

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of RTX Corporation (RTX) is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with accounting principles generally accepted in the United States of America. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements.

Management has assessed the effectiveness of RTX's internal control over financial reporting as of December 31, 2023. In making its assessment, management has utilized the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in its *Internal Control—Integrated Framework*, released in 2013. Management concluded that based on its assessment, RTX's internal control over financial reporting was effective as of December 31, 2023. The effectiveness of RTX's internal control over financial reporting, as of December 31, 2023, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

/s/ GREGORY J. HAYES

Gregory J. Hayes
Chief Executive Officer

/s/ NEIL G. MITCHILL, JR.

Neil G. Mitchill, Jr.
Executive Vice President and Chief Financial Officer

/s/ AMY L. JOHNSON

Amy L. Johnson
Corporate Vice President and Controller

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareowners and Board of Directors of RTX Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of RTX Corporation and its subsidiaries (the “Company”) as of December 31, 2023 and 2022, and the related consolidated statements of operations, of comprehensive income, of changes in equity and of cash flows for each of the three years in the period ended December 31, 2023, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company’s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company’s internal control over financial reporting based on our audits. 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 audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

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

Critical Audit Matters

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

Revenue Recognition - Contract Estimates at Completion

As described in Note 1 to the consolidated financial statements, the majority of the Company's revenues of \$68.9 billion for the year ended December 31, 2023, are from long-term contracts associated with the design, development, manufacture or modification of complex aerospace or defense equipment or related services. The Collins and Pratt & Whitney segments primarily serve commercial and government customers in both the original equipment manufacturer and aftermarket parts and services markets of the aerospace industry, while the Raytheon segment primarily provides products and services to government customers in the defense industry. For certain long-term aftermarket contracts, revenue is recognized over the contract period, and the Company generally accounts for such contracts as a series of daily performance obligations to stand ready to provide spare parts, product maintenance and aftermarket services. Substantially all of the defense business revenue is recognized over time because of the continuous transfer of control to customers. For performance obligations satisfied over time, revenue is recognized on a percentage-of-completion basis generally using costs incurred to date relative to total estimated costs at completion to measure progress. Incurred costs represent work performed, which correspond with and best depict transfer of control to the customer. Management reviews the estimated costs at completion at least annually or when a change in circumstances warrants a modification to a previous estimate. Due to the nature of the work required to be performed on many of the Company's performance obligations, the estimation of total revenue and cost at completion is complex, subject to many inputs and requires significant judgment by management on a contract-by-contract basis. As part of this process, management reviews information including, but not limited to, any outstanding key contract matters, progress towards completion and the related program schedule, identified risks and opportunities and the related changes in estimates of revenues and costs. The risks and opportunities relate to management's judgment about the ability and cost to achieve the schedule, consideration of customer directed delays or reductions in scheduled deliveries, technical requirements, customer activity levels, such as flight hours or aircraft landings, and related variable consideration. Management makes assumptions and estimates regarding contract revenue and costs, including estimates of labor productivity and availability, the complexity and scope of the work to be performed, the availability and cost of materials, including any impact from rising costs or inflation, the length of time to complete the performance obligation, execution by its subcontractors, the availability and timing of funding from the customer, overhead cost rates, and current and past maintenance cost and frequency driven by estimated aircraft and engine utilization and estimated useful lives of components, among others. Changes in estimates of net sales, cost of sales and the related impact to operating profit on contracts recognized over time are recognized on a cumulative catch-up basis, which recognizes the cumulative effect of the profit changes on current and prior periods based on a performance obligation's percentage of completion in the current period. A significant change in one or more of these estimates could affect the profitability of one or more of the performance obligations.

The principal considerations for our determination that performing procedures relating to revenue recognition - contract estimates at completion is a critical audit matter are (i) the significant judgment by management in developing the estimates of total revenue and total costs at completion, including significant judgments and assumptions on a contract-by-contract basis, and (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating audit evidence related to management's estimates of total revenue and total costs at completion for contracts.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the revenue recognition process, including controls over the estimates of total revenue and total costs at completion. These procedures also included, among others, testing management's process for developing the estimated total revenue and total costs at completion, including evaluating on a test basis the reasonableness of certain significant judgments and inputs considered by management specific to each contract or performance obligation. Evaluating the significant judgments and assumptions related to the estimates of total revenue and total costs at completion on a contract-by-contract basis involved evaluating whether the significant judgments and assumptions used were reasonable considering: (i) management's historical

forecasting accuracy, (ii) evidence to support the aforementioned inputs relevant to an individual contract, (iii) the consistent application of accounting policies, and (iv) the timely identification of circumstances which may warrant a modification to a previous estimate.

/s/ PricewaterhouseCoopers LLP
Boston, Massachusetts
February 5, 2024

We have served as the Company's auditor since 1947.

RTX CORPORATION
CONSOLIDATED STATEMENT OF OPERATIONS
(dollars in millions, except per share amounts; shares in millions)

	2023	2022	2021
Net sales:			
Products sales	\$ 49,571	\$ 50,773	\$ 49,270
Services sales	19,349	16,301	15,118
Total net sales	68,920	67,074	64,388
Costs and expenses:			
Cost of sales - products	43,425	41,927	41,095
Cost of sales - services	13,406	11,479	10,802
Research and development	2,805	2,711	2,732
Selling, general and administrative	5,809	5,573	5,046
Total costs and expenses	65,445	61,690	59,675
Other income, net	86	120	423
Operating profit	3,561	5,504	5,136
Non-operating expense (income), net:			
Non-service pension income	(1,780)	(1,889)	(1,944)
Debt extinguishment costs	—	—	649
Interest expense, net	1,505	1,276	1,322
Total non-operating expense (income), net	(275)	(613)	27
Income from continuing operations before income taxes	3,836	6,117	5,109
Income tax expense	456	790	964
Net income from continuing operations	3,380	5,327	4,145
Less: Noncontrolling interest in subsidiaries' earnings from continuing operations	185	111	248
Net income from continuing operations attributable to common shareowners	3,195	5,216	3,897
Loss from discontinued operations attributable to common shareowners	—	(19)	(33)
Net income attributable to common shareowners	\$ 3,195	\$ 5,197	\$ 3,864
Earnings (loss) per share attributable to common shareowners - basic			
Income from continuing operations attributable to common shareowners	\$ 2.24	\$ 3.54	\$ 2.60
Loss from discontinued operations	—	(0.02)	(0.03)
Net income attributable to common shareowners	\$ 2.24	\$ 3.52	\$ 2.57
Earnings (loss) per share attributable to common shareowners - diluted			
Income from continuing operations attributable to common shareowners	\$ 2.23	\$ 3.51	\$ 2.58
Loss from discontinued operations	—	(0.01)	(0.02)
Net income attributable to common shareowners	\$ 2.23	\$ 3.50	\$ 2.56
Weighted average number of shares outstanding:			
Basic shares	1,426.0	1,475.5	1,501.6
Diluted shares	1,435.4	1,485.9	1,508.5

See accompanying Notes to Consolidated Financial Statements

RTX CORPORATION
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(dollars in millions)

	2023	2022	2021
Net income from continuing and discontinued operations	\$ 3,380	\$ 5,308	\$ 4,112
Pension and postretirement benefit plans adjustments			
Net actuarial (loss) gain arising during period	(971)	1,291	3,246
Prior service cost arising during period	(19)	(131)	(59)
Amortization of actuarial (gain) loss and prior service cost	(568)	129	258
Other	(51)	65	23
Pension and postretirement benefit plans adjustments	(1,609)	1,354	3,468
Change in unrealized cash flow hedging	358	(143)	(254)
Foreign currency translation adjustments	562	(1,048)	(647)
Other comprehensive income (loss), before tax	(689)	163	2,567
Income tax expense related to items of other comprehensive income	288	(266)	(748)
Other comprehensive income (loss), net of tax	(401)	(103)	1,819
Comprehensive income	2,979	5,205	5,931
Less: Comprehensive income attributable to noncontrolling interest	185	111	248
Comprehensive income attributable to common shareowners	\$ 2,794	\$ 5,094	\$ 5,683

See accompanying Notes to Consolidated Financial Statements

RTX CORPORATION
CONSOLIDATED BALANCE SHEET
(dollars in millions; shares in thousands)

2023

2022

Assets		
Current assets		
Cash and cash equivalents	\$ 6,587	\$ 6,220
Accounts receivable, net	10,838	9,108
Contract assets	12,139	11,534
Inventory, net	11,777	10,617
Other assets, current	7,076	4,964
Total current assets	48,417	42,443
Customer financing assets	2,392	2,603
Fixed assets, net	15,748	15,170
Operating lease right-of-use assets	1,638	1,829
Goodwill	53,699	53,840
Intangible assets, net	35,399	36,823
Other assets	4,576	6,156
Total assets	\$ 161,869	\$ 158,864
Liabilities, Redeemable Noncontrolling Interest, and Equity		
Current liabilities		
Short-term borrowings	\$ 189	\$ 625
Accounts payable	10,698	9,896
Accrued employee compensation	2,491	2,401
Other accrued liabilities	14,917	10,999
Contract liabilities	17,183	14,598
Long-term debt currently due	1,283	595
Total current liabilities	46,761	39,114
Long-term debt	42,355	30,694
Operating lease liabilities, non-current	1,412	1,586
Future pension and postretirement benefit obligations	2,385	4,807
Other long-term liabilities	7,511	8,449
Total liabilities	100,424	84,650
Commitments and contingencies (Note 17)		
Redeemable noncontrolling interest	35	36
Shareowners' equity:		
Capital stock:		
Preferred stock, \$1 par value; 250,000 shares authorized; None issued or outstanding	—	—
Common stock, \$1 par value; 4,000,000 shares authorized; 1,712,717 and 1,710,960 shares issued	37,055	37,939
Treasury stock, 385,810 and 244,720 common shares at average cost	(26,977)	(15,530)
Retained earnings	52,154	52,269
Unearned ESOP shares	(15)	(28)
Accumulated other comprehensive loss	(2,419)	(2,018)
Total shareowners' equity	59,798	72,632
Noncontrolling interest	1,612	1,546
Total equity	61,410	74,178
Total liabilities, redeemable noncontrolling interest, and equity	\$ 161,869	\$ 158,864

See accompanying Notes to Consolidated Financial Statements

RTX CORPORATION
CONSOLIDATED STATEMENT OF CASH FLOWS
(dollars in millions)

	2023	2022	2021
Operating Activities:			
Net income from continuing operations	\$ 3,380	\$ 5,327	\$ 4,145
Adjustments to reconcile net income from continuing operations to net cash flows provided by operating activities:			
Depreciation and amortization	4,211	4,108	4,557
Deferred income tax benefit	(402)	(1,663)	(88)
Stock compensation cost	425	420	442
Net periodic pension and other postretirement income	(1,555)	(1,413)	(1,414)
Debt extinguishment costs	—	—	649
Change in:			
Accounts receivable	(1,805)	437	(570)
Contract assets	(753)	(234)	(1,594)
Inventory	(1,104)	(1,575)	163
Other current assets	(1,161)	(1,027)	(566)
Accounts payable and accrued liabilities	4,016	2,075	917
Contract liabilities	2,322	846	1,372
Other operating activities, net	309	(133)	(871)
Net cash flows provided by operating activities from continuing operations	7,883	7,168	7,142
Investing Activities:			
Capital expenditures	(2,415)	(2,288)	(2,134)
Payments on customer financing assets	(117)	(150)	(231)
Receipts from customer financing assets	212	179	389
Investments in businesses	—	(66)	(1,088)
Dispositions of businesses, net of cash transferred	6	94	1,879
Increase in other intangible assets	(751)	(487)	(308)
Receipts (payments) from settlements of derivative contracts, net	14	(205)	(16)
Other investing activities, net	12	94	145
Net cash flows used in investing activities from continuing operations	(3,039)	(2,829)	(1,364)
Financing Activities:			
Proceeds from long-term debt	12,914	1	4,062
Repayment of long-term debt	(578)	(3)	(4,254)
Proceeds from bridge loan	10,000	—	—
Repayment of bridge loan	(10,000)	—	—
Debt extinguishment costs	—	—	(649)
Change in commercial paper, net (Note 9)	(524)	518	(160)
Change in other short-term borrowings, net	87	(29)	47
Dividends paid on common stock	(3,239)	(3,128)	(2,957)
Repurchase of common stock	(12,870)	(2,803)	(2,327)
Net transfers to discontinued operations	—	—	(71)
Other financing activities, net	(317)	(415)	(447)
Net cash flows used in financing activities from continuing operations	(4,527)	(5,859)	(6,756)
Discontinued Operations:			
Net cash used in operating activities	—	—	(71)
Net cash used in investing activities	—	—	—
Net cash provided by financing activities	—	—	71
Net cash used in discontinued operations	—	—	—
Effect of foreign exchange rate changes on cash and cash equivalents from continuing operations	18	(42)	(1)
Net increase (decrease) in cash, cash equivalents and restricted cash	335	(1,562)	(979)
Cash, cash equivalents and restricted cash, beginning of year	6,291	7,853	8,832
Cash, cash equivalents and restricted cash, end of year	6,626	6,291	7,853
Less: Restricted cash, included in Other assets, current and Other assets	39	71	21
Cash and cash equivalents, end of year	\$ 6,587	\$ 6,220	\$ 7,832
Supplemental Disclosure of Cash Flow Information¹:			
Interest paid, net of amounts capitalized	\$ 1,464	\$ 1,263	\$ 1,339
Income taxes paid, net of refunds	1,527	2,400	1,124

