowners from continuing operations. In addition to operating cash flows, other significant factors that affect our overall management of liquidity include: common stock repurchases, capital expenditures, customer financing requirements, investments in businesses, dividends, pension funding, access to the commercial paper markets, adequacy of available bank lines of credit, issuances and redemptions of debt, and the ability to attract long-term capital at satisfactory terms.

As part of our long-term strategy to de-risk our defined benefit pension plans, we entered into an agreement to purchase a group annuity contract to transfer approximately $768 million of our outstanding pension benefit obligations related to certain U.S. retirees or beneficiaries, which was finalized on October 12, 2016. We also offered certain former U.S. employees or beneficiaries (generally all former U.S. participants not yet in receipt of their vested pension benefits) an option to take a one-time lump-sum distribution in lieu of future monthly pension payments, which has reduced our pension benefit obligations by approximately $935 million as of December 31, 2016. These transactions reduced the assets of our defined benefit pension plans by approximately $1.5 billion. As a result of these transactions, we recognized a one-time pre-tax pension settlement charge of approximately $423 million in the fourth quarter of 2016. See Note 12 to the Consolidated Financial Statements for further discussion.

Our domestic pension funds experienced a positive return on assets of approximately 11.6% during 2016. Approximately 88% of these domestic pension plans are invested in readily-liquid investments, including equity, fixed income, asset-backed receivables and structured products. The balance of these domestic pension plans (12%) is invested in less-liquid but market-valued investments, including real estate and private equity. Across our global pension plans, the impact of the continued recognition of prior pension investment gains, 2016 actual returns on plan assets and lower discount rates for interest costs, offset by the lower discount rates for pension obligations, will result in a net periodic pension benefit in 2017 consistent with 2016 amounts.

Historically, our strong debt ratings and financial position have enabled us to issue long-term debt at favorable market rates. Our ability to obtain debt financing at comparable risk-based interest rates is partly a function of our existing debt-to-total-capitalization level as well as our credit standing. In September 2015, several external rating agencies downgraded our debt ratings ("A" to "A-", and "A2" to "A3") with a stable ratings outlook, primarily attributing their actions to the level of completed and projected share repurchase activity. Our debt-to-total-capitalization increased 400 basis points from 41% at December 31, 2015 to 45% at December 31, 2016 primarily reflecting additional borrowings in 2016 to fund share repurchases and for general corporate purposes. The average maturity of our long-term debt at December 31, 2016 is approximately ten years. We use our commercial paper borrowings for general corporate purposes, including the funding of potential acquisitions, debt refinancing, and repurchases of our common stock. The need for commercial paper borrowings arises when the use of domestic cash for acquisitions, dividends, and share repurchases exceeds the sum of domestic cash generation and foreign cash repatriated to the U.S.

On December 1, 2016, we redeemed all outstanding 5.375% notes due in 2017, representing $1.0 billion in aggregate principal, and all outstanding 6.125% notes due in 2019, representing $1.25 billion in aggregate principal, under our redemption notice issued on November 1, 2016. A combined net extinguishment loss of approximately $164 million was recognized within Interest expense, net in the accompanying Consolidated Statement of Operations.

On November 1, 2016, we issued $650 million aggregate principal amount of 1.500% notes due 2019, $750 million aggregate principal amount of 1.950% notes due 2021, $1,150 million aggregate principal amount of 2.650% notes due 2026, $1,100 million aggregate principal amount of 3.750% notes due 2046 and $350 million aggregate principal amount of floating rate notes due 2019. We used the net proceeds received from these issuances to fund the redemption price of the 5.375% notes due 2017 and the 6.125% notes due 2019, to fund the repayment of commercial paper, and for other general corporate purposes.

On February 22, 2016, we issued €950 million aggregate principal amount of 1.125% notes due 2021, €500 million aggregate principal amount of 1.875% notes due 2026 and €750 million aggregate principal amount of floating rate notes due 2018. The net proceeds from these debt issuances were used for general corporate purposes.

On May 4, 2015, we completed the optional remarketing of the 1.550% junior subordinated notes, which were originally issued as part of our equity units on June 18, 2012. As a result of the remarketing, these notes were redesignated as our 1.778% junior subordinated notes due May 4, 2018. On August 3, 2015, we received approximately $1.1 billion from the proceeds of the remarketing, and issued approximately 11.3 million shares of Common Stock to settle the purchase obligation of the holders of the equity units under the purchase contract entered into at the time of the original issuance of the equity units.

During the quarter ended June 30, 2015, we repaid at maturity all 4.875% notes due in 2015 and all floating rate notes due in 2015, representing $1.7 billion in aggregate principal. On May 4, 2015, we issued $850 million aggregate principal amount of 4.150% notes due May 15, 2045. On May 22, 2015 we issued €750 million aggregate principal amount of 1.250% notes due May 22, 2023. The net proceeds from these debt issuances were used primarily to repay the 4.875% notes and floating rate notes maturing during the quarter ended June 30, 2015.

On March 13, 2015, we entered into accelerated share repurchase (ASR) agreements to repurchase an aggregate of $2.65 billion of our common stock, which was largely funded by our commercial paper borrowings. Under the terms of the ASR agreements, we made the aggregate payments and received an initial delivery of approximately 18.6 million shares of our common stock, representing approximately 85% of the shares expected to be repurchased. On July 31, 2015, the shares associated with the remaining portion of the aggregate purchase were settled upon final delivery of approximately 4.2 million additional shares of common stock.

On November 6, 2015, we completed the sale of Sikorsky to Lockheed Martin Corp. for approximately $9.1 billion in cash. In connection with the sale of Sikorsky, we made tax payments of approximately $2.5 billion in 2016. On November 11, 2015, we entered into ASR agreements to repurchase an aggregate of $6 billion of our common stock utilizing the net after-tax proceeds from the sale of Sikorsky. Under the terms of the ASR agreements, we made the aggregate payments and received an initial delivery of approximately 51.9 million shares of our common stock, representing approximately 85% of the shares expected to be repurchased. In 2016, the shares associated with the remaining portion of the aggregate purchase were settled upon final delivery to us of approximately 10.1 million additional shares of common stock.

At December 31, 2016, we had revolving credit agreements with various banks permitting aggregate borrowings of up to $4.35 billion pursuant to a $2.20 billion revolving credit agreement and a $2.15 billion multicurrency revolving credit agreement, both of which expire in August 2021. As of December 31, 2016 and 2015, there were no borrowings under either of these revolving credit agreements. The undrawn portions of our revolving credit agreements are also available to serve as backup facilities for the issuance of commercial paper. As of December 31, 2016, our maximum commercial paper borrowing authority was $4.35 billion.

At December 31, 2016, approximately 93% of our cash was held by UTC's foreign subsidiaries, due to our extensive international operations. We manage our worldwide cash requirements by reviewing available funds among the many subsidiaries through which we conduct our business and the cost effectiveness with which those funds can be accessed. The repatriation of cash balances from certain of our subsidiaries could have adverse tax consequences or be subject to capital controls; however, those balances are generally available without legal restrictions to fund ordinary business operations. In the quarter ended December 31, 2015, we recognized an income tax provision of approximately $274 million related to the intended repatriation of foreign cash, the majority of which is from 2015 earnings of certain international subsidiaries. As discussed in Note 11, with few other exceptions, U.S. income taxes have not been provided on other undistributed earnings of international subsidiaries. Our intention is to reinvest these earnings permanently or to repatriate the earnings only when it is tax effective to do so.

We continue to be involved in litigation with the German Tax Office in the German Tax Court with respect to certain tax benefits that we have claimed related to a 1998 reorganization of the corporate structure of Otis operations in Germany. We made tax and interest payments of approximately $300 million during 2015 to avoid additional interest accruals while we continue to litigate this matter. We do not expect to make significant additional tax or interest payments pending final resolution of this matter. See Note 18 for a further discussion of this German tax litigation.

On occasion, we are required to maintain cash deposits with certain banks with respect to contractual obligations related to acquisitions or divestitures or other legal obligations. As of December 31, 2016, 2015 and 2014, the amount of such restricted cash was approximately $32 million, $45 million and $255 million, respectively. Approximately $210 million of our restricted cash balance as of December 31, 2014 was utilized in cash investments in businesses in 2015.

We believe our future operating cash flows will be sufficient to meet our future operating cash needs. Further, we continue to have access to the commercial paper markets and our existing credit facilities, and our ability to obtain debt or equity financing, as well as the availability under committed credit lines, provides additional potential sources of liquidity should they be required or appropriate.

Cash Flow—Operating Activities of Continuing Operations

(dollars in millions)	**2016**	2015	2014
Net cash flows provided by operating activities of continuing operations	**$ 6,412**	$ 6,755	$ 6,979

2016 Compared with 2015

Cash generated from operating activities of continuing operations in 2016 was approximately $343 million lower than 2015, driven primarily by $392 million higher investment in working capital, $156 million higher contributions to our global defined benefit pension plans, and the first of four annual payments of $237 million related to the 2015 Canadian government settlement; partially offset by the absence of the noncash portion of other infrequently occurring items, as discussed in Results of Operations, which are included in Other operating activities, net in the Consolidated Statement of Cash Flows for the year ended December 31, 2015. The 2016 cash outflows for working capital were primarily driven by increases in inventory in our aerospace businesses to support deliveries and other contractual commitments, including approximately $220 million of inventory costs attributable to new engine offerings recognized based on the average cost per unit expected over the life of each contract using the units-of-delivery method of percentage of completion accounting, as discussed in Note 6. Increases in accounts receivable at Pratt & Whitney and our commercial businesses were partially offset by increases in accounts payable and accrued liabilities across all of our businesses. Factoring activity in 2016 was approximately $200 million lower than the prior year, excluding customer-funded factoring at Pratt & Whitney related to certain extensions of contractual payment terms. For 2015, cash outflows for working capital were primarily driven by increases in inventory in our aerospace businesses to support deliveries and other contractual commitments, and were partially offset by increases in accounts payable and accrued liabilities in these businesses. Increases in accounts receivable in our commercial businesses were largely offset by increases in accounts payable and customer advances in these businesses. Reductions in accrued liabilities also include payments of interest and taxes of approximately $300 million related to the German tax matter, as discussed in Note 18.

The funded status of our defined benefit pension plans is dependent upon many factors, including returns on invested assets, the level of market interest rates and actuarial mortality assumptions. We can contribute cash or UTC shares to our plans at our discretion, subject to applicable regulations. Total cash contributions to our global defined benefit pension plans were $303 million, $147 million and $517 million during 2016, 2015 and 2014, respectively. In 2015, we made noncash contributions of $250 million in UTC common stock to our defined benefit pension plans. As of December 31, 2016, the total investment by the global defined benefit pension plans in our securities was approximately 1% of total plan assets. Although our domestic defined benefit pension plans are approximately 90% funded on a projected benefit obligation basis as of December 31, 2016, and we are not required to make additional contributions through the end of 2021, we may elect to make discretionary contributions in 2017. We expect to make total contributions of approximately $300 million to our global defined benefit pension plans in 2017, including discretionary contributions of approximately $150 million to our domestic defined benefit pension plans. Contributions to our global defined benefit pension plans in 2017 are expected to meet or exceed the current funding requirements.

2015 Compared with 2014

Cash generated from operating activities of continuing operations in 2015 was $224 million lower than 2014. Income from continuing operations and noncash deferred income tax provision and depreciation and amortization charges were approximately $1.8 billion lower than 2014. This decline includes the noncash expense related to the Canadian government settlement of $867 million and the noncash portion of other infrequently occurring items, as discussed in Results of Operations, which are included in Other operating activities, net in the Consolidated Statement of Cash Flows for the year ended December 31, 2015. The 2015 cash outflows for working capital were primarily driven by increases in inventory in our aerospace businesses to support deliveries and other contractual commitments, and were partially offset by increases in accounts payable and accrued liabilities in these businesses. Increases in accounts receivable in our commercial businesses were largely offset by increases in accounts payable and customer advances in these businesses. Reductions in accrued liabilities also include payments of interest and taxes of approximately $300 million related to the German tax matter, as discussed in Note 18. For 2014, cash outflows for working capital were driven by increases in inventory to support deliveries and other contractual commitments across all business segments. Reductions in accounts receivable in our aerospace businesses, driven primarily by accelerated customer collections and selected factoring primarily at Pratt & Whitney, were partially offset by increases in accounts receivable in our commercial businesses.

Cash Flow—Investing Activities of Continuing Operations

(dollars in millions)	**2016**	2015	2014
Net cash flows used in investing activities of continuing operations	**$ (2,509)**	$ (2,794)	$ (1,967)

2016 Compared with 2015

Cash flows used in investing activities of continuing operations for 2016 and 2015 primarily reflect capital expenditures, cash investments in businesses, and payments related to our collaboration intangible assets and contractual rights to provide product on new aircraft platforms.

In 2016, we increased our collaboration intangible assets by approximately $388 million, of which $345 million represented payments made under our 2012 agreement to acquire Rolls-Royce's ownership and collaboration interests in IAE. Capital expenditures for 2016 ($1,699 million) primarily relate to investments in new programs at Pratt & Whitney and UTC Aerospace Systems, as well as new facilities at Pratt & Whitney and UTC Climate, Controls & Security. Cash investments in businesses in 2016 ($710 million) consisted of the acquisition of a majority interest in an Italian heating products and services company by UTC Climate, Controls & Security, the acquisition of a Japanese services company by Otis and a number of small acquisitions, primarily in our commercial businesses. We expect total cash investments for acquisitions in 2017 to be $1 billion to $2 billion. However, actual acquisition spending may vary depending upon the timing, availability and appropriate value of acquisition opportunities. We expect capital expenditures in 2017 to be approximately $1.8 billion.

As discussed in Note 14 to the Consolidated Financial Statements, we enter into derivative instruments for risk management purposes only, including derivatives designated as hedging instruments under the Derivatives and Hedging Topic of the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) and those utilized as economic hedges. We operate internationally and, in the normal course of business, are exposed to fluctuations in interest rates, foreign exchange rates and commodity prices. These fluctuations can increase the costs of financing, investing and operating the business. We have used derivative instruments, including swaps, forward contracts and options to manage certain foreign currency, interest rate and commodity price exposures. During the years ended December 31, 2016 and 2015, we had net cash receipts of approximately $249 million and $160 million, respectively, from the settlement of these derivative instruments.

Customer financing activities were a net use of cash of $221 million and $247 million in 2016 and 2015, respectively. We expect 2017 investments in customer financing assets to increase by approximately $400 million, primarily due to increased levels of investment in commercial aircraft engines and products under lease. While we expect that 2017 customer financing activity will be a net use of funds, actual funding is subject to usage under existing customer financing commitments during the year. We may also arrange for third-party investors to assume a portion of our commitments. At December 31, 2016, we had commercial aerospace financing and other contractual commitments of approximately $14.4 billion related to commercial aircraft and certain contractual rights to provide product on new aircraft platforms, of which as much as $1.3 billion may be required to be disbursed during 2017. As discussed in Note 1 to the Consolidated Financial Statements, we have entered into certain collaboration arrangements, which may include participation by our collaborators in these commitments. At December 31, 2016, our collaborators' share of these commitments was approximately $4.6 billion of which as much as $386 million may be required to be disbursed to us during 2017. Refer to Note 5 to the Consolidated Financial Statements for additional discussion of our commercial aerospace industry assets and commitments.

2015 Compared with 2014

Cash flows used in investing activities of continuing operations for 2015 and 2014 primarily reflect capital expenditures, cash investments in businesses, and payments related to our collaboration intangible assets and contractual rights to provide product on new aircraft platforms. Investing cash outflows in 2014 were partially offset by net proceeds of approximately $344 million from business dispositions, primarily a number of small dispositions in our commercial businesses.

Cash investments in businesses in 2015 ($538 million) consisted of the acquisition of the majority interest in a UTC Climate, Controls & Security business, the acquisition of an imaging technology company by UTC Aerospace Systems and a number of small acquisitions, primarily in our commercial businesses, and were partially offset by net proceeds of approximately $200 million from business dispositions. Cash investments in businesses in 2014 ($402 million) included the acquisition of the majority interest in a Pratt & Whitney joint venture and a number of small acquisitions, primarily in our commercial businesses, and were partially offset by net proceeds of approximately $344 million from business dispositions, primarily a number of small dispositions in our commercial businesses. Customer financing activities were a net use of cash of $247 million in 2015 and a net source of cash of $129 million in 2014.

Cash Flow—Financing Activities of Continuing Operations

(dollars in millions)	**2016**	2015	2014
Net cash flows used in financing activities of continuing operations	**$ (1,188)**	$ (10,776)	$ (4,249)

2016 Compared with 2015

The timing and levels of certain cash flow activities, such as acquisitions and repurchases of our stock, have resulted in the issuance of both long-term and short-term debt, including approximately $4 billion of net long-term debt issuances in 2016. Commercial paper borrowings and revolving credit facilities provide short-term liquidity to supplement operating cash flows and are used for general corporate purposes, including the funding of potential acquisitions and repurchases of our stock. We had approximately $522 million and $727 million of outstanding commercial paper at December 31, 2016 and 2015, respectively. Commercial paper borrowings at December 31, 2016 were comprised of approximately €500 million ($522 million) of Euro-denominated commercial paper.

At December 31, 2016, management had remaining authority to repurchase approximately $3.7 billion of our common stock under the October 14, 2015 share repurchase program. Under this program, shares may be purchased on the open market, in privately negotiated transactions, under accelerated share repurchase programs, and under plans complying with Rules 10b5-1 and 10b-18 under the Securities Exchange Act of 1934, as amended. We may also reacquire shares outside of the program from time to time in connection with the surrender of shares to cover taxes on vesting of restricted stock. In addition to the transactions under the ASR agreements discussed above, we made cash payments of approximately $2.25 billion to repurchase approximately 22 million shares of our common stock during the year ended December 31, 2016, and we repurchased approximately 14 million shares of our common stock for approximately $1.35 billion during the year ended December 31, 2015.

We expect 2017 share repurchases to be approximately $3.5 billion, which we expect to fund with cash generated from operating activities of continuing operations as well as additional borrowings. Our share repurchases vary depending upon various factors including the level of our other investing activities. In 2016 and 2015, we paid aggregate dividends on common stock of approximately $2.1 billion and $2.2 billion, respectively.

On April 29, 2016, we renewed our universal shelf registration statement filed with the SEC for an indeterminate amount of debt and equity securities for future issuance, subject to our internal limitations on the amount of debt to be issued under this shelf registration statement.

2015 Compared with 2014

In 2015, we completed the optional remarketing of the 1.550% junior subordinated notes, which were originally issued as part of our equity units on June 18, 2012. As a result of the remarketing, these notes were redesignated as our 1.778% junior subordinated notes due May 4, 2018. We received approximately $1.1 billion from the proceeds of the remarketing, and issued approximately 11.3 million shares of Common Stock to settle the purchase obligation of the holders of the equity units under the purchase contract entered into at the time of the original issuance of the equity units.

We made net repayments of long-term debt of $20 million and $206 million in 2015 and 2014, respectively. We had approximately $727 million of outstanding commercial paper at December 31, 2015. We had no commercial paper outstanding at December 31, 2014. Financing cash outflows for 2014 included the repurchase of 13.5 million shares of our common stock for approximately $1.5 billion.

In 2015, we paid aggregate dividends on common stock of approximately $2.2 billion. During 2014, an aggregate $2.0 billion of cash dividends were paid to common stock shareowners.

Cash Flow—Discontinued Operations

(dollars in millions)	**2016**	2015	2014
Net cash flows (used in) provided by discontinued operations	**$ (2,526)**	$ 8,619	$ 217

2016 Compared with 2015

Cash flows used in operating activities of discontinued operations in 2016 primarily reflect the payment of taxes associated with the net gain realized on the sale of Sikorsky to Lockheed Martin Corp. in November 2015.

For the year ended December 31, 2015, cash flows provided by discontinued operations primarily reflect those from investing activities, which includes the proceeds of $9.1 billion from the sale of Sikorsky to Lockheed Martin Corp. in November 2015, partially offset by capital expenditures of Sikorsky in 2015. Cash outflows from operating activities of discontinued operations for the year ended December 31, 2015 primarily reflect operating income and noncash expenses, as well as net investments in working capital and other net operating assets of Sikorsky.

2015 Compared with 2014

Cash flows from discontinued operations for the year ended December 31, 2015 primarily reflect those from investing activities, which includes the proceeds of $9.1 billion from the sale of Sikorsky to Lockheed Martin Corp. in November 2015, as discussed above.

For the year ended December 31, 2014, cash flows provided by discontinued operations primarily reflect cash provided by Sikorsky operating income of approximately $150 million and noncash charges, including $438 million of charges related to the change in estimate resulting from contract amendments signed with the Canadian government for the CH-148 derivative of the H-92 helicopter, a military variant of the S-92 helicopter (the Cyclone Helicopter program), partially offset by working capital investments in inventories. Cash flows used in investing activities of $113 million were primarily related to capital expenditures of Sikorsky.

CRITICAL ACCOUNTING ESTIMATES

Preparation of our financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Note 1 to the Consolidated Financial Statements describes the significant accounting policies used in preparation of the Consolidated Financial Statements. Management believes the most complex and sensitive judgments, because of their significance to the Consolidated Financial Statements, result primarily from the need to make estimates about the effects of matters that are inherently uncertain. The most significant areas involving management judgments and estimates are described below. Actual results in these areas could differ from management's estimates.

Long-Term Contract Accounting. We utilize percentage-of-completion accounting on certain of our long-term contracts. The percentage-of-completion method requires estimates of future revenues and costs over the full term of product and/or service delivery. We also utilize the completed-contract method of accounting on certain lesser value commercial contracts. Under the completed-contract method, sales and cost of sales are recognized when a contract is completed.

Losses, if any, on long-term contracts are provided for when anticipated. We recognize loss provisions on original equipment contracts to the extent that estimated inventoriable manufacturing, engineering, product warranty and product performance guarantee costs, as appropriate, exceed the projected revenue from the products and services contemplated under the contractual arrangement. For new commitments, we generally record loss provisions at the earlier of contract announcement or contract signing except for certain requirements contracts under which losses are recorded based upon receipt of the purchase order which obligates us to perform. For existing commitments, anticipated losses on contracts are recognized in the period in which losses become evident. Products contemplated under the contractual arrangement include products purchased under the contract and, in the large commercial engine and wheels and brakes businesses, future highly probable sales of replacement parts required by regulation that are expected to be purchased subsequently for incorporation into the original equipment. Revenue projections used in determining contract loss provisions are based upon estimates of the quantity, pricing and timing of future product deliveries. We measure the extent of progress toward completion on our long-term commercial aerospace equipment contracts using units-of-delivery. In addition, we use the cost-to-cost method for elevator and escalator sales, installation and modernization contracts in the commercial businesses and certain aerospace development contracts. For long-term aftermarket contracts, we recognize revenue over the contract period in proportion to the costs expected to be incurred in performing services under the contract. Within commercial aerospace, inventory costs attributable to new engine offerings are recognized based on the average cost per unit expected over the life of each contract using the units-of-delivery method of percentage of completion accounting. Under this method, costs of initial engine deliveries in excess of the projected contract per unit average cost are capitalized, and these capitalized amounts are subsequently expensed as additional engine deliveries occur for engines with costs below the projected contract per unit average cost over the life of the contract. As of December 31, 2016 and 2015, inventories included $233 million and $13 million, respectively, of such capitalized amounts. Contract accounting also requires estimates of future costs over the performance period of the contract as well as an estimate of award fees and other sources of revenue.

Contract costs are incurred over a period of time, which can be several years, and the estimation of these costs requires management's judgment. The long-term nature of these contracts, the complexity of the products, and the strict safety and performance standards under which they are regulated can affect our ability to estimate costs precisely. As a result, we review and update our cost estimates on significant contracts on a quarterly basis, and no less frequently than annually for all others, and when circumstances change and warrant a modification to a previous estimate. We record changes in contract estimates primarily using the cumulative catch-up method in accordance with the Revenue Recognition Topic of the FASB ASC.

Income Taxes. The future tax benefit arising from deductible temporary differences and tax carryforwards was $5.7 billion at December 31, 2016 and $6.2 billion at December 31, 2015. Management believes that our earnings during the periods when the temporary differences become deductible will be sufficient to realize the related future income tax benefits, which may be realized over an extended period of time. For those jurisdictions where the expiration date of tax carryforwards or the projected operating results indicate that realization is not likely, a valuation allowance is provided.

In assessing the need for a valuation allowance, we estimate future taxable income, considering the feasibility of ongoing tax planning strategies and the realizability of tax loss carryforwards. Valuation allowances related to deferred tax assets can be affected by changes to tax laws, changes to statutory tax rates and future taxable income levels. In the event we were to determine that we would not be able to realize all or a portion of our deferred tax assets in the future, we would reduce such amounts through an increase to tax expense in the period in which that determination is made or when tax law changes are enacted. Conversely, if we were to determine that we would be able to realize our deferred tax assets in the future in excess of the net carrying amounts, we would decrease the recorded valuation allowance through a decrease to tax expense in the period in which that determination is made.

In the ordinary course of business there is inherent uncertainty in quantifying our income tax positions. We assess our income tax positions and record tax benefits for all years subject to examination based upon management's evaluation of the facts, circumstances and information available at the reporting date. For those tax positions where it is more likely than not that a tax benefit will be sustained, we have recorded the largest amount of tax benefit with a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where it is not more likely than not that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements. See Notes 1 and 11 to the Consolidated Financial Statements for further discussion. Also see Note 18 for discussion of UTC administrative review proceedings with the German Tax Office.

Goodwill and Intangible Assets. Our investments in businesses in 2016 totaled $712 million (including debt assumed of $2 million). The assets and liabilities of acquired businesses are recorded under the acquisition method of accounting at their estimated fair values at the dates of acquisition. Goodwill represents costs in excess of fair values assigned to the underlying identifiable net assets of acquired businesses. Intangible assets consist of service portfolios, patents, trademarks/tradenames, customer relationships and other intangible assets including a collaboration asset established in connection with our 2012 agreement to acquire Rolls-Royce's ownership and collaboration interests in IAE, as discussed above and in Note 2 to the Consolidated Financial Statements.

Also included within other intangible assets are payments made to secure certain contractual rights to provide product on new commercial aerospace platforms. Such payments are capitalized when there are distinct rights obtained and there are sufficient incremental cash flows to support the recoverability of the assets established. Otherwise, the applicable portion of the payments are expensed. Capitalized payments made on these contractual commitments are amortized as a reduction of sales. We amortize these intangible assets based on the pattern of economic benefit, which typically results in an amortization method other than straight-line. In the aerospace industry, amortization based on the pattern of economic benefit generally results in lower amortization expense during the development period with increasing amortization expense as programs enter full production and aftermarket cycles. If a pattern of economic benefit cannot be reliably determined, a straight-line amortization method is used. The gross value of these contractual commitments at December 31, 2016 was approximately $10.8 billion, of which approximately $2.0 billion has been paid to date. We record these payments as intangible assets when such payments are no longer conditional. The recoverability of these intangibles is dependent upon the future success and profitability of the underlying aircraft platforms including the associated aftermarket revenue streams.

Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are subject to annual, or more frequent if necessary, impairment testing using the guidance and criteria described in the Intangibles—Goodwill and Other Topic of the FASB ASC. This testing compares carrying values to fair values and, when appropriate, the carrying values of these assets are reduced to fair value. In developing our estimates for the fair value of our reporting units, significant judgment is required in the determination of the appropriateness of using a qualitative assessment or quantitative assessment. When quantitative assessments are required or elected to be performed, fair value is primarily based on income approaches using discounted cash flow models which have significant assumptions. Such assumptions are subject to variability from year to year and are directly impacted by global market conditions. We completed our annual impairment testing as of July 1, 2016 and determined that no significant adjustments to the carrying value of goodwill or indefinite lived intangible assets were necessary based on the results of the impairment tests. Although these assets are not currently impaired, there can be no assurance that future impairments will not occur. See Note 2 to the Consolidated Financial Statements for further discussion.

Contingent Liabilities. Our operating units include businesses which sell products and services and conduct operations throughout the world. As described in Note 18 to the Consolidated Financial Statements, contractual, regulatory and other matters, including asbestos claims, in the normal course of business may arise that subject us to claims or litigation. Additionally, we have significant contracts with the U.S. Government, subject to government oversight and audit, which may require significant adjustment of contract prices. We accrue for liabilities associated with these matters when it is probable that a liability has been incurred and the amount can be reasonably estimated. The most likely cost to be incurred is accrued based on an evaluation of then currently available facts with respect to each matter. When no amount within a range of estimates is more likely, the minimum is accrued. The inherent uncertainty related to the outcome of these matters can result in amounts materially different from any provisions made with respect to their resolution.

Employee Benefit Plans. We sponsor domestic and foreign defined benefit pension and other postretirement plans. Major assumptions used in the accounting for these employee benefit plans include the discount rate, expected return on plan assets, rate of increase in employee compensation levels, mortality rates, and health care cost increase projections. Assumptions are determined based on company data and appropriate market indicators, and are evaluated each year at December 31. A change in any of these assumptions would have an effect on net periodic pension and postretirement benefit costs reported in the Consolidated Financial Statements.

In the following table, we show the sensitivity of our pension and other postretirement benefit plan liabilities and net annual periodic cost to a 25 basis point change in the discount rates for benefit obligations, interest cost and service cost as of December 31, 2016:

(dollars in millions)	Increase in Discount Rate of 25 bps	Decrease in Discount Rate of 25 bps
Pension plans		
Projected benefit obligation	$ (976)	$ 1,029
Net periodic pension cost	(70)	75
Other postretirement benefit plans		
Accumulated postretirement benefit obligation	(14)	15
Net periodic postretirement benefit cost	(1)	1

These estimates assume no change in the shape or steepness of the company-specific yield curve used to plot the individual spot rates that will be applied to the future cash outflows for future benefit payments in order to calculate interest and service cost. A flattening of the yield curve, from a narrowing of the spread between interest and obligation discount rates, would increase our net periodic pension cost. Conversely, a steepening of the yield curve, from an increase in the spread between interest and obligation discount rates, would decrease our net periodic pension cost.

Pension expense is also sensitive to changes in the expected long-term rate of asset return. An increase or decrease of 25 basis points in the expected long-term rate of asset return would have decreased or increased 2016 pension expense by approximately $71 million.

The weighted-average discount rates used to measure pension liabilities and costs is set by reference to UTC-specific analysis using each plan's specific cash flows and is then compared to high-quality bond indices for reasonableness. For our significant plans, we utilize a full yield curve approach in the estimation of the service cost and interest cost components by applying the specific spot rates along the yield curve used in determination of the benefit obligation to the relevant projected cash flows. Global market interest rates have decreased in 2016 as compared with 2015 and, as a result, the weighted-average discount rate used to measure pension liabilities decreased from 4.1% in 2015 to 3.8% in 2016. The weighted-average discount rates used to measure service cost and interest cost were 3.8% and 3.4% in 2016, respectively. In December 2009, we amended the salaried retirement plans (qualified and non-qualified) to change the retirement formula effective January 1, 2015. The formula changed from a final average earnings (FAE) and credited service formula to the existing cash balance formula that was adopted in 2003 for newly hired non-union employees and for other non-union employees who made a one-time voluntary election to have future benefit accruals determined under this formula. Employees hired after 2009 are not eligible for any defined benefit pension plan and will instead receive an enhanced benefit under the UTC Savings Plan. As of July 26, 2012 the same amendment was applied to legacy Goodrich salaried employees. Across our global pension plans, the impact of the continued recognition of prior pension investment gains, 2016 actual returns on plan assets and lower discount rates for interest costs, offset by the lower discount rates for pension obligations, will result in a net periodic pension benefit in 2017 consistent with 2016 amounts.

See Note 12 to the Consolidated Financial Statements for further discussion.

OFF-BALANCE SHEET ARRANGEMENTS AND CONTRACTUAL OBLIGATIONS

We extend a variety of financial guarantees to third parties in support of unconsolidated affiliates and for potential financing requirements of commercial aerospace customers. We also have obligations arising from sales of certain businesses and assets, including indemnities for representations and warranties and environmental, health and safety, tax and employment matters. Circumstances that could cause the contingent obligations and liabilities arising from these arrangements to come to fruition include changes in an underlying transaction (e.g., hazardous waste discoveries, etc.), nonperformance under a contract, customer requests for financing, or deterioration in the financial condition of the guaranteed party.

A summary of our consolidated contractual obligations and commitments as of December 31, 2016 is as follows:

		Payments Due by Period			
(dollars in millions)	**Total**	2017	2018-2019	2020-2021	Thereafter
Long-term debt—principal	**$ 23,299**	$ 1,603	$ 3,311	$ 3,494	$ 14,891
Long-term debt—future interest	**13,287**	855	1,637	1,424	9,371
Operating leases	**2,094**	462	640	354	638
Purchase obligations	**13,882**	8,145	5,034	631	72
Other long-term liabilities	**3,731**	1,126	1,382	404	819
Total contractual obligations	**$ 56,293**	$ 12,191	$ 12,004	$ 6,307	$ 25,791

Purchase obligations include amounts committed under legally enforceable contracts or purchase orders for goods and services with defined terms as to price, quantity, delivery and termination liability. Approximately 14% of the purchase obligations disclosed above represent purchase orders for products to be delivered under firm contracts with the U.S. Government for which we have full recourse under customary contract termination clauses.

Other long-term liabilities primarily include those amounts on our December 31, 2016 balance sheet representing obligations under product service and warranty policies, performance and operating cost guarantees, estimated environmental remediation costs and expected contributions under employee benefit programs. The timing of expected cash flows associated with these obligations is based upon management's estimates over the terms of these agreements and is largely based upon historical experience.

In connection with the acquisition of Goodrich in 2012, we recorded assumed liabilities of approximately $2.2 billion related to customer contractual obligations on certain OEM development programs where the expected costs exceeded the expected revenue under contract. These liabilities are being liquidated in accordance with the underlying economic pattern of obligations, as reflected by the net cash outflows incurred on the OEM contracts. Total consumption of the contractual obligations for the year ended December 31, 2016 was approximately $213 million. Total future consumption of the contractual obligations is expected to be as follows: $251 million in 2017, $248 million in 2018, $222 million in 2019, $149 million in 2020, $83 million in 2021 and $250 million thereafter. These amounts are not included in the table above.

The above table also does not reflect unrecognized tax benefits of $1,086 million, the timing of which is uncertain, except for approximately $9 million that may become payable during 2017. Refer to Note 11 to the Consolidated Financial Statements for additional discussion on unrecognized tax benefits.

COMMERCIAL COMMITMENTS

The following table summarizes our commercial commitments outstanding as of December 31, 2016:

		Amount of Commitment Expiration per Period			
(dollars in millions)	**Committed**	2017	2018-2019	2020-2021	Thereafter
Commercial aerospace financing commitments	**$ 2,358**	$ 435	$ 937	$ 641	$ 345
Other commercial aerospace commitments	**12,063**	860	1,711	1,436	8,056
Commercial aerospace financing arrangements	**348**	8	2	21	317
Credit facilities and debt obligations (expire 2017 to 2028)	**270**	252	6	—	12
Performance guarantees	**55**	7	—	39	9
Total commercial commitments	**$ 15,094**	$ 1,562	$ 2,656	$ 2,137	$ 8,739

In connection with our 2012 agreement to acquire Rolls-Royce's ownership and collaboration interests in IAE, additional payments are due to Rolls-Royce contingent upon each hour flown through June 2027 by the V2500-powered aircraft in service as of the acquisition date. These flight hour payments, included in "Other commercial aerospace commitments" in the table above, are being capitalized as collaboration intangible assets.

We also have other contractual commitments, including commitments to secure certain contractual rights to provide product on new aircraft platforms, which are included in "Other commercial aerospace commitments" in the table above. Such payments are capitalized when distinct rights are obtained and there are sufficient incremental cash flows to support the recoverability of the assets established. Otherwise, the applicable portion of the payments are expensed. Capitalized payments made on these contractual commitments are included in intangible assets and are amortized over the term of underlying economic benefit.

Refer to Notes 1, 5 and 17 to the Consolidated Financial Statements for additional discussion on contractual and commercial commitments.

MARKET RISK AND RISK MANAGEMENT

We are exposed to fluctuations in foreign currency exchange rates, interest rates and commodity prices. To manage certain of those exposures, we use derivative instruments, including swaps, forward contracts and options. Derivative instruments utilized by us in our hedging activities are viewed as risk management tools, involve little complexity and are not used for trading or speculative purposes. We diversify the counterparties used and monitor the concentration of risk to limit our counterparty exposure.

We have evaluated our exposure to changes in foreign currency exchange rates, interest rates and commodity prices in our market risk sensitive instruments, which are primarily cash, debt and derivative instruments, using a value at risk analysis. Based on a 95% confidence level and a one-day holding period, at December 31, 2016, the potential loss in fair value on our market risk sensitive instruments was not material in relation to our financial position, results of operations or cash flows. Our calculated value at risk exposure represents an estimate of reasonably possible net losses based on volatilities and correlations and is not necessarily indicative of actual results. Refer to Notes 1, 9 and 14 to the Consolidated Financial Statements for additional discussion of foreign currency exchange, interest rates and financial instruments.

Foreign Currency Exposures. We have a large volume of foreign currency exposures that result from our international sales, purchases, investments, borrowings and other international transactions. International segment sales, excluding U.S. export sales, averaged approximately $26 billion over the last three years. We actively manage foreign currency exposures that are associated with committed foreign currency purchases and sales, and other assets and liabilities created in the normal course of business at the operating unit level. More than insignificant exposures that cannot be naturally offset within an operating unit are hedged with foreign currency derivatives. We also have a significant amount of foreign currency net asset exposures. As discussed in Note 9 to the Consolidated Financial Statements, at December 31, 2016 we have approximately €2.95 billion of Euro-denominated long-term debt and €500 million of outstanding Euro-denominated commercial paper borrowings, which qualify as a net investment hedge against our investments in European businesses. As of December 31, 2016, the net investment hedge is deemed to be effective. Currently, we do not hold any derivative contracts that hedge our foreign currency net asset exposures but may consider such strategies in the future.

Within aerospace, our sales are typically denominated in U.S. Dollars under accepted industry convention. However, for our non-U.S. based entities, such as P&WC, a substantial portion of their costs are incurred in local currencies. Consequently, there is a foreign currency exchange impact and risk to operational results as U.S. Dollars must be converted to local currencies such as the Canadian Dollar in order to meet local currency cost obligations. In order to minimize the exposure that exists from changes in the exchange rate of the U.S. Dollar against these other currencies, we hedge a certain portion of sales to secure the rates at which U.S. Dollars will be converted. The majority of this hedging activity occurs at P&WC, and hedging activity also occurs to a lesser extent at certain UTC Aerospace Systems businesses. At P&WC, firm and forecasted sales for both engines and spare parts are hedged at varying amounts for up to 48 months on the U.S. Dollar sales exposure as represented by the excess of U.S. Dollar sales over U.S. Dollar denominated purchases. Hedging gains and losses resulting from movements in foreign currency exchange rates are partially offset by the foreign currency translation impacts that are generated on the translation of local currency operating results into U.S. Dollars for reporting purposes. While the objective of the hedging program is to minimize the foreign currency exchange impact on operating results, there are typically variances between the hedging gains or losses and the translational impact due to the length of hedging contracts, changes in the sales profile, volatility in the exchange rates and other such operational considerations.

Interest Rate Exposures. Our long-term debt portfolio consists mostly of fixed-rate instruments. From time to time, we may hedge to floating rates using interest rate swaps. The hedges are designated as fair value hedges and the gains and losses on the swaps are reported in interest expense, reflecting that portion of interest expense at a variable rate. We issue commercial paper, which exposes us to changes in interest rates. Currently, we do not hold any derivative contracts that hedge our interest exposures, but may consider such strategies in the future.

Commodity Price Exposures. We are exposed to volatility in the prices of raw materials used in some of our products and from time to time we may use forward contracts in limited circumstances to manage some of those exposures. In the future, if hedges are used, gains and losses may affect earnings. There were no significant outstanding commodity hedges as of December 31, 2016.

ENVIRONMENTAL MATTERS

Our operations are subject to environmental regulation by federal, state and local authorities in the United States and regulatory authorities with jurisdiction over our foreign operations. As a result, we have established, and continually update, policies relating to environmental standards of performance for our operations worldwide. We believe that expenditures necessary to comply with the present regulations governing environmental protection will not have a material effect upon our competitive position, results of operations, cash flows or financial condition.

We have identified 725 locations, mostly in the United States, at which we may have some liability for remediating contamination. We have resolved our liability at 346 of these locations. We do not believe that any individual location's exposure will have a material effect on our results of operations. Sites in the investigation, remediation or operation and maintenance stage represent approximately 93% of our accrued environmental remediation reserve.

We have been identified as a potentially responsible party under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA or Superfund) at 127 sites. The number of Superfund sites, in and of itself, does not represent a relevant measure of liability because the nature and extent of environmental concerns vary from site to site and our share of responsibility varies from sole responsibility to very little responsibility. In estimating our liability for remediation, we consider our likely proportionate share of the anticipated remediation expense and the ability of other potentially responsible parties to fulfill their obligations.

At December 31, 2016 and 2015, we had $829 million and $837 million reserved for environmental remediation, respectively. Cash outflows for environmental remediation were $44 million in 2016, $50 million in 2015 and $63 million in 2014. We estimate that ongoing environmental remediation expenditures in each of the next two years will not exceed approximately $84 million.

ASBESTOS MATTERS

As a result of the definitization of the insurance coverage for existing and potential future asbestos claims through the negotiation and establishment of settlement agreements during 2015, as well as the stabilization of company and industry experience, we established a reserve for our potential asbestos exposure, recording a noncash pretax charge to earnings of $237 million in the fourth quarter of 2015.

Our estimated total liability to resolve all pending and unasserted potential future asbestos claims through 2059 is approximately $374 million and is principally recorded in Other long-term liabilities on our Consolidated Balance Sheet as of December 31, 2016. This amount is on a pre-tax basis, not discounted, and excludes the Company’s legal fees to defend the asbestos claims (which will continue to be expensed by the Company as they are incurred). In addition, the Company has an insurance recovery receivable for probable asbestos related recoveries of approximately $124 million, which is included primarily in Other assets on our Consolidated Balance Sheet as of December 31, 2016. See Note 18 "Contingent Liabilities" of our Consolidated Financial Statements for further discussion of this matter.

GOVERNMENT MATTERS

As described in "Critical Accounting Estimates—Contingent Liabilities," our contracts with the U.S. Government are subject to audits. Such audits may recommend that certain contract prices should be reduced to comply with various government regulations, or that certain payments be delayed or withheld. We are also the subject of one or more investigations and legal proceedings initiated by the U.S. Government with respect to government contract matters. See "Legal Proceedings" in Item 1 to this Form 10-K, and Note 11 "Income Taxes" and Note 18 "Contingent Liabilities" of our Consolidated Financial Statements for further discussion of these and other government matters.

Cautionary Note Concerning Factors That May Affect Future Results

This 2016 Annual Report to Shareowners (2016 Annual Report) contains statements which, to the extent they are not statements of historical or present fact, constitute "forward-looking statements" under the securities laws. From time to time, oral or written forward-looking statements may also be included in other information released to the public. These forward-looking statements are intended to provide management's current expectations or plans for our future operating and financial performance, based on assumptions currently believed to be valid. Forward-looking statements can be identified by the use of words such as "believe," "expect," "expectations," "plans," "strategy," "prospects," "estimate," "project," "target," "anticipate," "will," "should," "see," "guidance," "confident" and other words of similar meaning in connection with a discussion of future operating or financial performance. Forward-looking statements may include, among other things, statements relating to future sales, earnings, cash flow, results of operations, uses of cash, share repurchases and other measures of financial performance or potential future plans, strategies or transactions. All forward-looking statements involve risks, uncertainties and other factors that may cause actual results to differ materially from those expressed or implied in the forward-looking statements. For those statements, we claim the protection of the safe harbor for forward-looking statements contained in the U.S. Private Securities Litigation Reform Act of 1995. Such risks, uncertainties and other factors include, without limitation:

- the effect of economic conditions in the industries and markets in which we operate in the U.S. and globally and any changes therein, including financial market conditions, fluctuations in commodity prices, interest rates and foreign currency exchange rates, levels of end market demand in construction and in both the commercial and defense segments of the aerospace industry, levels of air travel, financial condition of commercial airlines, the impact of weather conditions and natural disasters and the financial condition of our customers and suppliers;
- challenges in the development, production, delivery, support, performance and realization of the anticipated benefits of advanced technologies and new products and services;
- future levels of indebtedness and capital spending and research and development spending;
- future availability of credit and factors that may affect such availability, including credit market conditions and our capital structure;
- the timing and scope of future repurchases of our common stock, which may be suspended at any time due to various factors, including market conditions and the level of other investing activities and uses of cash;
- delays and disruption in delivery of materials and services from suppliers;
- company and customer- directed cost reduction efforts and restructuring costs and savings and other consequences thereof;
- the scope, nature, impact or timing of acquisition and divestiture activity, including among other things integration of acquired businesses into our existing businesses and realization of synergies and opportunities for growth and innovation;
- new business opportunities;
- our ability to realize the intended benefits of organizational changes;
- the anticipated benefits of diversification and balance of operations across product lines, regions and industries;
- the outcome of legal proceedings, investigations and other contingencies;
- pension plan assumptions and future contributions;
- the impact of the negotiation of collective bargaining agreements and labor disputes;
- the effect of changes in political conditions in the U.S. and other countries in which we operate, including the effect of changes in U.S. trade policies or the U.K.'s pending withdrawal from the EU, on general market conditions, global trade policies and currency exchange rates in the near term and beyond; and
- the effect of changes in tax, environmental, regulatory (including among other things import/export) and other laws and regulations in the U.S. and other countries in which we operate.

In addition, our Annual Report on Form 10-K for 2016 includes important information as to risks, uncertainties and other factors that may cause actual results to differ materially from those expressed or implied in the forward-looking statements. See the "Notes to Consolidated Financial Statements" under the heading "Note 18: Contingent Liabilities," the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" under the headings "Business Overview," "Results of Operations," "Liquidity and Financial Condition," and "Critical Accounting Estimates," and the section titled "Risk Factors." Our Annual Report on Form 10-K for 2016 also includes important information as to these factors in the "Business" section under the headings "General," "Description of Business by Segment" and "Other Matters Relating to Our Business as a Whole," and in the "Legal Proceedings" section. Additional important information as to these factors is included in this 2016 Annual Report in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" under the headings "Restructuring Costs," "Environmental Matters" and "Governmental Matters." The forward-looking statements speak only as of the date of this report or, in the case of any document incorporated by reference, the date of that document. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law. Additional information as to factors that may cause actual results to differ materially from those expressed or implied in the forward-looking statements is disclosed from time to time in our other filings with the SEC.

Management's Report on Internal Control over Financial Reporting

The management of UTC is responsible for establishing and maintaining adequate internal control over financial reporting. 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 reporting purposes in accordance with accounting principles generally accepted in the United States of America. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Management has assessed the effectiveness of UTC's internal control over financial reporting as of December 31, 2016. In making its assessment, management has utilized the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in its *Internal Control—Integrated Framework*, released in 2013. Management concluded that based on its assessment, UTC's internal control over financial reporting was effective as of December 31, 2016. The effectiveness of UTC's internal control over financial reporting, as of December 31, 2016, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

/s/ Gregory J. Hayes

Gregory J. Hayes
Chairman, President and Chief Executive Officer

/s/ Akhil Johri

Akhil Johri
Executive Vice President & Chief Financial Officer

/s/ Robert J. Bailey

Robert J. Bailey
Corporate Vice President, Controller

Report of Independent Registered Public Accounting Firm

TO THE BOARD OF DIRECTORS AND SHAREOWNERS OF UNITED TECHNOLOGIES CORPORATION:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statement of operations, of comprehensive income, of cash flows and of changes in equity present fairly, in all material respects, the financial position of United Technologies Corporation and its subsidiaries at December 31, 2016 and December 31, 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016 based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2013. The Corporation's management is responsible for these financial statements, 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 opinions on these financial statements and on the Corporation's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As disclosed in Note 1 to the consolidated financial statements, the Corporation changed the presentation and classification of certain cash receipts and cash payments and the presentation of restricted cash in the statement of cash flows, as well as the classification and presentation of certain employee share-based payment transactions and the tax-related cash flows resulting from these payments.

A corporation'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 corporation's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the corporation; (ii) 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 corporation are being made only in accordance with authorizations of management and directors of the corporation; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the corporation's assets that could have a material effect on the financial statements.

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

/s/ PricewaterhouseCoopers LLP

Hartford, Connecticut
February 9, 2017

Consolidated Statement of Operations

(dollars in millions, except per share amounts; shares in millions)	**2016**	2015	2014
Net Sales:			
Product sales	**$ 40,735**	$ 39,801	$ 41,545
Service sales	**16,509**	16,297	16,355
	57,244	56,098	57,900
Costs and Expenses:			
Cost of products sold	**30,325**	29,771	30,367
Cost of services sold	**11,135**	10,660	10,531
Research and development	**2,337**	2,279	2,475
Selling, general and administrative	**6,060**	5,886	6,172
	49,857	48,596	49,545
Other income (expense), net	**785**	(211)	1,238
Operating profit	**8,172**	7,291	9,593
Interest expense, net	**1,039**	824	881
Income from continuing operations before income taxes	**7,133**	6,467	8,712
Income tax expense	**1,697**	2,111	2,244
Net income from continuing operations	**5,436**	4,356	6,468
Less: Noncontrolling interest in subsidiaries' earnings from continuing operations	**371**	360	402
Income from continuing operations attributable to common shareowners	**5,065**	3,996	6,066
Discontinued operations (Note 3):			
Income from operations	**1**	252	175
Gain on disposal	**13**	6,042	—
Income tax expense	**(24)**	(2,684)	(20)
Net (loss) income from discontinued operations	**(10)**	3,610	155
Less: Noncontrolling interest in subsidiaries' (loss) earnings from discontinued operations	**—**	(2)	1
(Loss) Income from discontinued operations attributable to common shareowners	**(10)**	3,612	154
Net income attributable to common shareowners	**$ 5,055**	$ 7,608	$ 6,220
Earnings Per Share of Common Stock—Basic:			
Net income from continuing operations attributable to common shareowners	**$ 6.19**	$ 4.58	$ 6.75
Net income attributable to common shareowners	**$ 6.18**	$ 8.72	$ 6.92
Earnings Per Share of Common Stock—Diluted:			
Net income from continuing operations attributable to common shareowners	**$ 6.13**	$ 4.53	$ 6.65
Net income attributable to common shareowners	**$ 6.12**	$ 8.61	$ 6.82
Dividends Per Share of Common Stock	**$ 2.62**	$ 2.56	$ 2.36
Weighted average number of shares outstanding:			
Basic shares	**818.2**	872.7	898.3
Diluted shares	**826.1**	883.2	911.6

See accompanying Notes to Consolidated Financial Statements

Consolidated Statement of Comprehensive Income

(dollars in millions)		**2016**		2015		2014
Net income from continuing operations	**$**	**5,436**	$	4,356	$	6,468
Net (loss) income from discontinued operations		**(10)**		3,610		155
Net income		**5,426**		7,966		6,623
Other comprehensive loss, net of tax						
Foreign currency translation adjustments						
Foreign currency translation adjustments arising during period		**(1,089)**		(1,502)		(1,302)
Reclassification adjustments from sale of an investment in a foreign entity recognized in net income		**—**		42		7
		(1,089)		(1,460)		(1,295)
Pension and postretirement benefit plans						
Net actuarial loss arising during period		**(785)**		(284)		(4,362)
Prior service cost arising during period		**(13)**		(37)		(5)
Other		**542**		326		121
Amortization of actuarial loss and prior service cost		**535**		867		416
		279		872		(3,830)
Tax (expense) benefit		**(189)**		(298)		1,388
		90		574		(2,442)
Unrealized gain (loss) on available-for-sale securities						
Unrealized holding gain arising during period		**190**		28		35
Reclassification adjustments for gain included in Other income, net		**(94)**		(54)		(20)
		96		(26)		15
Tax (expense) benefit		**(36)**		11		(3)
		60		(15)		12
Change in unrealized cash flow hedging						
Unrealized cash flow hedging gain (loss) arising during period		**75**		(415)		(263)
Loss reclassified into Product sales		**171**		234		96
		246		(181)		(167)
Tax (expense) benefit		**(69)**		51		37
		177		(130)		(130)
Other comprehensive loss, net of tax		**(762)**		(1,031)		(3,855)
Comprehensive income		**4,664**		6,935		2,768
Less: comprehensive income attributable to noncontrolling interest		**(324)**		(285)		(329)
Comprehensive income attributable to common shareowners	**$**	**4,340**	$	6,650	$	2,439

