

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

FORM 10-Q

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

For the quarterly period ended September 30, 2019

OR

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

For the transition period from _____ to _____

Commission file number 1-812

UNITED TECHNOLOGIES CORPORATION

Delaware

(State or other jurisdiction of incorporation)

06-0570975

(I.R.S. Employer Identification No.)

10 Farm Springs Road, Farmington, Connecticut 06032

(Address of principal executive offices, including zip code)

(860) 728-7000

(Registrant's telephone number, including area code)

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

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock (\$1 par value) (CUSIP 913017 10 9)	UTX	New York Stock Exchange
1.125% Notes due 2021 (CUSIP 913017 CD9)	UTX 21D	New York Stock Exchange
1.250% Notes due 2023 (CUSIP U91301 AD0)	UTX 23	New York Stock Exchange
1.150% Notes due 2024 (CUSIP 913017 CU1)	UTX 24A	New York Stock Exchange
1.875% Notes due 2026 (CUSIP 913017 CE7)	UTX 26	New York Stock Exchange
2.150% Notes due 2030 (CUSIP 913017 CV9)	UTX 30	New York Stock Exchange
Floating Rate Notes due 2019 (CUSIP 913017 CS6)	UTX 19C	New York Stock Exchange
Floating Rate Notes due 2020 (CUSIP 913017 CT4)	UTX 20B	New York Stock Exchange

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405) 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 whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer	<input checked="" type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-accelerated Filer	<input type="checkbox"/>	Smaller Reporting Company	<input type="checkbox"/>
		Emerging Growth Company	<input type="checkbox"/>

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

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

At September 30, 2019 there were 863,268,940 shares of Common Stock outstanding.

**UNITED TECHNOLOGIES CORPORATION
AND SUBSIDIARIES**
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Quarter Ended September 30, 2019

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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 products 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-Q are provided for convenience only. Information available through these web sites is not incorporated by reference into this Form 10-Q.

PART I – FINANCIAL INFORMATION**Item 1. Financial Statements****UNITED TECHNOLOGIES CORPORATION
AND SUBSIDIARIES****CONDENSED CONSOLIDATED STATEMENT OF OPERATIONS**
(Unaudited)

<i>(dollars in millions, except per share amounts)</i>	Quarter Ended September 30,	
	2019	2018
Net Sales:		
Product sales	\$ 13,651	\$ 11,254
Service sales	5,845	5,256
	<u>19,496</u>	<u>16,510</u>
Costs and Expenses:		
Cost of products sold	10,461	9,342
Cost of services sold	3,750	3,194
Research and development	732	586
Selling, general and administrative	2,104	1,681
	<u>17,047</u>	<u>14,803</u>
Other income, net	37	131
Operating profit	2,486	1,838
Non-service pension (benefit)	(303)	(188)
Interest expense, net	401	258
Income from operations before income taxes	2,388	1,768
Income tax expense	1,131	419
Net income from operations	1,257	1,349
Less: Noncontrolling interest in subsidiaries' earnings from operations	109	111
Net income attributable to common shareowners	\$ 1,148	\$ 1,238
Earnings Per Share of Common Stock - Basic:		
Net income attributable to common shareowners	\$ 1.34	\$ 1.56
Earnings Per Share of Common Stock - Diluted:		
Net income attributable to common shareowners	\$ 1.33	\$ 1.54

See accompanying Notes to Condensed Consolidated Financial Statements

**UNITED TECHNOLOGIES CORPORATION
AND SUBSIDIARIES**

CONDENSED CONSOLIDATED STATEMENT OF OPERATIONS
(Unaudited)

<i>(dollars in millions, except per share amounts)</i>	Nine Months Ended September 30,	
	2019	2018
Net Sales:		
Product sales	\$ 40,559	\$ 33,032
Service sales	16,936	15,425
	57,495	48,457
Costs and Expenses:		
Cost of products sold	31,610	26,512
Cost of services sold	10,721	9,726
Research and development	2,203	1,729
Selling, general and administrative	6,207	5,151
	50,741	43,118
Other income, net	361	1,303
Operating profit	7,115	6,642
Non-service pension (benefit)	(727)	(571)
Interest expense, net	1,192	721
Income from operations before income taxes	6,650	6,492
Income tax expense	1,969	1,636
Net income from operations	4,681	4,856
Less: Noncontrolling interest in subsidiaries' earnings from operations	287	273
Net income attributable to common shareowners	\$ 4,394	\$ 4,583
Earnings Per Share of Common Stock - Basic:		
Net income attributable to common shareowners	\$ 5.14	\$ 5.80
Earnings Per Share of Common Stock - Diluted:		
Net income attributable to common shareowners	\$ 5.09	\$ 5.72

See accompanying Notes to Condensed Consolidated Financial Statements

**UNITED TECHNOLOGIES CORPORATION
AND SUBSIDIARIES**

CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
(Unaudited)

<i>(dollars in millions)</i>	Quarter Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net income from operations	\$ 1,257	\$ 1,349	\$ 4,681	\$ 4,856
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	(489)	(181)	(391)	(321)
Pension and postretirement benefit plans adjustments	(347)	54	(290)	207
ASU 2016-01 adoption impact (Note 12)	—	—	—	(5)
Change in unrealized cash flow hedging	(107)	69	(74)	(103)
Other comprehensive (loss) income, net of tax	(943)	(58)	(755)	(222)
Comprehensive income	314	1,291	3,926	4,634
Less: Comprehensive income attributable to noncontrolling interest	(91)	(92)	(273)	(249)
Comprehensive income attributable to common shareowners	\$ 223	\$ 1,199	\$ 3,653	\$ 4,385

See accompanying Notes to Condensed Consolidated Financial Statements

**UNITED TECHNOLOGIES CORPORATION
AND SUBSIDIARIES**

CONDENSED CONSOLIDATED BALANCE SHEET
(Unaudited)

<i>(dollars in millions)</i>	September 30, 2019	December 31, 2018
Assets		
Cash and cash equivalents	\$ 7,341	\$ 6,152
Accounts receivable, net	13,607	14,271
Contract assets, current	4,316	3,486
Inventory, net	11,242	10,083
Other assets, current	1,310	1,511
Total Current Assets	37,816	35,503
Customer financing assets	3,372	3,023
Future income tax benefits	1,699	1,646
Fixed assets	24,649	24,084
Less: Accumulated depreciation	(12,449)	(11,787)
Fixed assets, net	12,200	12,297
Operating lease right-of-use assets	2,556	—
Goodwill	48,041	48,112
Intangible assets, net	25,686	26,424
Other assets	7,639	7,206
Total Assets	\$ 139,009	\$ 134,211
Liabilities and Equity		
Short-term borrowings	\$ 1,327	\$ 1,469
Accounts payable	10,840	11,080
Accrued liabilities	11,672	10,223
Contract liabilities, current	6,233	5,720
Long-term debt currently due	5,495	2,876
Total Current Liabilities	35,567	31,368
Long-term debt	37,782	41,192
Future pension and postretirement benefit obligations	3,855	4,018
Operating lease liabilities	2,105	—
Other long-term liabilities	16,774	16,914
Total Liabilities	96,083	93,492
Commitments and contingent liabilities (Note 15)		
Redeemable noncontrolling interest	107	109
Shareowners' Equity:		
Common Stock	22,873	22,514
Treasury Stock	(32,588)	(32,482)
Retained earnings	61,069	57,823
Unearned ESOP shares	(67)	(76)
Accumulated other comprehensive loss	(10,819)	(9,333)
Total Shareowners' Equity	40,468	38,446
Noncontrolling interest	2,351	2,164
Total Equity	42,819	40,610
Total Liabilities and Equity	\$ 139,009	\$ 134,211

See accompanying Notes to Condensed Consolidated Financial Statements

**UNITED TECHNOLOGIES CORPORATION
AND SUBSIDIARIES**

CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS
(Unaudited)

<i>(dollars in millions)</i>	Nine Months Ended September 30,	
	2019	2018
Operating Activities:		
Net income from operations	\$ 4,681	\$ 4,856
Adjustments to reconcile net income from operations to net cash flows provided by operating activities:		
Depreciation and amortization	2,831	1,766
Deferred income tax provision	(19)	70
Stock compensation cost	261	181
Portfolio separation tax cost	618	—
Gain on sale of Taylor Company	—	(799)
Change in:		
Accounts receivable	59	(2,379)
Contract assets, current	(499)	(892)
Inventory	(1,503)	(991)
Other current assets	(111)	262
Accounts payable and accrued liabilities	1,089	3,044
Contract liabilities, current	394	313
Global pension contributions	(89)	(72)
Canadian government settlement	(38)	(221)
Other operating activities, net	(1,573)	(821)
Net cash flows provided by operating activities	6,101	4,317
Investing Activities:		
Capital expenditures	(1,359)	(1,122)
Investments in businesses (Note 1)	(39)	(177)
Dispositions of businesses (Note 1)	134	1,099
Increase in customer financing assets, net	(444)	(453)
Increase in collaboration intangible assets	(259)	(302)
Receipts from settlements of derivative contracts	158	71
Other investing activities, net	(164)	(135)
Net cash flows used in investing activities	(1,973)	(1,019)
Financing Activities:		
Issuance of long-term debt	73	13,409
Repayment of long-term debt	(711)	(2,093)
(Decrease) increase in short-term borrowings, net	(104)	1,228
Proceeds from Common Stock issued under employee stock plans	14	33
Dividends paid on Common Stock	(1,830)	(1,606)
Repurchase of Common Stock	(111)	(72)
Other financing activities, net	(225)	(60)
Net cash flows (used in) provided by financing activities	(2,894)	10,839
Effect of foreign exchange rate changes on cash and cash equivalents	(65)	(111)
Net increase in cash, cash equivalents and restricted cash	1,169	14,026
Cash, cash equivalents and restricted cash, beginning of year	6,212	9,018
Cash, cash equivalents and restricted cash, end of period	7,381	23,044
Less: Restricted cash	40	9,245
Cash and cash equivalents, end of period	\$ 7,341	\$ 13,799

See accompanying Notes to Condensed Consolidated Financial Statements

**UNITED TECHNOLOGIES CORPORATION
AND SUBSIDIARIES**
CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
(Unaudited)

	Quarter Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
<i>(dollars in millions, except per share amounts; shares in thousands)</i>				
Equity beginning balance	\$ 42,977	\$ 33,346	\$ 40,610	\$ 31,421
Common Stock				
Beginning balance	22,718	17,747	22,514	17,574
Common Stock issued under employee plans	161	122	372	296
Purchase of subsidiary shares from noncontrolling interest, net	(1)	—	(1)	(1)
Redeemable noncontrolling interest fair value adjustment	(5)	—	(12)	—
Ending balance	22,873	17,869	22,873	17,869
Treasury Stock				
Beginning balance	(32,549)	(35,645)	(32,482)	(35,596)
Common Stock issued under employee plans	1	1	5	4
Common Stock repurchased	(40)	(23)	(111)	(75)
Ending balance	(32,588)	(35,667)	(32,588)	(35,667)
Retained Earnings				
Beginning balance	60,548	57,027	57,823	55,242
Net Income	1,148	1,238	4,394	4,583
Dividends on Common Stock	(611)	(536)	(1,830)	(1,606)
Dividends on ESOP Common Stock	(17)	(18)	(53)	(53)
Redeemable noncontrolling interest fair value adjustment	14	(6)	7	(8)
New Revenue Standard adoption impact	—	—	—	(480)
ASU 2018-02 adoption impact (Note 12)	—	—	745	—
Other	(13)	1	(17)	28
Ending balance	61,069	57,706	61,069	57,706
Unearned ESOP Shares				
Beginning balance	(71)	(81)	(76)	(85)
Common Stock issued under employee plans	4	2	9	6
Ending balance	(67)	(79)	(67)	(79)
Accumulated Other Comprehensive (Loss) Income				
Beginning balance	(9,892)	(7,684)	(9,333)	(7,525)
Other comprehensive loss, net of tax	(927)	(39)	(741)	(198)
ASU 2018-02 adoption impact (Note 12)	—	—	(745)	—
Ending balance	(10,819)	(7,723)	(10,819)	(7,723)
Noncontrolling Interest				
Beginning balance	2,223	1,982	2,164	1,811
Net Income	109	111	287	273
Redeemable noncontrolling interest in subsidiaries' earnings	2	—	7	(5)
Other comprehensive loss, net of tax	(18)	(19)	(14)	(24)
Dividends attributable to noncontrolling interest	(39)	(73)	(184)	(212)
Purchase of subsidiary shares from noncontrolling interest, net	(2)	—	(3)	(1)
Acquisition of noncontrolling interest, net	3	—	3	(8)
Capital contributions	73	138	91	300
Other	—	5	—	10
Ending balance	2,351	2,144	2,351	2,144
Equity at September 30	\$ 42,819	\$ 34,250	\$ 42,819	\$ 34,250
Supplemental share information				
Shares of Common Stock issued under employee plans	727	1,051	2,554	2,361
Shares of Common Stock repurchased	304	172	857	574
Dividends per share of Common Stock	\$ 0.74	\$ 0.70	\$ 2.21	\$ 2.10

See accompanying Notes to Condensed Consolidated Financial Statements

**UNITED TECHNOLOGIES CORPORATION
AND SUBSIDIARIES**

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

The Condensed Consolidated Financial Statements at September 30, 2019 and for the quarters and nine months ended September 30, 2019 and 2018 are unaudited, but in the opinion of management include all adjustments (consisting only of normal recurring adjustments) necessary for a fair statement of the results for the interim periods. The results reported in these Condensed Consolidated Financial Statements should not necessarily be taken as indicative of results that may be expected for the entire year. The financial information included herein should be read in conjunction with the financial statements and notes in our Annual Report to Shareowners (2018 Annual Report) incorporated by reference in our Annual Report on [Form 10-K](#) for calendar year 2018 (2018 Form 10-K).

Note 1: Acquisitions, Dispositions, Goodwill and Other Intangible Assets

Business Acquisitions. During the nine months ended September 30, 2019, our investment in business acquisitions was \$39 million, which consisted of small acquisitions at Otis.

On June 9, 2019, UTC entered into a merger agreement with Raytheon Company (“Raytheon”) providing for an all-stock merger of equals transaction. The Raytheon merger agreement provides, among other things, that each share of Raytheon common stock issued and outstanding immediately prior to the closing of the Raytheon merger (except for shares held by Raytheon as treasury stock) will be converted into the right to receive 2.3348 shares of UTC common stock. Upon the closing of the Raytheon merger, Raytheon will become a wholly-owned subsidiary of UTC, and UTC will change its name to Raytheon Technologies Corporation. On October 11, 2019, the shareowners of UTC and Raytheon approved the proposals necessary to complete the Raytheon merger. The Raytheon merger is expected to close in the first half of 2020 and is subject to customary closing conditions, including receipt of required regulatory approvals, as well as the completion of UTC's previously announced separation of its Otis and Carrier businesses.

On November 26, 2018, we completed the acquisition of Rockwell Collins (the "Rockwell Acquisition"), a leader in aviation and high-integrity solutions for commercial and military customers as well as leading-edge avionics, flight controls, aircraft interior and data connectivity solutions. Under the terms of the Rockwell acquisition agreement, each share of common stock, par value \$0.01 per share, of Rockwell Collins issued and outstanding immediately prior to the effective time of the Rockwell Acquisition (other than shares held by Rockwell Collins, the Company, Riveter Merger Sub Corp or any of their respective wholly owned subsidiaries) was converted into the right to receive (1) \$93.33 in cash, without interest, and (2) 0.37525 shares of Company common stock (together, the “Acquisition Consideration”), less any applicable withholding taxes, with cash paid in lieu of fractional shares. The total aggregate consideration payable in the Rockwell Acquisition was \$15.5 billion in cash (\$14.9 billion net of cash acquired) and 62.2 million shares of Company common stock. In addition, \$7.8 billion of Rockwell Collins debt was outstanding at the time of the Rockwell Acquisition. This equated to a total enterprise value of \$30.6 billion, including the \$7.8 billion of Rockwell Collins' outstanding debt.

(dollars in millions)

	Amount
Cash consideration paid for Rockwell Collins outstanding common stock & equity awards	\$ 15,533
Fair value of UTC common stock issued for Rockwell Collins outstanding common stock & equity awards	7,960
Total consideration transferred	\$ 23,493

The cash consideration utilized for the Rockwell Acquisition was partially financed through the previously disclosed issuance of \$11.0 billion aggregate principal notes on August 16, 2018 for net proceeds of \$10.9 billion. For the remainder of the cash consideration, we utilized repatriated cash and cash equivalents and cash flow generated from operating activities.

Preliminary Allocation of Consideration Transferred to Net Assets Acquired:

The following amounts represent the preliminary determination of the fair value of identifiable assets acquired and liabilities assumed from the Rockwell Collins acquisition. The final determination of the fair value of certain assets and liabilities will be completed up to a one year measurement period from the date of acquisition as required by the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 805, “*Business Combinations*”. As of September 30, 2019, the valuation studies necessary to determine the fair market value of the assets acquired and liabilities assumed have not yet been finalized, including the validation of the underlying cash flows used to determine the fair value of the identified intangible assets. The size and breadth of the Rockwell Collins acquisition necessitates use of the one year measurement period to adequately analyze all the factors used in establishing the asset and liability fair values as of the

acquisition date, including, but not limited to, intangible assets, inventory, real property, leases, deferred tax liabilities related to the unremitted earnings of foreign subsidiaries, certain reserves and the related tax impacts of any adjustments. The table below reflects adjustments recorded as of September 30, 2019. Any additional potential adjustments could be material in relation to the preliminary values presented below:

(dollars in millions)

Cash and cash equivalents	\$	640
Accounts receivable, net		1,665
Inventory, net		1,512
Contract assets, current		291
Other assets, current		252
Future income tax benefits		38
Fixed assets, net		1,558
Intangible assets:		
Customer relationships		8,220
Tradenames/trademarks		1,870
Developed technology		600
Other assets		217
Total identifiable assets acquired		16,863
Short-term borrowings		2,254
Accounts payable		520
Accrued liabilities		1,657
Contract liabilities, current		299
Long-term debt		5,530
Future pension and postretirement benefit obligation		502
Other long-term liabilities		3,464
Noncontrolling interest		6
Total liabilities acquired		14,232
Total identifiable net assets		2,631
Goodwill		20,862
Total consideration transferred	\$	23,493

In order to allocate the consideration transferred for Rockwell Collins, the fair values of all identifiable assets and liabilities were established. For accounting and financial reporting purposes, fair value is defined under FASB ASC Topic 820, "Fair Value Measurements and Disclosures" as the price that would be received upon sale of an asset or the amount paid to transfer a liability in an orderly transaction between market participants at the measurement date. Market participants are assumed to be buyers and sellers in the principal (most advantageous) market for the asset or liability. Additionally, fair value measurements for an asset assume the highest and best use of that asset by market participants. Use of different estimates and judgments could yield different results. Fair value adjustments to Rockwell Collins' identified assets and liabilities resulted in an increase in inventory and fixed assets of \$282 million and \$256 million, respectively. In determining the fair value of identifiable assets acquired and liabilities assumed, a review was conducted for any significant contingent assets or liabilities existing as of the acquisition date. The preliminary assessment did not note any significant contingencies related to existing legal or government action.