See accompanying Notes to Consolidated Financial Statements

RTX CORPORATION
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
(dollars in millions, except per share amounts; shares in thousands)

	2023	2022	2021
Equity at January 1	\$ 74,178	\$ 74,664	\$ 73,852
Common Stock			
Balance at January 1	37,939	37,483	36,930
Common stock plans activity	610	485	553
Common stock repurchased	(1,500)	—	—
Common stock contributed to defined benefit pension plans	7	—	—
Purchase of subsidiary shares from noncontrolling interest, net	(1)	(29)	—
Balance at December 31	37,055	37,939	37,483
Treasury Stock			
Balance at January 1	(15,530)	(12,727)	(10,407)
Common stock repurchased	(11,490)	(2,803)	(2,331)
Common stock contributed to defined benefit pension plans	43	—	—
Other	—	—	11
Balance at December 31	(26,977)	(15,530)	(12,727)
Retained Earnings			
Balance at January 1	52,269	50,265	49,423
Net income	3,195	5,197	3,864
Dividends on common stock	(3,239)	(3,128)	(2,957)
Dividends on ESOP common stock	(56)	(54)	(50)
Other	(15)	(11)	(15)
Balance at December 31	52,154	52,269	50,265
Unearned ESOP Shares			
Balance at January 1	(28)	(38)	(49)
Common Stock plans activity	13	10	11
Balance at December 31	(15)	(28)	(38)
Accumulated Other Comprehensive Loss			
Balance at January 1	(2,018)	(1,915)	(3,734)
Other comprehensive income (loss), net of tax	(401)	(103)	1,819
Balance at December 31	(2,419)	(2,018)	(1,915)
Noncontrolling Interest			
Balance at January 1	1,546	1,596	1,689
Net income	185	111	248
Less: Redeemable noncontrolling interest net income	(8)	(8)	(8)
Dividends attributable to noncontrolling interest	(108)	(132)	(332)
Purchase of subsidiary shares from noncontrolling interest, net	—	(19)	—
Disposition of noncontrolling interest, net	(3)	(13)	(1)
Capital contributions	—	11	—
Balance at December 31	1,612	1,546	1,596
Equity at December 31	\$ 61,410	\$ 74,178	\$ 74,664
Supplemental share information			
Shares of common stock issued under employee plans, net	1,757	2,894	1,893
Shares of common stock repurchased	141,712	29,935	28,052
Shares of common stock contributed to benefit plans	623	—	—
Dividends declared per share of common stock	\$ 2.320	\$ 2.160	\$ 2.005

See accompanying Notes to Consolidated Financial Statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: BASIS OF PRESENTATION AND SUMMARY OF ACCOUNTING PRINCIPLES

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses. Actual results could differ from those estimates.

Effective July 17, 2023, we changed our legal name from Raytheon Technologies Corporation to RTX Corporation.

Unless the context otherwise requires, the terms “we,” “our,” “us,” “the Company,” and “RTX” mean RTX Corporation and its subsidiaries.

Organizational Structure. As previously announced, effective July 1, 2023, we streamlined the structure of our core businesses to three principal business segments: Collins Aerospace (Collins), Pratt & Whitney, and Raytheon. All segment information included in this Form 10-K is reflective of this new structure and prior period information has been recast to conform to our current period presentation. In conjunction with the segment realignment, the Company revised its accounting policy with respect to the financial statement presentation of an immaterial amount of state income taxes allocable to U.S. government contracts related to our legacy Raytheon Intelligence & Space (RIS) and Raytheon Missiles & Defense (RMD) segments. Prior to July 1, 2023, these state income taxes were classified as Selling, general and administrative expenses. Effective with the segment change, state income tax amounts previously reported within Selling, general, and administrative expenses were reclassified to Income tax expense (benefit) within the Consolidated Statement of Operations, and prior period amounts have been reclassified to conform to our current period presentation.

Pratt & Whitney Powder Metal Matter. Pratt & Whitney has determined that a rare condition in powder metal used to manufacture certain engine parts requires accelerated inspection of the PW1100G-JM (PW1100) Geared Turbofan (GTF) fleet, which powers the A320neo family of aircraft (A320neo) (herein referred to as the “Powder Metal Matter”). See “Note 17: Commitments and Contingencies” for additional information.

Russia Sanctions. In response to Russia’s invasion of Ukraine, the U.S. government and the governments of various jurisdictions in which we operate, have imposed broad economic sanctions and export controls targeting specific industries, entities, and individuals in Russia. The Russian government has implemented similar counter-sanctions and export controls targeting specific industries, entities, and individuals in the U.S. and other jurisdictions in which we operate, including certain members of the Company’s management team and Board of Directors. These government measures, among other limitations, restrict transactions involving various Russian banks and financial institutions and impose enhanced export controls limiting transfers of various goods, software, and technologies to and from Russia, including broadened export controls specifically targeting the aerospace sector. These measures have adversely affected, and could continue to adversely affect, the Company and/or our supply chain, business partners, or customers. As a result of these sanctions on Russia and export controls, in the first quarter of 2022, we recorded pretax charges of \$290 million, \$210 million net of tax and the impact of noncontrolling interest, within our Collins and Pratt & Whitney businesses primarily related to increased estimates for credit losses on both our accounts receivable and contract assets, inventory reserves and purchase order obligations, impairment of customer financing assets for products under lease, impairment of contract fulfillment costs that are no longer recoverable, and a loss on the exit of our investment in a Russia-based joint venture. We continue to monitor developments, including additional sanctions and other measures, that could adversely affect the Company and/or our supply chain, business partners, or customers.

Coronavirus Disease 2019 (COVID-19) Pandemic. The COVID-19 pandemic had negative effects on the global economy, our business and operations, the labor market, supply chains, inflation, and the industries in which we operate. However, we believe the long-term outlook for the aerospace industry remains positive due to the fundamental drivers of air travel demand, and we are not expecting significant additional direct COVID-19-related impacts on our business. Our expectations regarding the effects of the COVID-19 pandemic are based on available information and assumptions that we believe are reasonable at this time; however, the actual financial impact is highly uncertain and subject to a wide range of factors and future developments.

Summary of Accounting Principles. The following represents the significant accounting principles of RTX Corporation.

Consolidation and Classification. The Consolidated Financial Statements include the accounts of RTX Corporation, and all wholly owned, majority-owned, and otherwise controlled domestic and foreign subsidiaries. All intercompany transactions have been eliminated. For our consolidated non-wholly owned subsidiaries, a noncontrolling interest is recognized to reflect the portion of income and equity that is not attributable to us. For classification of certain current assets and liabilities, the duration of our contracts or programs is utilized to define our operating cycle, which is generally longer than one year. Included within our current assets and liabilities are Contract assets and liabilities related to our aftermarket and development arrangements, which can generally span up to twenty years.

We reclassified certain immaterial prior period amounts within the Consolidated Statement of Cash Flows to conform to our current period presentation.

Use of Estimates. Our Consolidated Financial Statements are based on the application of U.S. Generally Accepted Accounting Principles (GAAP), which require us to make estimates and assumptions about future events that affect the amounts reported in our Consolidated Financial Statements and the accompanying notes. Actual results could differ from those estimates, and any such differences may be material to our Consolidated Financial Statements. Estimates and assumptions are reviewed periodically and the effects of changes, if any, are reflected in our Consolidated Financial Statements in the period they are determined.

Cash and Cash Equivalents. Cash and cash equivalents includes cash on hand, demand deposits, and short-term cash investments that are highly liquid in nature and have original maturities of three months or less. The estimated fair value of Cash and cash equivalents approximates the carrying value due to their short maturities.

Accounts Receivable. Accounts receivable are stated at the net amount expected to be collected. Accounts receivable related to the commercial aerospace industry was approximately 80% and 73% of Accounts receivable, net at December 31, 2023 and 2022, respectively. We are exposed to credit losses primarily on our accounts receivable and contract assets related to our sales of products and services to commercial customers. The allowance for expected credit losses is established to provide for the expected lifetime credit losses by evaluating factors such as customer creditworthiness, historical payment and loss experiences, current economic conditions, including geographic and political risk, and the age and status of outstanding receivables. In certain circumstances, we may be able to develop reasonable and supportable forecasts over the contractual term of the financial asset. For periods beyond which we are able to make or obtain reasonable and supportable forecasts, we revert to historical loss experience and information.

We determine credit ratings for each customer in our portfolio based upon public information and information obtained directly from our customers. We conduct a review of customer credit ratings, published historical credit default rates for different rating categories, and multiple third-party aircraft value publications as a basis to validate the reasonableness of the allowance for expected credit losses on a quarterly basis, or when events and circumstances warrant. A credit limit is established for each customer based on the outcome of this review and consideration of the other factors discussed above. In certain cases, we may require collateral or prepayment to mitigate credit risk.

Expected credit losses are written off in the period in which the financial asset is no longer collectible.

Unbilled receivables represent revenues that are not currently billable to the customer under the terms of the contract and include unbilled amounts under commercial contracts where payment is solely subject to the passage of time. These items are expected to be billed and collected in the normal course of business. Accounts receivable, net as of December 31, 2023 and 2022 includes unbilled receivables of \$427 million and \$298 million, respectively, which primarily includes unbilled receivables with commercial aerospace customers. Other unbilled receivables where payment is subject to factors beyond just the passage of time are included in Contract assets in the Consolidated Balance Sheet.

Contract Assets and Liabilities. Contract assets and liabilities represent the difference in the timing of revenue recognition from receipt of cash from our customers. Contract assets reflect revenue recognized and performance obligations satisfied or partially 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.

Contract assets and Contract liabilities are generally classified as current as our operating cycle is generally longer than one year. See “Note 6: Contract Assets and Liabilities” for further discussion of Contract assets and liabilities.

As described in more detail above in “Accounts Receivable,” we are exposed to credit losses on our contract assets related to our sales of products and services to commercial customers and regularly assess our allowance for expected credit losses as it relates to our Contract assets.

Inventory. Inventory is stated at the lower of cost or estimated realizable value and is primarily based on first-in, first-out (FIFO) or average cost methods.

Valuation reserves for excess, obsolete, and slow-moving inventory are estimated by comparing the inventory levels of individual parts to both future sales forecasts or production requirements and historical usage rates in order to identify inventory where the resale value or replacement value is less than inventoriable cost. Other factors that management considers in determining the adequacy of these reserves include whether individual inventory parts meet current specifications and can be substituted for a part currently being sold or used as a service part, overall market conditions, and other inventory management initiatives. Manufacturing costs are allocated to current production contracts.

Equity Investments. Investments in entities we do not control are included in Other assets on the Consolidated Balance Sheet. For investments where we have significant influence, we apply the equity method of accounting, and as such, our share of the

net earnings or losses of the investee is recorded. For investments where we do not have significant influence, we record them at cost under the measurement alternative and record adjustments for observable price changes. Equity investment income and losses are included in Other income, net on the Consolidated Statement of Operations since the activities of the investee are closely aligned with our operations. We evaluate our equity investments whenever events or changes in circumstance indicate that the carrying amounts of such investments may be impaired. If a decline in the value of an equity method investment is determined to be other than temporary, a loss is recorded in earnings in the current period. Our sales to and purchases from unconsolidated entities accounted for under the equity method, which are considered related parties, are not material.