See accompanying Notes to Consolidated Financial Statements

Consolidated Balance Sheet

(dollars in millions, except per share amounts; shares in thousands)	**2016**	2015
Assets		
Cash and cash equivalents	**$ 7,157**	$ 7,075
Accounts receivable (net of allowance for doubtful accounts of $450 and $504)	**11,481**	10,653
Inventories and contracts in progress, net	**8,704**	8,135
Other assets, current	**1,208**	843
Total Current Assets	**28,550**	26,706
Customer financing assets	**1,398**	1,018
Future income tax benefits	**1,809**	1,961
Fixed assets, net	**9,158**	8,732
Goodwill	**27,059**	27,301
Intangible assets, net	**15,684**	15,603
Other assets	**6,048**	6,163
Total Assets	**$ 89,706**	$ 87,484
Liabilities and Equity		
Short-term borrowings	**$ 601**	$ 926
Accounts payable	**7,483**	6,875
Accrued liabilities	**12,219**	14,638
Long-term debt currently due	**1,603**	179
Total Current Liabilities	**21,906**	22,618
Long-term debt	**21,697**	19,320
Future pension and postretirement benefit obligations	**5,612**	6,022
Other long-term liabilities	**11,026**	10,558
Total Liabilities	**60,241**	58,518
Commitments and contingent liabilities (Notes 5 and 18)		
Redeemable noncontrolling interest	**296**	122
Shareowners' Equity:		
Capital Stock:		
Preferred Stock, $1 par value; 250,000 shares authorized; None issued or outstanding	**—**	—
Common Stock, $1 par value; 4,000,000 shares authorized; 1,440,982 and 1,438,497 shares issued	**17,285**	16,033
Treasury Stock— 632,281 and 600,153 common shares at average cost	**(34,150)**	(30,907)
Retained earnings	**52,873**	49,956
Unearned ESOP shares	**(95)**	(105)
Total Accumulated other comprehensive loss	**(8,334)**	(7,619)
Total Shareowners' Equity	**27,579**	27,358
Noncontrolling interest	**1,590**	1,486
Total Equity	**29,169**	28,844
Total Liabilities and Equity	**$ 89,706**	$ 87,484

See accompanying Notes to Consolidated Financial Statements

Consolidated Statement of Cash Flows

(dollars in millions)	**2016**	2015	2014
Operating Activities of Continuing Operations:			
Income from continuing operations	**$ 5,436**	$ 4,356	$ 6,468
Adjustments to reconcile income from continuing operations to net cash flows provided by operating activities of continuing operations:			
Depreciation and amortization	**1,962**	1,863	1,820
Deferred income tax provision	**398**	662	403
Stock compensation cost	**152**	158	219
Canadian government settlement	**(237)**	867	—
Change in:			
Accounts receivable	**(941)**	(438)	111
Inventories and contracts in progress	**(719)**	(766)	(636)
Other current assets	**49**	(55)	(115)
Accounts payable and accrued liabilities	**450**	490	(89)
Global pension contributions	**(303)**	(147)	(517)
Other operating activities, net	**165**	(235)	(685)
Net cash flows provided by operating activities of continuing operations	**6,412**	6,755	6,979
Investing Activities of Continuing Operations:			
Capital expenditures	**(1,699)**	(1,652)	(1,594)
Increase in customer financing assets	**(438)**	(364)	(202)
Decrease in customer financing assets	**217**	117	331
Investments in businesses	**(710)**	(538)	(402)
Dispositions of businesses	**211**	200	344
Increase in collaboration intangible assets	**(388)**	(437)	(593)
Receipts from settlements of derivative contracts	**249**	160	93
Other investing activities, net	**49**	(280)	56
Net cash flows used in investing activities of continuing operations	**(2,509)**	(2,794)	(1,967)
Financing Activities of Continuing Operations:			
Issuance of long-term debt	**6,469**	1,744	98
Repayment of long-term debt	**(2,452)**	(1,764)	(304)
(Decrease) increase in short-term borrowings, net	**(331)**	795	(346)
Proceeds from Common Stock issuance - equity unit settlement	**—**	1,100	—
Proceeds from Common Stock issued under employee stock plans	**13**	41	187
Dividends paid on Common Stock	**(2,069)**	(2,184)	(2,048)
Repurchase of Common Stock	**(2,254)**	(10,000)	(1,500)
Other financing activities, net	**(564)**	(508)	(336)
Net cash flows used in financing activities of continuing operations	**(1,188)**	(10,776)	(4,249)
Discontinued Operations:			
Net cash (used in) provided by operating activities	**(2,532)**	(372)	342
Net cash provided by (used in) investing activities	**6**	9,000	(113)
Net cash used in financing activities	**—**	(9)	(12)
Net cash flows (used in) provided by discontinued operations	**(2,526)**	8,619	217
Effect of foreign exchange rate changes on cash and cash equivalents	**(120)**	(174)	(156)
Net increase in cash, cash equivalents and restricted cash	**69**	1,630	824
Cash, cash equivalents and restricted cash, beginning of year	**7,120**	5,490	4,666
Cash, cash equivalents and restricted cash, end of year	**7,189**	7,120	5,490
Less: Cash and cash equivalents of businesses held for sale	**—**	—	6
Less: Restricted cash, included in Other assets	**32**	45	255
Cash and cash equivalents of continuing operations, end of year	**$ 7,157**	$ 7,075	$ 5,229
Supplemental Disclosure of Cash Flow Information:			
Interest paid, net of amounts capitalized	**$ 1,157**	$ 1,057	$ 1,076
Income taxes paid, net of refunds	**$ 4,096**	$ 2,060	$ 2,024
Noncash investing and financing activities include:			
Contributions of UTC Common Stock to domestic defined benefit pension plans	**$ —**	$ 250	$ —

See accompanying Notes to Consolidated Financial Statements

Consolidated Statement of Changes in Equity

(dollars in millions)

		Common Stock
Balance at December 31, 2013	**$**	**14,764**
Comprehensive income (loss):		
Net income		
Redeemable noncontrolling interest in subsidiaries' earnings		
Other comprehensive loss, net of tax		
Common Stock issued under employee plans (6.2 million shares), net of tax benefit of $103		607
Common Stock repurchased (13.5 million shares)		
Dividends on Common Stock		
Dividends on ESOP Common Stock		
Dividends attributable to noncontrolling interest		
Purchase of subsidiary shares from noncontrolling interest		(75)
Sale of subsidiary shares in noncontrolling interest		4
Redeemable noncontrolling interest reclassification to noncontrolling interest		
Other		
Balance at December 31, 2014	**$**	**15,300**
Comprehensive income (loss):		
Net income		
Redeemable noncontrolling interest in subsidiaries' earnings		
Other comprehensive loss, net of tax		
Common Stock issued - equity unit settlement (11.3 million shares)		1,100
Common Stock issued under employee plans (3.7 million shares), net of tax benefit of $64		379
Common Stock contributed to defined benefit pension plans (2.7 million shares)		112
Common Stock repurchased (88.7 million shares)		(870)
Dividends on Common Stock		
Dividends on ESOP Common Stock		
Dividends attributable to noncontrolling interest		
Purchase of subsidiary shares from noncontrolling interest		(12)
Sale of subsidiary shares in noncontrolling interest		24
Acquisition of noncontrolling interest		
Disposition of noncontrolling interest		
Redeemable noncontrolling interest fair value adjustment		
Balance at December 31, 2015	**$**	**16,033**
Comprehensive income (loss):		
Net income		
Redeemable noncontrolling interest in subsidiaries' earnings		
Other comprehensive loss, net of tax		
Common Stock issued under employee plans (2.5 million shares)		**262**
Common Stock repurchased (32.3 million shares)		**998**
Dividends on Common Stock		
Dividends on ESOP Common Stock		
Dividends attributable to noncontrolling interest		
Purchase of subsidiary shares from noncontrolling interest		**(8)**
Sale of subsidiary shares in noncontrolling interest		
Acquisition of noncontrolling interest		
Redeemable noncontrolling interest fair value adjustment		
Redeemable noncontrolling interest reclassification to noncontrolling interest		
Other		
Balance at December 31, 2016	**$**	**17,285**

See accompanying Notes to Consolidated Financial Statements

Shareowners' Equity						
Treasury Stock	Retained Earnings	Unearned ESOP Shares	Accumulated Other Comprehensive (Loss) Income	Noncontrolling Interest	Total Equity	Redeemable Noncontrolling Interest
$ (20,431)	**$ 40,539**	**$ (126)**	**$ (2,880)**	**$ 1,353**	**$ 33,219**	**$ 111**
	6,220			403	6,623	
				(9)	(9)	9
			(3,781)	(67)	(3,848)	(7)
9	(29)	11			598	
(1,500)					(1,500)	
	(2,048)				(2,048)	
	(71)				(71)	
				(318)	(318)	(3)
				(18)	(93)	
				11	15	
				(16)	(16)	16
				12	12	14
$ (21,922)	**$ 44,611**	**$ (115)**	**$ (6,661)**	**$ 1,351**	**$ 32,564**	**$ 140**
	7,608			358	7,966	
				(4)	(4)	4
			(958)	(61)	(1,019)	(12)
					1,100	
7	(2)	10			394	
138					250	
(9,130)					(10,000)	
	(2,184)				(2,184)	
	(75)				(75)	
				(337)	(337)	(3)
				(5)	(17)	(9)
				15	39	
				173	173	
				(4)	(4)	
	(2)				(2)	2
$ (30,907)	**$ 49,956**	**$ (105)**	**$ (7,619)**	**$ 1,486**	**$ 28,844**	**$ 122**
	5,055			**371**	**5,426**	
				(6)	**(6)**	**6**
			(715)	**(27)**	**(742)**	**(20)**
9		**10**			**281**	
(3,252)					**(2,254)**	
	(2,069)				**(2,069)**	
	(74)				**(74)**	
				(345)	**(345)**	**(2)**
				(1)	**(9)**	**(4)**
				25	**25**	
				98	**98**	**189**
	(1)				**(1)**	**1**
				(12)	**(12)**	**12**
	6			**1**	**7**	**(8)**
$ (34,150)	**$ 52,873**	**$ (95)**	**$ (8,334)**	**$ 1,590**	**$ 29,169**	**$ 296**

Notes to Consolidated Financial Statements

NOTE 1: SUMMARY OF ACCOUNTING PRINCIPLES

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Actual results could differ from those estimates. Certain reclassifications have been made to the prior year amounts to conform to the current year presentation.

Consolidation. The Consolidated Financial Statements include the accounts of United Technologies Corporation (UTC) and its controlled subsidiaries. Intercompany transactions have been eliminated.

Cash and Cash Equivalents. Cash and cash equivalents includes cash on hand, demand deposits and short-term cash investments that are highly liquid in nature and have original maturities of three months or less.

On occasion, we are required to maintain cash deposits with certain banks with respect to contractual obligations related to acquisitions or divestitures or other legal obligations. As of December 31, 2016 and 2015, the amount of such restricted cash was approximately $32 million and $45 million, respectively.

Accounts Receivable. Current and long-term accounts receivable as of December 31, 2016 include retainage of $106 million and unbilled receivables of $2,786 million, which includes approximately $1,169 million of unbilled receivables under commercial aerospace long-term aftermarket contracts. Current and long-term accounts receivable as of December 31, 2015 include retainage of $141 million and unbilled receivables of $2,318 million, which includes approximately $1,091 million of unbilled receivables under commercial aerospace long-term aftermarket contracts. See Note 5 for discussion of commercial aerospace industry assets and commitments.

Retainage represents amounts that, pursuant to the applicable contract, are not due until project completion and acceptance by the customer. Unbilled receivables represent revenues that are not currently billable to the customer under the terms of the contract. These items are expected to be billed and collected in the normal course of business.

Marketable Equity Securities. Equity securities that have a readily determinable fair value and that we do not intend to trade are classified as available-for-sale and carried at fair value. Unrealized holding gains and losses are recorded as a separate component of shareowners' equity, net of deferred income taxes.

In June 2016, the FASB issued Accounting Standards Update (ASU) 2016-13, *Financial Instruments - Credit Losses (Topic 328): Measurement of Credit Losses on Financial Instruments*. This ASU requires that certain financial assets, including those measured at amortized cost basis, be presented at the net amount expected to be collected, utilizing an impairment model known as the current expected credit loss model. In addition, available-for-sale debt securities will no longer use the concept of "other than temporary" when considering credit losses. Under this ASU, entities must use an allowance approach for credit losses on available-for-sale debt securities, and the allowance must be limited to the amount at which a security's fair value is below the amortized cost of the asset. The provisions of this ASU are effective for years beginning after December 15, 2019, with early adoption permitted. We are currently evaluating the impact of this ASU.

In January 2016, the FASB issued ASU 2016-01, *Financial Instruments - Overall: Recognition and Measurement of Financial Assets and Financial Liabilities*. This ASU modifies how entities measure equity investments and present changes in the fair value of financial liabilities. Upon adoption, investments that do not result in consolidation and are not accounted for under the equity method generally must be carried at fair value, with changes in fair value recognized in net income. As discussed in Note 10, we have approximately $353 million of unrealized gains on these securities recorded in Accumulated other comprehensive loss in our Consolidated Balance Sheet as of December 31, 2016. To the extent currently unrealized gains or losses on these investments are not realized through sale or other actions prior to the date of adoption, these amounts would be recorded directly to retained earnings upon adoption. The provisions of this ASU are effective for years beginning after December 15, 2017.

Inventories and Contracts in Progress. Inventories and contracts in progress are stated at the lower of cost or estimated realizable value and are primarily based on first-in, first-out (FIFO) or average cost methods; however, certain UTC Aerospace Systems and UTC Climate, Controls & Security entities use the last-in, first-out (LIFO) method. If inventories that were valued using the LIFO method had been valued under the FIFO method, they would have been higher by $114 million and $127 million at December 31, 2016 and 2015, respectively.

Costs accumulated against specific contracts or orders are at actual cost. Valuation reserves for excess, obsolete, and slow-moving inventory are estimated by comparing the inventory levels of individual parts to both future sales forecasts or production requirements and historical usage rates in order to identify inventory where the resale value or replacement value is less than inventoriable cost. Other factors that management considers in determining the adequacy of these reserves include whether individual inventory parts meet current specifications and cannot be substituted for a part currently being sold or used as a service part, overall market conditions, and other inventory management initiatives. Manufacturing costs are allocated to current production and firm contracts. Within commercial aerospace, inventory costs attributable to new engine offerings are recognized based on the average cost per unit expected over the life of each contract using the units-of-delivery method of percentage of completion accounting. Under this method, costs of initial engine deliveries in excess of the projected contract per unit average cost are capitalized, and these capitalized amounts are subsequently expensed as additional engine deliveries occur for engines with costs below the projected contract per unit average cost over the life of the contract.

Equity Method Investments. Investments in which we have the ability to exercise significant influence, but do not control, are accounted for under the equity method of accounting and are included in Other assets on the Consolidated Balance Sheet. Under this method of accounting, our share of the net earnings or losses of the investee is included in Other income, net on the Consolidated Statement of Operations since the activities of the investee are closely aligned with the operations of the business segment holding the investment. We evaluate our equity method investments whenever events or changes in circumstance indicate that the carrying amounts of such investments may be impaired. If a decline in the value of an equity method investment is determined to be other than temporary, a loss is recorded in earnings in the current period.

Goodwill and Intangible Assets. Goodwill represents costs in excess of fair values assigned to the underlying net assets of acquired businesses. Goodwill and intangible assets deemed to have indefinite lives are not amortized. Goodwill and indefinite-lived intangible assets are subject to annual impairment testing using the guidance and criteria described in the Intangibles - Goodwill and Other Topic of the FASB ASC. This testing compares carrying values to fair values and, when appropriate, the carrying value of these assets is reduced to fair value.

Intangible assets consist of service portfolios, patents, trademarks/tradenames, customer relationships and other intangible assets including a collaboration asset, as discussed further in Note 2. Acquired intangible assets are recognized at fair value in purchase accounting and then amortized to cost of sales and selling, general & administrative expenses over the applicable useful lives. Also included within other intangible assets are commercial aerospace payments made to secure certain contractual rights to provide product on new aircraft platforms. We classify amortization of such payments as a reduction of sales. Such payments are capitalized when there are distinct rights obtained and there are sufficient incremental cash flows to support the recoverability of the assets established. Otherwise, the applicable portion of the payments are expensed. Consideration paid on these contractual commitments is capitalized when it is no longer conditional.

Useful lives of finite-lived intangible assets are estimated based upon the nature of the intangible asset and the industry in which the intangible asset is used. These intangible assets are amortized based on the pattern in which the economic benefits of the intangible assets are consumed. For both our commercial aerospace collaboration assets and exclusivity arrangements, the pattern of economic benefit generally results in lower amortization during the development period with increasing amortization as programs enter full rate production and aftermarket cycles. If a pattern of economic benefit cannot be reliably determined, a straight-line amortization method is used. The range of estimated useful lives is as follows:

Collaboration assets	30 years
Customer relationships and related programs	1 to 50 years
Purchased service contracts	5 to 25 years
Patents & trademarks	4 to 40 years
Exclusivity assets	5 to 25 years

Other Long-Lived Assets. We evaluate the potential impairment of other long-lived assets when appropriate. If the carrying value of other long-lived assets held and used exceeds the sum of the undiscounted expected future cash flows, the carrying value is written down to fair value.

Long-Term Financing Receivables. Our long-term financing receivables primarily represent balances related to the aerospace businesses such as long-term trade accounts receivable, leases, and notes receivable. We also have other long-term receivables in our commercial businesses; however, both the individual and aggregate amounts of those other receivables are not significant.

Long-term trade accounts receivable, including unbilled receivables related to long-term aftermarket contracts, are principally amounts arising from the sale of goods and services with a contractual maturity date or realization period of greater than one year and are recognized as "Other assets" in our Consolidated Balance Sheet. Notes and leases receivable represent notes and lease receivables other than receivables related to operating leases, and are recognized as "Customer financing assets" in our Consolidated Balance Sheet. The following table summarizes the balance by class of aerospace business-related long-term receivables as of December 31, 2016 and 2015:

(dollars in millions)		**2016**		2015
Long-term trade accounts receivable	**$**	**926**	$	903
Notes and leases receivable		**430**		451
Total long-term receivables	**$**	**1,356**	$	1,354

We determine a receivable is impaired when, based on current information and events, it is probable that we will be unable to collect amounts due according to the contractual terms of the receivable agreement. Factors considered in assessing collectability and risk include, but are not limited to, examination of credit quality indicators and other evaluation measures, underlying value of any collateral or security interests, significant past due balances, historical losses, and existing economic conditions.

We determine credit ratings for each customer in our portfolio based upon public information and information obtained directly from our customers. We conduct a review of customer credit ratings, published historical credit default rates for different rating categories, and multiple third party aircraft value publications as a basis to validate the reasonableness of the allowance for losses on these balances quarterly or when events and circumstances warrant. Customer credit ratings range from customers with an extremely strong capacity to meet financial obligations, to customers whose uncollateralized receivable is in default. There can be no assurance that actual results will not differ from estimates or that consideration of these factors in the future will not result in an increase or decrease to the allowance for credit losses on long-term receivables. Based upon the customer credit ratings, approximately 13% of our long-term receivables were considered to bear high credit risk as of both December 31, 2016 and 2015. See Note 5 for further discussion of commercial aerospace industry assets and commitments.

Reserves for credit losses on receivables relate to specifically identified receivables that are evaluated individually for impairment. For notes and leases receivable, we determine a specific reserve for exposure based on the difference between the carrying value of the receivable and the estimated fair value of the related collateral in connection with the evaluation of credit risk and collectability. For long-term trade accounts receivable, we evaluate credit risk and collectability individually to determine if an allowance is necessary. Our long-term receivables reflected in the table above, which include reserves of $17 million and $18 million as of December 31, 2016 and 2015, respectively, are individually evaluated for impairment. At both December 31, 2016 and 2015, we did not have any significant balances that are considered to be delinquent, on non-accrual status, past due 90 days or more, or considered to be impaired.

Income Taxes. In the ordinary course of business there is inherent uncertainty in quantifying our income tax positions. We assess our income tax positions and record tax benefits for all years subject to examination based upon management's evaluation of the facts, circumstances, and information available at the reporting date. For those tax positions where it is more-likely-than-not that a tax benefit will be sustained, we have recorded the largest amount of tax benefit with a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where it is not more-likely-than-not that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements. Where applicable, associated interest expense has also been recognized. We recognize accrued interest related to unrecognized tax benefits in interest expense. Penalties, if incurred, would be recognized as a component of income tax expense.

Revenue Recognition. As a result of our diverse product and service mix and customer base, we use multiple revenue recognition practices. We recognize sales for products and services in accordance with the provisions of Staff Accounting Bulletin (SAB) Topic 13, Revenue Recognition, as applicable. Products and services included within the scope of this SAB Topic include heating, ventilating, air-conditioning and refrigeration systems, certain alarm and fire detection and suppression systems, commercially funded research and development contracts and certain aerospace components. Sales within the scope of this SAB Topic are recognized when persuasive evidence of an arrangement exists, product delivery has occurred or services have been rendered, pricing is fixed or determinable and collectability is reasonably assured. Subsequent changes in service contracts are accounted for prospectively.

Contract Accounting and Separately Priced Maintenance and Extended Warranty Aftermarket Contracts: For our construction-type and certain production-type contracts, sales are recognized on a percentage-of-completion basis following contract accounting methods. Contracts consist of enforceable agreements which form the basis of our unit of accounting for measuring sales, accumulating costs and recording loss provisions as necessary. Contract accounting requires estimates of award fees and other sources of variable consideration as well as future costs over the performance period of the contract. Cost estimates also include the estimated cost of satisfying our offset obligations required under certain contracts. Cost estimates are subject to change and result in adjustments to margins on contracts in progress. The extent of progress toward completion on our long-term commercial aerospace equipment is measured using units of delivery or other contractual milestones. The extent of progress towards completion on our development and other cost reimbursement contracts in our aerospace businesses and elevator and escalator sales, installation, modernization and other construction contracts in our commercial businesses is measured using cost-to-cost based input measures. Contract costs include estimated inventoriable manufacturing, engineering, product warranty and product performance guarantee costs, as appropriate.

For separately priced product maintenance and extended warranty aftermarket contracts, sales are recognized over the contract period. In the commercial businesses, sales are primarily recognized on a straight-line basis. In the aerospace businesses, sales are primarily recognized in proportion to cost as sufficient historical evidence indicates that costs of performing services under the contract are incurred on an other than straight-line basis.

Loss provisions on original equipment contracts are recognized to the extent that estimated contract costs exceed the estimated consideration from the products contemplated under the contractual arrangement. For new commitments, we generally record loss provisions at the earlier of contract announcement or contract signing except for certain requirements contracts under which losses are recorded upon receipt of the purchase order which obligates us to perform. For existing commitments, anticipated losses on contracts are recognized in the period in which losses become evident. Products contemplated under contractual arrangements include firm quantities of products sold under contract and, in the large commercial engine and wheels and brakes businesses, future highly probable sales of replacement parts required by regulation that are expected to be sold subsequently for incorporation into the original equipment. In the large commercial engine and wheels and brakes businesses, when the combined original equipment and aftermarket arrangements for each individual sales campaign are profitable, we record original equipment product losses, as applicable, at the time of delivery.

We review our cost estimates on significant contracts on a quarterly basis, and for others, no less frequently than annually or when circumstances change and warrant a modification to a previous estimate. We record changes in contract estimates using the cumulative catch-up method in accordance with the Revenue Recognition Topic of the FASB ASC. Operating profits included significant net unfavorable changes in aerospace contract estimates of approximately $157 million in 2016, primarily the result of unexpected increases in estimated costs related to Pratt & Whitney long term aftermarket contracts.

Collaborations: Sales generated from engine programs, spare parts sales, and aftermarket business under collaboration arrangements are recorded consistent with our revenue recognition policies in our consolidated financial statements. Amounts attributable to our collaborators for their share of sales are recorded as cost of sales in our financial statements based upon the terms and nature of the arrangement. Costs associated with engine programs under collaborative arrangements are expensed as incurred. Under these arrangements, collaborators contribute their program share of engine parts, incur their own production costs and make certain payments to Pratt & Whitney for shared or joint program costs. The reimbursement of a collaborator's share of program costs is recorded as a reduction of the related expense item at that time.

Cash Payments to Customers: UTC Climate, Controls & Security customarily offers its customers incentives to purchase products to ensure an adequate supply of its products in the distribution channels. The principal incentive program provides reimbursements to distributors for offering promotional pricing for our products. We account for incentive payments made as a reduction in sales. In our aerospace businesses, we may make participation payments to certain customers to secure certain contractual rights. To the extent these rights are incremental and are supported by the incremental cash flows obtained, they are capitalized as intangible assets. Otherwise, such payments are expensed. We classify the subsequent amortization of the capitalized acquired intangible assets from our customers as a reduction in sales. Contractually stated prices in arrangements with our customers that include the acquisition of intangible rights within the scope of the Intangibles - Goodwill and Other Topic of the FASB ASC and deliverables within the scope of the Revenue Recognition Topic of the FASB ASC are not presumed to be representative of fair value for determining the amounts to allocate to each element of an arrangement.

Accounting Standards Update (ASU) 2014-09, Revenue from Contracts with Customers: In May 2014, the FASB issued Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers*. In 2015 and 2016, the FASB issued various updates to this ASU as follows:

- ASU 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date* - delays the effective date of ASU 2014-09 by one year.
- ASU 2016-08, *Revenue from Contracts with Customers (Topic 606), Principal versus Agent Considerations (Reporting Revenue Gross versus Net)* - clarifies how an entity should identify the unit of accounting (i.e. the specified good or service) for the principal versus agent evaluation and how it should apply the control principle to certain types of arrangements.
- ASU 2016-10, *Revenue from Contracts with Customers (Topic 606), Identifying Performance Obligations and Licensing* - clarifies the guidance surrounding licensing arrangements and the identification of performance obligations.
- ASU 2016-12, *Revenue from Contracts with Customers (Topic 606), Narrow-Scope Improvements and Practical Expedients* - addresses implementation issues raised by stakeholders concerning collectability, noncash consideration, presentation of sales tax, and transition.

- ASU 2016-20, *Revenue from Contracts with Customers (Topic 606), Technical Corrections and Improvements* - addresses loan guarantee fees, impairment testing of contract costs, provisions for losses on certain contracts, and various disclosures.

ASU 2014-09 and its related amendments (collectively, the New Revenue Standard) are effective for reporting periods beginning after December 15, 2017, and interim periods therein, using either of the following transition methods; (i) a full retrospective adoption reflecting the application of the standard in each prior reporting period, or (ii) a modified retrospective approach with the cumulative effect of adopting recognized through retained earnings at the date of adoption.