The fair values of the customer relationship and related program intangible assets, which include the related aerospace program original equipment ("OEM") and aftermarket cash flows, were determined by using an "income approach." Under this approach, the net earnings attributable to the asset or liability being measured are isolated using the discounted projected net cash flows. These projected cash flows are isolated from the projected cash flows of the combined asset group over the remaining economic life of the intangible asset or liability being measured. Both the amount and the duration of the cash flows are considered from a market participant perspective. Our estimates of market participant net cash flows considered historical and projected pricing, remaining developmental effort, operational performance, including company specific synergies, aftermarket retention, product life cycles, material and labor pricing, and other relevant customer, contractual and market factors. Where appropriate, the net cash flows are probability-adjusted to reflect the uncertainties associated with the underlying assumptions as well as the risk profile of the net cash flows utilized in the valuation. The probability-adjusted future cash flows are then discounted to present value using an appropriate discount rate. The customer relationship and related program intangible assets are being amortized on a straight-line basis (which approximates the economic pattern of benefits) over the estimated economic life of the underlying programs of 10 to 20 years. The developed technology intangible asset is being amortized over the economic pattern of benefit. The fair value of the tradename intangible assets were determined utilizing the relief from royalty method which is a form of the income approach. Under this method, a royalty rate based on observed market royalties is applied to projected revenue supporting the valuation of the tradename and discounted to present value using an appropriate discount rate. The tradename intangible assets have been determined to have an indefinite life. The intangible assets included above consist of the following:

<i>(dollars in millions)</i>	Estimated Fair Value	Estimated Life
Acquired customer relationships	\$ 8,220	10-20 years
Acquired tradenames/trademarks	1,870	Indefinite
Acquired developed technology	600	15 years
	<u>\$ 10,690</u>	

We also identified customer contractual obligations on certain contracts with economic returns that are lower than could be realized in market transactions as of the acquisition date. We measured these liabilities under the measurement provisions of FASB ASC Topic 820, "Fair Value Measurements and Disclosures," which is based on the price to transfer the obligation to a market participant at the measurement date, assuming that the liability will remain outstanding in the marketplace. Based on the estimated net cash outflows of the programs plus a reasonable contracting profit margin required to transfer the contracts to market participants, we recorded assumed liabilities of approximately \$1,020 million. These liabilities will be liquidated in accordance with the underlying pattern of obligations, as reflected by the expenses incurred on the contracts. Total consumption of the contractual obligation for the next five years is expected to be as follows: \$36 million remaining in 2019, \$114 million in 2020, \$101 million in 2021, \$106 million in 2022, and \$91 million in 2023.

Acquisition-Related Costs:

Acquisition-related costs have been expensed as incurred. In the nine months ended September 30, 2019 and 2018, approximately \$30 million and \$71 million, respectively, of transaction and integration costs have been incurred. These costs were recorded in Selling, general and administrative expenses within the Condensed Consolidated Statement of Operations.

Supplemental Pro-Forma Data:

Rockwell Collins' results of operations have been included in UTC's financial statements for the period subsequent to the completion of the acquisition on November 26, 2018. Rockwell Collins contributed sales of approximately \$6.9 billion and operating profit of approximately \$1.1 billion for the nine months ended September 30, 2019. The following unaudited supplemental pro-forma data presents consolidated information as if the acquisition had been completed on January 1, 2017. The pro-forma results were calculated by combining the results of UTC with the stand-alone results of Rockwell Collins for the pre-acquisition periods, which were adjusted to account for certain costs that would have been incurred during this pre-acquisition period:

<i>(dollars in millions, except per share amounts)</i>	Quarter Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net sales	\$ 19,496	\$ 18,664	\$ 57,490	\$ 54,795
Net income attributable to common shareowners	\$ 1,149	\$ 1,455	\$ 4,534	\$ 5,196
Basic earnings per share of common stock	\$ 1.34	\$ 1.70	\$ 5.31	\$ 6.09
Diluted earnings per share of common stock	\$ 1.33	\$ 1.68	\$ 5.25	\$ 6.02

The unaudited supplemental pro-forma data above includes the following significant adjustments made to account for certain costs which would have been incurred if the acquisition had been completed on January 1, 2017, as adjusted for the applicable tax impact.

<i>(dollars in millions)</i>	Quarter Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Amortization of inventory and fixed asset fair value adjustment ¹	\$ —	\$ (5)	\$ 141	\$ (15)
Amortization of acquired Rockwell Collins intangible assets, net ²	—	(51)	—	(156)
Utilization of contractual customer obligation ³	—	1	—	11
UTC/Rockwell Collins fees for advisory, legal, accounting services ⁴	1	17	4	60
Interest expense incurred on acquisition financing, net ⁵	—	(40)	—	(192)
Elimination of capitalized pre-production engineering amortization ⁶	—	20	—	51
Adjustment to net periodic pension cost ⁷	—	11	—	33
Adjustment to reflect the adoption of ASC 606 ⁸	—	29	—	87
Elimination of entities held for sale ⁹	—	(5)	(5)	(18)
	\$ 1	\$ (23)	\$ 140	\$ (139)

- Reflects the elimination of the inventory step-up amortization recorded by UTC in 2019 as this would have been completed within the first two quarters of 2017. Additionally, this adjustment reflects the amortization of the fixed asset fair value adjustment as of the acquisition date.
- Reflects the additional amortization of the acquired Rockwell Collins' intangible assets recognized at fair value in purchase accounting and eliminates the historical Rockwell Collins intangible asset amortization expense.
- Reflects the additional amortization of liabilities recognized for acquired contracts with terms less favorable than could be realized in market transactions as of the acquisition date and eliminates Rockwell Collins historical amortization of these liabilities.
- Reflects the elimination of transaction-related fees incurred by UTC and Rockwell Collins in connection with the acquisition and assumes all of the fees were incurred during the first quarter of 2017.
- Reflects the additional interest expense incurred on debt to finance our acquisition of Rockwell Collins and reduces interest expense for the debt fair value adjustment which would have been amortized.
- Reflects the elimination of Rockwell Collins capitalized pre-production engineering amortization to conform to UTC policy.
- Reflects adjustments for the elimination of amortization of prior service cost and actuarial loss amortization, which was recorded by Rockwell Collins, as a result of fair value purchase accounting, net of the impact of the revised pension and post-retirement benefit (expense) as determined under UTC's plan assumptions.
- Reflects adjustments to Rockwell Collins revenue recognition as if they adopted the New Revenue Standard as of January 1, 2018 and primarily relates to capitalization of contract costs and changes in timing of sales recognition for contracts requiring an over time method of revenue recognition, partially offset by deferral of revenue recognized on OEM product engineering and development.
- Reflects the elimination of entities required to be sold for regulatory approvals.

The unaudited supplemental pro-forma financial information does not reflect the potential realization of cost savings related to the integration of the two companies. Further, the pro-forma data should not be considered indicative of the results that would have occurred if the acquisition and related financing had been consummated on January 1, 2017, nor are they indicative of future results.

Dispositions. Cash inflows related to dispositions during the nine months ended September 30, 2019 were \$134 million and primarily consisted of the dispositions of businesses held for sale associated with the Rockwell Collins acquisition. In accordance with conditions imposed for regulatory approval of the acquisition, Rockwell Collins was required to dispose of certain businesses. These businesses were held separate from UTC's and Rockwell Collins' ongoing businesses pursuant to regulatory requirements. Definitive agreements to sell each of the businesses were entered into prior to the completion of UTC's acquisition of Rockwell Collins. The related assets and liabilities of these businesses had been accounted for as held for sale at fair value less cost to sell. As of December 31, 2018, assets held for sale of \$175 million were included within Other assets, current and liabilities held for sale of \$40 million were included within Accrued liabilities on the Consolidated Balance Sheet. The major classes of assets and liabilities primarily include net Inventory of \$51 million and net Fixed assets of \$37 million. In the first quarter of 2019, Rockwell Collins completed the sale of all businesses which were held for sale as of December 31, 2018.

On November 26, 2018, the Company announced its intention to separate into three independent companies. Following the separations, the Company will operate as an aerospace company comprised of Collins Aerospace Systems and the Pratt & Whitney businesses, and Otis and Carrier will become independent companies. The proposed separations are expected to be effected through spin-offs of Otis and Carrier that are intended to be tax-free for the Company's shareowners for U.S. federal income tax purposes, and are expected to be completed in the first half of 2020. Separation of Otis and Carrier from UTC via spin-off transactions will be subject to the satisfaction of customary conditions, including, among others, final approval by the Company's Board of Directors, receipt of tax rulings in certain jurisdictions and/or a tax opinion from external counsel (as applicable), the filing with the Securities and Exchange Commission (SEC) and effectiveness of Form 10 registration statements, and satisfactory completion of financing (subject to UTC's agreement to consummate the distributions pursuant to, and subject to the terms and conditions of, the Raytheon merger agreement). In the nine months ended September 30, 2019, \$342 million of Selling, general and administrative costs and \$618 million of tax charges have been incurred related to the portfolio separation activities.

Goodwill. Changes in our goodwill balances for the nine months ended September 30, 2019 were as follows:

<i>(dollars in millions)</i>	Balance as of January 1, 2019	Goodwill Resulting from Business Combinations	Foreign Currency Translation and Other	Balance as of September 30, 2019
Otis	\$ 1,688	\$ 14	\$ (80)	\$ 1,622
Carrier	9,835	1	(136)	9,700
Pratt & Whitney	1,567	1	(4)	1,564
Collins Aerospace Systems	35,001	394	(261)	35,134
Total Segments	48,091	410	(481)	48,020
Eliminations and other	21	—	—	21
Total	\$ 48,112	\$ 410	\$ (481)	\$ 48,041

Goodwill increased \$394 million at Collins Aerospace Systems resulting from several insignificant purchase accounting adjustments made during the nine months ended September 30, 2019, including a reduction in acquired customer relationship intangible assets of \$100 million and a reduction in fixed assets of approximately \$130 million.

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

(dollars in millions)	September 30, 2019		December 31, 2018	
	Gross Amount	Accumulated Amortization	Gross Amount	Accumulated Amortization
Amortized:				
Service portfolios	\$ 2,105	\$ (1,607)	\$ 2,164	\$ (1,608)
Patents and trademarks	353	(244)	361	(236)
Collaboration intangible assets	4,770	(857)	4,509	(649)
Customer relationships and other	22,594	(5,318)	22,525	(4,560)
	29,822	(8,026)	29,559	(7,053)
Unamortized:				
Trademarks and other	3,890	—	3,918	—
Total	\$ 33,712	\$ (8,026)	\$ 33,477	\$ (7,053)

In addition to customer relationship intangible assets obtained through business combinations, customer relationship intangible assets include payments made to our customers to secure certain contractual rights. Such payments are capitalized when distinct rights are obtained and sufficient incremental cash flows to support the recoverability of the assets have been established. Otherwise, the applicable portion of the payments is expensed. We amortize these intangible assets based on the underlying pattern of economic benefit, which may result 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 amortization expense increasing 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. We classify amortization of such payments as a reduction of sales. The collaboration intangible assets are amortized based upon the pattern of economic benefits as represented by the underlying cash flows.

Amortization of intangible assets for the quarter and nine months ended September 30, 2019 was \$369 million and \$1,091 million, respectively, compared with \$225 million and \$680 million for the same periods of 2018. The following is the expected amortization of intangible assets for the years 2019 through 2024, which reflects the pattern of expected economic benefit on certain aerospace intangible assets.

(dollars in millions)	Remaining 2019	2020	2021	2022	2023	2024
Amortization expense	\$ 363	\$ 1,422	\$ 1,410	\$ 1,410	\$ 1,404	\$ 1,370

Note 2: Revenue Recognition

We account for revenue in accordance with ASC Topic 606: *Revenue from Contracts with Customers*.

Performance Obligations. A performance obligation is a promise in a contract with a customer to transfer a distinct good or service to the customer. Some of our contracts with customers contain a single performance obligation, while others contain multiple performance obligations most commonly when a contract spans multiple phases of the product life-cycle such as development, production, maintenance and support. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. When there are multiple performance obligations within a contract, we allocate the transaction price to each performance obligation based on its standalone selling price.

We consider the contractual consideration payable by the customer and assess variable consideration that may affect the total transaction price, including contractual discounts, contract incentive payments, estimates of award fees, unfunded contract value under U.S. Government contracts, and other sources of variable consideration, when determining the transaction price of each contract. We include variable consideration in the estimated transaction price when there is a basis to reasonably estimate the amount. These estimates are based on historical experience, anticipated performance and our best judgment at the time. We also consider whether our contracts provide customers with significant financing. Generally, our contracts do not contain significant financing.

Timing of the satisfaction of performance obligations varies across our businesses due to our diverse product and service mix, customer base, and contractual terms.

Remaining Performance Obligations (RPO). RPO represents the aggregate amount of total contract transaction price that is unsatisfied or partially unsatisfied. As of September 30, 2019 our total RPO was approximately \$127.7 billion compared to

\$115.5 billion as of December 31, 2018. Of the total RPO as of September 30, 2019, we expect approximately 43% will be recognized as sales over the following 24 months.

Capitalized Contract Costs. We incur costs for engineering and development of aerospace products directly related to existing or anticipated contracts with customers. Such costs generate or enhance our ability to satisfy our performance obligations under these contracts. We capitalize these costs as contract fulfillment costs to the extent the costs are recoverable from the associated contract margin and subsequently amortize the costs as the OEM products performance obligations are satisfied. In instances where intellectual property does not transfer to the customer, we defer the customer funding of OEM product engineering and development and recognize revenue when the performance obligations related to the OEM products are satisfied. Capitalized net contract fulfillment costs were \$1,383 million and \$914 million as of September 30, 2019 and December 31, 2018, respectively and are recognized in Other assets in our Condensed Consolidated Balance Sheet. The increase in capitalized net contract fulfillment costs is primarily driven by current year activity in the recently acquired Rockwell Collins businesses.

Contract Assets and Liabilities. Contract assets reflect revenue recognized and performance obligations satisfied in advance of customer billing. Contract liabilities relate to payments received in advance of the satisfaction of performance under the contract. We receive payments from customers based on the terms established in our contracts. Total contract assets and contract liabilities as of September 30, 2019 and December 31, 2018 are as follows:

<i>(dollars in millions)</i>	September 30, 2019	December 31, 2018
Contract assets, current	\$ 4,316	\$ 3,486
Contract assets, noncurrent (included within Other assets)	1,364	1,142
Total contract assets	5,680	4,628
Contract liabilities, current	(6,233)	(5,720)
Contract liabilities, noncurrent (included within Other long-term liabilities)	(5,417)	(5,069)
Total contract liabilities	(11,650)	(10,789)
Net contract liabilities	\$ (5,970)	\$ (6,161)

Contract assets increased \$1,052 million during the nine months ended September 30, 2019 due to revenue recognition in excess of customer billings, primarily on Pratt & Whitney military and commercial aftermarket service agreements and various programs at Collins Aerospace Systems. Contract liabilities increased \$861 million during the nine months ended September 30, 2019 primarily due to customer billings in excess of revenue recognized on Pratt & Whitney commercial aftermarket service agreements, at Collins Aerospace Systems across various programs, and on Otis maintenance contracts. We recognized revenue of \$4.1 billion during the nine months ended September 30, 2019 related to contract liabilities as of December 31, 2018.

Note 3: Earnings Per Share

<i>(dollars in millions, except per share amounts; shares in millions)</i>	Quarter Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net income attributable to common shareowners	\$ 1,148	\$ 1,238	\$ 4,394	\$ 4,583
Basic weighted average number of shares outstanding	855.1	791.3	854.2	790.6
Stock awards and equity units (share equivalent)	9.0	10.5	8.7	10.1
Diluted weighted average number of shares outstanding	864.1	801.8	862.9	800.7
Earnings Per Share of Common Stock:				
Basic	\$ 1.34	\$ 1.56	\$ 5.14	\$ 5.80
Diluted	\$ 1.33	\$ 1.54	\$ 5.09	\$ 5.72

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 because the effect would be anti-dilutive. In addition, the computation of diluted earnings per share excludes the effect of the potential exercise of stock awards when the awards' assumed proceeds exceed the average market price of the common shares during the period. For the quarter and nine months ended September 30, 2019, the number of stock awards excluded from the computation was approximately 8.0 million and 11.0 million, respectively. For the quarter and nine months ended September 30, 2018, the number of stock awards excluded from the computation was approximately 5.0 million and 5.2 million, respectively.

Note 4: Inventory, net

<i>(dollars in millions)</i>	September 30, 2019	December 31, 2018
Raw materials	\$ 3,149	\$ 3,052
Work-in-process	2,921	2,673
Finished goods	5,172	4,358
	<u>\$ 11,242</u>	<u>\$ 10,083</u>

Raw materials, work-in-process and finished goods are net of valuation reserves of \$1,370 million and \$1,270 million as of September 30, 2019 and December 31, 2018, respectively.

Note 5: Borrowings and Lines of Credit

<i>(dollars in millions)</i>	September 30, 2019	December 31, 2018
Commercial paper	\$ 984	\$ 1,257
Other borrowings	343	212
Total short-term borrowings	<u>\$ 1,327</u>	<u>\$ 1,469</u>

At September 30, 2019, we had credit agreements with various banks permitting aggregate borrowings of up to \$10.35 billion, including: a \$2.20 billion revolving credit agreement and a \$2.15 billion multicurrency revolving credit agreement, both of which expire in August 2021; and a \$2.0 billion revolving credit agreement and a \$4.0 billion term credit agreement, both of which we entered into on March 15, 2019 and which will expire on March 15, 2021 or, if earlier, the date that is 180 days after the date on which each of the separations of Otis and Carrier have been consummated. As of September 30, 2019, there were no borrowings under any of these 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 September 30, 2019, our maximum commercial paper borrowing limit was \$6.35 billion. Commercial paper borrowings at September 30, 2019 include approximately €750 million (\$824 million) of euro-denominated commercial paper. We use our commercial paper borrowings for general corporate purposes, including the funding of potential acquisitions, pension contributions, debt refinancing, dividend payments and repurchases of our common stock. The need for commercial paper borrowings arises when the use of domestic cash for general corporate purposes exceeds the sum of domestic cash generation and foreign cash repatriated to the U.S.