Customer Financing Assets. Customer financing assets (CFA) relate to our commercial aerospace businesses in which we provide financing to airline customers. Our financing predominantly relates to products under lease, often provided through the customers' aftermarket maintenance coverage, and to a lesser extent, notes and lease receivables. In certain limited circumstances, we pay deposits on behalf of our airline customers to secure production slots with the airframers, and such pre-delivery payments are included in Accounts receivable, net, if current, and Customer financing assets, if non-current, in our Consolidated Balance Sheet. Any unfunded pre-delivery payments are included within our commercial aerospace financing commitments as further discussed in "Note 17: Commitments and Contingencies." Interest income from notes and financing leases and rental income from operating lease assets is generally included in Other income, net in the Consolidated Statement of Operations, while gains or losses on sales of operating lease assets are included in Products sales and Cost of sales. The current portion of these financing arrangements are aggregated in Accounts receivable, net and the non-current portion of these financing arrangements are aggregated in Customer financing assets in the Consolidated Balance Sheet. The increases and decreases in CFA from funding, receipts, and certain other activity, are generally reflected as Investing Activities in the Consolidated Statement of Cash Flows. Leased assets are valued at cost and reviewed for impairment when circumstances indicate that the related carrying amounts may not be recoverable. Notes and lease receivables are valued at the net amount expected to be collected. For notes and lease receivables, we determine a specific reserve for exposure based on the difference between the carrying value of the receivable and the estimated fair value of the related collateral in connection with the evaluation of credit risk and collectability. As of December 31, 2023 and 2022, the reserves related to CFA were not material. At December 31, 2023 and 2022, 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.

Fixed Assets, Net. Fixed assets, net, are stated at cost less accumulated depreciation. Major improvements are capitalized while expenditures for maintenance, repairs, and minor improvements are expensed. For asset sales or retirements, the assets and related accumulated depreciation and amortization are eliminated from the accounts. Gains and losses on sales of our Fixed assets, net, are generally recorded in operating income.

Business Combinations. Once a business is acquired, the fair value of the identifiable assets acquired and liabilities assumed is determined with the excess cost recorded to goodwill. A preliminary fair value is determined once a business is acquired, with the final determination of the fair value being completed no later than one year from the date of acquisition.

In connection with the acquisitions of Rockwell Collins in 2018 and Goodrich in 2012, and to a lesser extent the acquisition of Raytheon Company in 2020, we recorded assumed liabilities related to customer contractual obligations on certain contracts with economic returns that were lower than what could be realized in market transactions as of the acquisition date. We measured these assumed liabilities based on the estimated cash flows of the programs plus a reasonable contracting profit margin required to transfer the contracts to market participants. These liabilities are being amortized in accordance with the underlying pattern of obligations, as reflected by the expenses incurred on the contracts. The balance of the contractual obligations was \$735 million and \$818 million at December 31, 2023 and 2022, respectively. Total consumption of the contractual obligations for the years ended December 31, 2023, 2022, and 2021 was \$83 million, \$111 million, and \$314 million, respectively, with future consumption expected to be as follows: \$81 million in 2024, \$72 million in 2025, \$61 million in 2026, \$73 million in 2027, \$60 million in 2028, and \$388 million thereafter.

Goodwill and Intangible Assets. Goodwill represents costs in excess of fair values assigned to the underlying net assets of acquired businesses. Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are subject to impairment testing annually, or more frequently if events or changes in circumstances indicate the asset might be impaired. The goodwill impairment test compares carrying values of the reporting units to their estimated fair values. If the carrying value exceeds the fair value then the carrying value is reduced to fair value. In evaluating our reporting units and indefinite-lived intangible assets for impairment, we may perform both qualitative and quantitative assessments. For the quantitative assessments that are performed, fair value is primarily based on market-based valuation methods, income-based methods using a discounted cash flow model, relief from royalty methods, or a combination of such. These assessments utilize significant assumptions including sales growth rates, projected operating profit, terminal growth rates, discount rates, royalty rates, and comparable multiples from publicly-traded companies in our industry. Such assumptions are subject to variability from year to year and are directly impacted by, among other things, global market conditions. Finite-lived intangible assets are tested for impairment when events occur that indicate that the net book value will not be recovered over future cash flows.

Intangible assets consist of patents, trademarks/tradenames, customer relationships, exclusivity assets, developed technology, and other intangible assets, including collaboration assets. Acquired intangible assets are recognized at fair value in purchase accounting. Finite-lived intangible assets are amortized to Cost of sales and Selling, general, and administrative expenses over the applicable useful lives. Exclusivity assets are commercial aerospace payments made to secure certain contractual rights to provide product on new aircraft platforms. We classify amortization of such payments as a reduction of sales. Such payments are capitalized when there are distinct rights obtained and there are sufficient incremental cash flows to support the recoverability of the assets established. Otherwise, the applicable portion of the payments are expensed. In addition, in connection with our 2012 agreement to acquire Rolls-Royce's ownership and collaboration interests in International Aero Engines AG (IAE), additional payments are due to Rolls-Royce contingent upon each hour flown through June 2027 by the V2500-powered aircraft in service as of the acquisition date. These flight hour payments are being capitalized as collaboration assets and amortized to cost of sales.

Useful lives of finite-lived intangible assets are estimated based upon the nature of the intangible asset and how the intangible asset is used. These intangible assets are amortized based on the pattern in which the economic benefits of the intangible assets are consumed, as represented by the underlying cash flows, which may result in an amortization method other than straight-line. For both our commercial aerospace collaboration assets and exclusivity arrangements, the pattern of economic benefit generally results in no amortization during the development period with amortization beginning as programs enter full rate production and aftermarket cycles. If a pattern of economic benefit cannot be reliably determined or if straight-line amortization approximates the pattern of economic benefit, a straight-line amortization method may be used. The range of estimated useful lives is as follows:

	Years
Collaboration assets	9 to 30
Customer relationships and related programs	3 to 30
Developed technology	3 to 25
Patents and trademarks	5 to 30
Exclusivity assets	5 to 25

Leases. As a lessee, we record a right-of-use asset and a lease liability on the Consolidated Balance Sheet for 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 Consolidated Statement of Operations.

We enter into lease agreements for the use of real estate space, vehicles, information technology equipment, and certain other equipment under both 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 and Operating lease liabilities, non-current on our Consolidated Balance Sheet. The current portion of our operating lease liabilities is included in Other accrued liabilities on our Consolidated Balance Sheet. Finance leases are not considered significant to our Consolidated Balance Sheet or Consolidated Statement of Operations.

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 initial direct costs and lease prepayments made at or before the commencement date and are reduced for any lease incentives received at or before the commencement date. 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 such payments are not considered fixed, and instead, expense variable payments as incurred. Variable lease expense and lease expense for short duration contracts are not a material component of lease expense. Some of our leases include the option to extend or terminate the lease. We include these options in the recognition of our right-of-use assets and lease liabilities when it is reasonably certain that we will exercise the option. Lease expense is generally recognized on a straight-line basis over the lease term.

In limited instances we act as a lessor, primarily for commercial aerospace engines for a short term during maintenance events. The majority of these leases are classified as operating leases. These leases are not significant to our Consolidated Balance Sheet or Consolidated Statement of Operations.

Other Long-Lived Assets. We evaluate the potential impairment of other long-lived assets whenever events or changes in circumstances indicate that the related carrying amounts may not be recoverable. If the carrying value of other long-lived assets held and used exceeds the sum of the undiscounted expected future cash flows, the carrying value is written down to fair value. In order for long-lived assets to be considered held for disposal, we must have committed to a plan to dispose of the assets. Once deemed held for disposal, the assets are stated at the lower of the carrying amount or fair value.

Income Taxes. Future income taxes represent the tax effects of transactions which are reported in different periods for tax and financial reporting purposes. These amounts consist of the tax effects of temporary differences between the tax and financial reporting balance sheets and tax carryforwards. Future income tax benefits and payables within the same tax-paying component of a particular jurisdiction are offset for presentation in the Consolidated Balance Sheet. In the ordinary course of business there is inherent uncertainty in quantifying our income tax positions. We assess our income tax positions and record tax benefits for all years subject to examination based upon management's evaluation of the facts, circumstances, and information available at the reporting date. For those tax positions where it is more-likely-than-not that a tax benefit will be sustained, we have recorded the largest amount of tax benefit with a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where it is not more-likely-than-not that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements. Where applicable, associated interest expense has also been recognized. We recognize accrued interest related to unrecognized tax benefits in interest expense. Penalties, if incurred, would be recognized as a component of income tax expense. State income tax amounts are generally included in income tax expense.

We have elected to account for tax on Global Intangible Low-Taxed Income (GILTI) as a period cost, as incurred.

Revenue Recognition. A majority of our revenues are from long-term contracts associated with the design, development, manufacture, or modification of complex aerospace or defense equipment or related services. Collins and Pratt & Whitney primarily serve commercial and government customers in both the original equipment manufacturer (OEM) and aftermarket parts and services markets of the aerospace industry, while Raytheon primarily provides products and services to government customers in the defense industry.

We account for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance, and collectability of consideration is probable. For certain contracts that meet the foregoing requirements, primarily contracts that are directly with a foreign government, we are required to obtain certain regulatory approvals. In these cases, we recognize revenue based on the likelihood of obtaining regulatory approvals based upon all known facts and circumstances. 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 contains multiple distinct units (such as engines or certain aerospace components), or spans multiple phases of the product life-cycle such as 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 when available. If standalone selling price is not available, we estimate the standalone selling price of each performance obligation, which is generally based on an expected cost-plus-a-margin approach.

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, flight hours, aircraft landings or other customer usage activities on long-term maintenance contracts, and other sources of variable consideration, when determining the transaction price of each contract. We account for consideration payable to a customer as a reduction of revenue. Consideration payable to a customer may include cash amounts we are obligated to pay or expect to pay a customer, as well as credits or other items that can be applied against amounts owed to us. In our Collins and Pratt & Whitney businesses, we may offer customer incentives to purchase our products, which may result in payments made to those customers.

When reasonably able to estimate, we include variable consideration in the transaction price at the most likely amount to which we expect to be entitled. We include estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. These estimates are based on historical experience, anticipated performance, and our best judgment at the time. We also consider whether our contracts contain a significant financing component, which they generally do not.

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

Performance obligations are satisfied as of a point-in-time for certain aerospace components, engines, and spare parts. Revenue is recognized when control of the product transfers to the customer, generally upon product shipment. Since billing also

typically occurs upon product shipment, we generally do not have Contract assets or Contract liabilities balances related to point-in-time sales.

Performance obligations are satisfied over time if the customer receives the benefits as we perform work, if the customer controls the asset as it is being produced (continuous transfer of control), or if the product being produced for the customer has no alternative use and we have a contractual right to payment for performance to date. We recognize revenue on an over-time basis for substantially all defense contracts and certain long-term aerospace OEM and aftermarket contracts.

Substantially all of our defense business revenue, which primarily relates to our Raytheon segment, and to a lesser extent Pratt & Whitney and Collins, is recognized over time because of the continuous transfer of control to our customers. For performance obligations satisfied over time, revenue is recognized on a percentage-of-completion basis generally using costs incurred to date relative to total estimated costs at completion to measure progress. Incurred costs represent work performed, which correspond with and best depict transfer of control to the customer. Contract costs can include labor, materials, subcontractors' costs, or other direct costs and indirect costs. Our contracts with the U.S. government are typically subject to the Federal Acquisition Regulation (FAR) and are priced based on estimated or actual costs of producing goods or providing services. The FAR provides guidance on the types of costs that are allowable in establishing prices for goods and services provided under U.S. government contracts. The pricing for non-U.S. government contracts is based on the specific negotiations with each customer. Under the typical payment terms of our U.S. government fixed-price contracts, the customer pays us either performance-based payments (PBPs) or progress payments. PBPs are interim payments equal to a negotiated percentage of the contract price based on quantifiable measures of performance or on the achievement of specified events or milestones. Progress payments are interim payments up to 80-90% of costs incurred as the work progresses. Because the customer retains a portion of the contract price until completion of the contract, our U.S. government fixed-price contracts generally result in revenue recognized in excess of billings which we present as Contract assets on the Consolidated Balance Sheet. For our U.S. government cost-type contracts, the customer generally pays us for our costs incurred within a short period of time. For non-U.S. government contracts, we typically receive interim payments as work progresses, although for some contracts, we may be entitled to receive an advance payment. Such advances are not considered a significant financing component because they are used to meet working capital demands that can be higher in the early stages of a contract and to protect us from the other party failing to adequately complete some or all of its obligations under the contract. We recognize a liability for advance payments in excess of revenue recognized and present it as Contract liabilities on the Consolidated Balance Sheet.