The New Revenue Standard is expected to change the revenue recognition practices for a number of revenue streams across our businesses, although the most significant impacts will be concentrated within our aerospace units. Several businesses, which currently account for revenue on a "point-in-time basis," will be required to use an "over time" model as they meet one or more of the mandatory criteria established in the New Revenue Standard. Revenue will be recognized based on percentage-of-completion for repair contracts within both Otis and UTC Climate, Controls & Security; certain U.S. Government aerospace contracts; and aerospace aftermarket service work performed on a time and materials basis. For these businesses, unrecognized sales and operating profits related to the satisfied portion of the performance obligations of contracts in process as of the date of adoption will be recorded through retained earnings. The ongoing effect of recording revenue on a percentage-of-completion basis within these businesses is not expected to be material.

In addition to the forgoing, our aerospace businesses will also incur changes related to the timing of manufacturing cost recognition and certain engineering and development costs. In most circumstances, our commercial aerospace businesses will identify the performance obligation, or the unit of accounting, as the individual original equipment (OEM) unit; revenues and costs to manufacture each unit will be recognized upon OEM unit delivery. Under current practice, the unit of accounting is the contract, and early-contract OEM unit costs in excess of the average expected over the contact are capitalized and amortized over lower-cost units later in the contract. With the adoption of the New Revenue Standard, any deferred unit costs in excess of the contract average will be eliminated through retained earnings and will not be amortized into future earnings. As of December 31, 2016, capitalized deferred unit costs in excess of the contract average are $233 million, which is expected to increase in 2017 prior to adoption of the New Revenue Standard.

In regards to costs incurred for the engineering and development of aerospace products under contract with customers, we generally expense as incurred unless there is a contractually guaranteed right of recovery. Any customer funding received for such efforts is recognized when earned, with the corresponding costs recognized as cost of sales. Under the New Revenue Standard, customer funding of OEM product engineering and development must be deferred and recognized as revenue as the OEM products are delivered to the customer. There is currently less clarity regarding the accounting for the associated product engineering and development costs. As such, we are continuing to evaluate whether such costs should continue to be expensed or capitalized as contract fulfillment costs and subsequently amortized. For contracts that are open as of the adoption date, previously recognized customer funding will be established as a contract liability.

We continue to evaluate the implications of the standard change. We intend to adopt the New Revenue Standard effective January 1, 2018 using the modified retrospective approach.

Research and Development. Research and development costs not specifically covered by contracts and those related to the company sponsored share of research and development activity in connection with cost-sharing arrangements are charged to expense as incurred. Government research and development support, not associated with specific contracts, is recorded as a reduction to research and development expense in the period earned. See Note 8 for a discussion of amendments of certain government research and development support arrangements concluded in December 2015 between Pratt & Whitney Canada and the Canadian government.

Research and development costs incurred under contracts with customers are included as a contract cost and reported as a component of cost of products sold when revenue from such contracts is recognized. Research and development costs in excess of contractual consideration is expensed as incurred.

Foreign Exchange. We conduct business in many different currencies and, accordingly, are subject to the inherent risks associated with foreign exchange rate movements. The financial position and results of operations of substantially all of our foreign subsidiaries are measured using the local currency as the functional currency. Foreign currency denominated assets and liabilities are translated into U.S. Dollars at the exchange rates existing at the respective balance sheet dates, and income and expense items are translated at the average exchange rates during the respective periods. The aggregate effects of translating the balance sheets of these subsidiaries are deferred as a separate component of shareowners' equity.

Derivatives and Hedging Activity. We have used derivative instruments, including swaps, forward contracts and options, to help manage certain foreign currency, interest rate and commodity price exposures. Derivative instruments are viewed as risk management tools by us and are not used for trading or speculative purposes. By their nature, all financial instruments involve market and credit risks. We enter into derivative and other financial instruments with major investment grade financial institutions and have policies to monitor the credit risk of those counterparties. We limit counterparty exposure and concentration of risk by diversifying counterparties. While there can be no assurance, we do not anticipate any material non-performance by any of these counterparties. We enter into transactions that are subject to enforceable master netting arrangements or other similar agreements with various counterparties. However, we have not elected to offset multiple contracts with a single counterparty and, as a result, the fair value of the derivative instruments in a loss position is not offset against the fair value of derivative instruments in a gain position.

Derivatives used for hedging purposes may be designated and effective as a hedge of the identified risk exposure at the inception of the contract. All derivative instruments are recorded on the balance sheet at fair value. Derivatives used to hedge foreign-currency-denominated balance sheet items are reported directly in earnings along with offsetting transaction gains and losses on the items being hedged. Derivatives used to hedge forecasted cash flows associated with foreign currency commitments or forecasted commodity purchases may be accounted for as cash flow hedges, as deemed appropriate. Gains and losses on derivatives designated as cash flow hedges are recorded in other comprehensive income and reclassified to earnings as a component of product sales or expenses, as applicable, when the hedged transaction occurs. To the extent that a previously designated hedging transaction is no longer an effective hedge, any ineffectiveness measured in the hedging relationship is recorded currently in earnings in the period it occurs. As discussed in Note 14, at December 31, 2016 we have approximately €2.95 billion of Euro-denominated long-term debt and €500 million of outstanding Euro-denominated commercial paper borrowings, which qualify as a net investment hedge against our investments in European businesses.

To the extent the hedge accounting criteria are not met, the foreign currency forward contracts are utilized as economic hedges and changes in the fair value of these contracts are recorded currently in earnings in the period in which they occur. Additional information pertaining to foreign currency forward contracts and net investment hedging is included in Note 14.

Environmental. Environmental investigatory, remediation, operating and maintenance costs are accrued when it is probable that a liability has been incurred and the amount can be reasonably estimated. The most likely cost to be incurred is accrued based on an evaluation of currently available facts with respect to each individual site, including existing technology, current laws and regulations and prior remediation experience. Where no amount within a range of estimates is more likely, the minimum is accrued. For sites with multiple responsible parties, we consider our likely proportionate share of the anticipated remediation costs and the ability of the other parties to fulfill their obligations in establishing a provision for those costs. Liabilities with fixed or reliably determinable future cash payments are discounted. Accrued environmental liabilities are not reduced by potential insurance reimbursements. See Note 18 for additional details on the environmental remediation activities.

Pension and Postretirement Obligations. Guidance under the Compensation - Retirement Benefits Topic of the FASB ASC requires balance sheet recognition of the overfunded or underfunded status of pension and postretirement benefit plans. Under this guidance, actuarial gains and losses, prior service costs or credits, and any remaining transition assets or obligations that have not been recognized under previous accounting standards must be recognized in other comprehensive income, net of tax effects, until they are amortized as a component of net periodic benefit cost.

Product Performance Obligations. We extend performance and operating cost guarantees beyond our normal service and warranty policies for extended periods on some of our products, particularly commercial aircraft engines. Liability under such guarantees is based upon future product performance and durability. We accrue for such costs that are probable and can be reasonably estimated. In addition, we incur discretionary costs to service our products in connection with product performance issues. The costs associated with these product performance and operating cost guarantees require estimates over the full terms of the agreements, and require management to consider factors such as the extent of future maintenance requirements and the future cost of material and labor to perform the services. These cost estimates are largely based upon historical experience. See Note 17 for further discussion.

Collaborative Arrangements. In view of the risks and costs associated with developing new engines, Pratt & Whitney has entered into certain collaboration arrangements in which sales, costs and risks are shared. Sales generated from engine programs, spare parts, and aftermarket business under collaboration arrangements are recorded as earned in our financial statements. Amounts attributable to our collaborators for their share of sales are recorded as an expense in our financial statements based upon the terms and nature of the arrangement. Costs associated with engine programs under collaborative arrangements are expensed as incurred. Under these arrangements, collaborators contribute their program share of engine parts, incur their own production costs and make certain payments to Pratt & Whitney for shared or joint program costs. The reimbursement of the collaborators' share of program costs is recorded as a reduction of the related expense item at that time. As of December 31, 2016, the collaborators' interests in all commercial engine programs ranged from 14% to 50%, inclusive of a portion of Pratt & Whitney's interests held by other participants. Pratt & Whitney is the principal participant in all existing collaborative arrangements. There are no individually significant collaborative arrangements and none of the collaborators exceed a 31% share in an individual program. The following table illustrates the income statement classification and amounts attributable to transactions arising from the collaborative arrangements between participants for each period presented:

(dollars in millions)	**2016**	2015	2014
Collaborator share of sales:			
Cost of products sold	**$ 1,700**	$ 1,547	$ 1,778
Cost of services sold	**675**	652	354
Collaborator share of program costs (reimbursement of expenses incurred):			
Cost of products sold	**(108)**	(104)	(103)
Research and development	**(184)**	(248)	(122)
Selling, general and administrative	**(5)**	(5)	(4)

Accounting Pronouncements. In October 2016, the FASB issued ASU 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory*. This ASU requires the income tax consequences of an intra-entity transfer of an asset, other than inventory, to be recognized when the transfer occurs. Two common examples of assets included in the scope of this update are intellectual property and property, plant, and equipment. The provisions of this ASU are effective for years beginning after December 15, 2017, with early adoption permitted. We are currently evaluating the impact of this ASU.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*. This ASU is intended to reduce diversity in practice in presentation and classification of certain cash receipts and cash payments by providing guidance on eight specific cash flow issues, including requirements that 1) cash payments for debt prepayment or debt extinguishment costs be classified as cash outflows for financing activities; and 2) for cash receipts and payments that have aspects of more than one class of cash flows, each separately identifiable source or use within the cash receipts and payments should be classified on the basis of their underlying nature in financing, investing, or operating activities. In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*. This ASU requires that restricted cash be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The provisions of ASU 2016-15 and ASU 2016-18 are effective for years beginning after December 15, 2017, with early adoption permitted. We have elected to early adopt the requirements of these ASUs effective December 31, 2016. Cash flow amounts for all periods presented have been updated to comply with the retrospective transition method, required by these ASUs upon adoption. As discussed in Note 9, for the year ended December 31, 2016, approximately $164 million in debt extinguishment costs have been classified as financing cash outflows in accordance with these updates. Additionally, cash flows provided by operating activities of continuing operations, attributable to changes in inventories and contracts in progress, and cash flows used in investing activities of continuing operations attributable to increases in customer financing assets for the year ended December 31, 2015 increased by approximately $78 million as a result of the required retrospective transition method of these updates. Other updates made as a result of adoption of these ASUs had an immaterial impact to the Consolidated Statement of Cash Flows.

In March 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, which amends the accounting for employee share-based payment transactions to require recognition of the tax effects resulting from the settlement of stock-based awards as income tax expense or benefit in the income statement in the reporting period in which they occur. The ASU also requires that all tax-related cash flows resulting from share-based payments, including the excess tax benefits related to the settlement of stock-based awards, be classified as cash flows from operating activities, and that cash paid by directly withholding shares for tax withholding purposes be classified as a financing activity in the statement of cash flows. In addition, the ASU also allows companies to make an accounting policy election to either estimate the number of awards that are expected to vest, consistent with current U.S. GAAP, or account for forfeitures when they occur. The new standard is effective for annual reporting periods beginning after December 15, 2016 with early adoption permitted. We elected to early adopt the requirements of the amended standard in the third quarter of 2016 and are therefore required to report the impacts as though adopted on January 1, 2016. Accordingly, we recognized additional income tax benefits of approximately $22 million for the year ended December 31, 2016. In addition, we recognized the additional income tax benefits and cash paid by directly withholding shares for tax withholding purposes of approximately $19 million for the year ended December 31, 2016 as an increase in net cash flows provided by operating activities of continuing operations, and an increase in net cash flows used in financing activities of continuing operations. There is no change to our accounting policy with respect to estimation of forfeitures.

In February 2016, the FASB issued ASU 2016- 02, *Leases (Topic 842)*. The new standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the Consolidated Statement of Operations. In addition, this standard requires a lessor to classify leases as either sales-type, finance or operating. A lease will be treated as a sale if it transfers all of the risks and rewards, as well as control of the underlying asset, to the lessee. If risks and rewards are conveyed without the transfer of control, the lease is treated as financing. If the lessor doesn't convey risks and rewards or control, the lease is treated as operating.

The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for lessees for capital and operating leases and lessors for sales-type, direct financing, and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. While we are still evaluating the impact of our pending adoption of the new standard on our consolidated financial statements, we expect that upon adoption we will recognize ROU assets and lease liabilities and that the amounts could be material. We do not expect the ASU to have a material impact on our cash flows or results of operations.

NOTE 2: BUSINESS ACQUISITIONS, DISPOSITIONS, GOODWILL AND INTANGIBLE ASSETS

Business Acquisitions and Dispositions. As discussed further in Note 3, on November 6, 2015, we completed the sale of Sikorsky to Lockheed Martin Corp. for approximately $9.1 billion in cash.

Our investments in businesses in 2016, 2015 and 2014 totaled $712 million (including debt assumed of $2 million), $556 million (including debt assumed of $18 million) and $530 million (including debt assumed of $128 million), respectively. Our investments in businesses in 2016 consisted of the acquisition of a majority interest in an Italian heating products and services company by UTC Climate, Controls & Security, the acquisition of a Japanese services company by Otis and a number of small acquisitions, primarily in our commercial businesses. Our investments in businesses in 2015 consisted of the acquisition of the majority interest in a UTC Climate, Controls & Security business, the acquisition of an imaging technology company by UTC Aerospace Systems, and a number of small acquisitions, primarily in our commercial businesses. Our investments in businesses in 2014 consisted of the acquisition of the majority interest in a Pratt & Whitney joint venture and a number of small acquisitions, primarily in our commercial businesses.

Goodwill. The changes in the carrying amount of goodwill, by segment, in 2016 are as follows:

(dollars in millions)	Balance as of January 1, 2016	Goodwill resulting from business combinations	Foreign currency translation and other	**Balance as of December 31, 2016**
Otis	$ 1,566	$ 60	$ (51)	**$ 1,575**
UTC Climate, Controls & Security	9,458	473	(444)	**9,487**
Pratt & Whitney	1,515	—	(4)	**1,511**
UTC Aerospace Systems	14,759	35	(311)	**14,483**
Total Segments	27,298	568	(810)	**27,056**
Eliminations and other	3	—	—	**3**
Total	$ 27,301	$ 568	$ (810)	**$ 27,059**

Intangible Assets. Identifiable intangible assets are comprised of the following:

	2016		2015	
(dollars in millions)	**Gross Amount**	**Accumulated Amortization**	Gross Amount	Accumulated Amortization
Amortized:				
Service portfolios	**$ 1,995**	**$ (1,344)**	$ 1,977	$ (1,307)
Patents and trademarks	**378**	**(201)**	361	(189)
Collaboration intangible assets	**3,724**	**(211)**	3,336	(86)
Customer relationships and other	**12,798**	**(3,480)**	12,430	(2,988)
	18,895	**(5,236)**	18,104	(4,570)
Unamortized:				
Trademarks and other	**2,025**	—	2,069	—
Total	**$ 20,920**	**$ (5,236)**	$ 20,173	$ (4,570)

Customer relationship intangible assets include payments made to our customers to secure certain contractual rights. Such payments are capitalized when there are distinct rights obtained and there are sufficient incremental cash flows to support the recoverability of the assets established. Otherwise, the applicable portion of the payments are expensed. We amortize these intangible assets based on the underlying pattern of economic benefit, which typically results in an amortization method other than straight-line. We classify amortization of such payments as a reduction of sales. Amortization of intangible assets was $778 million, $722 million and $713 million in 2016, 2015 and 2014, respectively. The collaboration intangible assets are amortized based upon the economic pattern of benefits as represented by the underlying cash flows. The following is the expected amortization of intangible assets for 2017 through 2021, which reflects the pattern of economic benefit on certain aerospace intangible assets:

(dollars in millions)	2017	2018	2019	2020	2021
Amortization expense	$ 809	$ 865	$ 878	$ 859	$ 829

NOTE 3: DISCONTINUED OPERATIONS

On November 6, 2015 we completed the sale of Sikorsky to Lockheed Martin Corp. for $9.1 billion in cash. Accordingly, the results of operations and the cash flows related to Sikorsky have been classified in Discontinued Operations in our Consolidated Statements of Operations, Comprehensive Income and Cash Flows for all periods presented. In 2016, we recognized approximately $13 million of additional gain on the disposal, primarily resulting from the settlement of working capital adjustments. In 2016, we recognized approximately $24 million of income tax expense, including the impacts related to filing Sikorsky's 2015 tax returns. Net cash outflows from discontinued operations of approximately $2.5 billion for the year ended December 31, 2016 were primarily due to the payment of taxes related to the 2015 gain realized on the sale of Sikorsky.

The following summarized financial information has been segregated from continuing operations and reported as Discontinued Operations:

Income (Expense) *(dollars in millions)*	**2016**	2015	2014
Discontinued Operations:			
Net Sales	**$ —**	$ 4,949	$ 7,452
Cost of Sales	**—**	(4,152)	(6,801)
Research and development	**—**	(150)	(160)
Selling, general and administrative	**1**	(315)	(328)
Pension curtailment	**—**	(110)	—
Other income, net	**—**	30	12
Income from operations	**1**	252	175
Gain on disposal	**13**	6,042	—
Income tax expense	**(24)**	(2,684)	(20)
(Loss) income from discontinued operations	**$ (10)**	$ 3,610	$ 155

UTC and its business segments have historically had sales to Sikorsky and purchases from Sikorsky, in the normal course of business, which were eliminated in consolidation. Net sales to Sikorsky were $138 million and $235 million for the years ended December 31, 2015 and 2014, respectively. Purchases from Sikorsky included in cost of products and services sold were $25 million and $17 million for the years ended December 31, 2015 and 2014, respectively.

NOTE 4: EARNINGS PER SHARE

(dollars in millions, except per share amounts; shares in millions)		2016		2015		2014
Net income attributable to common shareowners:						
Net income from continuing operations	**$**	**5,065**	$	3,996	$	6,066
Net (loss) income from discontinued operations		**(10)**		3,612		154
Net income attributable to common shareowners	**$**	**5,055**	$	7,608	$	6,220
Basic weighted average number of shares outstanding		**818.2**		872.7		898.3
Stock awards		**7.9**		10.5		13.3
Diluted weighted average number of shares outstanding		**826.1**		883.2		911.6
Earnings Per Share of Common Stock—Basic:						
Net income from continuing operations	**$**	**6.19**	$	4.58	$	6.75
Net (loss) income from discontinued operations		**(0.01)**		4.14		0.17
Net income attributable to common shareowners		**6.18**		8.72		6.92
Earnings Per Share of Common Stock—Diluted:						
Net income from continuing operations	**$**	**6.13**	$	4.53	$	6.65
Net (loss) income from discontinued operations		**(0.01)**		4.09		0.17
Net income attributable to common shareowners		**6.12**		8.61		6.82

The computation of diluted earnings per share excludes the effect of the potential exercise of stock awards, including stock appreciation rights and stock options, when the average market price of the common stock is lower than the exercise price of the related stock awards during the period. These outstanding stock awards are not included in the computation of diluted earnings per share because the effect would have been anti-dilutive. For 2016, 2015 and 2014, there were 14.5 million, 9.7 million and 3.5 million anti-dilutive stock awards excluded from the computation, respectively.

NOTE 5: COMMERCIAL AEROSPACE INDUSTRY ASSETS AND COMMITMENTS

We have receivables and other financing assets with commercial aerospace industry customers totaling $7,222 million and $6,143 million at December 31, 2016 and 2015, respectively. These include customer financing assets related to commercial aerospace industry customers, consisting of products under lease of $939 million and $537 million, and notes and leases receivable of $497 million and $566 million, at December 31, 2016 and 2015, respectively.

Aircraft financing commitments, in the form of debt, guarantees or lease financing, are provided to commercial aerospace customers. The extent to which the financing commitments will be utilized is not currently known, since customers may be able to obtain more favorable terms from other financing sources. We may also arrange for third-party investors to assume a portion of these commitments. If financing commitments are exercised, debt financing is generally secured by assets with fair market values equal to or exceeding the financed amounts consistent with market terms and conditions. We may also lease aircraft and subsequently sublease the aircraft to customers under long-term non-cancelable operating leases. Lastly, we have made residual value and other guarantees related to various commercial aerospace customer financing arrangements. The estimated fair market values of the guaranteed assets equal or exceed the value of the related guarantees, net of existing reserves.

We also have other contractual commitments, including commitments to secure certain contractual rights to provide products on new aircraft platforms, which are included in "Other commercial aerospace commitments" in the table below. Such payments are capitalized when there are distinct rights obtained and there are sufficient incremental cash flows to support the recoverability of the assets established. Otherwise, the applicable portion of the payments are expensed. Payments capitalized are included in intangible assets and are amortized over the term of underlying economic benefit. Our commercial aerospace financing and other contractual commitments as of December 31, 2016 were approximately $14.4 billion. We have entered into certain collaboration arrangements, which may include participation by our collaboration partners in these commitments.

The following is the expected maturity of commercial aerospace industry assets and commitments as of December 31, 2016:

(dollars in millions)	Committed	2017	2018	2019	2020	2021	Thereafter
Notes and leases receivable	$ 497	$ 51	$ 24	$ 47	$ 79	$ 32	$ 264
Commercial aerospace financing commitments	$ 2,358	$ 435	$ 521	$ 416	$ 354	$ 287	$ 345
Other commercial aerospace commitments	12,063	860	973	738	706	730	8,056
Collaboration partners' share	(4,608)	(386)	(479)	(322)	(271)	(250)	(2,900)
Total commercial commitments	$ 9,813	$ 909	$ 1,015	$ 832	$ 789	$ 767	$ 5,501

In connection with our 2012 agreement to acquire Rolls-Royce's ownership and collaboration interests in IAE, additional payments are due to Rolls-Royce contingent upon each hour flown through June 2027 by the V2500-powered aircraft in service as of the acquisition date.These flight hour payments, included in "Other commercial aerospace commitments" in the table above, are being capitalized as collaboration intangible assets.

Our financing commitments with customers are contingent upon maintenance of certain levels of financial condition by the customers. In addition, we have residual value and other guarantees of $348 million as of December 31, 2016.

We have long-term aftermarket maintenance contracts with commercial aerospace industry customers for which revenue is recognized in proportion to actual costs incurred relative to total expected costs to be incurred over the respective contract periods. Billings, however, are typically based on factors such as engine flight hours. The timing differences between the billings and the maintenance costs incurred generates both unbilled receivables and deferred revenues. Unbilled receivables under these long-term aftermarket contracts totaled $1,169 million and $1,091 million at December 31, 2016 and 2015, respectively, and are included in Accounts receivable and Other assets in the accompanying Consolidated Balance Sheet. Deferred revenues totaled $4,288 million and $3,502 million at December 31, 2016 and 2015, respectively, and are included in Accrued liabilities and Other long-term liabilities in the accompanying Consolidated Balance Sheet.

Reserves related to aerospace notes and leases receivable were $16 million and $17 million at December 31, 2016 and 2015, respectively. Reserves related to aerospace receivables and other financing assets were $157 million and $200 million at December 31, 2016 and 2015, respectively. Reserves related to financing commitments and guarantees were $36 million and $47 million at December 31, 2016 and 2015, respectively.

In addition, in connection with the 2012 Goodrich acquisition, we recorded assumed liabilities of approximately $2.2 billion related to customer contractual obligations on certain OEM development programs where the expected costs exceeded the expected revenue under contract. These liabilities are being liquidated in accordance with the underlying economic pattern of obligations, as reflected by the net cash outflows incurred on the OEM contracts. Total consumption of the contractual obligations was approximately $213 million and $193 million in 2016 and 2015, respectively. Expected consumption of the contractual obligations is as follows: $251 million in 2017, $248 million in 2018, $222 million in 2019, $149 million in 2020, $83 million in 2021 and $250 million thereafter.

NOTE 6: INVENTORIES & CONTRACTS IN PROGRESS

(dollars in millions)	2016	2015
Raw materials	$ 2,040	$ 2,037
Work-in-process	2,787	2,422
Finished goods	3,305	3,183
Contracts in progress	9,395	8,668
	17,527	16,310
Less:		
Progress payments, secured by lien, on U.S. Government contracts	(130)	(239)
Billings on contracts in progress	(8,693)	(7,936)
	$ 8,704	$ 8,135

Raw materials, work-in-process and finished goods are net of valuation reserves of $877 million and $760 million as of December 31, 2016 and 2015, respectively. Contracts in progress principally relate to elevator and escalator contracts and include costs of manufactured components, accumulated installation costs and estimated earnings on incomplete contracts.

Inventories also include capitalized contract development costs related to certain aerospace programs at UTC Aerospace Systems. As of December 31, 2016 and 2015, these capitalized costs were $140 million and $152 million, respectively, which are being liquidated as production units are delivered to the customer. In addition, within commercial aerospace, inventory costs attributable to new engine offerings are recognized based on the average cost per unit expected over the life of each contract using the units-of-delivery method of percentage of completion accounting. Under this method, costs of initial engine deliveries in excess of the projected contract per unit average cost are capitalized, and these capitalized amounts are subsequently expensed as additional engine deliveries occur for engines with costs below the projected contract per unit average cost over the life of the contract. As of December 31, 2016 and 2015, inventories included $233 million and $13 million, respectively, of such capitalized amounts.

Our sales contracts in many cases are long-term contracts expected to be performed over periods exceeding twelve months. At December 31, 2016 and 2015, approximately 68% and 67% respectively, of total inventories and contracts in progress have been acquired or manufactured under such long-term contracts, with approximately 41% scheduled for delivery within the succeeding twelve months for both 2016 and 2015.

NOTE 7: FIXED ASSETS

(dollars in millions)	Estimated Useful Lives	**2016**	2015
Land		**$ 392**	$ 384
Buildings and improvements	12-40 years	**5,180**	5,030
Machinery, tools and equipment	3-20 years	**12,471**	11,717
Other, including assets under construction		**1,426**	1,363
		19,469	18,494
Accumulated depreciation		**(10,311)**	(9,762)
		$ 9,158	$ 8,732

Depreciation expense was $1,105 million in 2016, $1,068 million in 2015 and $1,043 million in 2014.

NOTE 8: ACCRUED LIABILITIES

(dollars in millions)	**2016**	2015
Advances on sales contracts and service billings	**$ 4,217**	$ 3,952
Accrued salaries, wages and employee benefits	**1,608**	1,543
Service and warranty accruals	**555**	546
Litigation and contract matters	**488**	482
Interest payable	**395**	391
Income taxes payable	**382**	2,498
Accrued property, sales and use taxes	**289**	292
Canadian government settlement - current portion	**245**	241
Insurance accruals	**217**	204
Accrued restructuring costs	**210**	334
Accrued workers compensation	**208**	212
Other	**3,405**	3,943
	$ 12,219	$ 14,638

Income taxes payable as of December 31, 2015 includes taxes payable related to the gain on the sale of Sikorsky, which were substantially paid in 2016.