Long-term debt consisted of the following:

<i>(dollars in millions)</i>	September 30, 2019	December 31, 2018
LIBOR plus 0.350% floating rate notes due 2019 ³	\$ 350	\$ 350
1.500% notes due 2019 ¹	650	650
1.950% notes due 2019 ⁴	—	300
EURIBOR plus 0.15% floating rate notes due 2019 (€750 million principal value) ²	824	858
5.250% notes due 2019 ⁴	—	300
8.875% notes due 2019	271	271
4.875% notes due 2020 ¹	171	171
4.500% notes due 2020 ¹	1,250	1,250
1.900% notes due 2020 ¹	1,000	1,000
EURIBOR plus 0.20% floating rate notes due 2020 (€750 million principal value) ²	824	858
8.750% notes due 2021	250	250
3.100% notes due 2021 ⁴	250	250
3.350% notes due 2021 ¹	1,000	1,000
LIBOR plus 0.650% floating rate notes due 2021 ^{1,3}	750	750
1.950% notes due 2021 ¹	750	750
1.125% notes due 2021 (€950 million principal value) ¹	1,044	1,088

2.300% notes due 2022 ¹	500	500
2.800% notes due 2022 ⁴	1,100	1,100
3.100% notes due 2022 ¹	2,300	2,300
1.250% notes due 2023 (€750 million principal value) ¹	824	858
3.650% notes due 2023 ¹	2,250	2,250
3.700% notes due 2023 ⁴	400	400
2.800% notes due 2024 ¹	800	800
3.200% notes due 2024 ⁴	950	950
1.150% notes due 2024 (€750 million principal value) ¹	824	858
3.950% notes due 2025 ¹	1,500	1,500
1.875% notes due 2026 (€500 million principal value) ¹	549	573
2.650% notes due 2026 ¹	1,150	1,150
3.125% notes due 2027 ¹	1,100	1,100
3.500% notes due 2027 ⁴	1,300	1,300
7.100% notes due 2027	141	141
6.700% notes due 2028	400	400
4.125% notes due 2028 ¹	3,000	3,000
7.500% notes due 2029 ¹	550	550
2.150% notes due 2030 (€500 million principal value) ¹	549	573
5.400% notes due 2035 ¹	600	600
6.050% notes due 2036 ¹	600	600
6.800% notes due 2036 ¹	134	134
7.000% notes due 2038	159	159
6.125% notes due 2038 ¹	1,000	1,000
4.450% notes due 2038 ¹	750	750
5.700% notes due 2040 ¹	1,000	1,000
4.500% notes due 2042 ¹	3,500	3,500
4.800% notes due 2043 ⁴	400	400
4.150% notes due 2045 ¹	850	850
3.750% notes due 2046 ¹	1,100	1,100
4.050% notes due 2047 ¹	600	600
4.350% notes due 2047 ⁴	1,000	1,000
4.625% notes due 2048 ¹	1,750	1,750
Project financing obligations ⁵	307	287
Other (including finance leases)	279	287
Total principal long-term debt	43,600	44,416
Other (fair market value adjustments, discounts and debt issuance costs)	(323)	(348)
Total long-term debt	43,277	44,068
Less: current portion	5,495	2,876
Long-term debt, net of current portion	\$ 37,782	\$ 41,192

¹ We may redeem these notes at our option pursuant to their terms.

² The three-month EURIBOR rate as of September 30, 2019 was approximately -0.418%. 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 September 30, 2019 was approximately 2.0851%.

⁴ Rockwell Collins debt which remained outstanding following the Rockwell Acquisition.

⁵ Project financing obligations are associated with the sale of rights to unbilled revenues related to the ongoing activity of an entity owned by Carrier.

We had no debt issuances during the nine months ended September 30, 2019 and had the following issuances of debt in 2018:

(dollars and Euro in millions)

Issuance Date	Description of Notes		Aggregate Principal Balance
August 16, 2018:	3.350% notes due 2021 ¹	\$	1,000
	3.650% notes due 2023 ¹		2,250
	3.950% notes due 2025 ¹		1,500
	4.125% notes due 2028 ¹		3,000
	4.450% notes due 2038 ¹		750
	4.625% notes due 2048 ²		1,750
	LIBOR plus 0.65% floating rate notes due 2021 ¹		750
May 18, 2018:	1.150% notes due 2024 ³	€	750
	2.150% notes due 2030 ³		500
	EURIBOR plus 0.20% floating rate notes due 2020 ³		750

1 The net proceeds received from these debt issuances were used to partially finance the cash consideration portion of the purchase price for Rockwell Collins and fees, expenses and other amounts related to the acquisition of Rockwell Collins.

2 The net proceeds from these debt issuances were used to fund the repayment of commercial paper and for other general corporate purposes.

3 The net proceeds received from these debt issuances were used for general corporate purposes.

We had the following repayments of debt during the nine months ended September 30, 2019 and the year-ended December 31, 2018:

(dollars and Euro in millions)

Repayment Date	Description of Notes		Aggregate Principal Balance
July 15, 2019	1.950% notes ¹	\$	300
July 15, 2019	5.250% notes ¹	\$	300
December 14, 2018	Variable-rate term loan due 2020 (1 month LIBOR plus 1.25%) ¹	\$	482
May 4, 2018	1.778% junior subordinated notes	\$	1,100
February 22, 2018	EURIBOR plus 0.80% floating rate notes	€	750
February 1, 2018	6.80% notes	\$	99

1 The notes and term loan were acquired in connection with the Rockwell Collins acquisition and have been subsequently repaid.

The average maturity of our long-term debt at September 30, 2019 is approximately 10 years. The average interest expense rate on our total borrowings for the quarters and nine months ended September 30, 2019 and 2018 were as follows:

	Quarter Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Average interest expense rate	3.7%	3.6%	3.7%	3.5%

On September 27, 2019 we filed a universal shelf registration statement 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 the shelf registration statement.

Note 6: Income Taxes

The increase in the effective tax rate for the quarter ended September 30, 2019 is primarily the result of tax charges connected to the Company's portfolio separation transactions and the non-deductible impact related to the impairment of an investment at Carrier.

The increase in the effective tax rate for the nine months ended September 30, 2019 is principally related to the items described above offset in part by gains associated with the conclusion of the audit by the Examination Division of the Internal Revenue Service for the UTC 2014, 2015, and 2016 tax years and the filing by a subsidiary of the Company to participate in an amnesty program offered by the Italian Tax Authority in the second quarter of 2019.

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, 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 2008.

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. Subject to the impact of the Company's portfolio separation transactions, it is reasonably possible that a net reduction within the range of \$100 million to \$600 million of unrecognized tax benefits may occur within the next 12 months as a result of additional worldwide uncertain tax positions, the closure of tax statutes, or the revaluation of current uncertain tax positions arising from the issuance of legislation, regulatory or other guidance or developments in examinations, in appeals, or in the courts. See Note 15, 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.

During the quarter, the Company recognized net non-cash gains of approximately \$18 million, including pre-tax interest of approximately \$5 million, as a result of various federal, state and non-US statute of limitations expirations and settlements with tax authorities. The Examination Division of the Internal Revenue Service is currently auditing Rockwell Collins fiscal tax years 2016 and 2017, prior to its acquisition by UTC, which will continue into 2020.

Note 7: Employee Benefit Plans

Pension and Postretirement Plans. In the quarter ended September 30, 2019, we amended our domestic pension plans to cease accrual of additional benefits for future service and compensation for non-union participants effective December 31, 2019. Beginning January 1, 2020, these participants will earn additional contributions under our domestic savings plan. We utilized the practical expedient and remeasured plan assets and pension benefit obligations for the affected pension plans as of the nearest month-end, August 31, 2019, resulting in a net actuarial loss of \$425 million. This reflects a benefit obligation gain of \$180 million resulting from the benefit plan change that was offset by remeasurement losses of \$605 million. The remeasurement losses are driven by a reduction of 124 basis points in the PBO discount rate as of the remeasurement date compared to December 31, 2018, partially offset by actual asset returns of approximately 17% as of the remeasurement date.

In the quarter ended September 30, 2019, we recorded a curtailment gain of \$98 million in the Condensed Consolidated Statement of Operations, due to the recognition of previously unrecognized prior service credits for the affected pension plans. Additionally, as a result of the remeasurement, pension income (excluding curtailment) decreased by approximately \$10 million in the quarter ended September 30, 2019.

We sponsor both funded and unfunded domestic and foreign defined pension and other postretirement benefit plans, and defined contribution plans. Contributions to our plans were as follows:

<i>(dollars in millions)</i>	Quarter Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Defined benefit plans	\$ 10	\$ 13	\$ 89	\$ 72
Defined contribution plans	134	97	421	296

We made no contributions to our domestic defined benefit pension plans for quarter ended September 30, 2019 and \$25 million of contributions in the nine months ended September 30, 2019. There were no contributions to our domestic defined benefit pension plans in the quarter and nine months ended September 30, 2018. Included in the current year contributions to employer sponsored defined contribution plans for the nine months ended September 30, 2019 is \$98 million of contributions to the Rockwell Collins participants. The following table illustrates the components of net periodic benefit (income) cost for our defined pension and other postretirement benefit plans:

<i>(dollars in millions)</i>	Pension Benefits Quarter Ended September 30,		Other Postretirement Benefits Quarter Ended September 30,	
	2019	2018	2019	2018
Service cost	\$ 88	\$ 94	\$ —	\$ —
Interest cost	334	274	7	7
Expected return on plan assets	(605)	(558)	—	—
Amortization of prior service cost (credit)	4	(11)	(10)	—
Recognized actuarial net loss (gain)	66	100	(3)	(3)
Net settlement and curtailment (gain) loss	(96)	3	—	—
Total net periodic benefit (income) cost	\$ (209)	\$ (98)	\$ (6)	\$ 4

<i>(dollars in millions)</i>	Pension Benefits Nine Months Ended September 30,		Other Postretirement Benefits Nine Months Ended September 30,	
	2019	2018	2019	2018
Service cost	\$ 264	\$ 280	\$ 2	\$ 1
Interest cost	1,014	831	23	19
Expected return on plan assets	(1,820)	(1,683)	(1)	—
Amortization of prior service cost (credit)	13	(31)	(32)	(2)
Recognized actuarial net loss (gain)	172	302	(9)	(7)
Net settlement and curtailment (gain)	(87)	—	—	—
Total net periodic benefit (income) cost	\$ (444)	\$ (301)	\$ (17)	\$ 11

Note 8: Restructuring Costs

During the nine months ended September 30, 2019, we recorded net pre-tax restructuring costs totaling \$244 million for new and ongoing restructuring actions. We recorded charges in the segments as follows:

<i>(dollars in millions)</i>	
Otis	\$ 44
Carrier	97
Pratt & Whitney	17
Collins Aerospace Systems	83
Eliminations and other	3
Total	\$ 244

Restructuring charges incurred during the nine months ended September 30, 2019 primarily relate to actions initiated during 2019 and 2018, and were recorded as follows:

<i>(dollars in millions)</i>	
Cost of sales	\$ 119
Selling, general and administrative	125
Total	\$ 244

2019 Actions. During the nine months ended September 30, 2019, we recorded net pre-tax restructuring costs of \$158 million, comprised of \$62 million in cost of sales and \$96 million in selling, general and administrative expenses. The 2019 actions relate to ongoing cost reduction efforts, including workforce reductions and the consolidation of field and manufacturing operations.

The following table summarizes the accrual balance and utilization for the 2019 restructuring actions for the quarter and nine months ended September 30, 2019:

<i>(dollars in millions)</i>	Severance	Facility Exit and Other Costs	Total
Quarter Ended September 30, 2019			
Restructuring accruals at June 30, 2019	\$ 57	\$ 11	\$ 68
Net pre-tax restructuring costs	35	8	43
Utilization, foreign exchange and other costs	(33)	(7)	(40)
Balance at September 30, 2019	<u>\$ 59</u>	<u>\$ 12</u>	<u>\$ 71</u>
Nine Months Ended September 30, 2019			
Net pre-tax restructuring costs	\$ 145	\$ 13	\$ 158
Utilization, foreign exchange and other costs	(86)	(1)	(87)
Balance at September 30, 2019	<u>\$ 59</u>	<u>\$ 12</u>	<u>\$ 71</u>

The following table summarizes expected, incurred and remaining costs for the 2019 restructuring actions by segment:

<i>(dollars in millions)</i>	Expected Costs	Costs Incurred Quarter Ended March 31, 2019	Costs Incurred Quarter Ended June 30, 2019	Costs Incurred Quarter Ended September 30, 2019	Remaining Costs at September 30, 2019
Otis	\$ 43	\$ (19)	\$ (14)	\$ (3)	\$ 7
Carrier	113	(25)	(24)	(32)	32
Pratt & Whitney	158	(14)	(3)	—	141
Collins Aerospace Systems	107	(14)	—	(7)	86
Eliminations and other	3	(1)	(1)	(1)	—
Total	<u>\$ 424</u>	<u>\$ (73)</u>	<u>\$ (42)</u>	<u>\$ (43)</u>	<u>\$ 266</u>

We are targeting to complete the majority of the remaining workforce and facility related cost reduction actions during 2019 and 2020. No specific plans for other significant actions have been finalized at this time.

2018 Actions. During the nine months ended September 30, 2019, we recorded net pre-tax restructuring costs totaling \$44 million for restructuring actions initiated in 2018, including \$21 million in cost of sales and \$23 million in selling, general and administrative expenses. The 2018 actions relate to ongoing cost reduction efforts, including workforce reductions, consolidation of field and manufacturing operations, and costs to exit legacy programs. The following table summarizes the accrual balances and utilization for the 2018 restructuring actions for the quarter and nine months ended September 30, 2019:

<i>(dollars in millions)</i>	Severance	Facility Exit, and Other Costs	Total
Quarter Ended September 30, 2019			
Restructuring accruals at June 30, 2019	\$ 48	\$ 9	\$ 57
Net pre-tax restructuring costs	1	4	5
Utilization, foreign exchange and other costs	(19)	(5)	(24)
Balance at September 30, 2019	<u>\$ 30</u>	<u>\$ 8</u>	<u>\$ 38</u>
Nine Months Ended September 30, 2019			
Restructuring accruals at December 31, 2018	\$ 115	\$ 23	\$ 138
Net pre-tax restructuring costs	36	8	44
Utilization, foreign exchange and other costs	(121)	(23)	(144)
Balance at September 30, 2019	<u>\$ 30</u>	<u>\$ 8</u>	<u>\$ 38</u>

The following table summarizes expected, incurred and remaining costs for the 2018 restructuring actions by segment:

<i>(dollars in millions)</i>	Expected Costs	Costs Incurred in 2018	Costs Incurred Quarter Ended March 31, 2019	Costs Incurred Quarter Ended June 30, 2019	Costs Incurred Quarter Ended September 30, 2019	Remaining Costs at September 30, 2019
Otis	\$ 55	\$ (48)	\$ (5)	\$ (1)	\$ —	\$ 1
Carrier	82	(64)	(7)	(6)	(2)	3
Pratt & Whitney	3	(3)	—	—	—	—
Collins Aerospace Systems	113	(87)	(11)	(9)	(3)	3
Eliminations and other	6	(5)	—	—	—	1
Total	\$ 259	\$ (207)	\$ (23)	\$ (16)	\$ (5)	\$ 8

2017 and Prior Actions. During the nine months ended September 30, 2019, we recorded net pre-tax restructuring costs totaling \$42 million for restructuring actions initiated in 2017 and prior. As of September 30, 2019, we have approximately \$73 million of accrual balances remaining related to 2017 and prior actions.

Note 9: Financial Instruments

We enter into derivative instruments primarily for risk management purposes, 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 \$18.5 billion and \$20.1 billion at September 30, 2019 and December 31, 2018, respectively.

The following table summarizes the fair value and presentation in the Condensed Consolidated Balance Sheets for derivative instruments as of September 30, 2019 and December 31, 2018:

<i>(dollars in millions)</i>	Balance Sheet Location	September 30, 2019	December 31, 2018
Derivatives designated as hedging instruments:			
Foreign exchange contracts	Asset Derivatives:		
	Other assets, current	\$ 5	\$ 10
	Other assets	5	12
	Total asset derivatives	\$ 10	\$ 22
	Liability Derivatives:		
	Accrued liabilities	(63)	(83)
	Other long-term liabilities	(78)	(111)
	Total liability derivatives	\$ (141)	\$ (194)
Derivatives not designated as hedging instruments:			
Foreign exchange contracts	Asset Derivatives:		
	Other assets, current	\$ 54	\$ 44
	Other assets	5	19
	Total asset derivatives	\$ 59	\$ 63
	Liability Derivatives:		
	Accrued liabilities	(97)	(89)
	Other long-term liabilities	(83)	(3)
	Total liability derivatives	\$ (180)	\$ (92)

The effect of cash flow hedging relationships on Accumulated other comprehensive income and on the Condensed Consolidated Statement of Operations for the quarters and nine months ended September 30, 2019 and 2018 are presented in the table below. The amounts of gain or (loss) are attributable to foreign exchange contract activity and are recorded as a component of Product sales when reclassified from accumulated other comprehensive income.

<i>(dollars in millions)</i>	Quarter Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Gain (loss) recorded in Accumulated other comprehensive loss	\$ (153)	\$ 95	\$ (125)	\$ (105)
Loss (gain) reclassified from Accumulated other comprehensive loss into Product sales	20	2	40	(26)

The Company utilizes the critical terms match method in assessing derivatives for hedge effectiveness. Accordingly, the hedged items and derivatives designated as hedging instruments are highly effective.

We have €4.95 billion of euro-denominated long-term debt and €750 million of euro-denominated commercial paper borrowings outstanding, which qualify as a net investment hedge against our investments in European businesses. As of September 30, 2019, the net investment hedge is deemed to be effective.