For certain of our long-term aftermarket contracts, revenue is recognized over the contract period. We generally account for such contracts as a series of daily performance obligations to stand ready to provide spare parts, product maintenance, and aftermarket services. These arrangements include the sale of spare parts with integral services to our customers, and are generally classified as Services sales, with the corresponding costs classified in Cost of sales - services, within the Consolidated Statement of Operations. Revenue is primarily recognized on a percentage-of-completion basis using costs incurred to date relative to total estimated costs at completion to measure progress, as sufficient historical evidence indicates that the cost of performing services under the contract is incurred on an other-than-straight-line basis. For some of our long-term aftermarket contracts, we receive payment prior to delivery of products and services, resulting in a contract liability balance, while for others, we deliver products or services in advance of payment, resulting in a contract asset balance.

Contracts are often modified to account for changes in contract specifications or requirements. We consider contract modifications to exist when the modification either creates new or changes existing enforceable rights and obligations. Contract modifications for goods or services that are not distinct are accounted for as part of the existing contract either on a cumulative catch-up basis or prospective basis depending on the nature of the modification.

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

We review our Estimates at Completion (EACs) at least annually or when a change in circumstances warrants a modification to a previous estimate. For significant contracts, we review our EACs more frequently. Due to the nature of the work required to be performed on many of the Company's performance obligations, the estimation of total revenue and cost at completion is complex, subject to many inputs, and requires significant judgment by management on a contract-by-contract basis. As part of

this process, management reviews information including, but not limited to, any outstanding key contract matters, progress towards completion and the related program schedule, identified risks and opportunities, and the related changes in estimates of revenues and costs. The risks and opportunities relate to management's judgment about the ability and cost to achieve the schedule, consideration of customer-directed delays or reductions in scheduled deliveries, technical requirements, customer activity levels, such as flight hours or aircraft landings, and related variable consideration. Management must make assumptions and estimates regarding contract revenue and costs, including estimates of labor productivity and availability, the complexity and scope of the work to be performed, the availability and cost of materials including any impact from changing costs or inflation, the length of time to complete the performance obligation, execution by our subcontractors, the availability and timing of funding from our customer, overhead cost rates, and current and past maintenance cost and frequency driven by estimated aircraft and engine utilization and estimated useful lives of components, among others. In particular, fixed-price development programs involve significant management judgment, as development contracts by nature have elements that have not been done before and thus, are highly subject to future unexpected cost changes. Cost estimates may also include the estimated cost of satisfying our industrial cooperation agreements, sometimes in the form of either offset obligations or in-country industrial participation (ICIP) agreements, required under certain contracts. These obligations may or may not be distinct depending on their nature. If cash is paid to a customer to satisfy our offset obligations it is recorded as a reduction in the transaction price.

Changes in estimates of net sales, cost of sales, and the related impact to operating profit on contracts recognized over time are recognized on a cumulative catch-up basis, which recognizes the cumulative effect of the profit changes on current and prior periods based on a performance obligation's percentage-of-completion in the current period. A significant change in one or more of these estimates could affect the profitability of one or more of our performance obligations. Our EAC adjustments also include the establishment of, and changes to, loss provisions for our contracts accounted for on a percentage-of-completion basis.

Net EAC adjustments had the following impact on our operating results:

<i>(dollars in millions, except per share amounts)</i>	2023	2022	2021
Total net sales	\$ (452)	\$ 152	\$ 296
Operating profit (loss)	(648)	(37)	110
Income (loss) from continuing operations attributable to common shareowners ⁽¹⁾	(512)	(29)	87
Diluted earnings (loss) per share from continuing operations attributable to common shareowners ⁽¹⁾	\$ (0.36)	\$ (0.02)	\$ 0.06

(1) Amounts reflect a U.S. statutory tax rate of 21%, which approximates our tax rate on our EAC adjustments.

In our Collins and Pratt & Whitney businesses, we incur contract fulfillment 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 customer funding, and subsequently amortize the costs as the related performance obligations are satisfied. In instances where intellectual property does not transfer to the customer, we generally defer the customer funding of product engineering and development and recognize revenue when the related performance obligations are satisfied. Capitalized contract fulfillment costs were \$2.6 billion and \$2.3 billion as of December 31, 2023 and 2022, respectively, and are classified in Other assets, current in our Consolidated Balance Sheet and are included in Other current assets in our Consolidated Statement of Cash Flows.

In view of the risks and costs associated with developing new engines and the large up-front investments required that often require returns generated over the full estimated life of the engine, Pratt & Whitney has entered into certain collaboration arrangements in which sales, costs, and risks are shared. Sales generated from engine programs, spare parts sales, and aftermarket business under these collaboration arrangements are recorded consistent with our revenue recognition policies in our Consolidated Financial Statements. Amounts attributable to our collaborators for their share of sales are recorded as cost of sales in our Consolidated Financial Statements based upon the terms and nature of the arrangement. Costs associated with engine programs under collaborative arrangements are expensed as incurred. Under these arrangements, collaborators contribute their program share of engine parts, incur their own production costs, and make certain payments for shared or joint program costs. The reimbursement from collaborators of their share of program costs is recorded as a reduction of the related expense item at that time. As of December 31, 2023, the collaborators' interests in all commercial engine programs ranged from 13% to 49%, inclusive of a portion of Pratt & Whitney's interests held by other participants. Pratt & Whitney is the principal participant in all existing collaborative arrangements, with the exception of the Engine Alliance (EA), a joint venture with GE Aviation, which provides aftermarket support, spare parts, and service for the GP7000 engine for the Airbus A380 aircraft. There are no individually significant collaborative arrangements, and none of the collaborators individually have more than a 25% share in an individual program where Pratt & Whitney is the principal participant. The following table illustrates the

Consolidated Statement of Operations classification and amounts attributable to transactions arising from the collaborative arrangements between participants for each period presented.

<i>(dollars in millions)</i>	2023	2022	2021
Collaborator share of sales:			
Cost of sales - products ⁽¹⁾	\$ (181)	\$ 2,058	\$ 1,534
Cost of sales - services	2,151	1,808	1,428
Collaborator share of program costs (reimbursement of expenses incurred):			
Cost of sales - products	(205)	(154)	(160)
Research and development	(208)	(182)	(135)
Selling, general, and administrative	(114)	(105)	(85)

(1) Total cost of sales includes a net reduction of \$2.6 billion related to our collaborators' share of the Powder Metal Matter.

Remaining Performance Obligations (RPO). RPO represent the aggregate amount of total contract transaction price that is unsatisfied or partially unsatisfied. Total RPO was \$196 billion as of December 31, 2023. Of the total RPO as of December 31, 2023, we expect approximately 25% will be recognized as revenue over the next 12 months. Approximately 45% of our RPO relates to long-term commercial aerospace maintenance contracts at Pratt & Whitney, which are generally expected to be realized over a span of up to 20 years.

Research and Development. Company-sponsored research and development costs, including those costs related to the Company's portion in connection with cost-sharing arrangements, are charged to expense as incurred and recovery on these cost-sharing arrangements is recorded as a reduction to research and development expense as earned. Customer-sponsored research and development projects performed under contracts with customers are accounted for as contract costs and reported as cost of sales on the related revenue-generating contracts.

Foreign Exchange. We conduct business in many different currencies and, accordingly, are subject to the inherent risks associated with foreign exchange rate movements. The financial position and results of operations of many of our foreign subsidiaries are often measured using the local currency as the functional currency. Foreign currency denominated assets and liabilities are translated into U.S. Dollars at the exchange rates existing at the respective balance sheet dates, and income and expense items are translated at the average exchange rates during the respective periods. The aggregate effects of translating the balance sheets of these subsidiaries are deferred as a separate component of Accumulated other comprehensive loss (AOCL) in Shareowners' equity on our Consolidated Balance Sheet. Foreign exchange transaction gains and losses are recorded in Other income, net on our Consolidated Statement of Operations.

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

Derivatives used for hedging purposes may be designated and effective as a hedge of the identified risk exposure at the inception of the contract. All derivative instruments are recorded on the balance sheet at fair value. Derivatives used to hedge foreign currency denominated balance sheet items are reported directly in earnings along with offsetting transaction gains and losses on the items being hedged. Derivatives used to hedge forecasted cash flows associated with foreign currency commitments or forecasted commodity purchases may be accounted for as cash flow hedges, as deemed appropriate. Gains and losses on derivatives designated as cash flow hedges are recorded in other comprehensive income (loss) and reclassified to earnings as a component of products sales or expenses, as applicable, when the hedged transaction occurs. Cash payments or receipts on derivatives designated as cash flow hedges are recorded in Other operating activities, net within the Consolidated Statement of Cash Flows. To the extent that a previously-designated hedging transaction is no longer an effective hedge, any ineffectiveness measured in the hedging relationship is recorded currently in earnings in the period it occurs.

To the extent the hedge accounting criteria are not met, the foreign currency forward contracts are utilized as economic hedges and changes in the fair value of these contracts are recorded currently in earnings in the period in which they occur. Cash

receipts or payments related to the settlement of derivatives not designated as hedging instruments are recorded as investing cash flows within the Consolidated Statement of Cash Flows. Additional information pertaining to foreign currency forward contracts and net investment hedging is included in “Note 13: Financial Instruments.”

Environmental. Environmental investigatory, remediation, operating, and maintenance costs are accrued when it is probable that a liability has been incurred and the amount can be reasonably estimated. The most likely cost to be incurred is accrued based on an evaluation of currently-available facts with respect to each individual site, including existing technology, current laws and regulations, and prior remediation experience. Where no amount within a range of estimates is more likely, the minimum is accrued. For sites with multiple responsible parties, we consider our likely proportionate share of the anticipated remediation costs and the ability of the other parties to fulfill their obligations in establishing a provision for those costs. Liabilities with fixed or reliably determinable future cash payments are discounted. A portion of these costs is eligible for future recovery through the pricing of our products and services to the U.S. government. We regularly assess the probability of recovery of these costs, which requires us to make assumptions about the extent of cost recovery under our contracts and the amount of future contract activity with the U.S. government. We consider such recovery probable based on government contracting regulations and our history of receiving reimbursement for such costs, and accordingly have recorded the future recovery of these costs from the U.S. government within Other assets, current in the Consolidated Balance Sheet. Accrued environmental liabilities are not reduced by potential insurance reimbursements or potential recoveries from pursuing other parties. We also lease certain government-owned properties and generally are not liable for remediation of preexisting environmental contamination at these sites. As a result, we generally do not provide for these costs in our Consolidated Financial Statements. See “Note 17: Commitments and Contingencies” for additional details on the environmental remediation activities.

Pension and Postretirement Obligations. U.S. GAAP requires balance sheet recognition of the overfunded or underfunded status of pension and postretirement benefit (PRB) plans. Funded status is measured at least annually in the fourth quarter and represents the difference between the plans’ projected benefit obligation (PBO) and the fair market value of the plans’ assets.

Changes to our pension and PRB plans’ funded status can result from company actions, such as contributions, changes in plan provisions, or by gains and losses. Gains and losses are primarily a result of changes in assumptions and actual experience that differs from these assumptions. Major assumptions include the discount rate and expected return on plan assets (EROA). These gains or losses are recorded in other comprehensive income, net of tax effects, until they are amortized as a component of net periodic benefit (income) expense.

A calculated “market-related value” of our plan assets is generally used to develop the amount of deferred asset gains or losses to be amortized. The market-related value of assets is generally equal to the fair value of assets adjusted to reflect the recognition, and subsequent amortization, of the difference between actual and expected asset returns over a five-year period. The market-related value of assets is used to calculate the expected return on assets included in the net periodic benefit (income) expense.

The Company has elected to use the “corridor” approach in the amortization of gains and losses, which limits the expense recognition to the net outstanding gains and losses in excess of the greater of 10% of the PBO or 10% of the market-related value of assets. Gains and losses exceeding the corridor are amortized in net periodic benefit (income) expense over either the projected average remaining employee service period or the projected average remaining lifetime of inactive participants depending on the plan.

Net periodic benefit (income) expense is classified between operating and non-operating, whereby only the service cost component is included in operating profit and the remaining components are included in Non-service pension income.

Product Performance Obligations. We extend performance and operating cost guarantees beyond our normal service and warranty policies for extended periods on some of our products, particularly commercial aircraft engines. Liability under such guarantees is based upon future product performance and durability. We accrue for such costs that are probable and can be reasonably estimated. In addition, we incur discretionary costs to service our products in connection with product performance issues. The costs associated with these product performance and operating cost guarantees require estimates over the full terms of the agreements, and require management to consider factors such as the extent of future maintenance requirements, interval between flight and repair time, and the future cost of material and labor to perform the services. These cost estimates are largely based upon historical experience. See “Note 16: Guarantees” for further discussion.