The Canadian government has historically provided research and development support under certain Pratt & Whitney Canada programs, where repayment, if any, is made in the form of royalties, conditioned upon the achievement of certain financial targets including specific aircraft engine sales, total aircraft engine sales volume and total year-over-year sales growth of the entity receiving the government funding. On December 30, 2015, Pratt & Whitney Canada and federal and provincial Canadian government agencies entered into amendments of certain government research and development support arrangements. Under the amendments, Pratt & Whitney Canada agreed to make four annual payments of approximately $327 million Canadian (approximately $245 million at December 2016) each, commencing in the first quarter of 2016, to fully settle and terminate Pratt & Whitney Canada's future contractual obligations to pay royalties to these agencies that had previously been contingent upon future engine deliveries and Pratt & Whitney Canada sales; to maintain its commitments to perform certain assembly, test and manufacturing operations in Canada; and to provide support of innovation and research and development through initiatives with post-secondary institutions and key industry associations in Canada over a fourteen year period. As a result of the amendments to these contractual arrangements, Pratt & Whitney recorded a charge and related discounted obligation of $867 million in the fourth quarter of 2015.

The Canadian government settlement included in the table above represents amounts expected to be paid under this agreement in 2017, with the remaining provision of approximately $477 million and $626 million included in Other long-term liabilities in the accompanying Consolidated Balance Sheet as of December 31, 2016 and 2015, respectively.

NOTE 9: BORROWINGS AND LINES OF CREDIT

(dollars in millions)	**2016**	2015
Short-term borrowings:		
Commercial paper	**$ 522**	$ 727
Other borrowings	**79**	199
Total short-term borrowings	**$ 601**	$ 926

At December 31, 2016, we had revolving credit agreements with various banks permitting aggregate borrowings of up to $4.35 billion pursuant to a $2.20 billion revolving credit agreement and a $2.15 billion multicurrency revolving credit agreement, both of which expire in August 2021. As of December 31, 2016, there were no borrowings under either of these revolving credit agreements. The undrawn portions of these revolving credit agreements are also available to serve as backup facilities for the issuance of commercial paper. As of December 31, 2016, our maximum commercial paper borrowing limit was $4.35 billion. Commercial paper borrowings at December 31, 2016 reflect approximately €500 million ($522 million) of Euro-denominated commercial paper. We use our commercial paper borrowings for general corporate purposes, including the funding of potential acquisitions and repurchases of our common stock. The need for commercial paper borrowings arises when the use of domestic cash for acquisitions, dividends, and share repurchases exceeds the sum of domestic cash generation and foreign cash repatriated to the U.S.

At December 31, 2016, approximately $1.5 billion was available under short-term lines of credit with local banks at our various domestic and international subsidiaries. The weighted-average interest rates applicable to short-term borrowings and total debt were as follows:

	2016	2015
Average interest expense rate - average outstanding borrowings during the year:		
Short-term borrowings	**1.3%**	0.6%
Total debt	**4.1%**	4.1%
Average interest expense rate - outstanding borrowings as of December 31:		
Short-term borrowings	**0.6%**	0.8%
Total debt	**3.7%**	4.4%

Long-term debt consisted of the following as of December 31:

(dollars in millions)	2016	2015
5.375% notes due 2017 [1]	—	1,000
1.800% notes due 2017 [1]	**1,500**	1,500
EURIBOR plus 0.80% floating rate notes due 2018 (€750 million principal value) [2]	**783**	—
1.778% junior subordinated notes due 2018	**1,100**	1,100
6.800% notes due 2018	**99**	99
LIBOR plus 0.350% floating rate notes due 2019 [3]	**350**	—
1.500% notes due 2019 [1]	**650**	—
6.125% notes due 2019 [1]	—	1,250
8.875% notes due 2019	**271**	271
4.500% notes due 2020 [1]	**1,250**	1,250
4.875% notes due 2020	**171**	171
1.950% notes due 2021 [1]	**750**	—
1.125% notes due 2021 (€950 million principal value) [4]	**992**	—
8.750% notes due 2021	**250**	250
3.100% notes due 2022 [1]	**2,300**	2,300
1.250% notes due 2023 (€750 million principal value) [4]	**783**	817
1.875% notes due 2026 (€500 million principal value) [4]	**522**	—
2.650% notes due 2026 [1]	**1,150**	—
7.100% notes due 2027	**141**	141
6.700% notes due 2028	**400**	400
7.500% notes due 2029 [1]	**550**	550
5.400% notes due 2035 [1]	**600**	600
6.050% notes due 2036 [1]	**600**	600
6.800% notes due 2036	**134**	134
7.000% notes due 2038	**159**	159
6.125% notes due 2038 [1]	**1,000**	1,000
5.700% notes due 2040 [1]	**1,000**	1,000
4.500% notes due 2042 [1]	**3,500**	3,500
4.150% notes due 2045 [1]	**850**	850
3.750% notes due 2046 [1]	**1,100**	—
Project financing obligations	**155**	191
Other (including capitalized leases)	**189**	306
Total principal long-term debt	**23,299**	19,439
Other (fair market value adjustments, discounts and debt issuance costs)	**1**	60
Total long-term debt	**23,300**	19,499
Less: current portion	**1,603**	179
Long-term debt, net of current portion	**$ 21,697**	$ 19,320

1 We may redeem the above notes, in whole or in part, at our option at any time at a redemption price in U.S. Dollars equal to the greater of 100% of the principal amount of the notes to be redeemed or the sum of the present values of the remaining scheduled payments of principal and interest on the notes to be redeemed, discounted to the redemption date on a semiannual basis at the adjusted treasury rate plus 10-50 basis points. The redemption price will also include interest accrued to the date of redemption on the principal balance of the notes being redeemed.

2 The three-month EURIBOR rate as of December 30, 2016 was approximately -0.319%. The notes may be redeemed at our option in whole, but not in part, at any time in the event of certain developments affecting U.S. taxation.

3 The three-month LIBOR rate as of December 30, 2016 was approximately 0.998%.

4 We may redeem these notes, in whole or in part, at our option at any time. If redeemed earlier than three months prior to the stated maturity date, the redemption price in Euro shall equal the greater of 100% of the principal amount of the notes to be redeemed or the sum of the present values of the remaining scheduled payments of principal and interest on the notes to be redeemed, discounted to the redemption date on an annual basis at a rate based upon a comparable German federal government bond whose maturity is closest to the maturity of the notes plus 15-30 basis points. In addition, the notes may be redeemed at our option in whole, but not in part, at any time in the event of certain developments affecting U.S. taxation.

On December 1, 2016, we redeemed all outstanding 5.375% notes due in 2017, representing $1.0 billion in aggregate principal, and all outstanding 6.125% notes due in 2019, representing $1.25 billion in aggregate principal, under our redemption notice issued on November 1, 2016. A combined net extinguishment loss of approximately $164 million was recognized within Interest expense, net in the accompanying Consolidated Statement of Operations.

On November 1, 2016, we issued $650 million aggregate principal amount of 1.500% notes due 2019, $750 million aggregate principal amount of 1.950% notes due 2021, $1,150 million aggregate principal amount of 2.650% notes due 2026, $1,100 million aggregate principal amount of 3.750% notes due 2046 and $350 million aggregate principal amount of floating rate notes due 2019. We used the net proceeds received from these issuances to fund the redemption price of the 5.375% notes due 2017 and the 6.125% notes due 2019, to fund the repayment of commercial paper, and for other general corporate purposes.

On February 22, 2016, we issued €950 million aggregate principal amount of 1.125% notes due 2021, €500 million aggregate principal amount of 1.875% notes due 2026 and €750 million aggregate principal amount of floating rate notes due 2018. The net proceeds from these debt issuances were used for general corporate purposes.

On May 4, 2015, we completed the previously announced optional remarketing of the 1.550% junior subordinated notes, which were originally issued as part of our equity units on June 18, 2012. As a result of the remarketing, these notes were redesignated as our 1.778% junior subordinated notes due May 4, 2018. The 1.778% junior subordinated notes are effectively subordinated to existing or future preferred stock and indebtedness, guarantees and other liabilities, and are not redeemable prior to maturity. On August 3, 2015, we received approximately $1.1 billion from the proceeds of the remarketing, and issued approximately 11.3 million shares of Common Stock to settle the purchase obligation of the holders of the equity units under the purchase contract entered into at the time of the original issuance of the equity units.

On May 1, 2015, we repaid all 4.875% notes due in 2015, representing $1.2 billion in aggregate principal. On June 1, 2015, we repaid all floating rate notes due in 2015, representing $500 million in aggregate principal. On May 4, 2015, we issued $850 million aggregate principal amount of 4.150% notes due May 15, 2045. On May 22, 2015 we issued €750 million aggregate principal amount of 1.250% notes due May 22, 2023. The net proceeds from these debt issuances were used primarily to repay the 4.875% notes and floating rate notes that matured during the quarter ended June 30, 2015.

The project financing obligations included in the table above are associated with the sale of rights to unbilled revenues related to the ongoing activity of an entity owned by UTC Climate, Controls & Security. The percentage of total short-term borrowings and long-term debt at variable interest rates was 7% and 5% at December 31, 2016 and 2015, respectively. Interest rates on our commercial paper borrowings are considered variable due to their short-term duration and high-frequency of turnover.

The average maturity of our long-term debt at December 31, 2016 is approximately ten years. The schedule of principal payments required on long-term debt for the next five years and thereafter is:

(dollars in millions)		
2017	$	1,603
2018		2,012
2019		1,299
2020		1,460
2021		2,034
Thereafter		14,891
Total	$	23,299

On April 29, 2016, we renewed our universal shelf registration statement filed with the Securities and Exchange Commission (SEC) for an indeterminate amount of equity and debt securities for future issuance, subject to our internal limitations on the amount of equity and debt to be issued under this shelf registration statement.

NOTE 10: EQUITY

On November 11, 2015, we entered into ASR agreements to repurchase an aggregate of $6.0 billion of our common stock utilizing the net after-tax proceeds from the sale of Sikorsky. Under the terms of the ASR agreements, we made the aggregate payments and received an initial delivery of approximately 51.9 million shares of our common stock, representing approximately 85% of the shares expected to be repurchased. In 2016, the shares associated with the remaining portion of the aggregate purchase were settled upon final delivery to us of approximately 10.1 million additional shares of common stock. Including the remaining shares settled in 2016, the final price under the November 11, 2015 ASR was $96.74 per share.

On March 13, 2015, we entered into ASR agreements to repurchase an aggregate of $2.65 billion of our common stock. Under the terms of the ASR agreements, we made the aggregate payments and received an initial delivery of approximately 18.6 million shares of our common stock, representing approximately 85% of the shares expected to be repurchased. On July 31, 2015, the shares associated with the remaining portion of the aggregate purchase were settled upon final delivery of approximately 4.2 million additional shares of common stock. Including the remaining shares settled on July 31, 2015, the final price under the ASR was $116.11 per share.

As discussed in Note 9, on August 3, 2015, we received approximately $1.1 billion from the proceeds of the remarketing of our 1.550% junior subordinated notes, which were originally issued as part of our equity units on June 18, 2012, and issued approximately 11.3 million shares of common stock to settle the purchase obligation of the holders of the equity units under the purchase contract entered into at the time of the original issuance of the equity units.

A summary of the changes in each component of accumulated other comprehensive (loss) income, net of tax for the years ended December 31, 2016 and 2015 is provided below:

(dollars in millions)	Foreign Currency Translation	Defined Benefit Pension and Postretirement Plans	Unrealized Gains (Losses) on Available-for-Sale Securities	Unrealized Hedging (Losses) Gains	Accumulated Other Comprehensive (Loss) Income
Balance at December 31, 2014	$ (1,051)	$ (5,709)	$ 308	$ (209)	$ (6,661)
Other comprehensive (loss) income before reclassifications, net	(1,429)	32	16	(298)	(1,679)
Amounts reclassified, pre-tax	42	867	(54)	234	1,089
Tax (benefit) expense reclassified	—	(325)	23	(66)	(368)
Balance at December 31, 2015	$ (2,438)	$ (5,135)	$ 293	$ (339)	$ (7,619)
Other comprehensive (loss) income before reclassifications, net	(1,042)	(247)	119	54	(1,116)
Amounts reclassified, pre-tax	—	535	(94)	171	612
Tax (benefit) expense reclassified	—	(198)	35	(48)	(211)
Balance at December 31, 2016	**$ (3,480)**	**$ (5,045)**	**$ 353**	**$ (162)**	**$ (8,334)**

Amounts reclassified related to our defined benefit pension and postretirement plans include amortization of prior service costs and actuarial net losses recognized during each period presented. These costs are recorded as components of net periodic pension cost for each period presented (see Note 12 for additional details).

Changes in noncontrolling interests that do not result in a change of control, and where there is a difference between fair value and carrying value, are accounted for as equity transactions. The pro-forma (decrease) increase in Net income attributable to common shareowners would have been $(8) million, $12 million and $(71) million for the years ended December 31, 2016, 2015 and 2014, respectively, had they been recorded through net income.

NOTE 11: INCOME TAXES

Income Before Income Taxes. The sources of income from continuing operations before income taxes are:

(dollars in millions)	**2016**	2015	2014
United States	**$ 2,534**	$ 2,782	$ 4,165
Foreign	**4,599**	3,685	4,547
	$ 7,133	$ 6,467	$ 8,712

With few exceptions, U.S. income taxes have not been provided on undistributed earnings of UTC's international subsidiaries. These earnings relate to ongoing operations and were approximately $31 billion as of December 31, 2016. It is not practicable to estimate the amount of tax that might be payable. We intend to reinvest these earnings permanently outside the U.S. or to repatriate the earnings only when it is tax effective to do so.

Provision for Income Taxes. The income tax expense (benefit) for the years ended December 31, 2016, 2015 and 2014 consisted of the following components:

(dollars in millions)	2016	2015	2014
Current:			
United States:			
Federal	**$ 30**	$ 328	$ 319
State	**(21)**	(37)	38
Foreign	**1,290**	1,158	1,484
	1,299	1,449	1,841
Future:			
United States:			
Federal	**318**	712	421
State	**134**	109	(23)
Foreign	**(54)**	(159)	5
	398	662	403
Income tax expense	**$ 1,697**	$ 2,111	$ 2,244
Attributable to items credited (charged) to equity	**$ (299)**	$ (114)	$ 1,535

Reconciliation of Effective Income Tax Rate. Differences between effective income tax rates and the statutory U.S. federal income tax rate are as follows:

	2016	2015	2014
Statutory U.S. federal income tax rate	**35.0 %**	35.0 %	35.0 %
Tax on international activities	**(8.1)%**	(2.0)%	(3.3)%
Tax audit settlements	**(2.9)%**	—	(4.3)%
Other	**(0.2)%**	(0.4)%	(1.6)%
Effective income tax rate	**23.8 %**	32.6 %	25.8 %

The 2016 effective tax rate reflects $206 million of favorable adjustments related to the conclusion of the review by the Examination Division of the Internal Revenue Service of both the UTC 2011 and 2012 tax years and the Goodrich Corporation 2011 and 2012 tax years through the date of its acquisition as well as the absence of 2015 items described below. In addition, at the end of 2016 France enacted a tax law change reducing its corporate income tax rate which resulted in a tax benefit of $25 million.

The 2015 effective tax rate reflects an unfavorable tax adjustment of $274 million related to the repatriation of certain foreign earnings, the majority of which were 2015 current year earnings, and a favorable adjustment of approximately $45 million related to a non-taxable gain recorded in the first quarter. France, the U.K. and certain U.S. states enacted tax law changes in the fourth quarter which resulted in a net incremental cost of approximately $68 million in 2015.

The 2014 effective tax rate reflects favorable tax adjustments of $371 million related to the conclusion of the examination of UTC's 2009 - 2010 tax years, the resolution of disputed tax matters with the Appeals Division of the IRS for UTC's 2006 - 2008 tax years, the conclusion of the State of Connecticut's review of UTC's 2010 - 2012 tax years and the conclusion of the Canada Revenue Agency's examination of the company's research credits claimed in 2006 - 2012. Also included was a favorable tax adjustment of $175 million associated with management's decision to repatriate additional high taxed dividends from the current year. These were partially offset by an unfavorable tax adjustment of approximately $265 million related to the 1998 reorganization of the corporate structure of Otis operations in Germany, a matter which is currently in litigation. This is reported in the table above in tax on international activities.

Deferred Tax Assets and Liabilities. Future income taxes represent the tax effects of transactions which are reported in different periods for tax and financial reporting purposes. These amounts consist of the tax effects of temporary differences between the tax and financial reporting balance sheets and tax carryforwards. Future income tax benefits and payables within the same tax paying component of a particular jurisdiction are offset for presentation in the Consolidated Balance Sheet.

The tax effects of temporary differences and tax carryforwards which gave rise to future income tax benefits and payables at December 31, 2016 and 2015 are as follows:

(dollars in millions)	**2016**	2015
Future income tax benefits:		
Insurance and employee benefits	**$ 2,382**	$ 2,650
Other asset basis differences	**1,098**	1,199
Other liability basis differences	**1,403**	1,543
Tax loss carryforwards	**494**	528
Tax credit carryforwards	**873**	872
Valuation allowances	**(545)**	(591)
	$ 5,705	$ 6,201
Future income taxes payable:		
Other asset basis differences	**$ 5,376**	$ 5,324
Other items, net	**364**	531
	$ 5,740	$ 5,855

Valuation allowances have been established primarily for tax credit carryforwards, tax loss carryforwards, and certain foreign temporary differences to reduce the future income tax benefits to expected realizable amounts.

Tax Credit and Loss Carryforwards. At December 31, 2016, tax credit carryforwards, principally state and foreign, and tax loss carryforwards, principally state and foreign, were as follows:

(dollars in millions)	Tax Credit Carryforwards	Tax Loss Carryforwards
Expiration period:		
2017-2021	$ 12	$ 317
2022-2026	13	187
2027-2036	219	363
Indefinite	629	1,780
Total	$ 873	$ 2,647

Unrecognized Tax Benefits. At December 31, 2016, we had gross tax-effected unrecognized tax benefits of $1,086 million, all of which, if recognized, would impact the effective tax rate. A reconciliation of the beginning and ending amounts of unrecognized tax benefits and interest expense related to unrecognized tax benefits for the years ended December 31, 2016, 2015 and 2014 is as follows:

(dollars in millions)	**2016**	2015	2014
Balance at January 1	**$ 1,169**	$ 1,089	$ 1,223
Additions for tax positions related to the current year	**69**	206	164
Additions for tax positions of prior years	**167**	99	435
Reductions for tax positions of prior years	**(61)**	(101)	(47)
Settlements	**(258)**	(124)	(686)
Balance at December 31	**$ 1,086**	$ 1,169	$ 1,089
Gross interest expense related to unrecognized tax benefits	**$ 41**	$ 39	$ 180
Total accrued interest balance at December 31	**$ 185**	$ 176	$ 292

Included in the balance at December 31, 2014 is $87 million of tax positions whose tax characterization is highly certain but for which there is uncertainty about the timing of tax return inclusion. Because of the impact of deferred tax accounting, other than interest and penalties, the timing would not impact the annual effective tax rate but could accelerate the payment of cash to the taxing authority to an earlier period.

We conduct business globally and, as a result, UTC or one or more of our subsidiaries files income tax returns in the U.S. federal jurisdiction and various state and foreign jurisdictions. In the normal course of business we are subject to examination by taxing authorities throughout the world, including such major jurisdictions as Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong, India, Italy, Japan, Mexico, Netherlands, Poland, Singapore, South Korea, Spain, Switzerland, and the United Kingdom and the United States. With few exceptions, we are no longer subject to U.S. federal, state and local, or non-U.S. income tax examinations for years before 2005.

During the quarter ended December 31, 2016, the Company recognized a noncash gain of approximately $172 million, including a pre-tax interest adjustment of $22 million, as a result of the closure of the audit by the Examination Division of the Internal Revenue Service (IRS) of UTC tax years 2011 and 2012. The IRS has notified the Company of its intention to begin an audit of tax year 2014 during the first quarter of 2017.

During the quarter ended September 30, 2016, the Company recognized a noncash gain of approximately $58 million, primarily tax, as a result of the closure of the audit by the Examination Division of the IRS of Goodrich Corporation tax years 2011 and 2012 through the date of acquisition by UTC.

During 2014, the Company resolved various tax audit, appeal and litigation activity with the IRS, Connecticut Department of Revenue, and French and Canadian taxing authorities resulting in approximately $508 million of primarily noncash tax gains, including pre-tax interest adjustments of $132 million. During 2014, the Company also reached an agreement with a state taxing authority for the monetization of tax credits resulting in a gain of approximately $220 million through Other Income.

It is reasonably possible that over the next 12 months the amount of unrecognized tax benefits may change within a range of a net increase of $50 million to a net decrease of $495 million as a result of additional worldwide uncertain tax positions, the revaluation of current uncertain tax positions arising from developments in examinations, in appeals, or in the courts, or the closure of tax statutes.

See Note 18 "Contingent Liabilities" for discussion regarding uncertain tax positions, included in the above range, related to pending litigation with respect to certain deductions claimed in Germany.

NOTE 12: EMPLOYEE BENEFIT PLANS

We sponsor numerous domestic and foreign employee benefit plans, which are discussed below.

Employee Savings Plans. We sponsor various employee savings plans. Our contributions to employer sponsored defined contribution plans were $318 million, $356 million and $330 million for 2016, 2015 and 2014, respectively.

Our non-union domestic employee savings plan uses an Employee Stock Ownership Plan (ESOP) for employer matching contributions. External borrowings were used by the ESOP to fund a portion of its purchase of ESOP stock from us. The external borrowings have been extinguished and only re-amortized loans remain between UTC and the ESOP Trust. As ESOP debt service payments are made, common stock is released from an unreleased shares account. ESOP debt may be prepaid or re-amortized to either increase or decrease the number of shares released so that the value of released shares equals the value of plan benefit. We may also, at our option, contribute additional common stock or cash to the ESOP.

Shares of common stock are allocated to employees' ESOP accounts at fair value on the date earned. Cash dividends on common stock held by the ESOP are used for debt service payments. Participants may choose to have their ESOP dividends reinvested or distributed in cash. Common stock allocated to ESOP participants is included in the average number of common shares outstanding for both basic and diluted earnings per share. At December 31, 2016, 27.8 million common shares had been allocated to employees, leaving 11.7 million unallocated common shares in the ESOP Trust, with an approximate fair value of $1.3 billion.

Pension Plans. We sponsor both funded and unfunded domestic and foreign defined benefit pension plans that cover a large number of our employees. Our largest plans are generally closed to new participants. Our plans use a December 31 measurement date consistent with our fiscal year.

(dollars in millions)	2016	2015
Change in Benefit Obligation:		
Beginning balance	**$ 35,428**	$ 37,853
Service cost	**383**	493
Interest cost	**1,183**	1,399
Actuarial loss (gain)	**1,831**	(1,716)
Total benefits paid	**(1,660)**	(1,796)
Net settlement, curtailment and special termination benefits	**(1,566)**	(55)
Plan amendments	**17**	39
Other	**(693)**	(789)
Ending balance	**$ 34,923**	$ 35,428
Change in Plan Assets:		
Beginning balance	**$ 31,011**	$ 32,738
Actual return on plan assets	**3,202**	265
Employer contributions	**384**	520
Benefits paid	**(1,660)**	(1,796)
Settlements	**(1,632)**	(59)
Other	**(750)**	(657)
Ending balance	**$ 30,555**	$ 31,011
Funded Status:		
Fair value of plan assets	**$ 30,555**	$ 31,011
Benefit obligations	**(34,923)**	(35,428)
Funded status of plan	**$ (4,368)**	$ (4,417)
Amounts Recognized in the Consolidated Balance Sheet Consist of:		
Noncurrent assets	**$ 451**	$ 742
Current liability	**(72)**	(71)
Noncurrent liability	**(4,747)**	(5,088)
Net amount recognized	**$ (4,368)**	$ (4,417)
Amounts Recognized in Accumulated Other Comprehensive Loss Consist of:		
Net actuarial loss	**$ 7,941**	$ 8,224
Prior service credit	**(6)**	(57)
Net amount recognized	**$ 7,935**	$ 8,167

At the end of fiscal 2015, we changed the approach we use to estimate the service and interest components of net periodic pension cost for our significant pension plans. This change compared to the previous approach resulted in a net decrease in the service and interest components of our annual net periodic pension cost of approximately $215 million for 2016. Historically, we estimated the service and interest cost components utilizing a single-weighted average discount rate derived from the yield curve used to measure the benefit obligation at the beginning of the period. We have elected to utilize a full yield curve approach in the estimation of these components by applying the specific spot rates along the yield curve used in determination of the benefit obligation to the relevant projected cash flows. We have made this change to provide a more precise measurement of service and interest costs by improving the correlation between projected benefit cash flows to the corresponding spot yield curve rates. This change does not materially affect the measurement of our total benefit obligations.

As part of our long-term strategy to de-risk our defined benefit pension plans, we entered into an agreement to purchase a group annuity contract to transfer approximately $768 million of our outstanding pension benefit obligations related to certain U.S. retirees or beneficiaries, which was finalized on October 12, 2016. We also offered certain former U.S. employees or beneficiaries (generally all former U.S. participants not yet in receipt of their vested pension benefits) an option to take a one-time lump-sum distribution in lieu of future monthly pension payments, which reduced our pension benefit obligations by approximately $935 million. These transactions reduced the assets of our defined benefit pension plans by approximately $1.5 billion. As a result of these transactions, we recognized a one-time pre-tax pension settlement charge of approximately $423 million in the fourth quarter of 2016.

The amounts included in "Other" in the above table primarily reflect the impact of foreign exchange translation, primarily for plans in the U.K. and Canada.

As approved in 2016, effective January 1, 2017, a voluntary lump-sum option is available for the frozen final average earnings benefits of certain U.S. salaried employees upon termination of employment after 2016. This option provides participants with the choice of electing to receive a lump-sum payment in lieu of receiving a future monthly pension benefit. This plan change reduced the projected benefit obligation by $170 million.

In 2014, we offered a voluntary lump-sum pension payout program to certain eligible terminated vested participants (generally any terminated vested participant with a lump-sum value of $50,000 or less) that settled our obligation to those participants who accepted the offer. The program provided participants with a one-time choice of electing to receive a lump-sum settlement in lieu of receiving a future monthly pension benefit. Payments to participants who accepted the offer began in 2014 and were completed in 2015. As part of this voluntary lump-sum program, the Company settled $147 million and $311 million of its projected benefit obligation in 2015 and 2014, respectively.