Assuming current market conditions continue, a \$57 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 September 30, 2019, all derivative contracts accounted for as cash flow hedges will mature by October 2023.

The effect of derivatives not designated as hedging instruments within Other income, net, on the Condensed Consolidated Statement of Operations was as follows:

<i>(dollars in millions)</i>	Quarter Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Foreign exchange contracts	\$ 4	\$ 16	\$ 40	\$ 86

Note 10: 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 Condensed Consolidated Balance Sheet as of September 30, 2019 and December 31, 2018:

<i>(dollars in millions)</i>	September 30, 2019			
	Total	Level 1	Level 2	Level 3
Recurring fair value measurements:				
Available-for-sale securities	\$ 54	\$ 54	\$ —	\$ —
Derivative assets	69	—	69	—
Derivative liabilities	(321)	—	(321)	—

<i>(dollars in millions)</i>	December 31, 2018			
	Total	Level 1	Level 2	Level 3
Recurring fair value measurements:				
Available-for-sale securities	\$ 51	\$ 51	\$ —	\$ —
Derivative assets	85	—	85	—
Derivative liabilities	(286)	—	(286)	—

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 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 September 30, 2019, 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 in our Condensed Consolidated Balance Sheet at September 30, 2019 and December 31, 2018:

<i>(dollars in millions)</i>	September 30, 2019		December 31, 2018	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Long-term receivables	\$ 375	\$ 367	\$ 334	\$ 314
Customer financing notes receivable	283	283	272	265
Short-term borrowings	(1,327)	(1,327)	(1,469)	(1,469)
Long-term debt (excluding finance leases)	(44,863)	(47,794)	(43,996)	(44,003)
Long-term liabilities	(406)	(389)	(508)	(467)

The following table provides the valuation hierarchy classification of assets and liabilities that are not carried at fair value in our Condensed Consolidated Balance Sheet at September 30, 2019 and December 31, 2018:

<i>(dollars in millions)</i>	September 30, 2019			
	Total	Level 1	Level 2	Level 3
Long-term receivables	\$ 367	\$ —	\$ 367	\$ —
Customer financing notes receivable	283	—	283	—
Short-term borrowings	(1,327)	—	(984)	(343)
Long-term debt (excluding finance leases)	(47,794)	—	(47,396)	(398)
Long-term liabilities	(389)	—	(389)	—

<i>(dollars in millions)</i>	December 31, 2018			
	Total	Level 1	Level 2	Level 3
Long-term receivables	\$ 314	\$ —	\$ 314	\$ —
Customer financing notes receivable	265	—	265	—
Short-term borrowings	(1,469)	—	(1,258)	(211)
Long-term debt (excluding finance leases)	(44,003)	—	(43,620)	(383)
Long-term liabilities	(467)	—	(467)	—

We had commercial aerospace financing and other contractual commitments totaling approximately \$15.7 billion and \$15.5 billion as of September 30, 2019 and December 31, 2018, respectively, related to commercial aircraft and certain contractual rights to provide product on new aircraft platforms. Associated risks on these commitments from changes in interest rates are mitigated because interest rates are variable during the commitment term and are set at the date of funding based on current market conditions, the fair value of the underlying collateral and the credit worthiness of the customers. As a result, the fair value of these financings is expected to equal the amounts funded.

Note 11: 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. The following table summarizes the balance by class of aerospace business related long-term receivables as of September 30, 2019 and December 31, 2018:

<i>(dollars in millions)</i>	September 30, 2019	December 31, 2018
Long-term trade accounts receivable	\$ 289	\$ 269
Notes and leases receivable	267	258
Total long-term receivables	\$ 556	\$ 527

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 \$150 million of our total long-term receivables were considered to bear high credit risk as of September 30, 2019 and December 31, 2018.

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 \$22 million and \$16 million as of September 30, 2019 and December 31, 2018, respectively, are individually evaluated for impairment. At September 30, 2019 and December 31, 2018, 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.

Note 12: Accumulated Other Comprehensive Loss

A summary of the changes in each component of Accumulated other comprehensive loss, net of tax for the quarters and nine months ended September 30, 2019 and 2018 is provided below:

<i>(dollars in millions)</i>	Foreign Currency Translation	Defined Benefit Pension and Post- retirement Plans	Unrealized Hedging (Losses) Gains	Accumulated Other Comprehensive (Loss) Income
Quarter Ended September 30, 2019				
Balance at June 30, 2019	\$ (3,354)	\$ (6,398)	\$ (140)	\$ (9,892)
Other comprehensive loss before reclassifications, net	(417)	(420)	(153)	(990)
Amounts reclassified, pre-tax	—	(41)	20	(21)
Tax (benefit) expense	(56)	114	26	84
Balance at September 30, 2019	<u>\$ (3,827)</u>	<u>\$ (6,745)</u>	<u>\$ (247)</u>	<u>\$ (10,819)</u>
Nine Months Ended September 30, 2019				
Balance at December 31, 2018	\$ (3,442)	\$ (5,718)	\$ (173)	\$ (9,333)
Other comprehensive loss before reclassifications, net	(322)	(434)	(125)	(881)
Amounts reclassified, pre-tax	—	46	40	86
Tax (benefit) expense	(55)	98	11	54
ASU 2018-02 adoption impact	(8)	(737)	—	(745)
Balance at September 30, 2019	<u>\$ (3,827)</u>	<u>\$ (6,745)</u>	<u>\$ (247)</u>	<u>\$ (10,819)</u>

<i>(dollars in millions)</i>	Foreign Currency Translation	Defined Benefit Pension and Post- retirement Plans	Unrealized Gains (Losses) on Available-for- Sale Securities	Unrealized Hedging (Losses) Gains	Accumulated Other Comprehensive (Loss) Income
Quarter Ended September 30, 2018					
Balance at June 30, 2018	\$ (3,085)	\$ (4,499)	\$ —	\$ (100)	\$ (7,684)
Other comprehensive (loss) income before reclassifications, net	(166)	(17)	—	95	(88)
Amounts reclassified, pre-tax	—	86	—	2	88
Tax expense (benefit)	4	(15)	—	(28)	(39)
Balance at September 30, 2018	<u>\$ (3,247)</u>	<u>\$ (4,445)</u>	<u>\$ —</u>	<u>\$ (31)</u>	<u>\$ (7,723)</u>
Nine Months Ended September 30, 2018					
Balance at December 31, 2017	\$ (2,950)	\$ (4,652)	\$ 5	\$ 72	\$ (7,525)
Other comprehensive (loss) income before reclassifications, net	(354)	9	—	(105)	(450)
Amounts reclassified, pre-tax	(3)	262	—	(26)	233
Tax expense (benefit)	60	(64)	—	28	24
ASU 2016-01 adoption impact	—	—	(5)	—	(5)
Balance at September 30, 2018	<u>\$ (3,247)</u>	<u>\$ (4,445)</u>	<u>\$ —</u>	<u>\$ (31)</u>	<u>\$ (7,723)</u>

In February 2018, the FASB issued ASU 2018-02, *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income (Topic 220)*. The new standard allows companies to reclassify to retained earnings the stranded tax effects in Accumulated other comprehensive income (AOCI) from the TCJA. We elected to reclassify the income tax effects of TCJA from AOCI of \$745 million to retained earnings, effective January 1, 2019.

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. We had approximately \$5 million of unrealized gains on these securities recorded in Accumulated other comprehensive loss in our Consolidated Balance Sheet as of December 31, 2017. We adopted this standard effective January 1, 2018, with these amounts recorded directly to retained earnings as of that date.

Amounts reclassified that relate to our defined benefit pension and postretirement plans include the 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. Additionally, in quarter ended September 30, 2019, we recorded a curtailment gain of \$98 million in the Condensed Consolidated Statement of Operations which is included within amounts reclassified related to our defined pension and postretirement plans. (See Note 7 for additional details).

All noncontrolling interests with redemption features, such as put options, that are not solely within our control (redeemable noncontrolling interests) are reported in the mezzanine section of the Condensed Consolidated Balance Sheet, between liabilities and equity, at the greater of redemption value or initial carrying value.

Note 13: Variable Interest Entities

Pratt & Whitney holds a 61% net interest in the International Aero Engines AG (IAE) collaboration with MTU Aero Engines AG (MTU) and Japanese Aero Engines Corporation (JAEC) 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 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 Condensed Consolidated Balance Sheet are as follows:

<i>(dollars in millions)</i>	September 30, 2019	December 31, 2018
Current assets	\$ 4,770	\$ 4,732
Noncurrent assets	1,785	1,600
Total assets	\$ 6,555	\$ 6,332
Current liabilities	\$ 5,251	\$ 4,946
Noncurrent liabilities	1,925	1,898
Total liabilities	\$ 7,176	\$ 6,844

Note 14: Guarantees

We extend a variety of financial, market value and product performance guarantees to third parties. There have been no material changes to financial guarantees outstanding since December 31, 2018. The changes in the carrying amount of service and product warranties and product performance guarantees for the nine months ended September 30, 2019 and 2018 are as follows:

<i>(dollars in millions)</i>	2019	2018
Balance as of January 1	\$ 1,449	\$ 1,146
Warranties and performance guarantees issued	464	472
Settlements made	(375)	(380)
Other	(15)	(8)
Balance as of September 30	\$ 1,523	\$ 1,230

Note 15: Contingent Liabilities

Summarized below are the matters previously described in Note 18 of the Notes to the Consolidated Financial Statements in our 2018 Annual Report, incorporated by reference in our 2018 [Form 10-K](#), updated as applicable.

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.

Environmental. Our operations are subject to environmental regulation by federal, state and local authorities in the United States and authorities with jurisdiction over our foreign operations. As described in Note 1 to the Consolidated Financial Statements in our 2018 Annual Report, we have accrued for the costs of environmental remediation activities, including but not limited to investigatory, remediation, operating and maintenance costs and performance guarantees, and periodically reassess these amounts. We believe that the likelihood of incurring losses materially in excess of amounts accrued is remote. Additional information pertaining to environmental matters is included in Note 1 to the Consolidated Financial Statements in our 2018 Annual Report.

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 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 recommending the reduction of certain contract prices because, for example, cost or pricing data or cost accounting practices used to price and negotiate those contracts may not have conformed to government regulations. Some of these audit

reports recommend that certain payments be repaid, delayed, or withheld, and may involve 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. The Company may be, and has been, required to make payments into escrow of disputed liabilities while the related litigation is pending. If the litigation is resolved in the Company's favor, any such payments will be returned to the Company with interest. 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 accrue the minimum amount.

Legal Proceedings.

Cost Accounting Standards Claims

In April 2019, a Divisional Administrative Contracting Officer (DACO) of the United States Defense Contract Management Agency (DCMA) asserted a claim against Pratt & Whitney to recover overpayments of approximately \$1.73 billion plus interest (approximately \$540 million through September 30, 2019). The claim is based on Pratt & Whitney's alleged noncompliance with cost accounting standards from January 1, 2007 to March 31, 2019, due to its method of allocating independent research and development costs to government contracts. Pratt & Whitney believes that the claim is without merit and filed an appeal to the Armed Services Board of Contract Appeals (ASBCA) on June 7, 2019.

As previously disclosed, in December 2013, a DCMA DACO asserted a claim against Pratt & Whitney to recover overpayments of approximately \$177 million plus interest (approximately \$96 million through September 30, 2019). 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. In 2014, Pratt & Whitney filed an appeal to the ASBCA. An evidentiary hearing was held and completed in June 2019. The parties are now engaged in post-hearing briefing, and a decision from the ASBCA will follow. We continue to believe that the claim is without merit. In December 2018, a DCMA DACO issued a second claim against Pratt & Whitney that similarly alleges that its method of determining the cost of collaborator parts does not comply with the cost accounting standards for calendar years 2013 through 2017. This second claim demands payment of \$269 million plus interest (approximately \$53 million through September 30, 2019), which we also believe is without merit and which Pratt & Whitney appealed to the ASBCA in January 2019.

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 \$237 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 \$130 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 appealed this decision to the German Federal Tax Court (FTC). Following a hearing in July 2018, the FTC remanded the matter to the local German Tax Court for further proceedings. 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.

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.

The amounts recorded by UTC for asbestos-related liabilities are based on currently available information and assumptions that we believe are reasonable and are made with input from outside actuarial experts. The estimated range of total liabilities to resolve all pending and unasserted potential future asbestos claims through 2059 is approximately \$330 million to \$395 million. Where no amount within a range of estimates is more likely, the minimum is accrued. We have recorded the minimum amount of \$330 million, which is principally recorded in Other long-term liabilities on our Consolidated Balance Sheet as of September 30, 2019. 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 \$142 million, which is included primarily in Other assets on our Condensed Consolidated Balance Sheet as of September 30, 2019.

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, the 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 14 of this Form 10-Q and Note 17 to the Consolidated Financial Statements in our 2018 Annual Report, 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 instances, 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 16: Leases

ASU 2016-02, *Leases (Topic 842)* and its related amendments (collectively, the New Lease Accounting Standard) are effective for reporting periods beginning after December 15, 2018. We adopted the New Lease Accounting Standard effective January 1, 2019 and elected the modified retrospective approach in which results for periods before 2019 were not adjusted for the new standard and the cumulative effect of the change in accounting was recognized through retained earnings at the date of adoption.

The New Lease Accounting Standard establishes a right-of-use model that requires a lessee to record a right-of-use asset and a lease liability on the Condensed Consolidated Balance Sheet for all leases with terms longer than 12 months. Leases are classified as either finance or operating, with classification affecting the pattern of expense recognition in the Condensed 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.

We have elected certain of the practical expedients available under the New Lease Accounting Standard upon adoption. We have applied the practical expedient which allows prospective transition to the New Lease Accounting Standard on January 1, 2019. Under the transition practical expedient, we did not reassess lease classification, embedded leases or initial direct costs. We have applied the practical expedient for short-term leases. We have lease agreements with lease and non-lease components. We have elected the practical expedients to combine these components for certain equipment leases. Additionally, for certain equipment leases, we apply a portfolio approach to effectively account for the operating lease right-of-use assets and liabilities. The adoption of the New Lease Accounting Standard did not have a material effect on our Condensed Consolidated Statement of Operations or Condensed Consolidated Statement of Cash Flows. Upon adoption, we recorded a \$2.6 billion right-of-use asset and a \$2.7 billion lease liability. The adoption of the New Lease Accounting Standard had an immaterial impact on retained earnings.

We enter into lease agreements for the use of real estate space, vehicles, information technology equipment, and certain other equipment under operating and finance leases. We determine if an arrangement contains a lease at inception. Operating leases are included in Operating lease right-of-use assets, Accrued liabilities, and Operating lease liabilities in our Condensed Consolidated Balance Sheet. Finance leases are not considered significant to our Condensed Consolidated Balance Sheet or Condensed Consolidated Statement of Operations. Finance lease right-of-use assets at September 30, 2019 of \$54 million are included in Other assets in our Condensed Consolidated Balance Sheet. Finance lease liabilities at September 30, 2019 of \$68 million are included in Long term debt currently due, and Long term debt in our Condensed Consolidated Balance Sheet.

Right-of-use assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Lease right-of-use assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most of our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments, and use the implicit rate when readily determinable. We determine our incremental borrowing rate through market sources including relevant industry rates. Our lease right-of-use assets also include any lease pre-payments and exclude lease incentives. Certain of our leases include variable payments, which may vary based upon changes in facts or circumstances after the start of the lease. We exclude variable payments from lease right-of-use assets and lease liabilities, to the extent not considered fixed, and instead, expense variable payments as incurred. Variable lease expense and lease expense for short duration contracts is not a material component of lease expense. Our leases generally have remaining lease terms of 1 to 20 years, some of which include options to extend leases. The majority of our leases with options to extend are up to 5 years with the ability to terminate the lease within 1 year. The exercise of lease renewal options is at our sole discretion and our lease right-of-use assets and liabilities reflect only the options we are reasonably certain that we will exercise. Lease expense is recognized on a straight-line basis over the lease term.

In limited instances we act as a lessor, primarily for commercial aerospace engines and certain heating, ventilation and air conditioning (HVAC) systems and commercial equipment, all of which are classified as operating leases. These leases are not significant to our Condensed Consolidated Balance Sheet or Condensed Consolidated Statement of Operations.

Operating lease expense for the quarter and nine months ended September 30, 2019 was \$194 million and \$573 million, respectively.

Supplemental cash flow information related to operating leases was as follows:

<i>(dollars in millions)</i>	Quarter Ended September 30, 2019	Nine Months Ended September 30, 2019
Operating cash flows for the measurement of operating lease liabilities	\$ (223)	\$ (560)
Operating lease right-of-use assets obtained in exchange for operating lease obligations	38	238

Operating lease right-of-use assets and liabilities are reflected on our Condensed Consolidated Balance Sheet as follows:

<i>(dollars in millions, except lease term and discount rate)</i>	September 30, 2019
Operating lease right-of-use assets	\$ 2,556
Accrued liabilities	\$ (546)
Operating lease liabilities	(2,105)
Total operating lease liabilities	\$ (2,651)

Supplemental balance sheet information related to operating leases was as follows:

	September 30, 2019
Weighted Average Remaining Lease Term (in years)	6.9
Weighted Average Discount Rate	3.6%

Undiscounted maturities of operating lease liabilities as of September 30, 2019 are as follows:

<i>(dollars in millions)</i>	Operating ¹
2019	\$ 186
2020	695
2021	600
2022	473
2023	320
Thereafter	1,005
Total undiscounted lease payments	3,279
Less imputed interest	(628)
Total discounted lease payments	\$ 2,651

¹ Operating lease payments include \$302 million related to options to extend lease terms that are reasonably certain of being exercised.

Prior to the adoption of the New Lease Accounting Standard, rental commitments on an undiscounted basis were approximately \$2.9 billion at December 31, 2018 under long-term non-cancelable operating leases and were payable as follows: \$683 million in 2019, \$544 million in 2020, \$407 million in 2021, \$301 million in 2022, \$235 million in 2023 and \$746 million thereafter.

Note 17: Segment Financial Data

Our operations are classified into four principal segments: Otis, Carrier, Pratt & Whitney, and Collins Aerospace Systems. The segments are generally 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.