Government Grants. We may receive grants from various federal, state, local, and foreign governments in exchange for compliance with certain conditions relating to our activities in a specific jurisdiction. Grants are often structured to encourage investment, job creation, job retention, employee training, and other related activities. We recognize government grants when there is reasonable assurance that the Company will comply with the conditions of the grant and the grant is received or is probable of receipt and the amount is determinable. Government grants are recorded as a reduction to the related expense or

asset to which the grant relates or recorded in Other income, net in our Consolidated Statement of Operations. Government grant transactions are not material to our financial position, results of operations, or liquidity.

Accounting Pronouncements. In December 2023, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures, to enhance income tax reporting disclosures and require disclosure of specific categories in the tabular rate reconciliation. The new standard is effective for fiscal years beginning after December 15, 2024, on a prospective basis. Early adoption and retrospective application are permitted. We are currently evaluating the impact on our disclosures of adopting this new pronouncement.

In November 2023, the FASB issued ASU 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures, which expands the segment reporting disclosures and requires disclosure of segment expenses that are regularly provided to the chief operating decision maker (CODM) and included within each reported measure of segment profit or loss, amounts and description of its composition for other segment items, and interim disclosure of a reportable segment's profit or loss and assets. Additionally, the amendments require the disclosure of the title and position of the CODM and an explanation of how the CODM uses the reported measure(s) of segment profit or loss in assessing performance and deciding how to allocate resources. The new standard is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, on a retrospective basis. Early adoption is permitted. We are currently evaluating the impact on our disclosures of adopting this new pronouncement.

In September 2022, the FASB issued ASU 2022-04, Liabilities – Supplier Finance Programs (Subtopic 405-50): Disclosure of Supplier Finance Program Obligations, which requires that a buyer in a supplier finance program disclose the key terms of supplier finance programs, the amount of obligations outstanding at the end of the reporting period that the entity has confirmed as valid to the finance provider, where these obligations are recorded in the balance sheet, and a roll forward of the obligations. The new standard is effective for fiscal years beginning after December 15, 2022, on a retrospective basis, including interim periods within those fiscal years. The adoption of this standard did not have an impact on our disclosures as we have determined the impact of supplier finance programs is not material.

Other new pronouncements issued but not effective until after December 31, 2023 are not expected to have a material impact on our results of operations, financial condition, or liquidity.

NOTE 2: ACQUISITIONS AND DISPOSITIONS

Acquisitions. Our investments in businesses, net of cash acquired, in 2022 and 2021 totaled \$66 million and \$1.1 billion, respectively. Our investments in businesses in 2022 consisted of insignificant acquisitions. Our investments in businesses in 2021 primarily consisted of the acquisitions discussed below.

In November 2021, we completed the acquisitions of FlightAware and SEAKR Engineering Inc., for a total of approximately \$1.1 billion, net of cash received. FlightAware is a leading digital aviation company providing global flight tracking solutions, predictive technology, analytics, and decision-making tools, and is reported in the Collins segment. SEAKR Engineering Inc. is a leading supplier of advanced space electronics and is reported in the Raytheon segment. In connection with these acquisitions, we recorded \$0.8 billion of goodwill and \$0.3 billion of intangible assets.

Pro forma financial information and revenue from the date of acquisition have not been provided for these acquisitions as they are not material either individually or in the aggregate.

Dispositions. In 2023, 2022, and 2021 cash inflows related to dispositions of businesses were \$6 million, \$94 million, and \$1.9 billion, respectively. Our dispositions of businesses in 2023 and 2022 consisted of insignificant dispositions. Our dispositions of businesses in 2021 primarily consisted of the dispositions discussed below.

On October 18, 2023, we entered into a definitive agreement to sell our Cybersecurity, Intelligence and Services (CIS) business within our Raytheon segment for proceeds of approximately \$1.3 billion. At December 31, 2023, the related assets of approximately \$1.0 billion and liabilities of approximately \$300 million have been accounted for as held for sale at fair value less cost to sell; however the disposition does not qualify for presentation as discontinued operations. These held for sale assets and liabilities, including approximately \$700 million of goodwill and intangibles, are presented in Other assets, current and Other assets and Other accrued liabilities and Other long-term liabilities, respectively, on our Consolidated Balance Sheet, consistent with the nature of the assets and liabilities classification before held for sale criteria was met. The closing of the transaction is subject to regulatory approvals and other customary closing conditions.

As previously disclosed, on July 20, 2023, we entered into a definitive agreement to sell the actuation and flight control business within our Collins segment to Safran S.A. for gross proceeds of approximately \$1.8 billion. The closing of the transaction is subject to regulatory approvals and other customary closing conditions. On November 16, 2023, the Italian government notified RTX that it has denied Safran's proposed acquisition of the portion of the Collins business conducted by

Microtecnica S.r.l. RTX and Safran have both appealed that decision to the relevant regional court in Italy, and continue to evaluate additional options in response to the Italian government's decision.

In December 2021, we divested our global training and services business within our Raytheon segment for approximately \$0.9 billion in cash and other consideration, resulting in an aggregate pre-tax gain, net of transaction costs, of \$251 million (\$135 million after tax), which includes a \$12 million pre-tax gain recognized in Non-service pension income within the Consolidated Statement of Operations.

In January 2021, we sold our Forcepoint business for proceeds of \$1.1 billion, net of cash transferred. We did not recognize a pre-tax gain or loss within the Consolidated Statement of Operations related to the sale of Forcepoint. The results of Forcepoint were included in Eliminations and other in our segment results.

NOTE 3: GOODWILL AND INTANGIBLE ASSETS

Goodwill. Changes in our goodwill balances for the year ended December 31, 2023 were as follows:

(dollars in millions)	Balance as of December 31, 2022	Acquisitions and Divestitures	Foreign currency translation and other	Balance as of December 31, 2023
Collins Aerospace	\$ 32,846	\$ (3)	\$ 292	\$ 33,135
Pratt & Whitney	1,563	—	—	1,563
Raytheon ⁽¹⁾	19,414	(430)	—	18,984
Total Segments	53,823	(433)	292	53,682
Eliminations and other	17	—	—	17
Total	\$ 53,840	\$ (433)	\$ 292	\$ 53,699

(1) The \$430 million reduction in Acquisition and Divestitures reflects the reclassification of goodwill to held for sale assets as a result of our definitive agreement to sell our CIS business. See "Note 2: Acquisitions and Dispositions" for additional information.

The Company reviews goodwill for impairment annually or more frequently if events or changes in circumstances indicate the asset might be impaired.

Effective July 1, 2023, we implemented a new organizational structure resulting in a change from four principal business segments to three principal business segments. As a result, we reassigned goodwill and customer relationship intangibles to our new segment structure. Goodwill was reassigned on a relative fair value basis, and we tested goodwill related to the impacted reporting units immediately before and after the reassignment and determined that no impairment existed.

We completed our annual goodwill impairment testing as of October 1, 2023 and determined that no adjustments to the carrying value of goodwill were necessary. We assessed all of our reporting units using qualitative factors to determine whether it was more likely than not that any individual reporting unit's fair value is less than its carrying value (step 0) and determined that no further testing was required.

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

(dollars in millions)	2023		2022	
	Gross Amount	Accumulated Amortization	Gross Amount	Accumulated Amortization
Amortized:				
Collaboration assets	\$ 5,810	\$ (1,688)	\$ 5,536	\$ (1,408)
Exclusivity assets	3,460	(352)	2,911	(323)
Developed technology and other	1,219	(635)	1,202	(544)
Customer relationships	29,605	(10,683)	29,775	(8,967)
	40,094	(13,358)	39,424	(11,242)
Indefinite-lived:				
Trademarks and other	8,663	—	8,641	—
Total	\$ 48,757	\$ (13,358)	\$ 48,065	\$ (11,242)

We also completed our annual indefinite-lived intangible assets impairment testing as of October 1, 2023 and determined that no adjustments to the carrying value of these assets were necessary.

Amortization of intangible assets was \$2,085 million, \$1,957 million, and \$2,439 million in 2023, 2022, and 2021, respectively. The following is the expected amortization of intangible assets for 2024 through 2028:

<i>(dollars in millions)</i>	2024	2025	2026	2027	2028
Amortization expense	\$2,193	\$2,079	\$2,005	\$1,887	\$1,811

NOTE 4: EARNINGS PER SHARE

<i>(dollars in millions, except per share amounts; shares in millions)</i>	2023	2022	2021
Net income attributable to common shareowners:			
Income from continuing operations	\$ 3,195	\$ 5,216	\$ 3,897
Loss from discontinued operations	—	(19)	(33)
Net income attributable to common shareowners	\$ 3,195	\$ 5,197	\$ 3,864
Basic weighted average number of shares outstanding	1,426.0	1,475.5	1,501.6
Stock awards and equity units (share equivalent)	9.4	10.4	6.9
Diluted weighted average number of shares outstanding	1,435.4	1,485.9	1,508.5
Earnings (loss) per share attributable to common shareowners - basic			
Income from continuing operations	\$ 2.24	\$ 3.54	\$ 2.60
Loss from discontinued operations	—	(0.02)	(0.03)
Net income attributable to common shareowners	\$ 2.24	\$ 3.52	\$ 2.57
Earnings (loss) per share attributable to common shareowners - diluted			
Income from continuing operations	\$ 2.23	\$ 3.51	\$ 2.58
Loss from discontinued operations	—	(0.01)	(0.02)
Net income attributable to common shareowners	\$ 2.23	\$ 3.50	\$ 2.56

The computation of diluted earnings per share (EPS) 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 EPS excludes the effect of the potential release or exercise of stock awards when the awards' assumed proceeds exceed the average market price of the common shares during the period. For 2023, 2022, and 2021, there were 9.6 million, 6.2 million, and 13.4 million stock awards excluded from the computation, respectively.

NOTE 5: ACCOUNTS RECEIVABLE, NET

Accounts receivable, net consisted of the following:

<i>(dollars in millions)</i>	2023	2022
U.S. government contracts (including foreign military sales)	\$ 1,147	\$ 1,371
Other customers	10,007	8,189
Allowance for expected credit losses	(316)	(452)
Total accounts receivable, net	\$ 10,838	\$ 9,108

The changes in the allowance for expected credit losses related to Accounts receivable were as follows:

<i>(dollars in millions)</i>	2023	2022
Balance as of January 1	\$ 452	\$ 475
Current period (recoveries) provision for expected credit losses, net	(92)	26
Write-offs charged against the allowance for expected credit losses	(42)	(42)
Other, net	(2)	(7)
Balance as of December 31	\$ 316	\$ 452

The activity in the allowance for expected credit losses was not material in 2021.

NOTE 6: 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 December 31, 2023 and 2022 are as follows:

<i>(dollars in millions)</i>	2023	2022
Contract assets	\$ 12,139	\$ 11,534
Contract liabilities	(17,183)	(14,598)
Net contract liabilities	\$ (5,044)	\$ (3,064)

Contract assets increased \$605 million during 2023 primarily due to sales in excess of billings on certain contracts at Pratt & Whitney and Raytheon. The above items were partially offset by a decrease in contract assets driven by a customer insolvency charge recorded in the second quarter of 2023 at Pratt & Whitney, the reclassification of certain Raytheon Contract assets to Other assets, current as a result of our definitive agreement to sell our CIS business (see “Note 2: Acquisitions and Dispositions” for additional information), and the EAC impacts related to the Powder Metal Matter recorded in the third quarter of 2023 at Pratt & Whitney. Contract liabilities increased \$2,585 million during 2023 primarily due to billings in excess of sales on certain contracts at Pratt & Whitney and Raytheon and international advances at Raytheon.

In 2023, 2022 and 2021, we recognized revenue of \$5.3 billion, \$4.8 billion, and \$4.3 billion related to our Contract liabilities at January 1, 2023, January 1, 2022, and January 1, 2021, respectively.

As of December 31, 2023, our Contract liabilities include approximately \$405 million of advance payments received from a Middle East customer on contracts for which we no longer believe we will be able to execute on or obtain required regulatory approvals. These advance payments may become refundable to the customer if the contracts are ultimately terminated.

Contract assets consisted of the following at December 31:

<i>(dollars in millions)</i>	2023	2022
Unbilled	\$ 26,481	\$ 23,909
Progress payments	(14,342)	(12,375)
Total contract assets	\$ 12,139	\$ 11,534

The U.S. government has title to the assets related to unbilled amounts on U.S. government contracts that provide progress payments.