Qualified domestic pension plan benefits comprise approximately 75% of the projected benefit obligation. Benefits for union employees are generally based on a stated amount for each year of service. For non-union employees, benefits for service up to December 31, 2014 are generally based on an employee's years of service and compensation through December 31, 2014. Benefits for service after December 31, 2014 are based on the existing cash balance formula that was adopted in 2003 for newly hired non-union employees and for other non-union employees who made a one-time voluntary election to have future benefit accruals determined under this formula. Certain foreign plans, which comprise approximately 24% of the projected benefit obligation, are considered defined benefit plans for accounting purposes. Nonqualified domestic pension plans provide supplementary retirement benefits to certain employees and are not a material component of the projected benefit obligation.

We made $100 million of cash contributions to our domestic defined benefit pension plans and made $203 million of cash contributions to our foreign defined benefit pension plans in 2016. In 2015, we contributed $250 million in UTC common stock to our domestic defined benefit pension plans and made $147 million of cash contributions to our foreign defined benefit pension plans.

Information for pension plans with accumulated benefit obligations in excess of plan assets:

(dollars in millions)	**2016**	2015
Projected benefit obligation	**$ 32,732**	$ 30,915
Accumulated benefit obligation	**32,095**	30,362
Fair value of plan assets	**27,943**	25,827

The accumulated benefit obligation for all defined benefit pension plans was $34.2 billion and $34.6 billion at December 31, 2016 and 2015, respectively.

The components of the net periodic pension cost are as follows:

(dollars in millions)	**2016**	2015	2014
Pension Benefits:			
Service cost	**$ 383**	$ 493	$ 487
Interest cost	**1,183**	1,399	1,517
Expected return on plan assets	**(2,202)**	(2,264)	(2,215)
Amortization of prior service credit	**(33)**	(11)	(8)
Recognized actuarial net loss	**572**	882	429
Net settlement, curtailment and special termination benefits loss	**498**	150	13
Net periodic pension cost - employer	**$ 401**	$ 649	$ 223

Net settlement and curtailment losses for pension benefits includes curtailment losses of approximately $109 million and $1 million related to, and recorded in, discontinued operations for the years ended December 31, 2015 and 2014, respectively. In addition, total net periodic pension cost includes approximately $98 million and $96 million related to, and recorded in, discontinued operations for the years ended December 31, 2015 and 2014, respectively.

Other changes in plan assets and benefit obligations recognized in other comprehensive loss in 2016 are as follows:

(dollars in millions)		
Current year actuarial loss	$	**831**
Amortization of actuarial loss		**(572)**
Current year prior service cost		**17**
Amortization of prior service credit		**33**
Net settlement and curtailment loss		**(436)**
Other		**(105)**
Total recognized in other comprehensive loss	**$**	**(232)**
Net recognized in net periodic pension cost and other comprehensive loss	**$**	**169**

The estimated amount that will be amortized from accumulated other comprehensive loss into net periodic pension cost in 2017 is as follows:

(dollars in millions)		
Net actuarial loss	**$**	**571**
Prior service credit		**(36)**
	$	**535**

Major assumptions used in determining the benefit obligation and net cost for pension plans are presented in the following table as weighted-averages:

	Benefit Obligation		Net Cost		
	2016	2015	**2016**	2015	2014
Discount rate					
PBO	**3.8%**	4.1%	**4.1%**	3.8%	4.7%
Interest cost[1]	**—**	—	**3.4%**	—	—
Service cost[1]	**—**	—	**3.8%**	—	—
Salary scale	**4.1%**	4.2%	**4.2%**	4.2%	4.2%
Expected return on plan assets	**—**	—	**7.3%**	7.6%	7.6%

Note 1 The 2016 discount rates used to measure the service cost and interest cost applies to our significant plans. The PBO discount rate is used for the service cost and interest cost measurements for non-significant plans.

In determining the expected return on plan assets, we consider the relative weighting of plan assets, the historical performance of total plan assets and individual asset classes, and economic and other indicators of future performance. In addition, we may consult with and consider the opinions of financial and other professionals in developing appropriate capital market assumptions. Return projections are also validated using a simulation model that incorporates yield curves, credit spreads and risk premiums to project long-term prospective returns.

The plans' investment management objectives include providing the liquidity and asset levels needed to meet current and future benefit payments while maintaining a prudent degree of portfolio diversification considering interest rate risk and market volatility. Globally, investment strategies target a mix of 55% to 65% of growth seeking assets and 35% to 45% income generating and hedging assets using a wide diversification of asset types, fund strategies and investment managers. The growth seeking allocation consists of global public equities in developed and emerging countries, private equity, real estate and balanced market risk strategies. Within public equities, approximately 11% of the total investment portfolio is an enhanced equity strategy that invests in publicly traded equity and fixed income securities, derivatives and foreign currency. Investments in private equity are primarily via limited partnership interests in buy-out strategies with smaller allocations to distressed debt funds. The real estate strategy is principally concentrated in directly held U.S. core investments with some smaller investments in international, value-added and opportunistic strategies. Within the income generating assets, the fixed income portfolio consists of mainly government and broadly diversified high quality corporate bonds.

The plans have continued their pension risk management techniques designed to reduce the plans' interest rate risk. More specifically, the plans have incorporated liability hedging programs that include the adoption of a risk reduction objective as part of the long-term investment strategy. Under this objective the interest rate hedge is dynamically increased as funded status improves. The hedging programs incorporate a range of assets and investment tools, each with ranging interest rate sensitivity. The investment portfolios are currently hedging approximately 35% to 45% of the interest rate sensitivity of the pension plan liabilities.

The fair values of pension plan assets at December 31, 2016 and 2015 by asset category are as follows:

(dollars in millions)	Quoted Prices in Active Markets For Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Not Subject to Leveling	Total
Asset Category:					
Public Equities					
Global Equities	$ 4,682	$ 3	$ —	$ —	**$ 4,685**
Global Equity Commingled Funds[1]	—	367	—	—	**367**
Enhanced Global Equities[2]	168	1,494	—	—	**1,662**
Global Equity Funds at net asset value[8]	—	—	—	7,090	**7,090**
Private Equities[3,8]	—	—	122	1,239	**1,361**
Fixed Income Securities					
Governments	260	54	—	—	**314**
Corporate Bonds	—	7,637	—	—	**7,637**
Fixed Income Securities[8]	—	—	—	2,788	**2,788**
Real Estate[4,8]	—	17	1,285	513	**1,815**
Other[5,8]	—	289	—	1,819	**2,108**
Cash & Cash Equivalents[6,8]	100	75	—	121	**296**
Subtotal	$ 5,210	$ 9,936	$ 1,407	$ 13,570	**30,123**
Other Assets & Liabilities[7]					**432**
Total at December 31, 2016					**$ 30,555**
Public Equities					
Global Equities	$ 5,884	$ —	$ —	$ —	$ 5,884
Global Equity Commingled Funds[1]	—	779	—	—	779
Enhanced Global Equities[2]	237	616	—	—	853
Global Equity Funds at net asset value[8]	—	—	—	6,475	6,475
Private Equities[3,8]	—	—	182	1,335	1,517
Fixed Income Securities					
Governments	365	53	—	—	418
Corporate Bonds	—	7,013	—	—	7,013
Fixed Income Securities[8]	—	—	—	2,992	2,992
Real Estate[4,8]	—	10	1,165	1,079	2,254
Other[5,8]	—	334	—	1,706	2,040
Cash & Cash Equivalents[6,8]	—	159	—	334	493
Subtotal	$ 6,486	$ 8,964	$ 1,347	$ 13,921	30,718
Other Assets & Liabilities[7]					293
Total at December 31, 2015					$ 31,011

Note 1 Represents commingled funds that invest primarily in common stocks.

Note 2 Represents enhanced equity separate account and commingled fund portfolios. A portion of the portfolio may include long-short market neutral and relative value strategies that invest in publicly traded, equity and fixed income securities, as well as derivatives of equity and fixed income securities and foreign currency.

Note 3 Represents limited partner investments with general partners that primarily invest in debt and equity.

Note 4 Represents investments in real estate including commingled funds and directly held properties.

Note 5 Represents insurance contracts and global balanced risk commingled funds consisting mainly of equity, bonds and some commodities.

Note 6 Represents short-term commercial paper, bonds and other cash or cash-like instruments.

Note 7 Represents trust receivables and payables that are not leveled.

Note 8 In accordance with ASU 2015-07, *Fair Value Measurement (Topic 820)*, certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented for the total pension benefits plan assets.

Derivatives in the plan are primarily used to manage risk and gain asset class exposure while still maintaining liquidity. Derivative instruments mainly consist of equity futures, interest rate futures, interest rate swaps and currency forward contracts.

Our common stock represents approximately 1% and 3% of total plan assets at December 31, 2016 and 2015, respectively. We review our assets at least quarterly to ensure we are within the targeted asset allocation ranges and, if necessary, asset balances are adjusted back within target allocations. We employ a broadly diversified investment manager structure that includes diversification by active and passive management, style, capitalization, country, sector, industry and number of investment managers.

The fair value measurement of plan assets using significant unobservable inputs (Level 3) changed due to the following:

(dollars in millions)	Private Equities	Real Estate	Total
Balance, December 31, 2014	$ 145	$ 975	$ 1,120
Realized gains (losses)	3	(4)	(1)
Unrealized gains relating to instruments still held in the reporting period	42	105	147
Purchases, sales, and settlements, net	(8)	89	81
Balance, December 31, 2015	182	1,165	1,347
Realized gains	**46**	**19**	**65**
Unrealized gains relating to instruments still held in the reporting period	**5**	**18**	**23**
Purchases, sales, and settlements, net	**(111)**	**83**	**(28)**
Balance, December 31, 2016	**$ 122**	**$ 1,285**	**$ 1,407**

Quoted market prices are used to value investments when available. Investments in securities traded on exchanges, including listed futures and options, are valued at the last reported sale prices on the last business day of the year or, if not available, the last reported bid prices. Fixed income securities are primarily measured using a market approach pricing methodology, where observable prices are obtained by market transactions involving identical or comparable securities of issuers with similar credit ratings. Mortgages have been valued on the basis of their future principal and interest payments discounted at prevailing interest rates for similar investments. Investment contracts are valued at fair value by discounting the related cash flows based on current yields of similar instruments with comparable durations. Real estate investments are valued on a quarterly basis using discounted cash flow models which consider long-term lease estimates, future rental receipts and estimated residual values. Valuation estimates are supplemented by third-party appraisals on an annual basis.

Private equity limited partnerships are valued quarterly using discounted cash flows, earnings multiples and market multiples. Valuation adjustments reflect changes in operating results, financial condition, or prospects of the applicable portfolio company. Over-the-counter securities and government obligations are valued at the bid prices or the average of the bid and ask prices on the last business day of the year from published sources or, if not available, from other sources considered reliable, generally broker quotes. Temporary cash investments are stated at cost, which approximates fair value.

Although we are not required to make additional contributions to our domestic defined benefit pension plans through the end of 2021, we may elect to make discretionary contributions in 2017. We expect to make total contributions of approximately $300 million to our global defined benefit pension plans in 2017, including discretionary contributions of approximately $150 million to our domestic defined benefit pension plans. Contributions do not reflect benefits to be paid directly from corporate assets.

Benefit payments, including amounts to be paid from corporate assets, and reflecting expected future service, as appropriate, are expected to be paid as follows: $1,930 million in 2017, $1,847 million in 2018, $1,896 million in 2019, $1,948 million in 2020, $1,994 million in 2021, and $10,545 million from 2022 through 2026.

Postretirement Benefit Plans. We sponsor a number of postretirement benefit plans that provide health and life benefits to eligible retirees. Such benefits are provided primarily from domestic plans, which comprise approximately 87% of the benefit obligation. The postretirement plans are unfunded.

(dollars in millions)	2016	2015
Change in Benefit Obligation:		
Beginning balance	**$ 890**	$ 952
Service cost	**3**	3
Interest cost	**34**	34
Actuarial gain	**(48)**	—
Total benefits paid	**(97)**	(104)
Other	**23**	5
Ending balance	**$ 805**	$ 890
Change in Plan Assets:		
Beginning balance	**$ —**	$ —
Employer contributions	**80**	84
Benefits paid	**(97)**	(104)
Other	**17**	20
Ending balance	**$ —**	$ —
Funded Status:		
Fair value of plan assets	**$ —**	$ —
Benefit obligations	**(805)**	(890)
Funded status of plan	**$ (805)**	$ (890)
Amounts Recognized in the Consolidated Balance Sheet Consist of:		
Current liability	**$ (78)**	$ (84)
Noncurrent liability	**(727)**	(806)
Net amount recognized	**$ (805)**	$ (890)
Amounts Recognized in Accumulated Other Comprehensive Loss Consist of:		
Net actuarial gain	**$ (152)**	$ (109)
Prior service credit	**(5)**	(1)
Net amount recognized	**$ (157)**	$ (110)

The components of net periodic benefit cost are as follows:

(dollars in millions)	2016	2015	2014
Other Postretirement Benefits:			
Service cost	**$ 3**	$ 3	$ 3
Interest cost	**34**	34	41
Amortization of prior service credit	**—**	—	(1)
Recognized actuarial net gain	**(4)**	(4)	(4)
Net settlement and curtailment gain	**—**	(1)	—
Net periodic other postretirement benefit cost	**$ 33**	$ 32	$ 39

Other changes in plan assets and benefit obligations recognized in other comprehensive loss in 2016 are as follows:

(dollars in millions)		
Current year actuarial gain	**$**	**(46)**
Current year prior service credit		**(4)**
Amortization of actuarial net gain		**4**
Other		**(1)**
Total recognized in other comprehensive loss	**$**	**(47)**
Net recognized in net periodic other postretirement benefit cost and other comprehensive loss	**$**	**(14)**

The estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic benefit cost in 2017 include actuarial net gains of $10 million and prior service credits of $1 million.

Major assumptions used in determining the benefit obligation and net cost for postretirement plans are presented in the following table as weighted-averages:

	Benefit Obligation		Net Cost		
	2016	2015	**2016**	2015	2014
Discount rate	**3.8%**	4.0%	**4.0%**	3.8%	4.4%

Assumed health care cost trend rates are as follows:

	2016	2015
Health care cost trend rate assumed for next year	**6.5%**	6.5%
Rate that the cost trend rate gradually declines to	**5.0%**	5.0%
Year that the rate reaches the rate it is assumed to remain at	**2022**	2022

Assumed health care cost trend rates have a significant effect on the amounts reported for the health care plans. A one-percentage-point change in assumed health care cost trend rates would have the following effects:

	2016 One-Percentage-Point	
(dollars in millions)	Increase	Decrease
Effect on total service and interest cost	$ 3	$ (2)
Effect on postretirement benefit obligation	46	(39)

Benefit payments, including net amounts to be paid from corporate assets and reflecting expected future service, as appropriate, are expected to be paid as follows: $78 million in 2017, $75 million in 2018, $70 million in 2019, $65 million in 2020, $60 million in 2021, and $242 million from 2022 through 2026.

Multiemployer Benefit Plans. We contribute to various domestic and foreign multiemployer defined benefit pension plans. The risks of participating in these multiemployer plans are different from single-employer plans in that assets contributed are pooled and may be used to provide benefits to employees of other participating employers. If a participating employer stops contributing to the plan, the unfunded obligations of the plan may be borne by the remaining participating employers. Lastly, if we choose to stop participating in some of our multiemployer plans, we may be required to pay those plans a withdrawal liability based on the underfunded status of the plan.

Our participation in these plans for the annual periods ended December 31 is outlined in the table below. Unless otherwise noted, the most recent Pension Protection Act (PPA) zone status available in 2016 and 2015 is for the plan's year-end at June 30, 2015, and June 30, 2014, respectively. The zone status is based on information that we received from the plan and is certified by the plan's actuary. Our significant plan is in the green zone which represents a plan that is at least 80% funded and does not require a financial improvement plan (FIP) or a rehabilitation plan (RP). An extended amortization provision of ten years is utilized to recognize investment gains or losses for our significant plan.

(dollars in millions)		Pension Protection Act Zone Status		FIP/ RP Status	Contributions				
Pension Fund	EIN/Pension Plan Number	**2016**	2015	Pending/ Implemented	**2016**	2015	2014	Surcharge Imposed	Expiration Date of Collective-Bargaining Agreement
National Elevator Industry Pension Plan	23-2694291	**Green**	Green	No	**$ 100**	$ 88	$ 79	No	July 8, 2017
Other funds					**31**	32	34		
					$ 131	$ 120	$ 113		

For the plan years ended June 30, 2015 and 2014, respectively, we were listed in the National Elevator Industry Pension Plan's Forms 5500 as providing more than 5% of the total contributions for the plan. At the date these financial statements were issued, Forms 5500 were not available for the plan year ending June 30, 2016.

In addition, we participate in several multiemployer arrangements that provide postretirement benefits other than pensions, with the National Elevator Industry Health Benefit Plan being the most significant. These arrangements generally provide medical and life benefits for eligible active employees and retirees and their dependents. Contributions to multiemployer plans that provide postretirement benefits other than pensions were $17 million, $15 million and $14 million for 2016, 2015 and 2014, respectively.

Stock-based Compensation. UTC's long-term incentive plan authorizes various types of market and performance based incentive awards that may be granted to officers and employees. Our Long-Term Incentive Plan (LTIP) was last amended on February 5, 2016. Since the LTIP's inception in 2005, a total of 149 million shares have been authorized for issuance pursuant to awards under the LTIP. All equity-based compensation awards are made exclusively through the LTIP. As of December 31, 2016, approximately 38 million shares remain available for awards under the LTIP. The LTIP does not contain an aggregate annual award limit. We expect that the shares awarded on an annual basis will range from 1.0% to 1.5% of shares outstanding. The LTIP will expire after all authorized shares have been awarded or April 30, 2020, whichever is sooner.

Under the LTIP and predecessor long-term incentive plans, the exercise price of awards is set on the grant date and may not be less than the fair market value per share on that date. Generally, stock appreciation rights and stock options have a term of ten years and a minimum three-year vesting period. In the event of retirement, awards held for more than one year may become vested and exercisable subject to certain terms and conditions. LTIP awards with performance-based vesting generally have a minimum three-year vesting period and vest based on performance against pre-established metrics. In the event of retirement, vesting for awards held more than one year does not accelerate but may vest as scheduled based on actual performance relative to target metrics. We have historically repurchased shares of our common stock in an amount at least equal to the number of shares issued under our equity compensation arrangements and will continue to evaluate this policy in conjunction with our overall share repurchase program.

We measure the cost of all share-based payments, including stock options, at fair value on the grant date and recognize this cost in the Consolidated Statement of Operations as follows:

(dollars in millions)	**2016**	2015	2014
Continuing operations	**$ 152**	$ 158	$ 219
Discontinued operations	**1**	17	21
Total compensation cost recognized	**$ 153**	$ 175	$ 240

The associated future income tax benefit recognized was $49 million, $57 million and $80 million for the years ended December 31, 2016, 2015 and 2014, respectively.

For the years ended December 31, 2016, 2015 and 2014, the amount of cash received from the exercise of stock options was $17 million, $41 million and $187 million, respectively, with an associated tax benefit realized of $69 million, $89 million and $125 million, respectively. In addition, for the years ended December 31, 2016, 2015 and 2014, the associated tax benefit realized from the vesting of performance share units and other restricted awards was $17 million, $48 million and $49 million, respectively. Also, as described in Note 1 "Summary of Accounting Principles," during 2016, we early adopted the provisions of ASU 2016-09, "Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting." Please refer to Note 1 for additional information regarding the impact of the early adoption on the 2016 financial statements. As part of that adoption, we elected to apply the prospective transition method and therefore, did not revise prior years' disclosure. As such, for the years ended December 31, 2015 and 2014, based on existing guidance prior to the issuance of

ASU 2016-09, $64 million and $103 million, respectively, of certain tax benefits have been reported as operating cash outflows with corresponding cash inflows from financing activities.

At December 31, 2016, there was $157 million of total unrecognized compensation cost related to non-vested equity awards granted under long-term incentive plans. This cost is expected to be recognized ratably over a weighted-average period of 3.1 years.

A summary of the transactions under all long-term incentive plans for the year ended December 31, 2016 follows:

	Stock Options			Stock Appreciation Rights			Performance Share Units			Other Incentive Shares/Units
(shares and units in thousands)	Shares		Average Price*	Shares		Average Price*	Units		Average Price**	
Outstanding at:										
December 31, 2015	1,879	$	86.19	38,111	$	83.58	2,170	$	101.78	1,467
Granted	**397**		**95.57**	**4,740**		**95.40**	**687**		**95.29**	**698**
Exercised / earned	**(239)**		**71.57**	**(5,760)**		**69.19**	**(372)**		**84.03**	**(339)**
Cancelled / Other	**(14)**		**92.02**	**(678)**		**95.03**	**(518)**		**85.92**	**207**
December 31, 2016	**2,023**	**$**	**89.72**	**36,413**	**$**	**87.18**	**1,967**	**$**	**107.05**	**2,033**

* weighted-average exercise price

** weighted-average grant stock price

The weighted-average grant date fair value of stock options and stock appreciation rights granted during 2016, 2015 and 2014 was $14.02, $18.69 and $28.36, respectively. The weighted-average grant date fair value of performance share units, which vest upon achieving certain performance metrics, granted during 2016, 2015 and 2014 was $91.63, $120.36 and $125.41, respectively. The total fair value of awards vested during the years ended December 31, 2016, 2015 and 2014 was $165 million, $247 million and $226 million, respectively. The total intrinsic value (which is the amount by which the stock price exceeded the exercise price on the date of exercise) of stock options and stock appreciation rights exercised during the years ended December 31, 2016, 2015 and 2014 was $214 million, $281 million and $425 million, respectively. The total intrinsic value (which is the stock price at vesting) of performance share units and other restricted awards vested was $61 million, $151 million and $154 million during the years ended December 31, 2016, 2015 and 2014, respectively.

The following table summarizes information about equity awards outstanding that are vested and expected to vest and equity awards outstanding that are exercisable at December 31, 2016:

	Equity Awards Vested and Expected to Vest					Equity Awards That Are Exercisable				
(shares in thousands; aggregate intrinsic value in millions)	Awards	Average Price*		Aggregate Intrinsic Value	Remaining Term**	Awards	Average Price*		Aggregate Intrinsic Value	Remaining Term**
Stock Options/Stock Appreciation Rights	38,314	$ 86.58	$	917	5.4 years	25,574	$ 77.64	$	824	4.2 years
Performance Share Units/Restricted Stock	2,376	—		260	2.8 years					

* weighted-average exercise price per share

** weighted-average contractual remaining term in years

The fair value of each option award is estimated on the date of grant using a binomial lattice model. The following table indicates the assumptions used in estimating fair value for the years ended December 31, 2016, 2015 and 2014. Lattice-based option models incorporate ranges of assumptions for inputs, those ranges are as follows:

	2016	2015	2014
Expected volatility	**20%**	20% - 23%	22% - 26%
Weighted-average volatility	**20%**	21%	26%
Expected term (in years)	**6.5**	6.0 - 6.8	7.6 - 8.0
Expected dividend yield	**2.7%**	2.2%	2.2%
Risk-free rate	**0.2% - 2.6%**	0.0% - 2.2%	0.0% - 3.1%

Expected volatilities are based on the returns of our stock, including implied volatilities from traded options on our stock for the binomial lattice model. We use historical data to estimate equity award exercise and employee termination behavior within the valuation model. Prior to 2016, separate employee groups and equity award characteristics were considered separately for valuation purposes. The expected term represents an estimate of the period of time equity awards are expected to remain outstanding. The risk-free rate is based on the term structure of interest rates at the time of equity award grant.

NOTE 13: RESTRUCTURING COSTS

During 2016, we recorded net pre-tax restructuring costs totaling $290 million for new and ongoing restructuring actions. We recorded charges in the segments as follows:

(dollars in millions)		
Otis	$	59
UTC Climate, Controls & Security		65
Pratt & Whitney		111
UTC Aerospace Systems		49
Eliminations and other		6
Total	$	290

Restructuring charges incurred in 2016 primarily relate to actions initiated during 2016 and 2015, and were recorded as follows:

(dollars in millions)		
Cost of sales	$	187
Selling, general & administrative		78
Other expense		25
Total		290

2016 Actions. During 2016, we recorded net pre-tax restructuring costs totaling $242 million for restructuring actions initiated in 2016, consisting of $149 million in cost of sales, $67 million in selling, general and administrative expenses, and $26 million in other expense. The 2016 actions relate to ongoing cost reduction efforts, including workforce reductions, consolidation of field operations, and costs to exit legacy programs.

We are targeting to complete in 2017 and 2018 the majority of the remaining workforce and all facility related cost reduction actions initiated in 2016. No specific plans for significant other actions have been finalized at this time. The following table summarizes the accrual balances and utilization by cost type for the 2016 restructuring actions:

(dollars in millions)		Severance		Facility Exit, Lease Termination & Other Costs		Total
Net pre-tax restructuring costs	$	166	$	76	$	242
Utilization and foreign exchange		(103)		(30)		(133)
Balance at December 31, 2016	**$**	**63**	**$**	**46**	**$**	**109**

The following table summarizes expected, incurred and remaining costs for the 2016 restructuring actions by segment:

(dollars in millions)		Expected Costs		**Cost Incurred During 2016**		**Remaining Costs at December 31, 2016**
Otis	$	57	**$**	**(48)**	**$**	**9**
UTC Climate, Controls & Security		87		**(45)**		**42**
Pratt & Whitney		118		**(118)**		**—**
UTC Aerospace Systems		92		**(31)**		**61**
Total	$	354	**$**	**(242)**	**$**	**112**

2015 Actions. During 2016, we recorded net pre-tax restructuring costs totaling $40 million for restructuring actions initiated in 2015, consisting of $36 million in cost of sales and $4 million in selling, general and administrative expenses. The 2015 actions relate to ongoing cost reduction efforts, including workforce reductions and the consolidation of field operations. The following table summarizes the accrual balances and utilization by cost type for the 2015 restructuring actions:

(dollars in millions)	Severance	Facility Exit, Lease Termination and Other Costs	Total
Restructuring accruals at January 1, 2016	$ 183	$ 23	$ 206
Net pre-tax restructuring costs	17	23	40
Utilization and foreign exchange	(158)	(22)	(180)
Balance at December 31, 2016	**$ 42**	**$ 24**	**$ 66**

The following table summarizes expected, incurred and remaining costs for the 2015 programs by segment:

(dollars in millions)	Expected Costs	Costs Incurred During 2015	**(Costs Incurred) Reversals During 2016**	**Remaining Costs at December 31, 2016**
Otis	$ 51	$ (35)	**$ (14)**	**$ 2**
UTC Climate, Controls & Security	139	(83)	**(24)**	**32**
Pratt & Whitney	62	(82)	**20**	**—**
UTC Aerospace Systems	129	(105)	**(16)**	**8**
Eliminations and other	27	(21)	**(6)**	**—**
Total	$ 408	$ (326)	**$ (40)**	**$ 42**

During 2016, we had reversals of previously accrued restructuring reserves for 2015 programs of approximately $65 million, which includes a Pratt & Whitney business that was sold in the third quarter of 2016 after originally being scheduled for closure, and a UTC Climate, Controls & Security facility that will remain operational after originally being scheduled for closure.