Total sales by segment include inter-segment sales, which are generally made at prices approximating those that the selling entity is able to obtain on external sales. Results for the quarters ended September 30, 2019 and 2018 are as follows:

<i>(dollars in millions)</i>	Net Sales		Operating Profits		Operating Profit Margins	
	2019	2018	2019	2018	2019	2018
Otis	\$ 3,307	\$ 3,223	\$ 508	\$ 486	15.4%	15.1%
Carrier	4,822	4,880	685	844	14.2%	17.3%
Pratt & Whitney	5,283	4,789	471	109	8.9%	2.3%
Collins Aerospace Systems	6,495	3,955	1,167	610	18.0%	15.4%
Total segments	19,907	16,847	2,831	2,049	14.2%	12.2%
Eliminations and other	(411)	(337)	(232)	(102)		
General corporate expenses	—	—	(113)	(109)		
Consolidated	\$ 19,496	\$ 16,510	\$ 2,486	\$ 1,838	12.8%	11.1%

Results for the nine months ended September 30, 2019 and 2018 are as follows:

<i>(dollars in millions)</i>	Net Sales		Operating Profits		Operating Profit Margins	
	2019	2018	2019	2018	2019	2018
Otis	\$ 9,751	\$ 9,604	\$ 1,449	\$ 1,424	14.9%	14.8%
Carrier	14,107	14,291	2,050	3,081	14.5%	21.6%
Pratt & Whitney	15,250	13,854	1,328	919	8.7%	6.6%
Collins Aerospace Systems	19,584	11,734	3,195	1,767	16.3%	15.1%
Total segments	58,692	49,483	8,022	7,191	13.7%	14.5%
Eliminations and other	(1,197)	(1,026)	(572)	(210)		
General corporate expenses	—	—	(335)	(339)		
Consolidated	\$ 57,495	\$ 48,457	\$ 7,115	\$ 6,642	12.4%	13.7%

Geographic sales are attributed to the geographic regions based on their location of origin. Segment information for the quarters ended September 30, 2019 and 2018 is as follows:

<i>(dollars in millions)</i>	2019					2018				
	Otis	Carrier	Pratt & Whitney	Collins Aerospace Systems	Total	Otis	Carrier	Pratt & Whitney	Collins Aerospace Systems	Total
United States	\$ 893	\$ 2,536	\$ 4,184	\$ 4,764	\$ 12,377	\$ 864	\$ 2,537	\$ 3,696	\$ 2,805	\$ 9,902
Europe	943	1,313	91	924	3,271	968	1,377	141	560	3,046
Asia Pacific	1,217	728	258	229	2,432	1,129	726	316	86	2,257
Other	254	245	750	578	1,827	262	240	636	504	1,642
Total segment	\$ 3,307	\$ 4,822	\$ 5,283	\$ 6,495	\$ 19,907	\$ 3,223	\$ 4,880	\$ 4,789	\$ 3,955	\$ 16,847

Segment geographic information for the nine months ended September 30, 2019 and 2018 is as follows:

<i>(dollars in millions)</i>	2019					2018				
	Otis	Carrier	Pratt & Whitney	Collins Aerospace Systems	Total	Otis	Carrier	Pratt & Whitney	Collins Aerospace Systems	Total
United States	\$ 2,709	\$ 7,457	\$ 11,883	\$ 14,291	\$ 36,340	\$ 2,568	\$ 7,250	\$ 10,469	\$ 8,235	\$ 28,522
Europe	2,891	3,906	311	2,935	10,043	3,028	4,216	440	1,752	9,436
Asia Pacific	3,393	2,077	807	628	6,905	3,220	2,131	996	255	6,602
Other	758	667	2,249	1,730	5,404	788	694	1,949	1,492	4,923
Total segment	\$ 9,751	\$ 14,107	\$ 15,250	\$ 19,584	\$ 58,692	\$ 9,604	\$ 14,291	\$ 13,854	\$ 11,734	\$ 49,483

Segment sales disaggregated by product type for the quarters ended September 30, 2019 and 2018 are as follows:

<i>(dollars in millions)</i>	2019					2018				
	Otis	Carrier	Pratt & Whitney	Collins Aerospace Systems	Total	Otis	Carrier	Pratt & Whitney	Collins Aerospace Systems	Total
Commercial and industrial, non aerospace	\$ 3,307	\$ 4,822	\$ 44	\$ 12	\$ 8,185	\$ 3,223	\$ 4,880	\$ 5	\$ 14	\$ 8,122
Commercial aerospace	—	—	3,671	4,723	8,394	—	—	3,421	3,031	6,452
Military aerospace	—	—	1,568	1,760	3,328	—	—	1,363	910	2,273
Total segment	\$ 3,307	\$ 4,822	\$ 5,283	\$ 6,495	\$ 19,907	\$ 3,223	\$ 4,880	\$ 4,789	\$ 3,955	\$ 16,847

Segment sales disaggregated by product type for the nine months ended September 30, 2019 and 2018 are as follows:

(dollars in millions)	2019					2018				
	Otis	Carrier	Pratt & Whitney	Collins Aerospace Systems	Total	Otis	Carrier	Pratt & Whitney	Collins Aerospace Systems	Total
Commercial and industrial, non aerospace	\$ 9,751	\$ 14,107	\$ 72	\$ 38	\$ 23,968	\$ 9,604	\$ 14,291	\$ 31	\$ 44	\$ 23,970
Commercial aerospace	—	—	10,584	14,406	24,990	—	—	9,989	8,966	18,955
Military aerospace	—	—	4,594	5,140	9,734	—	—	3,834	2,724	6,558
Total segment	\$ 9,751	\$ 14,107	\$ 15,250	\$ 19,584	\$ 58,692	\$ 9,604	\$ 14,291	\$ 13,854	\$ 11,734	\$ 49,483

Segment sales disaggregated by sales type for the quarters ended September 30, 2019 and 2018 are as follows:

(dollars in millions)	2019					2018				
	Otis	Carrier	Pratt & Whitney	Collins Aerospace Systems	Total	Otis	Carrier	Pratt & Whitney	Collins Aerospace Systems	Total
Product	\$ 1,449	\$ 3,998	\$ 3,230	\$ 5,346	\$ 14,023	\$ 1,448	\$ 4,106	\$ 2,703	\$ 3,297	\$ 11,554
Service	1,858	824	2,053	1,149	5,884	1,775	774	2,086	658	5,293
Total segment	\$ 3,307	\$ 4,822	\$ 5,283	\$ 6,495	\$ 19,907	\$ 3,223	\$ 4,880	\$ 4,789	\$ 3,955	\$ 16,847

Segment sales disaggregated by sales type for the nine months ended September 30, 2019 and 2018 are as follows:

(dollars in millions)	2019					2018				
	Otis	Carrier	Pratt & Whitney	Collins Aerospace Systems	Total	Otis	Carrier	Pratt & Whitney	Collins Aerospace Systems	Total
Product	\$ 4,240	\$ 11,703	\$ 9,508	\$ 16,191	\$ 41,642	\$ 4,192	\$ 11,917	\$ 8,016	\$ 9,825	\$ 33,950
Service	5,511	2,404	5,742	3,393	17,050	5,412	2,374	5,838	1,909	15,533
Total segment	\$ 9,751	\$ 14,107	\$ 15,250	\$ 19,584	\$ 58,692	\$ 9,604	\$ 14,291	\$ 13,854	\$ 11,734	\$ 49,483

Note 18: Accounting Pronouncements

In June 2016, the FASB issued Accounting Standards Update (ASU) 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. This ASU and its related amendments modifies the impairment model to utilize an expected loss methodology in place of the incurred loss methodology for financial instruments, including trade receivables, contract assets, long term receivables and off-balance sheet credit exposures. The amendment requires entities to consider a broader range of information to estimate expected credit losses, including historical information, current conditions and a reasonable forecast period, which may result in earlier recognition of certain losses. 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 and its related amendments.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*. The new standard removes the disclosure requirements for the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy. This standard did not have a material impact on our financial statement disclosures. We early adopted this standard effective January 1, 2019.

In August 2018, the FASB issued ASU 2018-14, *Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20): Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans*. The new standard includes updates to the disclosure requirements for defined benefit plans including several additions, deletions and modifications to the disclosure requirements. The provisions of this ASU are effective for years beginning after December 15, 2020, with early adoption permitted. We are currently evaluating the impact of this ASU.

In August 2018, the FASB issued ASU 2018-15, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*. The new standard provides updated guidance surrounding implementation costs associated with cloud computing

arrangements that are service contracts. The provisions of this ASU are effective for years beginning after December 15, 2020, with early adoption permitted. We do not expect this ASU to have a material impact on the consolidated financial statements.

In October 2018, the FASB issued ASU 2018-17, *Consolidation (Topic 810): Targeted Improvements to Related Party Guidance for Variable Interest Entities*. The amendments in this update for determining whether a decision-making fee is a variable interest require reporting entities to consider indirect interests held through related parties under common control on a proportional basis rather than as the equivalent of a direct interest in its entirety (as currently required in generally accepted accounting principles (GAAP)). These amendments also will create alignment between determining whether a decision making fee is a variable interest and determining whether a reporting entity within a related party group is the primary beneficiary of a VIE. This will significantly reduce the risk that decision makers with insignificant direct and indirect interests could be deemed the primary beneficiary of a VIE. The provisions of this ASU are effective for years beginning after December 15, 2019, with early adoption permitted. We do not expect this ASU to have a material impact on the consolidated financial statements.

In November 2018, the FASB issued ASU 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606*. The amendments in this update make targeted improvements to GAAP for collaborative arrangements as follows: clarify that certain transactions between collaborative arrangement participants should be accounted for as revenue under Topic 606 when the collaborative arrangement participant is a customer in the context of a unit of account. In those situations, all the guidance in Topic 606 should be applied, including recognition, measurement, presentation, and disclosure requirements; add unit-of-account guidance in Topic 808 to align with the guidance in Topic 606 (that is, a distinct good or service) when an entity is assessing whether the collaborative arrangement or a part of the arrangement is within the scope of Topic 606; and require that in a transaction with a collaborative arrangement participant that is not directly related to sales to third parties, presenting the transaction together with revenue recognized under Topic 606 is precluded if the collaborative arrangement participant is not a customer. The provisions of this ASU are effective for years beginning after December 15, 2019, with early adoption permitted. We do not expect this ASU to have a material impact on the consolidated financial statements.

With respect to the unaudited condensed consolidated financial information of UTC for the quarters and nine months ended September 30, 2019 and 2018, PricewaterhouseCoopers LLP (PricewaterhouseCoopers) reported that it has applied limited procedures in accordance with professional standards for a review of such information. However, its report dated October 25, 2019, appearing below, states that the firm did not audit and does not express an opinion on that unaudited condensed consolidated financial information. PricewaterhouseCoopers has not carried out any significant or additional audit tests beyond those that would have been necessary if their report had not been included. Accordingly, the degree of reliance on its report on such information should be restricted in light of the limited nature of the review procedures applied. PricewaterhouseCoopers is not subject to the liability provisions of Section 11 of the Securities Act of 1933, as amended (the Act) for its report on the unaudited condensed consolidated financial information because that report is not a "report" or a "part" of a registration statement prepared or certified by PricewaterhouseCoopers within the meaning of Sections 7 and 11 of the Act.

Report of Independent Registered Public Accounting Firm

To the Shareowners and Board of Directors of United Technologies Corporation

Results of Review of Interim Financial Information

We have reviewed the accompanying condensed consolidated balance sheet of United Technologies Corporation and its subsidiaries (the "Company") as of September 30, 2019, and the related condensed consolidated statements of operations, of comprehensive income and of changes in equity for the three-month and nine-month periods ended September 30, 2019 and 2018 and the condensed consolidated statement of cash flows for the nine-month periods ended September 30, 2019 and 2018, including the related notes (collectively referred to as the "interim financial information"). Based on our reviews, we are not aware of any material modifications that should be made to the accompanying interim financial information for it to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet of the Company as of December 31, 2018, and the related consolidated statements of operations, of comprehensive income, of changes in equity and of cash flows for the year then ended (not presented herein), and in our report dated February 7, 2019, which included a paragraph describing a change in the manner of accounting for revenue from contracts with customers and net periodic benefit cost in the 2018 financial statements, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying condensed consolidated balance sheet information as of December 31, 2018 is fairly stated, in all material respects, in relation to the consolidated balance sheet from which it has been derived.

Basis for Review Results

This interim financial information is the responsibility of the Company's management. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our review in accordance with the standards of the PCAOB. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

/s/ PricewaterhouseCoopers LLP

Hartford, CT
October 25, 2019

Item 2. 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, Carrier, Pratt & Whitney, and Collins Aerospace Systems. Otis and Carrier are referred to as the "commercial businesses," while Pratt & Whitney and Collins Aerospace Systems are referred to as the "aerospace businesses."

The current status of significant factors affecting our business environment in 2019 is discussed below. For additional discussion, refer to the "Business Overview" section in Management's Discussion and Analysis of Financial Condition and Results of Operations in our 2018 Annual Report, which is incorporated by reference in our 2018 [Form 10-K](#).

General

Our worldwide operations can be affected by industrial, economic and political factors on both a regional and global level. Our operations include original equipment manufacturing (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 Carrier and in our commercial aerospace spares businesses, and longer cycles at Otis and in our aerospace OEM and aftermarket maintenance businesses. Our customers are in the public and private sectors, and our businesses reflect an extensive geographic diversification that has evolved with continued globalization.

Our military businesses' sales are affected by U.S. Department of Defense budget and spending levels, changes in market demand and the global political environment. Total sales to the U.S. Government were \$2.7 billion and \$1.9 billion for the quarters ended September 30, 2019 and 2018, 14% and 11% of total UTC sales for those periods, respectively. Our participation in long-term production, development and sustainment programs for the U.S. Government has and is expected to contribute positively to our results in 2019.

As has been previously disclosed, on November 26, 2018, the Company announced its intention to separate into three independent companies. Following the separations, the Company will operate as an aerospace company comprised of the Collins Aerospace Systems and Pratt & Whitney businesses, and Otis and Carrier will become independent companies. The proposed separations are expected to be effected through spin-offs of Otis and Carrier that are intended to be tax-free for the Company's shareowners for U.S. federal income tax purposes, and are expected to be completed in the first half of 2020. Separation of Otis and Carrier from UTC via spin-off transactions will be subject to the satisfaction of customary conditions, including, among others, final approval by the Company's Board of Directors, receipt of tax rulings in certain jurisdictions and/or a tax opinion from external counsel (as applicable), the filing with the Securities and Exchange Commission (SEC) and effectiveness of Form 10 registration statements, and satisfactory completion of financing (subject to UTC's agreement to consummate the distributions pursuant to, and subject to the terms and conditions of, the Raytheon merger agreement). See Notes To Condensed Consolidated Financial Statements, Note 1 for additional information regarding the Raytheon transaction.

On June 9, 2019, UTC entered into a merger agreement with Raytheon Company ("Raytheon") providing for an all-stock merger of equals transaction. The Raytheon merger agreement provides, among other things, that each share of Raytheon common stock issued and outstanding immediately prior to the closing of the Raytheon merger (except for shares held by Raytheon as treasury stock) will be converted into the right to receive 2.3348 shares of UTC common stock. Upon the closing of the Raytheon merger, Raytheon will become a wholly-owned subsidiary of UTC, and UTC will change its name to Raytheon Technologies Corporation. On October 11, 2019, the shareowners of UTC and Raytheon approved the proposals necessary to complete the Raytheon merger. The Raytheon merger is expected to close in the first half of 2020 and is subject to customary closing conditions, including receipt of required regulatory approvals, as well as the completion of UTC's previously announced separation of its Otis and Carrier businesses.

Acquisition Activity

Our growth strategy contemplates acquisitions. Our operations and results can be affected by the rate and extent to which appropriate acquisition opportunities are available, acquired businesses are effectively integrated, and anticipated synergies or cost savings are achieved. During the nine months ended September 30, 2019, our investment in business acquisitions was \$39 million, which consisted of small acquisitions at Otis.

Other

Government legislation, policies and regulations can have a negative impact on our worldwide operations. Government regulation of refrigerants and energy efficiency standards, elevator safety codes and fire protection regulations are important to

our commercial businesses. Government and market-driven safety and performance regulations, restrictions on aircraft engine noise and emissions, and government procurement practices can impact our aerospace and defense businesses.

Global economic and political conditions, changes in raw material and commodity prices, interest rates, foreign currency exchange rates, energy costs, levels of end market demand in construction, levels of air travel, the financial condition of commercial airlines, and the impact from natural disasters and weather conditions create uncertainties that could impact our earnings outlook for the remainder of 2019. With regard to political conditions, the U.S. Government suspended Turkey's participation in the F-35 Joint Strike Fighter program because Turkey accepted delivery of the Russian-built S-400 air and missile defense system. The U.S. has imposed, and may impose additional, sanctions on Turkey as a result of this or other political disputes. Turkish companies supply components, some of which are sole-sourced, to our aerospace businesses for commercial and military engines and aerospace products. Depending upon the scope and timing of U.S. sanctions on Turkey and potential reciprocal actions, if any, such sanctions or actions could impact our aerospace businesses' sources of supply and could have a material adverse effect on our results of operations, cash flows or financial condition. See Part I, Item 1A, "Risk Factors" in our 2018 Form 10-K for further discussion.

CRITICAL ACCOUNTING ESTIMATES

Preparation of our financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, sales and expenses. We believe 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. Management's Discussion and Analysis of Financial Condition and Results of Operations and Note 1 to the Consolidated Financial Statements in our 2018 Annual Report, incorporated by reference in our 2018 [Form 10-K](#), describe the significant accounting estimates and policies used in preparation of the Consolidated Financial Statements. Actual results in these areas could differ from management's estimates. There have been no significant changes in our critical accounting estimates during the nine months ended September 30, 2019.

RESULTS OF OPERATIONS

Net Sales

<i>(dollars in millions)</i>	Quarter Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net Sales	\$ 19,496	\$ 16,510	\$ 57,495	\$ 48,457

The factors contributing to the total percentage change year-over-year in total net sales for the quarter and nine months ended September 30, 2019 are as follows:

	Quarter Ended September 30, 2019	Nine Months Ended September 30, 2019
Organic change	5 %	6 %
Foreign currency translation	(1)%	(1)%
Acquisitions and divestitures, net	14 %	14 %
Total % change	18 %	19 %

Net sales grew 5% organically during the quarter ended September 30, 2019. This increase reflects organic sales growth of 11% at Pratt & Whitney driven by higher sales across all channels; 7% organic sales growth at Collins Aerospace Systems, primarily driven by higher commercial aftermarket and military sales; and organic sales growth of 4% at Otis reflecting higher service sales across all regions and higher new equipment sales driven by growth in Asia. Carrier organic sales were consistent with the prior year as growth in commercial HVAC and Fire & Security products was offset by declines in both transport and commercial refrigeration. The 14% increase in Acquisitions and divestitures, net for the quarter ended September 30, 2019 primarily reflects the impact of the November 26, 2018 acquisition of Rockwell Collins.