Contract assets are net of an allowance for expected credit losses of \$197 million and \$318 million as of December 31, 2023 and 2022, respectively. The allowance for expected credit losses activity was not significant in 2023 or 2022.

NOTE 7: INVENTORY, NET

<i>(dollars in millions)</i>	2023	2022
Raw materials	\$ 3,911	\$ 3,477
Work-in-process	4,162	3,839
Finished goods	3,704	3,301
Total inventory, net	\$ 11,777	\$ 10,617

Raw materials, work-in-process and finished goods are net of total valuation reserves of \$2.4 billion and \$2.2 billion as of December 31, 2023 and 2022, respectively.

NOTE 8: FIXED ASSETS, NET

Fixed assets, net, consisted of the following:

<i>(dollars in millions)</i>	Estimated Useful Lives	2023	2022
Land		\$ 743	\$ 744
Buildings and improvements	10-45 years	8,151	7,519
Machinery, tools, and equipment	3-20 years	18,904	17,479
Other, including assets under construction		3,594	3,374
Fixed assets, gross		31,392	29,116
Accumulated depreciation		(15,644)	(13,946)
Fixed assets, net		\$ 15,748	\$ 15,170

Leasehold improvements are amortized over the lesser of the remaining lease term or the estimated useful life of the improvement.

Depreciation expense related to Fixed assets, net is recorded predominantly utilizing the straight-line method and was \$1.8 billion in 2023, 2022, and 2021.

NOTE 9: BORROWINGS AND LINES OF CREDIT

As of December 31, 2023, we had a revolving credit agreement with various banks permitting aggregate borrowings of up to \$5.0 billion. This agreement was renewed in August 2023 and expires in August 2028. As of December 31, 2023, there were no borrowings outstanding under this agreement. The Company's \$2.0 billion revolving credit agreement scheduled to expire in September 2023 was terminated in August 2023, and there were no outstanding borrowings at the time of termination. In addition, at December 31, 2023, approximately \$0.7 billion was available under short-term lines of credit with local banks primarily at our international subsidiaries.

From time to time, we use 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 commercial paper notes have original maturities of not more than 364 days from the date of issuance. As of December 31, 2023, our maximum commercial paper borrowing limit was \$5.0 billion as the commercial paper is backed by our \$5.0 billion revolving credit agreement. We had no commercial paper borrowings outstanding at December 31, 2023. At December 31, 2022, we had \$0.5 billion of commercial paper borrowings outstanding, which is reflected in Short-term borrowings in our Consolidated Balance Sheet. During 2023, we had no new proceeds from issuance, and \$200 million of repayments, of commercial paper with maturities greater than 90 days. During 2022, we had \$1.4 billion of proceeds from issuance, and \$1.2 billion of repayments, of commercial paper with maturities greater than 90 days. At December 31, 2022, short-term commercial paper borrowings outstanding had a weighted-average interest rate of 4.4%.

On October 24, 2023, we entered into a senior unsecured bridge credit agreement (Bridge Loan) with various banks permitting aggregate borrowings of up to \$10.0 billion, to fund an accelerated share repurchase (ASR) and pay related fees and expenses. The \$10.0 billion Bridge Loan was paid in full and terminated in the fourth quarter of 2023 upon receipt of proceeds from the \$4.0 billion term loan facilities and the \$6.0 billion of long-term debt issuances as described below and cash on hand.

During 2022, we had insignificant issuances and repayments of long-term debt. During 2023, we had the following issuances of long-term debt and proceeds from term loan borrowings:

Date	Description of Notes	Aggregate Principal Balance (in millions)
November 8, 2023	5.750% notes due 2026 ⁽¹⁾	\$ 1,250
	5.750% notes due 2029 ⁽¹⁾	500
	6.000% notes due 2031 ⁽¹⁾	1,000
	6.100% notes due 2034 ⁽¹⁾	1,500
	6.400% notes due 2054 ⁽¹⁾	1,750
November 7, 2023	18 Month term loan at 3 Month Secured Overnight Financing Rate (SOFR) plus 1.225% due 2025 ⁽¹⁾	2,000
	3-Year term loan at 3 Month SOFR plus 1.225% due 2026 ⁽¹⁾	2,000
February 27, 2023	5.000% notes due 2026	500
	5.150% notes due 2033	1,250
	5.375% notes due 2053	1,250

(1) The net proceeds received from these debt issuances and term loans, along with cash on hand, were used to fund the repayment of the Bridge Loan, which was used to fund the ASR.

During 2023, we made the following repayments of long-term debt:

Date	Description of Notes	Aggregate Principal Balance (in millions)
December 15, 2023	3.700% notes due 2023	\$ 400
August 16, 2023	3.650% notes due 2023	171

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

(dollars in millions)	2023	2022
3.650% notes due 2023 ⁽¹⁾	\$ —	\$ 171
3.700% notes due 2023 ⁽¹⁾	—	400
3.200% notes due 2024 ⁽¹⁾	950	950
3.150% notes due 2024 ⁽¹⁾	300	300
3 Month SOFR plus 1.225% term loan due 2025	2,000	—
3.950% notes due 2025 ⁽¹⁾	1,500	1,500
5.000% notes due 2026 ⁽¹⁾	500	—
2.650% notes due 2026 ⁽¹⁾	719	719
3 Month SOFR plus 1.225% term loan due 2026	2,000	—
5.750% notes due 2026 ⁽¹⁾	1,250	—
3.125% notes due 2027 ⁽¹⁾	1,100	1,100
3.500% notes due 2027 ⁽¹⁾	1,300	1,300
7.200% notes due 2027 ⁽¹⁾	382	382
7.100% notes due 2027	135	135
6.700% notes due 2028	285	285
7.000% notes due 2028 ⁽¹⁾	185	185
4.125% notes due 2028 ⁽¹⁾	3,000	3,000
5.750% notes due 2029 ⁽¹⁾	500	—
7.500% notes due 2029 ⁽¹⁾	414	414
2.150% notes due 2030 (€500 million principal value) ⁽¹⁾	548	531
2.250% notes due 2030 ⁽¹⁾	1,000	1,000
6.000% notes due 2031 ⁽¹⁾	1,000	—
1.900% notes due 2031 ⁽¹⁾	1,000	1,000
2.375% notes due 2032 ⁽¹⁾	1,000	1,000

<i>(dollars in millions)</i>	2023	2022
5.150% notes due 2033 ⁽¹⁾	1,250	—
6.100% notes due 2034 ⁽¹⁾	1,500	—
5.400% notes due 2035 ⁽¹⁾	446	446
6.050% notes due 2036 ⁽¹⁾	410	410
6.800% notes due 2036 ⁽¹⁾	117	117
7.000% notes due 2038	148	148
6.125% notes due 2038 ⁽¹⁾	575	575
4.450% notes due 2038 ⁽¹⁾	750	750
5.700% notes due 2040 ⁽¹⁾	553	553
4.875% notes due 2040 ⁽¹⁾	600	600
4.700% notes due 2041 ⁽¹⁾	425	425
4.500% notes due 2042 ⁽¹⁾	3,500	3,500
4.800% notes due 2043 ⁽¹⁾	400	400
4.200% notes due 2044 ⁽¹⁾	300	300
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 ⁽¹⁾	1,000	1,000
4.625% notes due 2048 ⁽¹⁾	1,750	1,750
3.125% notes due 2050 ⁽¹⁾	1,000	1,000
2.820% notes due 2051 ⁽¹⁾	1,000	1,000
3.030% notes due 2052 ⁽¹⁾	1,100	1,100
5.375% notes due 2053 ⁽¹⁾	1,250	—
6.400% notes due 2054 ⁽¹⁾	1,750	—
Other (including finance leases)	255	253
Total principal long-term debt	43,697	31,249
Other (fair market value adjustments, (discounts)/premiums and debt issuance costs)	(59)	40
Total long-term debt	43,638	31,289
Less: current portion	1,283	595
Long-term debt, net of current portion	\$ 42,355	\$ 30,694

(1) We may redeem these notes, in whole or in part, at our option pursuant to their terms prior to the applicable maturity date.

The weighted-average interest rate related to total debt was 4.6% and 4.0% at December 31, 2023 and 2022, respectively.

The average maturity of our long-term debt at December 31, 2023 is approximately 13 years. The schedule of principal payments required on long-term debt for the next five years and thereafter is:

<i>(in millions)</i>	
2024	\$ 1,272
2025	3,593
2026	4,505
2027	2,937
2028	3,482
Thereafter	27,908
Total	\$ 43,697

NOTE 10: EMPLOYEE BENEFIT PLANS

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

Employee Savings Plans. We sponsor various employee savings plans. Our contributions to employer sponsored defined contribution plans were \$1,301 million, \$1,037 million, and \$962 million for 2023, 2022, and 2021, respectively.

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

Shares of common stock are allocated to employees' ESOP accounts at fair value on the date earned. Cash dividends on common stock held by the ESOP are used for debt service payments. Participants may choose to have their ESOP dividends reinvested or distributed in cash. Common stock allocated to ESOP participants is included in the average number of common shares outstanding for both basic and diluted EPS. At December 31, 2023, 24.2 million common shares had been allocated to employees, leaving 2.3 million unallocated common shares in the ESOP Trust, with a fair value of \$191 million.

Pension and Postretirement Plans. We sponsor both funded and unfunded domestic and foreign defined benefit pension plans that cover a large number of our employees. Our largest plans are generally closed to new participants. We also sponsor both funded and unfunded PRB plans that provide health care and life insurance benefits to eligible retirees. Our plans use a December 31 measurement date consistent with our fiscal year.

In December 2020, we approved a change to the Raytheon Company domestic defined benefit pension plans for non-union participants to cease future benefit accruals based on an employee's years of service and compensation under the historical formula effective December 31, 2022. The plan change does not impact participants' historical benefit accruals. Benefits for service after December 31, 2022 are based on a cash balance formula. This plan change resulted in lower pension service cost beginning January 1, 2023. At December 31, 2023, we merged our remaining Raytheon Company domestic defined benefit pension plans into the RTX Consolidated Pension Plan. This plan merger does not impact participants' benefit formulas.

We made the following contributions to our pension and PRB plans' trusts during the years ended December 31:

<i>(dollars in millions)</i>	2023	2022	2021
U.S. qualified defined benefit plans ⁽¹⁾	\$ 69	\$ —	\$ —
International defined benefit plans	60	69	42
PRB plans	28	25	17

(1) 2023 includes \$50 million of RTX common stock contributions.

(dollars in millions)	Pension		PRB	
	2023	2022	2023	2022
Change in Benefit Obligation:				
Beginning balance	\$ 49,028	\$ 67,214	\$ 984	\$ 1,370
Service cost attributable to continuing operations	222	470	3	6
Interest cost	2,507	1,520	50	29
Actuarial loss (gain)	1,909	(15,466)	53	(294)
Total benefits paid ⁽¹⁾	(4,258)	(4,328)	(176)	(166)
Net settlement, curtailment, and special termination benefits	5	3	(9)	(8)
Plan amendments	19	131	—	—
Other ⁽²⁾	160	(516)	57	47
Ending balance	\$ 49,592	\$ 49,028	\$ 962	\$ 984
Change in Plan Assets:				
Beginning balance	\$ 47,960	\$ 63,323	\$ 302	\$ 389
Actual return on plan assets	4,730	(10,841)	37	(63)
Employer contributions ⁽¹⁾	363	306	106	98
Total benefits paid ⁽¹⁾	(4,258)	(4,328)	(176)	(166)
Settlements	(2)	(4)	(9)	(8)
Other ⁽²⁾	152	(496)	56	52
Ending balance	\$ 48,945	\$ 47,960	\$ 316	\$ 302
Funded Status:				
Fair value of plan assets	\$ 48,945	\$ 47,960	\$ 316	\$ 302
Benefit obligations	(49,592)	(49,028)	(962)	(984)
Funded status of plan	\$ (647)	\$ (1,068)	\$ (646)	\$ (682)
Amounts Recognized in the Consolidated Balance Sheet Consist of:				
Noncurrent assets	\$ 1,296	\$ 3,301	\$ —	\$ —
Current liability	(206)	(236)	(64)	(71)
Noncurrent liability	(1,737)	(4,133)	(582)	(611)
Net amount recognized	\$ (647)	\$ (1,068)	\$ (646)	\$ (682)
Amounts Recognized in Accumulated Other Comprehensive Loss Consist of:				
Net actuarial loss (gain)	\$ 4,311	\$ 2,950	\$ (325)	\$ (394)
Prior service credit	(1,246)	(1,424)	(3)	(4)
Net amount recognized	\$ 3,065	\$ 1,526	\$ (328)	\$ (398)

(1) Includes benefit payments paid directly by the company.