NOTE 14: FINANCIAL INSTRUMENTS

We enter into derivative instruments for risk management purposes only, including derivatives designated as hedging instruments under the Derivatives and Hedging Topic of the FASB ASC and those utilized as economic hedges. We operate internationally and, in the normal course of business, are exposed to fluctuations in interest rates, foreign exchange rates and commodity prices. These fluctuations can increase the costs of financing, investing and operating the business. We have used derivative instruments, including swaps, forward contracts and options to manage certain foreign currency, interest rate and commodity price exposures.

The four quarter rolling average of the notional amount of foreign exchange contracts hedging foreign currency transactions was $18.3 billion and $15.6 billion at December 31, 2016 and 2015, respectively. Additional information pertaining to foreign exchange and hedging activities is included in Note 1.

The following table summarizes the fair value of derivative instruments as of December 31, 2016 and 2015 which consist solely of foreign exchange contracts:

	Asset Derivatives		**Liability Derivatives**	
(dollars in millions)	**2016**	2015	**2016**	2015
Derivatives designated as hedging instruments	**$ 15**	$ 4	**$ 196**	$ 428
Derivatives not designated as hedging instruments	**155**	97	**158**	105

As discussed in Note 9, at December 31, 2016 we have approximately €2.95 billion of Euro-denominated long-term debt and €500 million of outstanding Euro-denominated commercial paper borrowings, which qualify as a net investment hedge against our investments in European businesses. As of December 31, 2016, the net investment hedge is deemed to be effective.

The impact from foreign exchange derivative instruments that qualified as cash flow hedges was as follows:

(dollars in millions)	Year Ended December 31, 2016	2015
Gain (loss) recorded in Accumulated other comprehensive loss	**$ 75**	$ (415)
Loss reclassified from Accumulated other comprehensive loss into Product sales (effective portion)	**$ 171**	$ 234

Assuming current market conditions continue, a $59 million pre-tax loss is expected to be reclassified from Accumulated other comprehensive loss into Product sales to reflect the fixed prices obtained from foreign exchange hedging within the next 12 months. At December 31, 2016, all derivative contracts accounted for as cash flow hedges mature by November 2022.

The effect on the Consolidated Statement of Operations of foreign exchange contracts not designated as hedging instruments was as follows:

(dollars in millions)	Year Ended December 31, 2016	2015
Gain recognized in Other income, net	**$ 56**	$ 63

We received $249 million, $160 million, and $93 million from settlements of derivative contracts during the years ended December 31, 2016, 2015 and 2014, respectively.

NOTE 15: FAIR VALUE MEASUREMENTS

In accordance with the provisions of ASC 820, the following tables provide the valuation hierarchy classification of assets and liabilities that are carried at fair value and measured on a recurring and non-recurring basis in our Consolidated Balance Sheet as of December 31, 2016 and 2015:

2016 *(dollars in millions)*	**Total**	**Level 1**	**Level 2**	**Level 3**
Recurring fair value measurements:				
Available-for-sale securities	**$ 987**	**$ 987**	**$ —**	**$ —**
Derivative assets	**170**	**—**	**170**	**—**
Derivative liabilities	**(354)**	**—**	**(354)**	**—**

2015 *(dollars in millions)*	Total	Level 1	Level 2	Level 3
Recurring fair value measurements:				
Available-for-sale securities	$ 951	$ 951	$ —	$ —
Derivative assets	101	—	101	—
Derivative liabilities	(533)	—	(533)	—

During 2015, we recorded net gains of approximately $126 million as a result of a fair value adjustment related to the acquisition of a controlling interest in a UTC Climate, Controls & Security joint venture investment, and an impairment charge of $61 million, related to certain assets held for sale by UTC Aerospace Systems.

Valuation Techniques. Our available-for-sale securities include equity investments that are traded in active markets, either domestically or internationally and are measured at fair value using closing stock prices from active markets. Our derivative assets and liabilities include foreign exchange contracts and commodity derivatives that are measured at fair value using internal models based on observable market inputs such as forward rates, interest rates, our own credit risk and our counterparties' credit risks. As of December 31, 2016, there were no significant transfers in and out of Level 1 and Level 2.

As of December 31, 2016, there has not been any significant impact to the fair value of our derivative liabilities due to our own credit risk. Similarly, there has not been any significant adverse impact to our derivative assets based on our evaluation of our counterparties' credit risks.

The following table provides carrying amounts and fair values of financial instruments that are not carried at fair value at December 31, 2016 and 2015:

(dollars in millions)	December 31, 2016		December 31, 2015	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Long-term receivables	$ 127	$ 121	$ 122	$ 107
Customer financing notes receivable	437	420	403	403
Short-term borrowings	(600)	(600)	(926)	(926)
Long-term debt (excluding capitalized leases)	(23,280)	(25,110)	(19,476)	(21,198)
Long-term liabilities	(457)	(427)	(458)	(419)

The following table provides the valuation hierarchy classification of assets and liabilities that are not carried at fair value in our Consolidated Balance Sheet as of December 31, 2016:

(dollars in millions)	Total	Level 1	Level 2	Level 3
Long-term receivables	$ 121	$ —	$ 121	$ —
Customer financing notes receivable	420	—	420	—
Short-term borrowings	(600)	—	(522)	(78)
Long-term debt (excluding capitalized leases)	(25,110)	—	(24,906)	(204)
Long-term liabilities	(427)	—	(427)	—

NOTE 16: VARIABLE INTEREST ENTITIES

In 2012, Pratt & Whitney, Rolls-Royce plc (Rolls-Royce), MTU Aero Engines AG (MTU) and Japanese Aero Engines Corporation (JAEC), participants in the IAE International Aero Engines AG (IAE) collaboration, completed a restructuring of their interests in IAE. As a result of this transaction, Pratt & Whitney holds a 61% net interest in the collaboration and a 49.5% ownership interest in IAE. IAE's business purpose is to coordinate the design, development, manufacturing and product support of the V2500 program through involvement with the collaborators. Additionally, Pratt & Whitney, JAEC and MTU are participants in International Aero Engines, LLC (IAE LLC), whose business purpose is to coordinate the design, development, manufacturing and product support for the PW1100G-JM engine for the Airbus A320neo aircraft and the PW1400G-JM engine for the Irkut MC21 aircraft. Pratt & Whitney holds a 59% net interest in the collaboration and a 59% ownership interest in IAE LLC. IAE and IAE LLC retain limited equity with the primary economics of the programs passed to the participants. As such, we have determined that IAE and IAE LLC are variable interest entities with Pratt & Whitney the primary beneficiary. IAE and IAE LLC have, therefore, been consolidated. The carrying amounts and classification of assets and liabilities for variable interest entities in our Consolidated Balance Sheet as of December 31, 2016 and 2015 are as follows:

(dollars in millions)	2016	2015
Current assets	$ 2,722	$ 1,920
Noncurrent assets	1,334	1,102
Total assets	$ 4,056	$ 3,022
Current liabilities	$ 2,422	$ 1,931
Noncurrent liabilities	1,636	1,355
Total liabilities	$ 4,058	$ 3,286

NOTE 17: GUARANTEES

We extend a variety of financial guarantees to third parties. As of December 31, 2016 and 2015, the following financial guarantees were outstanding:

	December 31, 2016		December 31, 2015	
(dollars in millions)	Maximum Potential Payment	Carrying Amount of Liability	Maximum Potential Payment	Carrying Amount of Liability
Commercial aerospace financing arrangements (see Note 5)	$ 348	$ 14	$ 365	$ 12
Credit facilities and debt obligations (expire 2017 to 2028)	270	15	241	—
Performance guarantees	55	4	55	3

We also have obligations arising from sales of certain businesses and assets, including those from representations and warranties and related indemnities for environmental, health and safety, tax and employment matters. The maximum potential payment related to these obligations is not a specified amount as a number of the obligations do not contain financial caps. The carrying amount of liabilities related to these obligations was $171 million at December 31, 2016 and 2015. For additional information regarding the environmental indemnifications, see Note 18.

We accrue for costs associated with guarantees when it is probable that a liability has been incurred and the amount can be reasonably estimated. The most likely cost to be incurred is accrued based on an evaluation of currently available facts, and where no amount within a range of estimates is more likely, the minimum is accrued. In accordance with the Guarantees Topic of the FASB ASC we record these liabilities at fair value.

We provide service and warranty policies on our products and extend performance and operating cost guarantees beyond our normal service and warranty policies on some of our products, particularly commercial aircraft engines. In addition, we incur discretionary costs to service our products in connection with specific product performance issues. Liabilities for performance and operating cost guarantees are based upon future product performance and durability, and are largely estimated based upon historical experience. Adjustments are made to accruals as claim data and historical experience warrant. The changes in the carrying amount of service and product warranties and product performance guarantees for the years ended December 31, 2016 and 2015 are as follows:

(dollars in millions)	2016	2015
Balance as of January 1	$ 1,212	$ 1,264
Warranties and performance guarantees issued	246	291
Settlements made	(240)	(259)
Other	(19)	(84)
Balance as of December 31	$ 1,199	$ 1,212

NOTE 18: CONTINGENT LIABILITIES

Except as otherwise noted, while we are unable to predict the final outcome, based on information currently available, we do not believe that resolution of any of the following matters will have a material adverse effect upon our competitive position, results of operations, cash flows or financial condition.

Leases. We occupy space and use certain equipment under lease arrangements. Rental commitments of $2,094 million at December 31, 2016 under long-term non-cancelable operating leases are payable as follows: $462 million in 2017, $354 million in 2018, $286 million in 2019, $209 million in 2020, $145 million in 2021 and $638 million thereafter. Rent expense was $386 million in 2016, $386 million in 2015 and $434 million in 2014.

Additional information pertaining to commercial aerospace rental commitments is included in Note 5 to the Consolidated Financial Statements.

Environmental. Our operations are subject to environmental regulation by federal, state and local authorities in the United States and regulatory authorities with jurisdiction over our foreign operations. As described in Note 1 to the Consolidated Financial Statements, we have accrued for the costs of environmental remediation activities, including but not limited to investigatory, remediation, operating and maintenance costs and performance guaranties, and periodically reassess these amounts. We believe that the likelihood of incurring losses materially in excess of amounts accrued is remote. As of December 31, 2016 and 2015, we had $829 million and $837 million reserved for environmental remediation, respectively. Additional information pertaining to environmental matters is included in Note 1 to the Consolidated Financial Statements.

Government. In the ordinary course of business, the Company and its subsidiaries and our properties are subject to regulatory and governmental examinations, information gathering requests, inquiries, investigations and threatened legal actions and proceedings. For example, we are now, and believe that, in light of the current U.S. Government contracting environment, we will continue to be the subject of one or more U.S. Government investigations. Such U.S. Government investigations often take years to complete and could result in administrative, civil or criminal liabilities, including repayments, fines, treble and other damages, forfeitures, restitution or penalties, or could lead to suspension or debarment of U.S. Government contracting or of export privileges. For instance, if we or one of our business units were charged with wrongdoing as a result of any of these investigations or other government investigations (including violations of certain environmental or export laws) the U.S. Government could suspend us from bidding on or receiving awards of new U.S. Government contracts pending the completion of legal proceedings. If convicted or found liable, the U.S. Government could fine and debar us from new U.S. Government contracting for a period generally not to exceed three years. The U.S. Government also reserves the right to debar a contractor from receiving new government contracts for fraudulent, criminal or other seriously improper conduct. The U.S. Government could void any contracts found to be tainted by fraud.

Our contracts with the U.S. Government are also subject to audits. Like many defense contractors, we have received audit reports, which recommend that certain contract prices should be reduced to comply with various government regulations, including because cost or pricing data we submitted in negotiation of the contract prices or cost accounting practices may not have conformed to government regulations, or that certain payments be delayed or withheld. Some of these audit reports involved substantial amounts. We have made voluntary refunds in those cases we believe appropriate, have settled some allegations and, in some cases, continue to negotiate and/or litigate. In addition, we accrue for liabilities associated with those matters that are probable and can be reasonably estimated. The most likely settlement amount to be incurred is accrued based upon a range of estimates. Where no amount within a range of estimates is more likely, then we accrued the minimum amount.

Legal Proceedings.

Cost Accounting Standards Claim

As previously disclosed, in December 2013, a Divisional Administrative Contracting Officer of the United States Defense Contract Management Agency asserted a claim against Pratt & Whitney to recover overpayments of approximately $177 million plus interest (approximately $63 million through December 31, 2016). The claim is based on Pratt & Whitney's alleged noncompliance with cost accounting standards from January 1, 2005 to December 31, 2012, due to its method of determining the cost of collaborator parts used in the calculation of material overhead costs for government contracts. On March 18, 2014, Pratt & Whitney filed an appeal to the Armed Services Board of Contract Appeals. Pratt & Whitney's appeal is still pending and we continue to believe the government's claim is without merit.

German Tax Litigation

As previously disclosed, UTC has been involved in administrative review proceedings with the German Tax Office, which concern approximately €215 million (approximately $225 million) of tax benefits that we have claimed related to a 1998 reorganization of the corporate structure of Otis operations in Germany. Upon audit, these tax benefits were disallowed by the German Tax Office. UTC estimates interest associated with the aforementioned tax benefits is an additional approximately €118 million (approximately $123 million). On August 3, 2012, we filed suit in the local German Tax Court (Berlin-Brandenburg). In March 2016, the local German Tax Court dismissed our suit, and we have appealed this decision to the German Federal Tax Court (FTC). In 2015, UTC made tax and interest payments to German tax authorities of €275 million (approximately $300 million) in order to avoid additional interest accruals pending final resolution of this matter. In the meantime, we continue vigorously to litigate this matter.

Asbestos Matters

As previously disclosed, like many other industrial companies, we and our subsidiaries have been named as defendants in lawsuits alleging personal injury as a result of exposure to asbestos integrated into certain of our products or business premises. While we have never manufactured asbestos and no longer incorporate it in any currently-manufactured products, certain of our historical products, like those of many other manufacturers, have contained components incorporating asbestos. A substantial majority of these asbestos-related claims have been dismissed without payment or were covered in full or in part by insurance or other forms of indemnity. Additional cases were litigated and settled without any insurance reimbursement. The amounts involved in asbestos related claims were not material individually or in the aggregate in any year.

Our estimated total liability to resolve all pending and unasserted potential future asbestos claims through 2059 is approximately $374 million and is principally recorded in Other long-term liabilities on our Consolidated Balance Sheet as of December 31, 2016. This amount is on a pre-tax basis, not discounted, and excludes the Company's legal fees to defend the asbestos claims (which will continue to be expensed by the Company as they are incurred). In addition, the Company has an insurance recovery receivable for probable asbestos related recoveries of approximately $124 million, which is included primarily in Other assets on our Consolidated Balance Sheet as of December 31, 2016.

The amounts recorded by UTC for asbestos-related liabilities and insurance recoveries are based on currently available information and assumptions that we believe are reasonable. Our actual liabilities or insurance recoveries could be higher or lower than those recorded if actual results vary significantly from the assumptions. Key variables in these assumptions include the number and type of new claims to be filed each year, the outcomes or resolution of such claims, the average cost of resolution of each new claim, the amount of insurance available, allocation methodologies, the contractual terms with each insurer with whom we have reached settlements, the resolution of coverage issues with other excess insurance carriers with whom we have not yet achieved settlements, and the solvency risk with respect to our insurance carriers. Other factors that may affect our future liability include uncertainties surrounding the litigation process from jurisdiction to jurisdiction and from case to case, legal rulings that may be made by state and federal courts, and the passage of state or federal legislation. At the end of each year, the Company will evaluate all of these factors and, with input from an outside actuarial expert, make any necessary adjustments to both our estimated asbestos liabilities and insurance recoveries.

Other.

As described in Note 17 to the Consolidated Financial Statements, we extend performance and operating cost guarantees beyond our normal warranty and service policies for extended periods on some of our products. We have accrued our estimate of the liability that may result under these guarantees and for service costs that are probable and can be reasonably estimated.

We also have other commitments and contingent liabilities related to legal proceedings, self-insurance programs and matters arising out of the normal course of business. We accrue contingencies based upon a range of possible outcomes. If no amount within this range is a better estimate than any other, then we accrue the minimum amount.

In the ordinary course of business, the Company and its subsidiaries are also routinely defendants in, parties to or otherwise subject to many pending and threatened legal actions, claims, disputes and proceedings. These matters are often based on alleged violations of contract, product liability, warranty, regulatory, environmental, health and safety, employment, intellectual property, tax and other laws. In some of these proceedings, claims for substantial monetary damages are asserted against the Company and its subsidiaries and could result in fines, penalties, compensatory or treble damages or non-monetary relief. We do not believe that these matters will have a material adverse effect upon our competitive position, results of operations, cash flows or financial condition.

NOTE 19: SEGMENT FINANCIAL DATA

Our operations for the periods presented herein are classified into four principal segments. The segments are generally determined based on the management structure of the businesses and the grouping of similar operating companies, where each management organization has general operating autonomy over diversified products and services.

As discussed in Note 3, on November 6, 2015, we completed the sale of Sikorsky to Lockheed Martin Corp. The tables below exclude amounts attributable to Sikorsky, which have been reclassified to Discontinued Operations in the accompanying Consolidated Statement of Operations and to Assets held for sale in the accompanying Consolidated Balance Sheet for all periods presented.

Otis products include elevators, escalators, moving walkways and service sold to customers in the commercial and residential property industries around the world.

UTC Climate, Controls & Security products and related services include HVAC and refrigeration systems, building controls and automation, fire and special hazard suppression systems and equipment, security monitoring and rapid response systems, provided to a diversified international customer base principally in the industrial, commercial and residential property and commercial transportation sectors.

Pratt & Whitney products include commercial, military, business jet and general aviation aircraft engines, parts and services sold to a diversified customer base, including international and domestic commercial airlines and aircraft leasing companies, aircraft manufacturers, and U.S. and foreign governments. Pratt & Whitney also provides product support and a full range of overhaul, repair and fleet management services.

UTC Aerospace Systems provides aerospace products and aftermarket services for commercial, military, business jet and general aviation customers worldwide. Products include electric power generation, power management and distribution systems, air data and flight sensing and management systems, engine control systems, electric systems, intelligence, surveillance and reconnaissance systems, engine components, environmental control systems, fire and ice detection and protection systems, propeller systems, aircraft aerostructures including engine nacelles, thrust reversers, and mounting pylons, interior and exterior aircraft lighting, aircraft seating and cargo systems, actuation systems, landing systems, including landing gears, wheels and brakes, and space products and subsystems. Aftermarket services include spare parts, overhaul and repair, engineering and technical support and fleet management solutions.

We have reported our financial and operational results for the periods presented herein under the four principal segments noted above, consistent with how we have reviewed our business operations for decision-making purposes, resource allocation and performance assessment during 2016.

Segment Information. Total sales by segment include intersegment sales, which are generally made at prices approximating those that the selling entity is able to obtain on external sales. Segment information for the years ended December 31 is as follows:

	Net Sales			Operating Profits		
(dollars in millions)	**2016**	2015	2014	**2016**	2015	2014
Otis	**$ 11,893**	$ 11,980	$ 12,982	**$ 2,147**	$ 2,338	$ 2,640
UTC Climate, Controls & Security	**16,851**	16,707	16,823	**2,956**	2,936	2,782
Pratt & Whitney	**14,894**	14,082	14,508	**1,545**	861	2,000
UTC Aerospace Systems	**14,465**	14,094	14,215	**2,298**	1,888	2,355
Total segment	**58,103**	56,863	58,528	**8,946**	8,023	9,777
Eliminations and other	**(859)**	(765)	(628)	**(368)**	(268)	304
General corporate expenses	**—**	—	—	**(406)**	(464)	(488)
Consolidated	**$ 57,244**	$ 56,098	$ 57,900	**$ 8,172**	$ 7,291	$ 9,593

	Total Assets			Capital Expenditures			Depreciation & Amortization		
(dollars in millions)	**2016**	2015	2014	**2016**	2015	2014	**2016**	2015	2014
Otis	**$ 8,867**	$ 8,846	$ 9,313	**$ 94**	$ 83	$ 87	**$ 171**	$ 176	$ 209
UTC Climate, Controls & Security	**21,787**	21,287	21,217	**340**	261	228	**354**	337	349
Pratt & Whitney	**22,971**	20,336	18,143	**725**	692	692	**550**	476	390
UTC Aerospace Systems	**34,093**	34,736	35,034	**452**	537	533	**807**	796	807
Total segment	**87,718**	85,205	83,707	**1,611**	1,573	1,540	**1,882**	1,785	1,755
Eliminations and other	**1,988**	2,279	2,631	**88**	79	54	**80**	78	65
Consolidated	**$ 89,706**	$ 87,484	$ 86,338	**$ 1,699**	$ 1,652	$ 1,594	**$ 1,962**	$ 1,863	$ 1,820

Geographic External Sales and Operating Profit. Geographic external sales and operating profits are attributed to the geographic regions based on their location of origin. U.S. external sales include export sales to commercial customers outside the U.S. and sales to the U.S. Government, commercial and affiliated customers, which are known to be for resale to customers outside the U.S. Long-lived assets are net fixed assets attributed to the specific geographic regions.

	External Net Sales			Operating Profits			Long-Lived Assets		
(dollars in millions)	**2016**	2015	2014	**2016**	2015	2014	**2016**	2015	2014
United States Operations	**$ 32,335**	$ 30,989	$ 30,814	**$ 4,566**	$ 4,391	$ 5,067	**$ 4,822**	$ 4,517	$ 4,211
International Operations									
Europe	**11,151**	10,945	12,587	**1,933**	1,882	2,238	**1,538**	1,525	1,577
Asia Pacific	**8,260**	8,425	8,746	**1,484**	1,641	1,712	**999**	994	995
Other	**5,479**	5,584	5,511	**963**	109	760	**1,325**	1,273	1,379
Eliminations and other	**19**	155	242	**(774)**	(732)	(184)	**474**	423	430
Consolidated	**$ 57,244**	$ 56,098	$ 57,900	**$ 8,172**	$ 7,291	$ 9,593	**$ 9,158**	$ 8,732	$ 8,592

Sales from U.S. operations include export sales as follows:

(dollars in millions)	**2016**	2015	2014
Europe	**$ 5,065**	$ 4,366	$ 4,137
Asia Pacific	**3,449**	2,902	3,469
Other	**2,313**	2,473	2,670
	$ 10,827	$ 9,741	$ 10,276

Major Customers. Net Sales include sales under prime contracts and subcontracts to the U.S. Government, primarily related to Pratt & Whitney and UTC Aerospace Systems products, as follows:

(dollars in millions)	**2016**	2015	2014
Pratt & Whitney	**$ 3,187**	$ 2,945	$ 3,126
UTC Aerospace Systems	**2,301**	2,409	2,459
Other	**138**	276	294
	$ 5,626	$ 5,630	$ 5,879

Net sales by Sikorsky under prime contracts and subcontracts to the U.S. Government of approximately $3.1 billion and $3.8 billion have been reclassified to Discontinued Operations in our Consolidated Statement of Operations for the years ended December 31, 2015 and 2014, respectively.

Net sales to Airbus, primarily related to Pratt & Whitney and UTC Aerospace Systems products, were approximately $7,688 million, $7,624 million and $7,757 million for the years ended December 31, 2016, 2015 and 2014, respectively.

SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

(dollars in millions, except per share amounts)	2016 Quarters First	Second	Third	Fourth	2015 Quarters First	Second	Third	Fourth
Net Sales	**$ 13,357**	**$ 14,874**	**$ 14,354**	**$ 14,659**	$ 13,320	$ 14,690	$ 13,788	$ 14,300
Gross margin	**3,703**	**4,133**	**4,012**	**3,936**	3,814	4,218	3,988	3,647
Net income attributable to common shareowners	**1,183**	**1,379**	**1,480**	**1,013**	1,426	1,542	1,362	3,278
Earnings per share of Common Stock:								
Basic - net income	**$ 1.43**	**$ 1.67**	**$ 1.80**	**$ 1.26**	$ 1.60	$ 1.76	$ 1.55	$ 3.86
Diluted - net income	**$ 1.42**	**$ 1.65**	**$ 1.78**	**$ 1.25**	$ 1.58	$ 1.73	$ 1.54	$ 3.86

COMPARATIVE STOCK DATA (UNAUDITED)

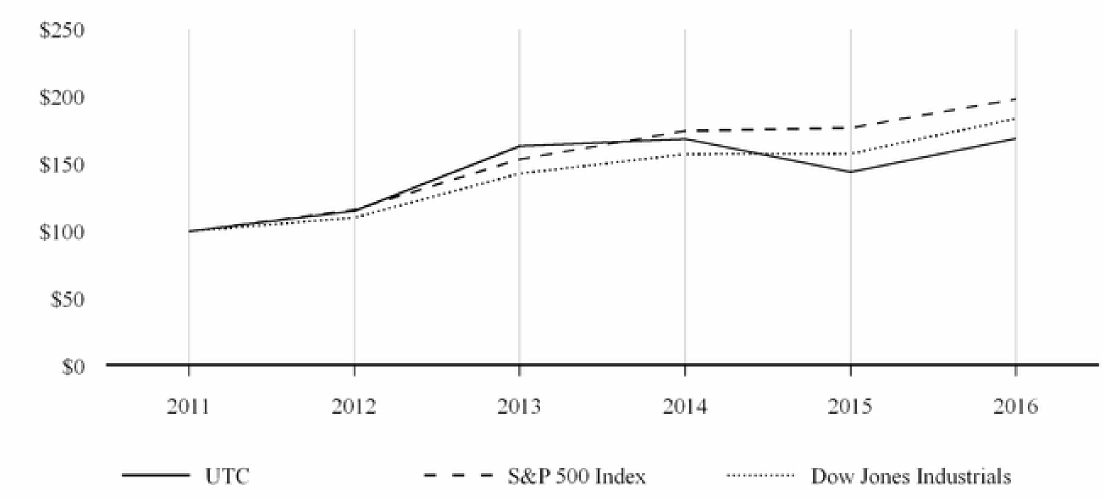
(common stock)	2016 High	Low	Dividend	2015 High	Low	Dividend
First quarter	**$ 100.25**	**$ 84.66**	**$ 0.64**	$ 124.11	$ 111.52	$ 0.64
Second quarter	**$ 105.89**	**$ 97.21**	**$ 0.66**	$ 119.14	$ 110.93	$ 0.64
Third quarter	**$ 109.69**	**$ 100.10**	**$ 0.66**	$ 111.58	$ 86.82	$ 0.64
Fourth quarter	**$ 110.98**	**$ 98.67**	**$ 0.66**	$ 100.80	$ 88.36	$ 0.64

Our common stock is listed on the New York Stock Exchange. The high and low prices are based on the Composite Tape of the New York Stock Exchange. There were approximately 19,126 registered shareholders at January 31, 2017.