All four segments experienced organic sales growth for the nine months ended September 30, 2019. Pratt & Whitney sales grew 11% organically, reflecting higher sales across all channels. Collins Aerospace Systems sales grew 9% organically, reflecting higher commercial and military sales. Organic sales growth of 5% at Otis reflects higher service sales across all regions and higher new equipment sales driven by growth in Asia. Organic sales growth of 2% at Carrier was driven by growth in global HVAC, Fire & Security, and transport refrigeration. The 14% increase in Acquisitions and divestitures, net for the

nine months ended September 30, 2019 primarily reflects the impact of the November 26, 2018 acquisition of Rockwell Collins.

Cost of Products and Services Sold

<i>(dollars in millions)</i>	<u>Quarter Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
Total cost of products and services sold	\$ 14,211	\$ 12,536	\$ 42,331	\$ 36,238
Percentage of net sales	72.9%	75.9%	73.6%	74.8%

The factors contributing to the percentage change year-over-year for the quarter and nine months ended September 30, 2019 in total cost of products and services sold are as follows:

	<u>Quarter Ended September 30, 2019</u>	<u>Nine Months Ended September 30, 2019</u>
Organic change	5 %	6 %
Foreign currency translation	(1)%	(1)%
Acquisitions and divestitures, net	12 %	13 %
Other	(3)%	(1)%
Total % change	13 %	17 %

The organic increase in total cost of products and services sold for the quarter and nine months ended September 30, 2019 was primarily driven by the organic sales increases noted above. The increase in Acquisitions and divestitures, net of 12% and 13% for the quarter and nine months ended September 30, 2019 respectively, primarily reflects the impact of the acquisition of Rockwell Collins. The decline in Other of 3% and 1% for the quarter and nine months ended September 30, 2019 respectively, reflects the absence of a prior year customer contract settlement at Pratt & Whitney.

Gross Margin

<i>(dollars in millions)</i>	<u>Quarter Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
Gross margin	\$ 5,285	\$ 3,974	\$ 15,164	\$ 12,219
Percentage of net sales	27.1%	24.1%	26.4%	25.2%

The increase in gross margin as a percentage of sales for the quarter ended September 30, 2019 reflects a 640 basis point improvement at Pratt & Whitney driven by the absence of a prior year customer contract settlement and favorable mix on large commercial engine shipments. Collins Aerospace Systems gross margin increased 340 basis points primarily driven by higher commercial aftermarket sales, the impact of the Rockwell Acquisition including the resulting synergies achieved, and cost reduction initiatives. Otis gross margin increased 60 basis points primarily driven by favorable pricing and mix in the Americas and China. Gross margin at Carrier was consistent with the prior year.

The increase in gross margin as a percentage of sales for the nine months ended September 30, 2019 was primarily driven by a 210 basis point increase at Pratt & Whitney driven by the absence of a prior year customer contract settlement and favorable mix on large commercial engine shipments. Collins Aerospace Systems gross margin increased 170 basis points primarily driven by the impact of the Rockwell Acquisition including the resulting synergies achieved, and an increase in commercial aftermarket sales and cost reduction initiatives. Otis gross margin increased 10 basis points primarily driven by favorable pricing and mix in the Americas and China. Gross margin at Carrier was down 20 basis points primarily driven by unfavorable mix and higher commodities, tariffs, and logistics costs.

Research and Development

<i>(dollars in millions)</i>	<u>Quarter Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
Company-funded	\$ 732	\$ 586	\$ 2,203	\$ 1,729
Percentage of net sales	3.8%	3.5%	3.8%	3.6%
Customer-funded	\$ 582	\$ 356	\$ 1,706	\$ 1,044
Percentage of net sales	3.0%	2.2%	3.0%	2.2%

Research and development spending is subject to the variable nature of program development schedules and, therefore, year-over-year fluctuations in spending levels are expected. The majority of the company-funded spending is incurred by the aerospace businesses. The year-over-year increase (25%) in company-funded research and development for the quarter ended September 30, 2019 was primarily driven by the impact of the Rockwell Acquisition (22%). The remaining increase primarily reflects higher expenses across various programs at Pratt & Whitney (3%) and Collins Aerospace Systems (2%), partially offset by lower expenses at Otis (2%). For the nine months ended September 30, 2019 company-funded research and development increased 27%, driven by the impact of the Rockwell Collins acquisition (22%). The remaining increase primarily reflects higher expenses across various programs at Pratt & Whitney (5%) and Collins Aerospace Systems (2%) partially offset by lower expenses at Otis (2%).

The increase (63%) in customer-funded research and development for the quarter ended September 30, 2019 was primarily driven by the impact of the Rockwell Acquisition (62%). The remaining increase was driven by higher military development program expenses at Collins Aerospace Systems (3%), partially offset by lower research and development expenses on military development programs at Pratt & Whitney (2%). The increase (63%) in customer-funded research and development for the nine months ended September 30, 2019 was also driven by the impact of the Rockwell Collins acquisition (63%). Lower research and development expenses on military development programs at Pratt & Whitney (3%), were offset by higher expenses at Collins Aerospace Systems (3%).

Selling, General and Administrative

<i>(dollars in millions)</i>	<u>Quarter Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
Selling, general and administrative expenses	\$ 2,104	\$ 1,681	\$ 6,207	\$ 5,151
Percentage of net sales	10.8%	10.2%	10.8%	10.6%

Selling, general and administrative expenses increased 25% in the quarter ended September 30, 2019. The increase in expenses includes the impact of the Rockwell Collins acquisition (11%), costs associated with the Company's intention to separate its commercial businesses (6%), costs associated with the Raytheon merger (1%), and higher restructuring costs (1%). The growth in Selling, general and administrative expenses also includes higher expenses at Carrier (2%) primarily driven by the unfavorable impact of a contract termination, and increases at Collins Aerospace Systems (2%), Otis (2%) and Pratt & Whitney (1%) driven primarily by increased employee compensation related expenses and headcount.

Selling, general and administrative expenses increased 21% in the nine months ended September 30, 2019, primarily driven by the impact of the Rockwell Collins acquisition (10%), costs associated with the Company's intention to separate its commercial businesses (6%), costs associated with the Raytheon merger (1%) and higher restructuring costs (1%). The growth in Selling, general and administrative expenses also includes higher expenses at Collins Aerospace Systems (1%), Pratt & Whitney (1%) and Otis (1%) driven primarily by increased employee compensation related expenses and headcount.

We are continuously evaluating our cost structure and have implemented restructuring actions as a method of keeping our cost structure competitive. As appropriate, the amounts reflected above include the beneficial impact of restructuring actions on Selling, general and administrative expenses. See Note 8: Restructuring Costs and the Restructuring Costs section of this Management's Discussion and Analysis of Financial Condition and Results of Operations for further discussion.

Other Income, Net

<i>(dollars in millions)</i>	<u>Quarter Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
Other income, net	\$ 37	\$ 131	\$ 361	\$ 1,303

Other income, net includes equity earnings in unconsolidated entities, royalty income, foreign exchange gains and losses, as well as other ongoing and nonrecurring items. The year-over-year decrease in Other income (72%) for the quarter ended September 30, 2019 primarily reflects the impairment of an investment at Carrier (82%), partially offset by the net favorable year-over-year impact of foreign exchange gains and losses (11%).

The year-over-year decrease in Other income, net (72%) for the nine months ended September 30, 2019 primarily reflects the absence of the prior year gain on the sale of Taylor Company (61%), the impairment of an investment at Carrier (8%) and the net unfavorable year-over-year impact of foreign exchange gains and losses (3%).

Interest Expense, Net

<i>(dollars in millions)</i>	<u>Quarter Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
Interest expense	\$ 435	\$ 323	\$ 1,323	\$ 837
Interest income	(34)	(65)	(131)	(116)
Interest expense, net	<u>\$ 401</u>	<u>\$ 258</u>	<u>\$ 1,192</u>	<u>\$ 721</u>
Average interest expense rate	3.7%	3.6%	3.7%	3.5%

Interest expense, net increased 55% and 65% for the quarter and nine months ended September 30, 2019, respectively. The increase in interest expense primarily reflects interest on debt acquired from the Rockwell Collins acquisition and the impact of the August 16, 2018 issuance of notes representing \$11 billion in aggregate principal. The average maturity of our long-term debt at September 30, 2019 is approximately 10 years. The decrease in interest income for the quarter ended September 30, 2019 primarily reflects prior year interest earned on higher cash balances accumulated in anticipation of the Rockwell Collins acquisition. The increase in interest income for the nine months ended September 30, 2019 was primarily driven by interest income related to tax settlements.

Income Taxes

	<u>Quarter Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
Effective tax rate	47.3%	23.7%	29.6%	25.2%

The increase in the effective tax rate for the quarter ended September 30, 2019 is primarily the result of tax charges connected to the Company's portfolio separation transactions and the non-deductible impact related to the impairment of an investment at Carrier.

The increase in the effective tax rate for the nine months ended September 30, 2019 is principally related to the items described above offset in part by gains associated with the conclusion of the audit by the Examination Division of the Internal Revenue Service for the UTC 2014, 2015, and 2016 tax years and the filing by a subsidiary of the Company to participate in an amnesty program offered by the Italian Tax Authority in the second quarter of 2019.

The Company will continue to review and incorporate as necessary TCJA changes related to forthcoming U.S. Treasury Regulations, other updates, and the finalization of the deemed inclusions to be reported on the Company's 2018 U.S. federal income tax return.

As shown in the table above, the effective tax rate for the nine months ended September 30, 2019 is 29.6%; the effective income tax rate for the same period, excluding restructuring, non-operational nonrecurring items is 23.5%. The full year rate is still subject to change as guidance and interpretations related to the TCJA continue to be finalized. The Company expects to continue to incur tax costs associated with the ongoing separation of its commercial businesses which is expected to be complete in the first half of 2020.

Net Income Attributable to Common Shareowners

<i>(dollars in millions, except per share amounts)</i>	<u>Quarter Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
Net income attributable to common shareowners	\$ 1,148	\$ 1,238	\$ 4,394	\$ 4,583
Diluted earnings per share from operations	\$ 1.33	\$ 1.54	\$ 5.09	\$ 5.72

Net income attributable to common shareowners for the quarter ended September 30, 2019 includes restructuring charges, net of tax benefit, of \$48 million, as well as a net charge for significant non-operational and/or nonrecurring items, including the impact of taxes, of \$712 million. The effect of restructuring charges and significant non-operational and/or nonrecurring items was a charge of \$0.88 per diluted share for the quarter ended September 30, 2019. The effect of foreign currency translation and Pratt & Whitney Canada hedging generated an unfavorable impact of \$0.02 on diluted earnings per share.

Net income attributable to common shareowners for the quarter ended September 30, 2018 includes restructuring charges, net of tax benefit, of \$28 million as well as a net charge for significant non-operational and/or nonrecurring items, net of tax, of \$281 million. The effect of restructuring charges and significant non-operational and/or nonrecurring items on diluted earnings per share for the quarter ended September 30, 2018 was a charge of \$0.39 per diluted share while the effect of foreign currency translation and Pratt & Whitney Canada hedging had no impact on diluted earnings per share.

Net income attributable to common shareowners for the nine months ended September 30, 2019 includes restructuring charges, net of tax benefit, of \$179 million as well as a net charge for significant non-operational and/or nonrecurring items, including the impact of taxes, of \$880 million. The effect of restructuring charges and nonrecurring items on diluted earnings per diluted share for the nine months ended September 30, 2019 was a charge of \$1.23 per diluted share while the effect of foreign currency translation and Pratt & Whitney Canada hedging generated an unfavorable impact of \$0.06 on diluted earnings per share.

Net income attributable to common shareowners for the nine months ended September 30, 2018 includes restructuring charges, net of tax benefit, of \$139 million as well as a net gain for significant non-operational and/or nonrecurring items, including the impact of taxes, of \$179 million. The effect of restructuring charges and nonrecurring items on diluted earnings per share for the nine months ended September 30, 2018 was a gain of \$0.05 per diluted share while the effect of foreign currency translation and Pratt & Whitney Canada hedging generated a favorable impact of \$0.05 on diluted earnings per share.

Restructuring Costs

<i>(dollars in millions)</i>	Nine Months Ended September 30,	
	2019	2018
Restructuring costs	\$ 244	\$ 186

Restructuring actions are an essential component of our operating margin improvement efforts and relate to existing and recently acquired operations. Charges generally arise from severance related to workforce reductions, facility exit and lease termination costs associated with the consolidation of field and manufacturing operations and costs to exit legacy programs. 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.

2019 Actions. During the nine months ended September 30, 2019, we recorded net pre-tax restructuring charges of \$158 million relating to ongoing cost reduction actions initiated in 2019. We expect to incur additional restructuring charges of \$266 million to complete these actions. We are targeting to complete in 2019 and 2020 the majority of the remaining workforce and facility related cost reduction actions initiated in 2019. We expect recurring pre-tax savings in continuing operations to increase to approximately \$358 million annually over the two-year period subsequent to initiating the actions. Approximately 93% of the total expected pre-tax charges will require cash payments, which we have funded and expect to continue to fund with cash generated from operations. During the nine months ended September 30, 2019, we had cash outflows of approximately \$89 million related to the 2019 actions.

2018 Actions. During the nine months ended September 30, 2019 and 2018, we recorded net pre-tax restructuring charges of \$44 million and \$97 million, respectively, for actions initiated in 2018. We expect to incur additional restructuring charges of \$8 million to complete these actions. We are targeting to complete in 2019 the majority of the remaining workforce and facility related cost reduction actions initiated in 2018. We expect recurring pre-tax savings in continuing operations to increase over the two-year period subsequent to initiating the actions to approximately \$260 million annually, of which, approximately \$140 million was realized during the nine months ended September 30, 2019. Approximately 93% of the total expected pre-tax charges will require cash payments, which we have funded and expect to continue to fund with cash generated from operations. During the nine months ended September 30, 2019, we had cash outflows of approximately \$126 million related to the 2018 actions.

In addition, during the nine months ended September 30, 2019, we recorded net pre-tax restructuring costs totaling \$42 million for restructuring actions initiated in 2017 and prior. For additional discussion of restructuring, see Note 8 to the Condensed Consolidated Financial Statements.

Segment Review

Segments are generally 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. Adjustments to reconcile segment reporting to the consolidated results for the quarters and nine months ended September 30, 2019 and 2018 are included in "Eliminations and other", which also includes certain smaller subsidiaries. We attempt to quantify material factors within our discussion of the results of each segment whenever those factors are determinable. However, in some instances, the factors we cite within our segment discussion are based upon input measures or qualitative information that does not lend itself to quantification when discussed in the context of the financial results measured on an output basis and are not, therefore, quantified in the below discussions.

Commercial Businesses

Our commercial businesses generally serve customers in the worldwide commercial and residential property industries, and Carrier also serves customers in the commercial and transport refrigeration industries. Sales in the commercial businesses 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, credit markets and other global and political factors. Carrier's financial performance can also be influenced by production and utilization of transport equipment and, in the case of its residential business, weather conditions. To ensure adequate supply of products in the distribution channel, Carrier customarily offers its customers incentives to purchase products. The principal incentive program provides reimbursements to distributors for offering promotional pricing on Carrier products. We account for incentive payments made as a reduction to sales.

At constant currency and excluding the effect of acquisitions and divestitures, Carrier equipment orders in the quarter ended September 30, 2019 decreased 11% in comparison to the same period of the prior year, driven by decreases in transport refrigeration (68%), commercial refrigeration (5%), and Fire and Security products (2%), partially offset by increased commercial HVAC (6%) and North America residential HVAC equipment (4%) orders. At constant currency, Otis new equipment orders in the quarter increased 6% in comparison to the prior year led by increases in the Americas (10%), Asia excluding China (6%) and China (5%).

Summary performance for each of the commercial businesses for the quarters ended September 30, 2019 and 2018 was as follows:

<i>(dollars in millions)</i>	Otis			Carrier		
	2019	2018	Change	2019	2018	Change
Net Sales	\$ 3,307	\$ 3,223	3%	\$ 4,822	\$ 4,880	(1)%
Cost of Sales	2,332	2,291	2%	3,376	3,421	(1)%
	975	932	5%	1,446	1,459	(1)%
Operating Expenses and Other	467	446	5%	761	615	24 %
Operating Profits	\$ 508	\$ 486	5%	\$ 685	\$ 844	(19)%

Operating Profit Margins

15.4%

15.1%

14.2%

17.3%

Summary performance for each of the commercial businesses for the nine months ended September 30, 2019 and 2018 was as follows:

(dollars in millions)	Otis			Carrier		
	2019	2018	Change	2019	2018	Change
Net Sales	\$ 9,751	\$ 9,604	2%	\$ 14,107	\$ 14,291	(1)%
Cost of Sales	6,901	6,814	1%	9,951	10,046	(1)%
	2,850	2,790	2%	4,156	4,245	(2)%
Operating Expenses and Other	1,401	1,366	3%	2,106	1,164	81 %
Operating Profits	\$ 1,449	\$ 1,424	2%	\$ 2,050	\$ 3,081	(33)%
Operating Profit Margins	14.9%	14.8%		14.5%	21.6%	

Otis –
Quarter Ended September 30, 2019 Compared with Quarter Ended September 30, 2018

	Factors Contributing to Total % Change				
	Organic / Operational	FX Translation	Acquisitions / Divestitures, net	Restructuring Costs	Other
Net Sales	4%	(2)%	—%	—%	1%
Cost of Sales	4%	(2)%	—%	—%	—%
Operating Profits	6%	(2)%	—%	—%	1%

The organic sales increase of 4% primarily reflects higher service sales (3%), driven by broad-based growth across geographies; and higher new equipment sales (1%) driven by growth in Asia (2%), partially offset by declines in other regions (combined, 1%).