(2) The amount included in Other primarily reflects the impact of foreign exchange translation, primarily for plans in the United Kingdom (U.K.) and Canada, and participant contributions.

The majority of our pension obligations relate to our U.S. Internal Revenue Service (IRS) qualified pension plans, which comprise 86% and 87% of our pension PBO as of December 31, 2023 and 2022, respectively. 3% of our pension PBO as of both December 31, 2023 and 2022, respectively, is attributable to our nonqualified domestic pension plans, which provide supplementary retirement benefits to certain employees in excess of the IRS qualified plan limits. International plans comprise 11% and 10% of the pension PBO as of December 31, 2023 and 2022, respectively, and are considered defined benefit pension plans for accounting purposes.

In addition to the pension and PRB noncurrent liabilities shown above, Future pension and postretirement benefit obligations on the Consolidated Balance Sheet include other immaterial pension and PRB-related liabilities.

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

<i>(dollars in millions)</i>	2023	2022
Projected benefit obligation	\$ 3,675	\$ 22,116
Accumulated benefit obligation	3,645	22,080
Fair value of plan assets	1,733	17,747

The accumulated benefit obligation for all defined benefit pension plans was \$49.4 billion and \$48.8 billion at December 31, 2023 and 2022, respectively.

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

<i>(dollars in millions)</i>	2023	2022
Projected benefit obligation	\$ 3,723	\$ 22,116
Accumulated benefit obligation	3,687	22,080
Fair value of plan assets	1,781	17,747

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

<i>(dollars in millions)</i>	2023	2022	2021
Operating expense			
Service cost	\$ 222	\$ 470	\$ 523
Non-operating expense			
Interest cost	2,507	1,520	1,249
Expected return on plan assets	(3,753)	(3,544)	(3,476)
Amortization of prior service credit	(158)	(163)	(168)
Recognized actuarial net (gain) loss	(378)	305	435
Net settlement, curtailment, and special termination benefits loss	6	2	22
Non-service pension income	(1,776)	(1,880)	(1,938)
Total net periodic pension income	\$ (1,554)	\$ (1,410)	\$ (1,415)

The components of the net periodic PRB (income) expense are as follows:

<i>(dollars in millions)</i>	2023	2022	2021
Operating expense			
Service cost	\$ 3	\$ 6	\$ 7
Non-operating expense			
Interest cost	50	29	24
Expected return on plan assets	(20)	(22)	(21)
Amortization of prior service credit	(1)	(2)	(3)
Recognized actuarial net gain	(31)	(11)	(6)
Net settlement, curtailment, and special termination benefits gain	(2)	(3)	—
Non-service pension income	(4)	(9)	(6)
Total net periodic PRB (income) expense	\$ (1)	\$ (3)	\$ 1

Other changes in pension plan assets and benefit obligations recognized in other comprehensive loss in 2023 and 2022 are as follows:

<i>(dollars in millions)</i>	2023	2022
Net actuarial loss (gain) arising during the period	\$ 935	\$ (1,082)
Amortization of actuarial gain (loss)	378	(305)
Current year prior service cost	19	131
Amortization of prior service credit	158	163
Net settlement and curtailment	(3)	1
Other ⁽¹⁾	52	(69)
Total recognized in other comprehensive income (loss)	1,539	(1,161)
Net recognized in net periodic income and other comprehensive loss	\$ (15)	\$ (2,571)

(1) The amount included in Other primarily reflects the impact of foreign exchange translation, primarily for plans in the U.K. and Canada.

The Actuarial loss arising in 2023 was primarily due to a decrease in discount rates during 2023, partially offset by actual asset returns greater than our expected return on assets.

The Actuarial gain arising in 2022 was primarily due to an increase in discount rates during 2022, partially offset by actual asset returns less than our expected return on assets.

Other changes in PRB assets and benefit obligations recognized in other comprehensive loss in 2023 and 2022 are as follows:

<i>(dollars in millions)</i>	2023	2022
Net actuarial loss (gain) arising during the period	\$ 36	\$ (209)
Amortization of actuarial gain	31	11
Amortization of prior service credit	1	2
Net settlement and curtailment	2	3
Total recognized in other comprehensive income (loss)	70	(193)
Net recognized in net periodic expense (income) and other comprehensive loss	\$ 69	\$ (196)

The Actuarial loss arising in 2023 was primarily due to a decrease in discount rates during 2023, partially offset by actual asset returns greater than our expected return on assets on our funded plans.

The Actuarial gain arising in 2022 was primarily due to an increase in discount rates during 2022, partially offset by actual asset returns less than our expected return on assets on our funded plans.

The table below reflects the total benefit payments expected to be paid from the plans or from corporate assets.

<i>(dollars in millions)</i>	Pension	PRB
2024	\$ 4,206	\$ 103
2025	3,778	95
2026	3,726	90
2027	3,663	85
2028	3,607	80
2029-2033	17,426	337

Major assumptions used in determining the pension benefit obligation and net periodic pension (income) expense are presented in the following table as weighted-averages:

	Benefit Obligation		Net Periodic Benefit (Income) Expense		
	2023	2022	2023	2022	2021
Discount rate					
PBO	5.1 %	5.5 %	5.5 %	2.8 %	2.5 %
Interest cost ⁽¹⁾	N/A	N/A	5.3 %	2.3 %	1.8 %
Service cost ⁽¹⁾	N/A	N/A	5.4 %	3.1 %	2.8 %
Salary scale	4.4 %	4.4 %	4.4 %	4.4 %	4.4 %
Expected return on plan assets	N/A	N/A	7.1 %	6.5 %	6.5 %
Interest crediting rate	5.0 %	4.5 %	4.4 %	4.0 %	3.8 %

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

Major assumptions used in determining the PRB benefit obligation and net periodic PRB (income) expense are presented in the following table as weighted-averages:

	Benefit Obligation		Net Periodic Benefit (Income) Expense		
	2023	2022	2023	2022	2021
Discount rate	5.1 %	5.5 %	5.5 %	2.8 %	2.4 %
Expected return on assets	N/A	N/A	6.8 %	5.7 %	5.7 %

Assumed health care cost trend rates used in determining the PRB benefit obligation and net periodic PRB (income) expense are as follows:

	2023	2022
Health care cost trend rate assumed for next year	4.8 %	5.0 %
Ultimate health care cost trend rate	4.2 %	4.2 %
Year that the rate reaches the ultimate health care cost trend rate	2029	2029

The weighted-average discount rates used to measure pension and PRB liabilities are generally based on yield curves developed using high-quality corporate bonds as well as plan specific expected cash flows. For our significant plans, we utilize a full yield curve approach in the estimation of the service cost and interest cost components of net periodic benefit expense by applying the specific spot rates along the yield curve used in determination of the benefit obligation to the relevant discounted projected cash flows.

In determining the EROA assumption, we consider the target asset allocation of plan assets, as well as economic and other indicators of future performance. We consult with and consider the opinions of financial and other professionals in determining the appropriate capital market assumptions. Return projections are validated using a simulation model that incorporates yield curves, credit spreads, and risk premiums to project long-term prospective returns.

Plan Assets. The plans' investment management objectives include providing the liquidity and asset levels needed to meet current and future benefit payments, while maintaining a prudent degree of portfolio diversification considering interest rate risk and market volatility. Globally, on average, investment strategies generally target a mix of 26% to 46% of growth seeking assets and 54% to 74% of income generating and hedging assets using a wide set of diversified asset types, fund strategies, and investment managers. The growth seeking allocation consists of global public equities in developed and emerging countries, private equity, real estate, and multi-asset class strategies. Growth assets include an enhanced alpha strategy that invests in publicly traded equity and fixed income securities, derivatives, and foreign currency. Investments in private equity are primarily via limited partnership interests in buy-out strategies with smaller allocations to distressed debt funds. The real estate strategy is principally concentrated in directly held U.S. core investments with some smaller investments in international, value-added, and opportunistic strategies. Within the income generating assets, the fixed income portfolio consists of mainly government and broadly diversified high quality corporate bonds.

The plans have continued their pension risk management techniques designed to reduce their interest rate risk. Specifically, the plans have incorporated liability hedging programs that include the adoption of a risk reduction objective as part of the long-term investment strategy. Under this objective the interest rate hedge is intended to increase as funded status improves. The hedging programs incorporate a range of assets and investment tools, each with varying interest rate sensitivities. The

investment portfolios are currently hedging approximately 80% of the interest rate sensitivity of the pension plan liabilities, depending on the funded status of the plan.

The fair values of pension plan assets at December 31, 2023 and 2022 by asset category are as follows:

<i>(dollars in millions)</i>	Quoted Prices in Active Markets For Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Not Subject to Leveling ⁽⁸⁾	Total
Asset Category:					
Public Equities					
Global Equities	\$ 6,156	\$ 4	\$ —	\$ —	\$ 6,160
Global Equity Commingled Funds ⁽¹⁾	—	1,012	—	—	1,012
Enhanced Global Equities ⁽²⁾	—	—	—	—	—
Other Public Equities	—	—	—	2,308	2,308
Private Equities ⁽³⁾	—	—	—	4,936	4,936
Fixed Income Securities					
Governments	3,507	1,560	—	—	5,067
Corporate Bonds	—	13,185	—	—	13,185
Structured Products	—	57	—	—	57
Other Fixed Income	—	—	—	9,669	9,669
Real Estate ⁽⁴⁾	—	—	1,467	1,632	3,099
Other ⁽⁵⁾	—	560	—	2,415	2,975
Cash & Cash Equivalents ⁽⁶⁾	—	383	—	128	511
Subtotal	\$ 9,663	\$ 16,761	\$ 1,467	\$ 21,088	\$ 48,979
Other Assets & Liabilities ⁽⁷⁾					(34)
Total at December 31, 2023				\$	\$ 48,945
Public Equities					
Global Equities	\$ 6,194	\$ 5	\$ —	\$ —	\$ 6,199
Global Equity Commingled Funds ⁽¹⁾	20	568	—	—	588
Enhanced Global Equities ⁽²⁾	(53)	75	—	—	22
Other Public Equities	—	—	—	5,771	5,771
Private Equities ⁽³⁾	—	—	—	4,068	4,068
Fixed Income Securities					
Governments	2,526	1,426	—	—	3,952
Corporate Bonds	1	12,638	—	—	12,639
Structured Products	—	57	—	—	57
Other Fixed Income	—	—	—	6,975	6,975
Real Estate ⁽⁴⁾	—	—	1,650	1,761	3,411
Other ⁽⁵⁾	—	84	—	3,071	3,155
Cash & Cash Equivalents ⁽⁶⁾	—	150	—	164	314
Subtotal	\$ 8,688	\$ 15,003	\$ 1,650	\$ 21,810	\$ 47,151
Other Assets & Liabilities ⁽⁷⁾					809
Total at December 31, 2022				\$	\$ 47,960

(1) Represents commingled funds that invest primarily in common stocks.

(2) Represents enhanced equity separate account and commingled fund portfolios. A portion of the portfolio may include long-short market neutral and relative value strategies that invest in publicly traded, equity, and fixed income securities, as well as derivatives of equity and fixed income securities and foreign currency.

(3) Represents limited partnership investments with general partners that primarily invest in equity and debt.

(4) Represents investments in real estate including commingled funds and directly held properties.

(5) Represents global balanced risk commingled funds that invest in multiple asset classes including equity, fixed income, and some commodities. "Other" also includes insurance contracts.

- (6) Represents short-term commercial paper, bonds, and other cash or cash-like instruments.
(7) Represents receivables, payables, and certain individually immaterial international plan assets that are not leveled.
(8) Certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented for the total pension benefits plan assets.

Derivatives in the plan are primarily used to manage risk and gain asset class exposure while still maintaining liquidity. Derivative instruments mainly consist of equity futures, interest rate futures, interest rate swaps, and currency forward contracts. The fair market value of the plans' derivatives through direct or separate account investments was approximately \$345 million and \$(79) million as of December 31, 2023 and 2022, respectively.

We review our assets at least quarterly to ensure we are within the targeted asset allocation ranges and, if necessary, asset balances are adjusted back within target allocations. We employ a broadly diversified investment manager structure that includes diversification by active and passive management, style, capitalization, country, sector, industry, and number of investment managers. No individual investment represented more than 5% of the plan assets as of December 31, 2023.