PERFORMANCE GRAPH (UNAUDITED)

The following graph presents the cumulative total shareholder return for the five years ending December 31, 2016 for our common stock, as compared to the Standard & Poor's 500 Stock Index and to the Dow Jones 30 Industrial Average. Our common stock price is a component of both indices. These figures assume that all dividends paid over the five-year period were reinvested, and that the starting value of each index and the investment in common stock was $100.00 on December 31, 2011.

COMPARISON OF CUMULATIVE FIVE YEAR TOTAL RETURN



	December					
	2011	2012	2013	2014	2015	**2016**
United Technologies Corporation	$ 100.00	$ 115.10	$ 163.30	$ 168.50	$ 144.23	**$ 168.81**
S&P 500 Index	$ 100.00	$ 116.00	$ 153.57	$ 174.60	$ 177.01	**$ 198.18**
Dow Jones Industrial Average	$ 100.00	$ 110.24	$ 142.93	$ 157.28	$ 157.61	**$ 183.61**

United Technologies Corporation **Exhibit 21**
Subsidiary and Affiliate Listing
December 31, 2016

Entity Name	**Place of Incorporation**
Allyn Holdings, Inc.	Delaware
AMI Industries, Inc.	Colorado
Arabian Air Conditioning Company	Saudi Arabia
Augusta (Gibraltar) Holdings I Limited	Gibraltar
Augusta (Gibraltar) Holdings II S.C.S.	Grand-Duchy of Luxembourg
Automated Logic Corporation	Georgia
Auxiliary Power International Corporation	Delaware
Beesail Limited	England
Belgium Parkview BVBA	Belgium
Berkeley Luxembourg S.à r.l.	Grand-Duchy of Luxembourg
Blades Technology International, Inc.	Delaware
Blades Technology Ltd.	Israel
Bridgecam (Ireland) Limited	Ireland
Cambridge Luxembourg S.à r.l.	Grand-Duchy of Luxembourg
Caricor Ltd.	Delaware
Carrier Asia Limited	Hong Kong
Carrier Commercial Refrigeration, Inc.	Delaware
Carrier Corporation	Delaware
Carrier Enterprise, LLC	Delaware
Carrier HVACR Investments B.V.	Netherlands
Carrier Mexico S.A. de C.V.	Mexico
Carrier Technologies ULC	Alberta
Ceesail Limited	England
Chubb Fire & Security Limited	England
Chubb Fire & Security Pty Ltd	Australia
Chubb Fire Limited	England
Chubb Group Limited	England
Chubb Group Security Limited	England
Chubb International (Netherlands) BV	Netherlands
Chubb International Holdings Limited	England
Chubb Limited	England
Chubb Nederland B.V.	Netherlands
Chubb Systems Limited	United Kingdom
Commonwealth Luxembourg Holdings S.à r.l.	Grand-Duchy of Luxembourg
CTU Of Delaware, Inc.	Delaware
Delavan Inc.	Delaware
Detector Electronics Corporation	Minnesota
Devonshire Switzerland Holdings AG	Switzerland
Elevadores Otis Ltda.	Brazil
Empresas Carrier, S. De R.L. De C.V.	Mexico

United Technologies Corporation
Subsidiary and Affiliate Listing
December 31, 2016

Entity Name	Place of Incorporation
Fyrnetics (Hong Kong) Limited	Hong Kong
Goodrich Aerospace Canada Ltd	Ontario
Goodrich Aftermarket Services Limited	United Kingdom
Goodrich Control Systems	United Kingdom
Goodrich Corporation	New York
Goodrich Inertial Limited	United Kingdom
Goodrich Limited	United Kingdom
Goodrich Systems Limited	United Kingdom
Goodrich XCH Luxembourg B.V./S.a.r.l. (Dual Dutch/Lux Citizenship)	Netherlands
Gulf Security Technology Company Limited	China
Hamilton Sundstrand Aviation Services, Inc.	Delaware
Hamilton Sundstrand Corporation	Delaware
Hamilton Sundstrand Holdings, Inc.	Delaware
Hamilton Sundstrand International Holdings (Luxembourg) S.à r.l.	Grand-Duchy of Luxembourg
HEJ Holding, Inc.	Delaware
IAE International Aero Engines AG	Switzerland
JMS I Corporation	Delaware
Kidde Fire Protection Inc.	Delaware
Kidde Graviner Limited	England
Kidde Holdings Limited	England
Kidde International Limited	England
Kidde Products Limited	England
Kidde Technologies Inc.*	Delaware
Kidde UK	England
Kidde US Holdings Inc.	Delaware
Latin American Holding, Inc.	Delaware
Menasco Aerosystems Inc.	Delaware
Netherlands Parkview Coöperatief U.A.	Netherlands
Nippon Otis Elevator Company	Japan
Noresco, LLC	Delaware
NSI, Inc.	Delaware
Otis Electric Elevator Company Limited	China
Otis Elevator (China) Company Limited	China
Otis Elevator (China) Investment Company Limited	China
Otis Elevator Company	New Jersey
Otis Elevator Company (India) Limited	India
Otis Elevator Korea	Korea, Republic of
Otis Far East Holdings Limited	Hong Kong
Otis Holdings GmbH & Co. OHG	Germany
Otis International Holdings GmbH	Germany

United Technologies Corporation
Subsidiary and Affiliate Listing
December 31, 2016

Entity Name	Place of Incorporation
Otis Investments Limited	England
Otis Limited	England
Otis Pacific Holdings B.V.	Netherlands
Otis S.C.S.	France
Parkview Treasury Services (UK) Limited	United Kingdom
Pratt & Whitney Aero Engines International GmbH	Switzerland
Pratt & Whitney Canada Corp.	Nova Scotia
Pratt & Whitney Canada Holdings Corp.	Nova Scotia
Pratt & Whitney Canada Leasing, Limited Partnership	Québec
Pratt & Whitney Component Solutions, Inc.	Michigan
Pratt & Whitney Compressor Airfoil Holdings, Inc.	Delaware
Pratt & Whitney Engine Leasing, LLC	Delaware
Pratt & Whitney Holdings LLC	Cayman Islands
Pratt & Whitney Rzeszow S.A.	Poland
Pratt Aero Limited Partnership	Nova Scotia
Riello Group S.P.A	Italy
Riello S.P.A., Italy	Italy
Rohr, Inc.	Delaware
Rosemount Aerospace Inc.	Delaware
Sensitech Inc.	Delaware
SICLI Holding SAS	France
Silver Lake Holdings S.à r.l.	Grand-Duchy of Luxembourg
Simmonds Precision Products, Inc.	New York
Sirius (Korea) Limited	England
Trenton Luxembourg S.à r.l.	Grand-Duchy of Luxembourg
Trumbull Holdings SCS	France
United Technologies Australia Holdings Limited	Australia
United Technologies Canada, Ltd.	New Brunswick
United Technologies Corporation [DE]	Delaware
United Technologies Electronic Controls, Inc.	Delaware
United Technologies Far East Limited	Hong Kong
United Technologies Finance (U.K.) Limited	England
United Technologies France SAS	France
United Technologies Holding GmbH	Germany
United Technologies Holdings Italy Srl	Italy
United Technologies Holdings Limited	England
United Technologies Holdings SAS	France
United Technologies Intercompany Lending Ireland Designated Activity Company	Ireland
United Technologies International Corporation	Delaware
United Technologies International Corporation-Asia Private Limited	Singapore

United Technologies Corporation
Subsidiary and Affiliate Listing
December 31, 2016

Entity Name	Place of Incorporation
United Technologies International SAS	France
United Technologies Luxembourg S.à r.l.	Grand-Duchy of Luxembourg
United Technologies Paris SNC	France
United Technologies South Asia Pacific Pte. Ltd	Singapore
UT Finance Corporation	Delaware
UT Luxembourg Holding II S.à r.l.	Grand-Duchy of Luxembourg
UT Park View, Inc.	Delaware
UTC (US) LLC	Delaware
UTC Australia Commercial Holdings Pty Ltd	Australia
UTC Canada Corporation	New Brunswick
UTC Corporation	Delaware
UTC Fire & Security Americas Corporation, Inc.	Delaware
UTC Fire & Security Canada Inc.	Nova Scotia
UTC Fire & Security Corporation	Delaware
UTC Fire & Security Luxembourg S.a r.l.	Grand-Duchy of Luxembourg
UTC Investments Australia Pty Limited	Australia
UTCL Holdings, Limited	New Brunswick
UTCL Investments B.V.	Netherlands
UTX Holdings S.C.S.	France
Walter Kidde Portable Equipment Inc.	Delaware
Zardoya Otis, S.A.	Spain

* Kidde Technologies Inc. also conducts business as Kidde Aerospace & Defense, Fenwal Safety Systems and Kidde Dual Spectrum.

Other subsidiaries of the Registrant have been omitted from this listing since, considered in the aggregate as a single subsidiary, they would not constitute a significant subsidiary, as defined by Rule 1-02 of Regulation S-K.

Exhibit 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-3 (No. 333-211035) and in the Registration Statements on Form S-8 (Nos. 333-207193, 333-197704, 333-183123, 333-177520, 333-175781, 333-150643, 333-125293, 333-110020, 333-100724, 333-100723, 333-100718 and 033-51385) of United Technologies Corporation of our report dated February 9, 2017 relating to the consolidated financial statements and the effectiveness of internal control over financial reporting, which appears in the Annual Report to Shareowners, which is incorporated in this Annual Report on Form 10-K. We also consent to the incorporation by reference of our report dated February 9, 2017 relating to the financial statement schedules, which appears on page S-I of this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Hartford, Connecticut
February 9, 2017

Exhibit 24

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

The undersigned, as a member of the Board of Directors, or as an officer of UNITED TECHNOLOGIES CORPORATION, a Delaware corporation (the "Corporation"), or as a member of a committee of said Board, or in all of said capacities, hereby constitutes and appoints CHARLES D. GILL, PETER J. GRABER-LIPPERMAN and AKHIL JOHRI, or any one of them, his or her true and lawful attorneys and agents to do any and all acts and things and execute any and all instruments which the said attorneys and agents may deem necessary or advisable to enable the Corporation to comply with the Securities Exchange Act of 1934 and any rules and regulations and requirements of the Securities and Exchange Commission in respect thereof in connection with the filing of the Annual Report of the Corporation on Form 10-K for the fiscal year ended December 31, 2016, including specifically, but without limiting the generality of the foregoing, the power and authority to sign the name of the undersigned, in the capacities aforesaid or in any other capacity, to such Form 10-K Annual Report filed or to be filed with the Securities and Exchange Commission, and any and all amendments to the said Form 10-K Annual Report, and any and all instruments and documents filed as a part of or in connection with the said Form 10-K Annual Report or any amendments thereto; hereby ratifying and confirming all that the said attorneys and agents, or any one of them, have done, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ LLOYD J. AUSTIN III

Lloyd J. Austin III

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

The undersigned, as a member of the Board of Directors, or as an officer of UNITED TECHNOLOGIES CORPORATION, a Delaware corporation (the "Corporation"), or as a member of a committee of said Board, or in all of said capacities, hereby constitutes and appoints CHARLES D. GILL, PETER J. GRABER-LIPPERMAN and AKHIL JOHRI, or any one of them, his or her true and lawful attorneys and agents to do any and all acts and things and execute any and all instruments which the said attorneys and agents may deem necessary or advisable to enable the Corporation to comply with the Securities Exchange Act of 1934 and any rules and regulations and requirements of the Securities and Exchange Commission in respect thereof in connection with the filing of the Annual Report of the Corporation on Form 10-K for the fiscal year ended December 31, 2016, including specifically, but without limiting the generality of the foregoing, the power and authority to sign the name of the undersigned, in the capacities aforesaid or in any other capacity, to such Form 10-K Annual Report filed or to be filed with the Securities and Exchange Commission, and any and all amendments to the said Form 10-K Annual Report, and any and all instruments and documents filed as a part of or in connection with the said Form 10-K Annual Report or any amendments thereto; hereby ratifying and confirming all that the said attorneys and agents, or any one of them, have done, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ DIANE M. BRYANT

Diane M. Bryant

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

The undersigned, as a member of the Board of Directors, or as an officer of UNITED TECHNOLOGIES CORPORATION, a Delaware corporation (the "Corporation"), or as a member of a committee of said Board, or in all of said capacities, hereby constitutes and appoints CHARLES D. GILL, PETER J. GRABER-LIPPERMAN and AKHIL JOHRI, or any one of them, his or her true and lawful attorneys and agents to do any and all acts and things and execute any and all instruments which the said attorneys and agents may deem necessary or advisable to enable the Corporation to comply with the Securities Exchange Act of 1934 and any rules and regulations and requirements of the Securities and Exchange Commission in respect thereof in connection with the filing of the Annual Report of the Corporation on Form 10-K for the fiscal year ended December 31, 2016, including specifically, but without limiting the generality of the foregoing, the power and authority to sign the name of the undersigned, in the capacities aforesaid or in any other capacity, to such Form 10-K Annual Report filed or to be filed with the Securities and Exchange Commission, and any and all amendments to the said Form 10-K Annual Report, and any and all instruments and documents filed as a part of or in connection with the said Form 10-K Annual Report or any amendments thereto; hereby ratifying and confirming all that the said attorneys and agents, or any one of them, have done, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ JOHN V. FARACI

John V. Faraci

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

The undersigned, as a member of the Board of Directors, or as an officer of UNITED TECHNOLOGIES CORPORATION, a Delaware corporation (the "Corporation"), or as a member of a committee of said Board, or in all of said capacities, hereby constitutes and appoints CHARLES D. GILL, PETER J. GRABER-LIPPERMAN and AKHIL JOHRI, or any one of them, his or her true and lawful attorneys and agents to do any and all acts and things and execute any and all instruments which the said attorneys and agents may deem necessary or advisable to enable the Corporation to comply with the Securities Exchange Act of 1934 and any rules and regulations and requirements of the Securities and Exchange Commission in respect thereof in connection with the filing of the Annual Report of the Corporation on Form 10-K for the fiscal year ended December 31, 2016, including specifically, but without limiting the generality of the foregoing, the power and authority to sign the name of the undersigned, in the capacities aforesaid or in any other capacity, to such Form 10-K Annual Report filed or to be filed with the Securities and Exchange Commission, and any and all amendments to the said Form 10-K Annual Report, and any and all instruments and documents filed as a part of or in connection with the said Form 10-K Annual Report or any amendments thereto; hereby ratifying and confirming all that the said attorneys and agents, or any one of them, have done, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ JEAN-PIERRE GARNIER

Jean-Pierre Garnier

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

The undersigned, as a member of the Board of Directors, or as an officer of UNITED TECHNOLOGIES CORPORATION, a Delaware corporation (the "Corporation"), or as a member of a committee of said Board, or in all of said capacities, hereby constitutes and appoints CHARLES D. GILL, PETER J. GRABER-LIPPERMAN and AKHIL JOHRI, or any one of them, his or her true and lawful attorneys and agents to do any and all acts and things and execute any and all instruments which the said attorneys and agents may deem necessary or advisable to enable the Corporation to comply with the Securities Exchange Act of 1934 and any rules and regulations and requirements of the Securities and Exchange Commission in respect thereof in connection with the filing of the Annual Report of the Corporation on Form 10-K for the fiscal year ended December 31, 2016, including specifically, but without limiting the generality of the foregoing, the power and authority to sign the name of the undersigned, in the capacities aforesaid or in any other capacity, to such Form 10-K Annual Report filed or to be filed with the Securities and Exchange Commission, and any and all amendments to the said Form 10-K Annual Report, and any and all instruments and documents filed as a part of or in connection with the said Form 10-K Annual Report or any amendments thereto; hereby ratifying and confirming all that the said attorneys and agents, or any one of them, have done, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ EDWARD A. KANGAS

Edward A. Kangas

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

The undersigned, as a member of the Board of Directors, or as an officer of UNITED TECHNOLOGIES CORPORATION, a Delaware corporation (the "Corporation"), or as a member of a committee of said Board, or in all of said capacities, hereby constitutes and appoints CHARLES D. GILL, PETER J. GRABER-LIPPERMAN and AKHIL JOHRI, or any one of them, his or her true and lawful attorneys and agents to do any and all acts and things and execute any and all instruments which the said attorneys and agents may deem necessary or advisable to enable the Corporation to comply with the Securities Exchange Act of 1934 and any rules and regulations and requirements of the Securities and Exchange Commission in respect thereof in connection with the filing of the Annual Report of the Corporation on Form 10-K for the fiscal year ended December 31, 2016, including specifically, but without limiting the generality of the foregoing, the power and authority to sign the name of the undersigned, in the capacities aforesaid or in any other capacity, to such Form 10-K Annual Report filed or to be filed with the Securities and Exchange Commission, and any and all amendments to the said Form 10-K Annual Report, and any and all instruments and documents filed as a part of or in connection with the said Form 10-K Annual Report or any amendments thereto; hereby ratifying and confirming all that the said attorneys and agents, or any one of them, have done, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ ELLEN J. KULLMAN

Ellen J. Kullman

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

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IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ MARSHALL O. LARSEN

Marshall O. Larsen

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

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IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ HAROLD W. MCGRAW III

Harold W. McGraw III

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

The undersigned, as a member of the Board of Directors, or as an officer of UNITED TECHNOLOGIES CORPORATION, a Delaware corporation (the "Corporation"), or as a member of a committee of said Board, or in all of said capacities, hereby constitutes and appoints CHARLES D. GILL, PETER J. GRABER-LIPPERMAN and AKHIL JOHRI, or any one of them, his or her true and lawful attorneys and agents to do any and all acts and things and execute any and all instruments which the said attorneys and agents may deem necessary or advisable to enable the Corporation to comply with the Securities Exchange Act of 1934 and any rules and regulations and requirements of the Securities and Exchange Commission in respect thereof in connection with the filing of the Annual Report of the Corporation on Form 10-K for the fiscal year ended December 31, 2016, including specifically, but without limiting the generality of the foregoing, the power and authority to sign the name of the undersigned, in the capacities aforesaid or in any other capacity, to such Form 10-K Annual Report filed or to be filed with the Securities and Exchange Commission, and any and all amendments to the said Form 10-K Annual Report, and any and all instruments and documents filed as a part of or in connection with the said Form 10-K Annual Report or any amendments thereto; hereby ratifying and confirming all that the said attorneys and agents, or any one of them, have done, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ RICHARD B. MYERS

Richard B. Myers

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

The undersigned, as a member of the Board of Directors, or as an officer of UNITED TECHNOLOGIES CORPORATION, a Delaware corporation (the "Corporation"), or as a member of a committee of said Board, or in all of said capacities, hereby constitutes and appoints CHARLES D. GILL, PETER J. GRABER-LIPPERMAN and AKHIL JOHRI, or any one of them, his or her true and lawful attorneys and agents to do any and all acts and things and execute any and all instruments which the said attorneys and agents may deem necessary or advisable to enable the Corporation to comply with the Securities Exchange Act of 1934 and any rules and regulations and requirements of the Securities and Exchange Commission in respect thereof in connection with the filing of the Annual Report of the Corporation on Form 10-K for the fiscal year ended December 31, 2016, including specifically, but without limiting the generality of the foregoing, the power and authority to sign the name of the undersigned, in the capacities aforesaid or in any other capacity, to such Form 10-K Annual Report filed or to be filed with the Securities and Exchange Commission, and any and all amendments to the said Form 10-K Annual Report, and any and all instruments and documents filed as a part of or in connection with the said Form 10-K Annual Report or any amendments thereto; hereby ratifying and confirming all that the said attorneys and agents, or any one of them, have done, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ FREDRIC G. REYNOLDS

Fredric G. Reynolds

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

The undersigned, as a member of the Board of Directors, or as an officer of UNITED TECHNOLOGIES CORPORATION, a Delaware corporation (the "Corporation"), or as a member of a committee of said Board, or in all of said capacities, hereby constitutes and appoints CHARLES D. GILL, PETER J. GRABER-LIPPERMAN and AKHIL JOHRI, or any one of them, his or her true and lawful attorneys and agents to do any and all acts and things and execute any and all instruments which the said attorneys and agents may deem necessary or advisable to enable the Corporation to comply with the Securities Exchange Act of 1934 and any rules and regulations and requirements of the Securities and Exchange Commission in respect thereof in connection with the filing of the Annual Report of the Corporation on Form 10-K for the fiscal year ended December 31, 2016, including specifically, but without limiting the generality of the foregoing, the power and authority to sign the name of the undersigned, in the capacities aforesaid or in any other capacity, to such Form 10-K Annual Report filed or to be filed with the Securities and Exchange Commission, and any and all amendments to the said Form 10-K Annual Report, and any and all instruments and documents filed as a part of or in connection with the said Form 10-K Annual Report or any amendments thereto; hereby ratifying and confirming all that the said attorneys and agents, or any one of them, have done, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ BRIAN C. ROGERS

Brian C. Rogers

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

The undersigned, as a member of the Board of Directors, or as an officer of UNITED TECHNOLOGIES CORPORATION, a Delaware corporation (the "Corporation"), or as a member of a committee of said Board, or in all of said capacities, hereby constitutes and appoints CHARLES D. GILL, PETER J. GRABER-LIPPERMAN and AKHIL JOHRI, or any one of them, his or her true and lawful attorneys and agents to do any and all acts and things and execute any and all instruments which the said attorneys and agents may deem necessary or advisable to enable the Corporation to comply with the Securities Exchange Act of 1934 and any rules and regulations and requirements of the Securities and Exchange Commission in respect thereof in connection with the filing of the Annual Report of the Corporation on Form 10-K for the fiscal year ended December 31, 2016, including specifically, but without limiting the generality of the foregoing, the power and authority to sign the name of the undersigned, in the capacities aforesaid or in any other capacity, to such Form 10-K Annual Report filed or to be filed with the Securities and Exchange Commission, and any and all amendments to the said Form 10-K Annual Report, and any and all instruments and documents filed as a part of or in connection with the said Form 10-K Annual Report or any amendments thereto; hereby ratifying and confirming all that the said attorneys and agents, or any one of them, have done, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ H. PATRICK SWYGERT

H. Patrick Swygert

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

The undersigned, as a member of the Board of Directors, or as an officer of UNITED TECHNOLOGIES CORPORATION, a Delaware corporation (the "Corporation"), or as a member of a committee of said Board, or in all of said capacities, hereby constitutes and appoints CHARLES D. GILL, PETER J. GRABER-LIPPERMAN and AKHIL JOHRI, or any one of them, his or her true and lawful attorneys and agents to do any and all acts and things and execute any and all instruments which the said attorneys and agents may deem necessary or advisable to enable the Corporation to comply with the Securities Exchange Act of 1934 and any rules and regulations and requirements of the Securities and Exchange Commission in respect thereof in connection with the filing of the Annual Report of the Corporation on Form 10-K for the fiscal year ended December 31, 2016, including specifically, but without limiting the generality of the foregoing, the power and authority to sign the name of the undersigned, in the capacities aforesaid or in any other capacity, to such Form 10-K Annual Report filed or to be filed with the Securities and Exchange Commission, and any and all amendments to the said Form 10-K Annual Report, and any and all instruments and documents filed as a part of or in connection with the said Form 10-K Annual Report or any amendments thereto; hereby ratifying and confirming all that the said attorneys and agents, or any one of them, have done, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ ANDRÉ VILLENEUVE

André Villeneuve

UNITED TECHNOLOGIES CORPORATION
Power of Attorney

The undersigned, as a member of the Board of Directors, or as an officer of UNITED TECHNOLOGIES CORPORATION, a Delaware corporation (the "Corporation"), or as a member of a committee of said Board, or in all of said capacities, hereby constitutes and appoints CHARLES D. GILL, PETER J. GRABER-LIPPERMAN and AKHIL JOHRI, or any one of them, his or her true and lawful attorneys and agents to do any and all acts and things and execute any and all instruments which the said attorneys and agents may deem necessary or advisable to enable the Corporation to comply with the Securities Exchange Act of 1934 and any rules and regulations and requirements of the Securities and Exchange Commission in respect thereof in connection with the filing of the Annual Report of the Corporation on Form 10-K for the fiscal year ended December 31, 2016, including specifically, but without limiting the generality of the foregoing, the power and authority to sign the name of the undersigned, in the capacities aforesaid or in any other capacity, to such Form 10-K Annual Report filed or to be filed with the Securities and Exchange Commission, and any and all amendments to the said Form 10-K Annual Report, and any and all instruments and documents filed as a part of or in connection with the said Form 10-K Annual Report or any amendments thereto; hereby ratifying and confirming all that the said attorneys and agents, or any one of them, have done, shall do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has signed this Power of Attorney this 6th day of February, 2017.

/s/ CHRISTINE TODD WHITMAN

Christine Todd Whitman

Exhibit 31.1

CERTIFICATION

I, Gregory J. Hayes, certify that:

1. I have reviewed this annual report on Form 10-K of United Technologies Corporation;

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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: February 9, 2017

/s/ GREGORY J. HAYES

Gregory J. Hayes

Chairman, President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Akhil Johri, certify that:

1. I have reviewed this annual report on Form 10-K of United Technologies Corporation;

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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: February 9, 2017

/s/ AKHIL JOHRI

Akhil Johri

Executive Vice President & Chief Financial Officer

Exhibit 31.3

CERTIFICATION

I, Robert J. Bailey, certify that:

1. I have reviewed this annual report on Form 10-K of United Technologies Corporation;

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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: February 9, 2017

/s/ ROBERT J. BAILEY

Robert J. Bailey

Corporate Vice President, Controller

Exhibit 32

Section 1350 Certifications
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of United Technologies Corporation, a Delaware corporation (the "Corporation"), does hereby certify that:

The Annual Report on Form 10-K for the year ended December 31, 2016 (the "Form 10-K") of the Corporation fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Date:	February 9, 2017	/s/ GREGORY J. HAYES
		Gregory J. Hayes
		Chairman, President and Chief Executive Officer
Date:	February 9, 2017	/s/ AKHIL JOHRI
		Akhil Johri
		Executive Vice President & Chief Financial Officer
Date:	February 9, 2017	/s/ ROBERT J. BAILEY
		Robert J. Bailey
		Corporate Vice President, Controller