The operational profit increase of 6% was driven by:

- favorable price and mix (8%)
- margin contribution from the higher sales volumes noted above (5%)

These increases were partially offset by:

- higher selling, general and administrative expenses (5%)

Nine Months Ended September 30, 2019 Compared with Nine Months Ended September 30, 2018

	Factors Contributing to Total % Change				
	Organic / Operational	FX Translation	Acquisitions / Divestitures, net	Restructuring Costs	Other
Net Sales	5%	(3)%	—%	—%	—%
Cost of Sales	6%	(4)%	—%	—%	(1)%
Operating Profits	4%	(4)%	—%	1%	1%

The organic sales increase of 5% primarily reflects higher service sales (3%), driven by broad-based growth across geographies, and higher new equipment sales (2%) driven by growth in Asia.

The operational profit increase of 4% was driven by:

- margin contribution from the higher sales volumes noted above (7%)
- favorable price and mix (3%)

These increases were partially offset by:

- higher selling, general and administrative expenses (4%)
- unfavorable transactional foreign exchange gains and losses from mark-to-market adjustments and embedded foreign currency derivatives within certain new equipment contracts (2%)

Carrier –

Quarter Ended September 30, 2019 Compared with Quarter Ended September 30, 2018

	Factors Contributing to Total % Change				
	Organic / Operational	FX Translation	Acquisitions / Divestitures, net	Restructuring Costs	Other
Net Sales	—%	(2)%	1%	—%	—%
Cost of Sales	—%	(1)%	—%	—%	—%
Operating Profits	1%	(2)%	1%	(2)%	(17)%

Organic sales were consistent with the prior year as growth in commercial HVAC and Fire & Security products (1%, combined) was offset by declines in both transport and commercial refrigeration (1%, combined).

Operational profit increased 1% as the impact of favorable pricing (5%), lower selling, general and administrative expenses and research and development costs (2%, combined), favorable material productivity, net of the impact of tariffs (1%) and higher joint venture income (1%) were largely offset by lower volume and unfavorable mix (6%) and the absence of a favorable prior year contract adjustment related to a large commercial project (3%).

The 17% decrease in "Other" primarily reflects the impairment of an investment (13%) and the unfavorable impact of a contract termination (4%).

Nine Months Ended September 30, 2019 Compared with Nine Months Ended September 30, 2018

	Factors Contributing to Total % Change				
	Organic / Operational	FX Translation	Acquisitions / Divestitures, net	Restructuring Costs	Other
Net Sales	2%	(2)%	(1)%	—%	—%
Cost of Sales	3%	(3)%	(1)%	—%	—%
Operating Profits	(1)%	(1)%	—%	(2)%	(29)%

The organic sales increase of 2% was primarily driven by growth in commercial and residential HVAC (1%, combined), and increases in global Fire & Security and transport refrigeration (1%, combined).

Operational profit decreased 1% in comparison to the prior year as favorable pricing (5%) was more than offset by unfavorable commodities, tariffs and labor productivity (3%, combined), unfavorable mix, net of higher volume (2%), and the absence of a favorable prior year contract adjustment related to a large commercial project (1%).

The 29% decrease in "Other" primarily reflects the absence of the prior year gain on the sale of Taylor Company (26%) and a current-year impairment of an investment (4%).

Aerospace Businesses

The aerospace businesses serve both commercial and government aerospace customers. Revenue passenger miles (RPMs), U.S. Government military and space spending, and the general economic health of airline carriers are all barometers for our aerospace businesses. Performance in the general aviation sector is closely tied to the overall health of the economy and is positively correlated to corporate profits.

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 RPMs, grew approximately 5% in the first eight months of 2019.

Our commercial aftermarket businesses continue to evolve as a significant portion of our aerospace businesses' customers are covered under long-term aftermarket service agreements at Pratt & Whitney and Collins Aerospace Systems. These agreements are comprehensive long-term spare part and service agreements with our customers. We expect a continued shift to long-term aftermarket service agreements in lieu of transactional spare part sales as new aerospace products enter our customers' fleets under long-term service agreements and legacy fleets are retired. For the first nine months of 2019, as compared with 2018, total commercial aerospace aftermarket sales increased 72% at Collins Aerospace Systems (up 15% excluding the impact of the Rockwell Collins acquisition) and 3% at Pratt & Whitney.

Operating profit in the quarter and nine months ended September 30, 2019 included net unfavorable changes in aerospace contract estimates totaling \$2 million and \$82 million, respectively, primarily reflecting net unfavorable contract adjustments at Pratt & Whitney. Operating profit in the quarter ended September 30, 2018 included significant net favorable changes in aerospace contract estimates totaling \$55 million, primarily reflecting favorable net contract adjustments at Pratt & Whitney. Operating profit for the nine months ended September 30, 2018 included significant net unfavorable changes in aerospace contract estimates totaling \$28 million, reflecting unfavorable net contract adjustments recorded at both Collins Aerospace Systems and Pratt & Whitney.

Summary performance for each of the aerospace businesses for the quarters ended September 30, 2019 and 2018 was as follows:

(dollars in millions)	Pratt & Whitney			Collins Aerospace Systems		
	2019	2018	Change	2019	2018	Change
Net Sales	\$ 5,283	\$ 4,789	10%	\$ 6,495	\$ 3,955	64%
Cost of Sales	4,311	4,215	2%	4,554	2,909	57%
	972	574	69%	1,941	1,046	86%
Operating Expenses and Other	501	465	8%	774	436	78%
Operating Profits	\$ 471	\$ 109	332%	\$ 1,167	\$ 610	91%
Operating Profit Margins	8.9%	2.3%		18.0%	15.4%	

Summary performance for each of the aerospace businesses for the nine months ended September 30, 2019 and 2018 was as follows:

(dollars in millions)	Pratt & Whitney			Collins Aerospace Systems		
	2019	2018	Change	2019	2018	Change
Net Sales	\$ 15,250	\$ 13,854	10%	\$ 19,584	\$ 11,734	67%
Cost of Sales	12,479	11,629	7%	14,038	8,614	63%
	2,771	2,225	25%	5,546	3,120	78%
Operating Expenses and Other	1,443	1,306	10%	2,351	1,353	74%
Operating Profits	\$ 1,328	\$ 919	45%	\$ 3,195	\$ 1,767	81%
Operating Profit Margins	8.7%	6.6%		16.3%	15.1%	

Pratt & Whitney –

Quarter Ended September 30, 2019 Compared with Quarter Ended September 30, 2018

	Factors Contributing to Total % Change				
	Organic / Operational	FX Translation*	Acquisitions / Divestitures, net	Restructuring Costs	Other
Net Sales	11%	(1)%	— %	—%	— %
Cost of Sales	10%	(1)%	— %	—%	(7)%
Operating Profits	60%	(9)%	(2)%	—%	283 %

* For Pratt & Whitney only, the transactional impact of foreign exchange hedging at Pratt & Whitney Canada has been netted against the translational foreign exchange impact for presentation purposes in the table above. For all other segments these foreign exchange transactional impacts are included within the organic/operational 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.

The organic sales growth of 11% primarily reflects higher military sales (4%), higher commercial OEM sales (3%), and higher commercial aftermarket sales (3%).

The operational profit increase of 60% was primarily driven by:

- higher commercial OEM margin contribution (118%) primarily driven by favorable mix on large commercial engine shipments and continued year-over-year cost reduction

- higher military margin contribution (17%) driven by the sales increase noted above

These increases were partially offset by:

- lower commercial aftermarket margin contribution (31%) as unfavorable mix and net unfavorable contract adjustments more than offset margin contribution from the higher volumes noted above
- higher selling, general and administrative expenses and other ramp-related costs (25%)
- higher research and development costs (18%)

The 283% increase in "Other" primarily reflects the absence of a prior year customer contract settlement.

Nine Months Ended September 30, 2019 Compared with Nine Months Ended September 30, 2018

	Factors Contributing to Total % Change				
	Organic / Operational	FX Translation*	Acquisitions / Divestitures, net	Restructuring Costs	Other
Net Sales	11%	(1)%	—%	—%	—%
Cost of Sales	10%	—%	—%	—%	(3)%
Operating Profits	13%	(2)%	—%	(2)%	36%

The organic sales growth of 11% primarily reflects higher commercial OEM sales (4%), higher military sales (4%), and higher commercial aftermarket sales of (2%).

The operational profit increase of 13% was primarily driven by:

- higher OEM margin contribution (20%) primarily driven by continued year-over-year cost reduction, favorable mix on large commercial engine shipments, and lower customer support costs
- higher military profit contribution (11%), driven by the sales increase noted above

These increases were partially offset by:

- higher research and development costs (9%)
- lower commercial aftermarket margin contribution (4%) as unfavorable mix and net unfavorable contract adjustments more than offset margin contribution from the higher volumes noted above
- higher selling, general and administrative expenses and other ramp-related costs (5%)

The 36% increase in "Other" primarily reflects the absence of a prior year customer contract settlement (33%) and favorable year-over-year licensing income (2%).

Collins Aerospace Systems –

Quarter Ended September 30, 2019 Compared with Quarter Ended September 30, 2018

	Factors Contributing to Total % Change				
	Organic / Operational	FX Translation	Acquisitions / Divestitures, net	Restructuring Costs	Other
Net Sales	7%	(1)%	58%	—%	—%
Cost of Sales	5%	—%	52%	—%	—%
Operating Profits	13%	1%	78%	(2)%	1%

The organic sales growth of 7% primarily reflects higher commercial aerospace aftermarket sales (7%), and higher military sales (3%), partially offset by lower commercial aerospace OEM sales (3%).

The increase in operational profit of 13% primarily reflects:

- higher commercial aerospace margins (8%) driven by the commercial aftermarket sales growth noted above, partially offset by lower commercial aerospace OEM margin contribution
- lower year-over-year warranty expense (7%)

- higher military margin contribution (3%) driven by the sales growth noted above

These increases were partially offset by:

- higher selling, general and administrative expenses (4%)

Nine Months Ended September 30, 2019 Compared with Nine Months Ended September 30, 2018

	Factors Contributing to Total % Change				
	Organic / Operational	FX Translation	Acquisitions / Divestitures, net	Restructuring Costs	Other
Net Sales	9%	(1)%	59%	—%	—%
Cost of Sales	8%	(1)%	56%	—%	—%
Operating Profits	12%	2 %	67%	—%	—%

The organic sales increase of 9% primarily reflects higher commercial aerospace aftermarket sales (6%), higher military sales (2%), and higher commercial OEM sales (1%).

The operational profit increase of 12% primarily reflects:

- higher commercial aerospace margin contribution (16%) driven by the commercial aftermarket sales growth noted above, partially offset by lower commercial aerospace OEM margin contribution
- higher military margin contribution (1%) driven by the sales growth noted above

This increase was partially offset by:

- higher selling, general and administrative expenses (3%)
- higher research and development costs (2%)

Eliminations and other –

	Net Sales		Operating Profits	
	Quarter Ended September 30,		Quarter Ended September 30,	
	2019	2018	2019	2018
<i>(dollars in millions)</i>				
Eliminations and other	\$ (411)	\$ (337)	\$ (232)	\$ (102)
General corporate expenses	—	—	(113)	(109)

	Net Sales		Operating Profits	
	Nine Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
<i>(dollars in millions)</i>				
Eliminations and other	\$ (1,197)	\$ (1,026)	\$ (572)	\$ (210)
General corporate expenses	—	—	(335)	(339)

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 sales eliminations for the quarter and nine months ended September 30, 2019, as compared to the same periods of 2018, reflects an increase in the amount of inter-segment eliminations, principally between our aerospace businesses. The decrease in operating profits related to Eliminations and other for the quarter ended September 30, 2019 is primarily driven by costs associated with the Company's intention to separate its commercial businesses as well as costs associated with the Raytheon merger. The decrease in operating profits related to Eliminations and other for the nine months ended September 30, 2019 is primarily driven by costs associated with the Company's intention to separate its commercial businesses, costs associated with the Raytheon merger, and the absence of the favorable impact of prior year insurance settlements.

LIQUIDITY AND FINANCIAL CONDITION

<i>(dollars in millions)</i>	September 30, 2019	December 31, 2018	September 30, 2018
Cash and cash equivalents	\$ 7,341	\$ 6,152	\$ 13,799
Total debt	44,604	45,537	39,943
Net debt (total debt less cash and cash equivalents)	37,263	39,385	26,144
Total equity	42,819	40,610	34,250
Total capitalization (total debt plus total equity)	87,423	86,147	74,193
Net capitalization (total debt plus total equity less cash and cash equivalents)	80,082	79,995	60,394
Total debt to total capitalization	51%	53%	54%
Net debt to net capitalization	47%	49%	43%

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. For 2019, we expect cash flows from operations, net of capital expenditures, to approximate \$5.3 billion to \$5.7 billion, including \$1.0 billion of one-time cash payments related to the portfolio separation. In addition to operating cash flows, other significant factors that affect our overall management of liquidity include: capital expenditures, customer financing requirements, investments in businesses, dividends, common stock repurchases, pension funding, access to the commercial paper markets, adequacy of available bank lines of credit, redemptions of debt, and the ability to attract long-term capital at satisfactory terms.

At September 30, 2019, we had cash and cash equivalents of \$7.3 billion, of which approximately 80% was held by UTC's foreign subsidiaries. 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 Company no longer intends to reinvest certain undistributed earnings of its international subsidiaries that have been previously taxed in the U.S. As such, in the fourth quarter of 2018, it has recorded the taxes therewith. For the remainder of the Company's undistributed international earnings, unless tax effective to repatriate, UTC will continue to permanently reinvest these earnings. We have repatriated approximately \$1.2 billion of cash for the nine months ended September 30, 2019.

On occasion, we are required to maintain cash deposits with certain banks with respect to contractual obligations related to acquisitions, divestitures or other legal obligations. As of September 30, 2019 and December 31, 2018, the amount of such restricted cash was approximately \$40 million and \$60 million, respectively.

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. Our debt-to-total capitalization increased in 2018 which reflected additional borrowings used to finance the acquisition of Rockwell Collins as well as the acquisition of Rockwell Collins' outstanding debt. Our debt-to-total-capitalization of 51% at September 30, 2019 is down 200 basis points from December 31, 2018 and down 300 basis points from September 30, 2018.

At September 30, 2019, we had credit agreements with various banks permitting aggregate borrowings of up to \$10.35 billion, including: a \$2.20 billion revolving credit agreement and a \$2.15 billion multicurrency revolving credit agreement, both of which expire in August 2021; and a \$2.0 billion revolving credit agreement and a \$4.0 billion term credit agreement, both of which we entered into on March 15, 2019 and which will expire on March 15, 2021 or, if earlier, the date that is 180 days after the date on which each of the separations of Otis and Carrier have been consummated. As of September 30, 2019, there were no borrowings under any of these 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 September 30, 2019, our maximum commercial paper borrowing limit was \$6.35 billion. Commercial paper borrowings at September 30, 2019 include approximately €750 million (\$824 million) of euro-denominated commercial paper. We use our commercial paper borrowings for general corporate purposes, including the funding of potential acquisitions, pension contributions, debt refinancing, dividend payments and repurchases of our common stock. The need for commercial paper borrowings arises when the use of domestic cash for general corporate purposes exceeds the sum of domestic cash generation and foreign cash repatriated to the U.S.

We had no debt issuances during the nine months ended September 30, 2019 and had the following issuances of debt in 2018:

(dollars and Euro in millions)

Issuance Date	Description of Notes		Aggregate Principal Balance
August 16, 2018:	3.350% notes due 2021 ¹	\$	1,000
	3.650% notes due 2023 ¹		2,250
	3.950% notes due 2025 ¹		1,500
	4.125% notes due 2028 ¹		3,000
	4.450% notes due 2038 ¹		750
	4.625% notes due 2048 ²		1,750
	LIBOR plus 0.65% floating rate notes due 2021 ¹		750
May 18, 2018:	1.150% notes due 2024 ³	€	750
	2.150% notes due 2030 ³		500
	EURIBOR plus 0.20% floating rate notes due 2020 ³		750

- 1 The net proceeds received from these debt issuances were used to partially finance the cash consideration portion of the purchase price for Rockwell Collins and fees, expenses and other amounts related to the acquisition of Rockwell Collins.
- 2 The net proceeds from these debt issuances were used to fund the repayment of commercial paper and for other general corporate purposes.
- 3 The net proceeds received from these debt issuances were used for general corporate purposes.

We had the following repayments of debt during the nine months ended September 30, 2019 and the year-ended December, 31, 2018:

(dollars and Euro in millions)

Repayment Date	Description of Notes		Aggregate Principal Balance
July 15, 2019	1.950% notes ¹		
		\$	300
July 15, 2019	5.250% notes ¹	\$	300
December 14, 2018	Variable-rate term loan due 2020 (1 month LIBOR plus 1.25%) ¹	\$	482
May 4, 2018	1.778% junior subordinated notes	\$	1,100
February 22, 2018	EURIBOR plus 0.80% floating rate notes	€	750
February 1, 2018	6.80% notes	\$	99

- 1 The notes and term loan were acquired in connection with the Rockwell Collins acquisition and have been subsequently repaid.

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

<i>(dollars in millions)</i>	Nine Months Ended September 30,	
	2019	2018
Net cash flows provided by operating activities	\$ 6,101	\$ 4,317

Cash generated from operating activities in the nine months ended September 30, 2019 was \$1,784 million higher than the same period in 2018. Net income from operations, when adjusted for the non-operating gain on the sale of Taylor Company in the prior year (\$799 million) and the current year non-cash tax charges associated with the Company's portfolio separation transactions (\$618 million), drove an increase of \$1.4 billion. Cash outflows from working capital improved \$72 million in the nine months ended September 30, 2019 over the prior period. Reduced factoring activity resulted in a decrease of approximately \$1.2 billion in cash flows from operating activities during the nine months ended September 30, 2019, as compared to the prior year. This decline in factoring activity was primarily driven by Pratt & Whitney partially offset by increased factoring a

t Collins Aerospace Systems. Factoring activity does not reflect the factoring of certain receivables performed at customer request for which we are compensated by the customer for the extended collection cycle.

In the nine months ended September 30, 2019, cash outflows from working capital were \$571 million. Inventory increased \$1.5 billion to support higher sales volume at Collins Aerospace Systems, the Geared Turbo Fan at Pratt & Whitney, and build in HVAC at Carrier. Contract assets, current increased \$499 million due to work performed in excess of billings at Pratt & Whitney and Collins Aerospace. Other current assets increased \$111 million due to increases in prepaid expenses at Pratt & Whitney. These outflows were partially offset by increases in Accounts payable and accrued liabilities of \$1.1 billion, Contract liabilities, current of \$394 million and decreases in Accounts receivable of \$59 million. Accounts payable increased at Pratt & Whitney and Collins Aerospace Systems primarily as a result of inventory build. The increase in Accrued liabilities was driven by an increase in accrued interest on debt and various accruals at Collins Aerospace Systems and Pratt & Whitney. The increase in Contract liabilities, current was driven by timing of billings at Otis and higher advanced billings at Collins Aerospace Systems.

In the nine months ended September 30, 2018, cash outflows from working capital were \$643 million, excluding the adoption impact of the New Revenue Standard. Accounts receivable increased \$2.4 billion due to an increase in sales volume. Contract assets, current increased \$892 million due to costs in excess of billings primarily at Pratt & Whitney driven by military engines, at Otis due to progress on major projects, and at Carrier. Inventory increased \$991 million primarily driven by an increase in production work in process for the Geared Turbo Fan at Pratt & Whitney, seasonal build in the Residential & Commercial HVAC businesses at Carrier, and increases at Collins Aerospace Systems. These increases were partially offset by decreases in Other assets of \$262 million primarily driven by a reduction in prepaid taxes, increases in Accounts payable and accrued liabilities of approximately \$3.0 billion, driven by higher inventory purchasing activity and customer advances at Pratt & Whitney, higher direct material purchases at Collins Aerospace Systems, and an increase in accrued interest, as well as an increase in Contract liabilities, current of \$313 million driven by progress payments on major contracts and advanced billings at Otis.

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 during the nine months ended September 30, 2019 and 2018 were approximately \$89 million and \$72 million, respectively. Although our domestic pension plans are approximately 97% funded on a projected benefit obligation basis as of September 30, 2019, and we are not required to make additional contributions through the end of 2024, we may elect to make discretionary contributions in 2019. We expect to make total contributions of approximately \$125 million to our global defined benefit pension plans in 2019, including \$25 million to our domestic pension plans. Contributions to our global defined benefit pension plans in 2019 are expected to meet or exceed the current funding requirements.

Cash Flow - Investing Activities

<i>(dollars in millions)</i>	Nine Months Ended September 30,	
	2019	2018
Net cash flows used in investing activities	\$ (1,973)	\$ (1,019)

Cash flows used in investing activities for the nine months ended September 30, 2019 and 2018 primarily reflect capital expenditures, cash investments in customer financing assets, investments/dispositions of businesses, payments related to our collaboration intangible assets and contractual rights to provide product on new aircraft platforms, and settlements of derivative contracts. The \$954 million increase in cash flows used in investing activities in the nine months ended September 30, 2019 compared to September 30, 2018 primarily relates to the absence of \$1 billion in proceeds from the sale of Taylor Company in June 2018 by Carrier.

Capital expenditures for the nine months ended September 30, 2019 of \$1,359 million primarily relate to several projects at Collins Aerospace Systems and investments in production and aftermarket capacity at Pratt & Whitney.

Cash investments in businesses in the nine months ended September 30, 2019 of \$39 million consisted of small acquisitions at Otis. Dispositions of businesses in the nine months ended September 30, 2019 of \$134 million primarily consisted of the businesses held for sale associated with the Rockwell Acquisition.

Customer financing activities in the nine months ended September 30, 2019 were a net use of cash of \$444 million, primarily driven by additional Geared Turbofan engines to support customer fleets. We may also arrange for third parties to assume a portion of our commitments. We had commercial aerospace financing and other contractual commitments of approximately \$15.7 billion at September 30, 2019 related to commercial aircraft and certain contractual rights to provide product on new aircraft platforms, of which up to \$0.2 billion may be required to be disbursed during the remainder of 2019.

We had commercial aerospace financing and other contractual commitments of approximately \$15.5 billion at December 31, 2018.

During the nine months ended September 30, 2019, our collaboration intangible assets increased by approximately \$259 million, which primarily relates to payments made under our 2012 agreement to acquire Rolls-Royce's collaboration interest in IAE.

As discussed in Note 9 to the Condensed 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 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 settlement of these derivative instruments resulted in a net cash inflow of approximately \$158 million during the nine months ended September 30, 2019 compared to a net cash inflow of \$71 million during the nine months ended September 30, 2018.

Cash Flow - Financing Activities

<i>(dollars in millions)</i>	Nine Months Ended September 30,	
	2019	2018
Net cash flows (used in) provided by financing activities	\$ (2,894)	\$ 10,839

Our financing activities primarily include the issuance and repayment of short-term and long-term debt, payment of dividends and stock repurchases. Financing activities was a cash outflow of \$2.9 billion in the nine months ended September 30, 2019 compared to a cash inflow of \$10.8 billion in the nine months ended September 30, 2018. This change is driven by the absence of \$13.4 billion of long-term debt issuances in the prior year which was primarily utilized to fund the Rockwell Acquisition, a decrease in short-term borrowings of \$1.3 billion, and an increase in dividends paid on common stock of \$0.2 billion, partially offset by a reduction in long-term debt repayments of \$1.4 billion.

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 \$984 million of outstanding commercial paper at September 30, 2019.

At September 30, 2019, management had remaining authority to repurchase approximately \$1.9 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 and as required under our employee savings plan. Our ability to repurchase shares is subject to applicable law, including restrictions arising from the pending merger transaction with Raytheon. We made cash payments of approximately \$111 million to repurchase approximately 857 thousand shares of our common stock during the nine months ended September 30, 2019.

We paid dividends on common stock of \$0.735 per share, totaling approximately \$1,830 million in the aggregate for the nine months ended September 30, 2019. On October 10, 2019, the Board of Directors declared a dividend of \$0.735 per share payable December 10, 2019 to shareowners of record at the close of business on November 15, 2019.

On September 27, 2019 we filed a universal shelf registration statement 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 the shelf registration statement.

Off-Balance Sheet Arrangements and Contractual Obligations

In our 2018 Annual Report, incorporated by reference in our 2018 [Form 10-K](#), we disclosed our off-balance sheet arrangements and contractual obligations. As of September 30, 2019, there have been no material changes to these off-balance sheet arrangements and contractual obligations outside the ordinary course of business.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There has been no significant change in our exposure to market risk during the nine months ended September 30, 2019. For discussion of our exposure to market risk, refer to Part II, Item 7A, "Quantitative and Qualitative Disclosures About Market Risk," contained in our 2018 Form 10-K.

Item 4. Controls and Procedures

As required by Rule 13a-15 under the Exchange Act, 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 as of September 30, 2019. 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, our CFO and our Controller have concluded that, as of September 30, 2019, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in the reports that we file or submit under the Exchange Act 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, our CFO and our Controller, as appropriate, to allow timely decisions regarding required disclosure.

There has been no change in our internal control over financial reporting during the nine months ended September 30, 2019, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Cautionary Note Concerning Factors That May Affect Future Results

This Form 10-Q 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,” “outlook,” “confident,” “on track” and other words of similar meaning. Forward-looking statements may include, among other things, statements relating to future sales, earnings, cash flow, results of operations, uses of cash, share repurchases, tax rates, R&D spend, other measures of financial performance, potential future plans, strategies or transactions, credit ratings and net indebtedness, other anticipated benefits of the Rockwell Acquisition, the proposed merger with Raytheon or the spin-offs by UTC of Otis and Carrier into separate independent companies (the “separation transactions”), including estimated synergies and customer cost savings resulting from the proposed merger, the expected timing of completion of the proposed merger and the separation transactions, estimated costs associated with such transactions and other statements that are not historical facts. 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 and Raytheon 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, the financial condition of our customers and suppliers, and the risks associated with U.S. government sales (including changes or shifts in defense spending due to budgetary constraints, spending cuts resulting from sequestration, a government shutdown, or otherwise, and uncertain funding of programs);
- challenges in the development, production, delivery, support, performance and realization of the anticipated benefits (including our expected returns under customer contracts) of advanced technologies and new products and services;
- the scope, nature, impact or timing of the proposed merger with Raytheon and the separation transactions and other merger, acquisition and divestiture activity, including among other things the integration of or with other businesses and realization of synergies and opportunities for growth and innovation and incurrence of related costs and expenses;
- future levels of indebtedness, including indebtedness that may be incurred in connection with the proposed merger with Raytheon and the separation transactions, 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, including in connection with the proposed merger with Raytheon;
- 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 (including the potential termination of U.S. government contracts and performance under undefinitized contract awards and the potential inability to recover termination costs);
- new business and investment opportunities;
- the 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 and Raytheon and our businesses each operate, including the effect of changes in U.S. trade policies or the U.K.’s pending withdrawal from the European Union, on general market conditions, global trade policies and currency exchange rates in the near term and beyond;
- the effect of changes in tax (including U.S. tax reform enacted on December 22, 2017, which is commonly referred to as the Tax Cuts and Jobs Act of 2017), environmental, regulatory and other laws and regulations (including, among other things, export and import requirements such as the International Traffic in Arms Regulations and the Export Administration Regulations, anti-bribery and anti-corruption requirements, including the Foreign Corrupt Practices

Act, industrial cooperation agreement obligations, and procurement and other regulations) in the U.S. and other countries in which we, Raytheon and our businesses each operate;

- negative effects of the announcement or pendency of the proposed merger with Raytheon or the separation transactions on the market price of our and/or Raytheon's respective common stock and/or on our respective financial performance;
- the ability of UTC and Raytheon to receive the required regulatory approvals for the proposed merger (and the risk that such approvals may result in the imposition of conditions that could adversely affect the combined company or the expected benefits of the transaction) and to satisfy the other conditions to the closing of the merger on a timely basis or at all;
- the occurrence of events that may give rise to a right of one or both of UTC or Raytheon to terminate the merger agreement;
- risks relating to the value of our shares to be issued in the proposed merger with Raytheon, significant transaction costs and/or unknown liabilities;
- the possibility that the anticipated benefits from the proposed merger with Raytheon cannot be realized in full or at all or may take longer to realize than expected, including risks associated with third party contracts containing consent and/or other provisions that may be triggered by the proposed transaction;
- risks associated with merger-related litigation;
- the possibility that costs or difficulties related to the integration of UTC's and Raytheon's operations will be greater than expected;
- risks relating to completed merger, acquisition and divestiture activity, including UTC's integration of Rockwell Collins, including the risk that the integration may be more difficult, time-consuming or costly than expected or may not result in the achievement of estimated synergies within the contemplated time frame or at all;
- the ability of each of UTC, Raytheon, the companies resulting from the separation transactions and the combined company to retain and hire key personnel;
- the expected benefits and timing of the separation transactions, and the risk that conditions to the separation transactions will not be satisfied and/or that the separation transactions will not be completed within the expected time frame, on the expected terms or at all;
- the intended qualification of (i) the merger as a tax-free reorganization and (ii) the separation transactions as tax-free to UTC and UTC's shareowners, in each case, for U.S. federal income tax purposes;
- the possibility that any opinions, consents, approvals or rulings required in connection with the separation transactions will not be received or obtained within the expected time frame, on the expected terms or at all;
- expected financing transactions undertaken in connection with the proposed merger with Raytheon and the separation transactions and risks associated with additional indebtedness;
- the risk that dissynergy costs, costs of restructuring transactions and other costs incurred in connection with the separation transactions will exceed our estimates; and
- the impact of the proposed merger and the separation transactions on the respective businesses of UTC and Raytheon and the risk that the separation transactions may be more difficult, time-consuming or costly than expected, including the impact on UTC's resources, systems, procedures and controls and the impact on relationships with customers, suppliers, employees and other business counterparties.

In addition, this Form 10-Q 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 Condensed Consolidated Financial Statements" under the heading "Note 15: Contingent Liabilities," the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" under the headings "Business Overview," "Critical Accounting Estimates," "Results of Operations," and "Liquidity and Financial Condition," and the sections titled "Legal Proceedings" and "Risk Factors" in this Form 10-Q and in our 2018 Annual Report and 2018 Form 10-K. Additional important information as to these factors is included in our 2018 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", in our 2018 Form 10-K 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 our Form S-4 Registration Statements (Registration No. 333-220883) and (Registrations No. 333-232696) under the heading "Risk Factors". 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.

PART II – OTHER INFORMATION**Item 1. Legal Proceedings***Federal Securities Laws Litigation*

On January 2, 2018, a purported shareowner filed a second amended complaint in the United States District Court for the Southern District of New York (the "District Court") under the federal securities laws against the Company and certain of its current and former executives (*Frankfurt-Trust Investment Luxemburg AG v. United Technologies Corporation et al.*), which further amends a previously disclosed complaint that was filed on May 10, 2017. In the second amended complaint, the plaintiff purports to represent a class of shareowners who purchased the Company's stock between December 11, 2014 and July 20, 2015. The second amended complaint alleges violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, and Rule 10b-5 thereunder, related to alleged false and misleading statements and omissions of material fact made in connection with the Company's 2015 earnings expectations. On September 28, 2018, the District Court granted the defendants' motion to dismiss the case in its entirety. On October 25, 2018, the plaintiff filed a Notice of Appeal to the United States Court of Appeals for the Second Circuit (the "Court of Appeals"). On October 15, 2019, the Court of Appeals affirmed the District Court's decision.

See Note 15: Contingent Liabilities, for discussion regarding other legal proceedings.

Except as otherwise noted above, there have been no material developments in legal proceedings. For previously reported information about legal proceedings refer to Part I, Item 3, "Legal Proceedings," of our 2018 Form 10-K and Part II - Other Information, Item 1. Legal Proceedings of our 2019 Form 10-Q for the quarters ended March 31, 2019 and June 30, 2019.

Item 1A. Risk Factors

There have been no material changes in the Company's risk factors from those disclosed in Part I, Item 1A, Risk Factors, in our 2018 Form 10-K and in Part II, Item 1A, Risk Factors in our 2019 Form 10-Q for the quarter ended June 30, 2019.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds**Issuer Purchases of Equity Securities**

The following table provides information about our purchases during the quarter ended September 30, 2019 of equity securities that are registered by us pursuant to Section 12 of the Exchange Act.

2019	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)
July 1 - July 31	95	\$ 132.96	95	\$ 1,880
August 1 - August 31	118	127.87	118	\$ 1,865
September 1 - September 30	92	136.78	92	\$ 1,852
Total	305	\$ 132.13	305	

On October 14, 2015, our Board of Directors authorized a share repurchase program for up to \$12 billion of our common stock, replacing the program announced on July 19, 2015. At September 30, 2019, the maximum dollar value of shares that may yet be purchased under this current program was approximately \$1,852 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 and as required under our employee savings plan. Our ability to repurchase shares is subject to applicable law, including restrictions arising from the pending merger transaction with Raytheon. No shares were reacquired in transactions outside the program during the quarter ended September 30, 2019.

Item 6.	Exhibits
Exhibit Number	Exhibit Description
15	Letter re: unaudited interim financial information.*
31.1	Rule 13a-14(a)/15d-14(a) Certification.*
31.2	Rule 13a-14(a)/15d-14(a) Certification.*
31.3	Rule 13a-14(a)/15d-14(a) Certification.*
32	Section 1350 Certifications.*
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.* (File name: utx-20190630.xml)
101.SCH	Inline XBRL Taxonomy Extension Schema Document.* (File name: utx-20190630.xsd)
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.* (File name: utx-20190630_cal.xml)
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.* (File name: utx-20190630_def.xml)
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.* (File name: utx-20190630_lab.xml)
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.* (File name: utx-20190630_pre.xml)
104	Cover Page Interactive Data File - the cover page XBRL tags are embedded within the Inline XBRL document.

Notes to Exhibits List:

* Submitted electronically herewith.

Attached as Exhibit 101 to this report are the following formatted in Inline XBRL (Extensible Business Reporting Language): (i) Condensed Consolidated Statements of Operations for the quarters and nine months ended September 30, 2019 and 2018, (ii) Condensed Consolidated Statements of Comprehensive Income for the quarters and nine months ended September 30, 2019 and 2018, (iii) Condensed Consolidated Balance Sheets as of September 30, 2019 and December 31, 2018, (iv) Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2019 and 2018, (v) Condensed Consolidated Statement of Changes in Equity for the quarters and nine months ended September 30, 2019 and 2018 and (vi) Notes to Condensed Consolidated Financial Statements.

SIGNATURES

Pursuant to the requirements 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)**

Dated: October 25, 2019

by: _____ /s/ AKHIL JOHRI

Akhil Johri

Executive Vice President & Chief Financial Officer

(on behalf of the Registrant and as the Registrant's Principal Financial Officer)

Dated: October 25, 2019

by: _____ /s/ ROBERT J. BAILEY

Robert J. Bailey

Corporate Vice President, Controller

(on behalf of the Registrant and as the Registrant's Principal Accounting Officer)

October 25, 2019

Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549

Commissioners:

We are aware that our report dated October 25, 2019 on our review of interim financial information of United Technologies Corporation, which appears in this Quarterly Report on Form 10-Q, is incorporated by reference in the Registration Statements on Form S-3 (No. 333-234027) and Form S-8 (Nos. 333-234086, 333-234085, 333-234084, 333-228649, 333-225839, 333-207193, 333-197704, 333-183123, 333-177517, 333-175781, 333-150643, 333-125293, 333-110020, 333-100724, 333-100723, 333-100718 and 033-51385) of United Technologies Corporation.

Very truly yours,

/s/ PricewaterhouseCoopers LLP

Hartford, CT

CERTIFICATION

I, Gregory J. Hayes, certify that:

1. I have reviewed this quarterly report on Form 10-Q 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: October 25, 2019

/s/ GREGORY J. HAYES

Gregory J. Hayes

Chairman, President and Chief Executive Officer

CERTIFICATION

I, Akhil Johri, certify that:

1. I have reviewed this quarterly report on Form 10-Q 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: October 25, 2019

/s/ AKHIL JOHRI

Akhil Johri

Executive Vice President & Chief Financial Officer

CERTIFICATION

I, Robert J. Bailey, certify that:

1. I have reviewed this quarterly report on Form 10-Q 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: October 25, 2019

/s/ ROBERT J. BAILEY

Robert J. Bailey

Corporate Vice President, Controller

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 Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 (the "Form 10-Q") 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-Q fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Date: October 25, 2019

/s/ GREGORY J. HAYES

Gregory J. Hayes

Chairman, President and Chief Executive Officer

Date: October 25, 2019

/s/ AKHIL JOHRI

Akhil Johri

Executive Vice President & Chief Financial Officer

Date: October 25, 2019

/s/ ROBERT J. BAILEY

Robert J. Bailey

Corporate Vice President, Controller