The fair value measurement of plan assets using significant unobservable inputs (Level 3) changed due to the following:

(dollars in millions)

Balance, December 31, 2021	\$	1,885
Realized gains		76
Unrealized gains relating to instruments still held in the reporting period		64
Purchases, sales, and settlements, net		(211)
Transfers in/out, net		(164)
Balance, December 31, 2022		1,650
Realized losses		(69)
Unrealized losses relating to instruments still held in the reporting period		(134)
Purchases, sales, and settlements, net		20
Transfers in/out, net		—
Balance, December 31, 2023	\$	1,467

Quoted market prices are used to value investments when available. Investments in securities traded on exchanges, including listed futures and options, are valued at the last reported sale prices on the last business day of the year or, if not available, the last reported bid prices. Fixed income securities are primarily measured using a market approach pricing methodology, where observable prices are obtained by market transactions involving identical or comparable securities of issuers with similar credit ratings. Mortgages have been valued on the basis of their future principal and interest payments discounted at prevailing interest rates for similar investments. Investment contracts are valued at fair value by discounting the related cash flows based on current yields of similar instruments with comparable durations. Real estate investments are valued on a quarterly basis using discounted cash flow models which consider long-term lease estimates, future rental receipts, and estimated residual values. Valuation estimates are supplemented by third-party appraisals on an annual basis.

The fair market value of assets related to our PRB benefits was \$316 million and \$302 million as of December 31, 2023 and 2022, respectively. These assets include \$93 million and \$105 million of which are invested in our domestic qualified pension plan trust at December 31, 2023 and 2022, respectively. The remaining PRB investments are held within Voluntary Employees' Beneficiary Association (VEBA) trusts. The VEBA assets are generally invested in mutual funds and are valued primarily using quoted prices in active markets (Level 1). There were no Level 3 investments in the VEBA trusts as of December 31, 2023 or 2022.

We have set aside assets in separate trusts, which we expect to be used to pay for certain nonqualified defined benefit and defined contribution plan obligations in excess of qualified plan limits. These assets are included in Other assets in our Consolidated Balance Sheet. The fair value of marketable securities held in trusts as of December 31 was as follows:

(dollars in millions)

	2023	2022
Marketable securities held in trusts	\$ 745	\$ 774

NOTE 11: LEASES

We enter into lease agreements for the use of real estate space, vehicles, information technology equipment, and certain other equipment under both operating and finance leases. The majority of our lease agreements are accounted for as operating leases.

Operating lease expense was \$463 million, \$475 million, and \$525 million for 2023, 2022, and 2021, respectively. Finance leases are not considered significant to our Consolidated Balance Sheet, Consolidated Statement of Operations, or Consolidated Statement of Cash Flows.

Leases under which we are the lessor are generally short-term leases that support our commercial aerospace customers during maintenance events. Our commercial aerospace customers have varying forms of aftermarket maintenance coverage that often provide a level of support for leased engines as part of the revenue arrangement. As such, leases where we are the lessor are not considered significant to our Consolidated Balance Sheet, Consolidated Statement of Operations, or Consolidated Statement of Cash Flows.

In 2023 and 2021, we entered into sale and leaseback transactions for the sale of new engines, and used leasepool engines and related maintenance, respectively. We subsequently leased back the engines sold for a limited timeframe, which are accounted for as operating leases. The proceeds received in 2023 as a result of sales of new engines are classified primarily in Other operating activities, net within our Consolidated Statement of Cash Flows. The proceeds received in 2021 as a result of sales of engines held in our leasepool are classified in Receipts from customer financing assets within Investing Activities in our Consolidated Statement of Cash Flows. The net gains as a result of these transactions were not material.

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

<i>(dollars in millions)</i>	2023	2022	2021
Operating cash flows used in the measurement of operating lease liabilities	\$ 421	\$ 399	\$ 490
Operating lease right-of-use assets obtained in exchange for operating lease obligations	373	359	535

Future lease payments related to our operating lease liabilities as of December 31, 2023 are as follows:

<i>(dollars in millions)</i>			
2024		\$	371
2025			314
2026			268
2027			223
2028			181
Thereafter			640
Total undiscounted lease payments			1,997
Less imputed interest			(237)
Total discounted lease payments		\$	1,760

Our lease liabilities recognized in our Consolidated Balance Sheet were as follows as of December 31:

<i>(dollars in millions)</i>	2023	2022
Operating lease liabilities, current (included in Other accrued liabilities)	\$ 348	\$ 356
Operating lease liabilities, noncurrent	1,412	1,586
Total operating lease liabilities	\$ 1,760	\$ 1,942

The weighted-average remaining lease term related to our operating leases was 9 years as of December 31, 2023 and 2022. The weighted-average discount rate related to our operating leases was 3.5% and 3.3% as of December 31, 2023 and 2022, respectively.

NOTE 12: INCOME TAXES

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

<i>(dollars in millions)</i>	2023	2022	2021
United States ⁽¹⁾	\$ 938	\$ 4,151	\$ 3,676
Foreign	2,898	1,966	1,433
Income from continuing operations before income taxes	\$ 3,836	\$ 6,117	\$ 5,109

(1) 2023 includes the impacts of the Powder Metal Matter.

The Company intends to repatriate certain undistributed earnings of its international subsidiaries that have been previously taxed in the U.S. As such, we recorded the taxes associated with the future remittance of these earnings. For the remainder of the Company's undistributed international earnings, unless tax effective to repatriate, the Company will continue to permanently reinvest these earnings. As of December 31, 2023, such undistributed earnings were approximately \$20 billion, excluding other comprehensive income amounts. It is not practicable to estimate the amount of tax that might be payable on the remaining amounts.

Provision for Income Taxes. The income tax expense (benefit) for the years ended December 31 are as follows:

<i>(dollars in millions)</i>	2023	2022	2021
Current:			
United States:			
Federal	\$ 213	\$ 1,724	\$ 387
State	70	216	238
Foreign	575	513	427
	858	2,453	1,052
Future:			
United States:			
Federal	(411)	(1,399)	(26)
State	(53)	(166)	41
Foreign	62	(98)	(103)
	(402)	(1,663)	(88)
Income tax expense	\$ 456	\$ 790	\$ 964

Prior to 2022, research and experimental expenditures were generally deductible in the period incurred. A provision enacted in the Tax Cuts and Jobs Act of 2017 related to the capitalization of research and experimental expenditures for tax purposes became effective on January 1, 2022. In September and December 2023, the Internal Revenue Service (IRS) issued interim guidance, retroactive to 2022, clarifying the capitalization requirements for certain types of research and experimental expenditures. The IRS notices also provide that the Department of the Treasury and the IRS intend to issue proposed regulations consistent with the guidance set forth in the notices and that taxpayers may rely on the guidance in the notices prior to the issuance of the proposed regulations.

The Company's analysis indicates the guidance provided in the notices result in fewer costs being subject to capitalization, and as such, costs previously required to be capitalized are now deductible in the year incurred. Accordingly, the financial statements for the year ended December 31, 2023 include the estimated impacts of the interim guidance provided in the notices for both the 2022 and 2023 tax years including lower income tax payables, adjustments to deferred taxes, a higher income tax expense due to the diluted Foreign Derived Intangible Income (FDII) benefit resulting from lower taxable income, and reductions in revenue attributable to the decreased reimbursable state income taxes. The Company will continue to review the applicability of the notices to our businesses and will review the proposed regulations when issued and adjust the estimates as necessary.

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

<i>(dollars in millions)</i>	2023		2022		2021	
	Amount	Rate	Amount	Rate	Amount	Rate
Statutory U.S. federal income tax rate	\$ 805	21.0 %	\$ 1,285	21.0 %	\$ 1,073	21.0 %
Tax on international activities	(27)	(0.7)	(186)	(3.1)	(204)	(4.0)
Tax charges related to separation of Carrier and Otis and Raytheon merger	—	—	—	—	(39)	(0.8)
Disposals of businesses	—	—	—	—	108	2.2
U.S. research and development credit	(168)	(4.4)	(164)	(2.7)	(172)	(3.4)
U.S. federal statute lapse	(59)	(1.5)	—	—	—	—
State income tax, net	17	0.4	59	1.0	174	3.4
Foreign Derived Intangible Income (FDII)	(142)	(3.7)	(214)	(3.5)	(121)	(2.4)
U.K. corporate tax rate enactment	—	—	—	—	73	1.5
Other	30	0.8	10	0.2	72	1.4
Effective income tax rate	\$ 456	11.9 %	\$ 790	12.9 %	\$ 964	18.9 %

The 2023 effective tax rate includes a benefit of \$168 million associated with U.S. research and development credits, \$142 million related to the FDII benefit, and a federal tax benefit of \$59 million associated with the expiration of the U.S. federal income tax statute of limitations for RTX's 2019 tax year.

The 2022 effective tax rate includes a benefit of \$214 million related to the FDII benefit, \$207 million associated with legal entity and operational reorganizations implemented in 2022, and \$164 million associated with U.S. research and development credits. The increase in the FDII benefit from 2021 is primarily attributable to the capitalization of research or experimental expenditures for tax-purposes, enacted as part of the Tax Cuts and Jobs Act of 2017 effective beginning January 1, 2022.

The 2021 effective tax rate includes tax benefits of \$244 million included in international activities associated with legal entity and operational reorganizations implemented in 2021, \$172 million associated with U.S. research and development credits and \$121 million associated with FDII, and tax charges of \$174 million associated with net state income taxes, \$108 million associated with the disposition of the Forcepoint business and the global training and services business, and \$73 million associated with the revaluation of deferred taxes resulting from the increase in the U.K. corporate tax rate to 25% enacted in 2021.

Deferred Tax Assets and Liabilities. The tax effects of temporary differences and tax carryforwards which gave rise to future income tax benefits and payables at December 31, 2023 and 2022 are as follows:

<i>(dollars in millions)</i>	2023	2022
Future income tax benefits:		
Insurance and employee benefits	\$ 994	\$ 1,126
Inventory and contract balances	571	639
Warranty provisions	240	242
Capitalization of research and experimental expenditures	1,631	1,712
Other basis differences	779	828
Powder Metal Matter	644	—
Tax loss carryforwards	905	305
Tax credit carryforwards	891	970
Valuation allowances	(1,465)	(842)
Total future income tax benefits	\$ 5,190	\$ 4,980
Future income taxes payable:		
Goodwill and Intangible assets	\$ 6,228	\$ 6,588
Fixed assets	1,739	1,751
Other basis differences	238	220
Total future income tax payable	\$ 8,205	\$ 8,559

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

Prior to 2023, certain of the Company's indefinite-lived non-US tax loss carryforwards were determined to have a remote possibility of realization and therefore were not reported in the table above. In connection with the implementation of the Organisation for Economic Co-operation and Development (OECD) global minimum tax initiative known as Pillar Two, any existing deferred taxes not disclosed in the Company's 2023 financial statements will not be available in the future to reduce tax otherwise due under Pillar Two. Accordingly, beginning in 2023, the Company is disclosing in the above table the tax effects of these indefinite-lived non-US tax loss carryforwards offset with a full valuation allowance.

Changes to valuation allowances consisted of the following:

<i>(dollars in millions)</i>	2023	2022	2021
Balance at January 1	\$ 842	\$ 825	\$ 757
Additions charged to income tax expense	170	54	136
Reductions credited to goodwill, due to acquisitions	—	—	(19)
Reductions credited to income tax expense	(58)	(82)	(37)
Other adjustments ⁽¹⁾	511	45	(12)
Balance at December 31	\$ 1,465	\$ 842	\$ 825

(1) 2023 includes the addition of the indefinite-lived tax loss carryforwards now disclosed in connection with OECD Pillar Two.

Tax Credit and Loss Carryforwards. At December 31, 2023, tax credit carryforwards, principally state and foreign, and tax loss carryforwards, principally state and foreign, were as follows:

<i>(dollars in millions)</i>	Tax Credit Carryforwards	Tax Loss Carryforwards
Expiration period:		
2024-2028	\$ 56	\$ 317
2029-2033	36	180
2034-2043	299	832
Indefinite	500	3,272
Total	\$ 891	\$ 4,601

Unrecognized Tax Benefits. At December 31, 2023, we had gross tax-effected unrecognized tax benefits of \$1,442 million, of which \$1,313 million, if recognized, would impact the effective tax rate. A reconciliation of the beginning and ending amounts of unrecognized tax benefits and interest expense related to unrecognized tax benefits for the years ended December 31, 2023, 2022, and 2021 is as follows:

<i>(dollars in millions)</i>	2023	2022	2021
Balance at January 1	\$ 1,515	\$ 1,458	\$ 1,225
Additions for tax positions related to the current year	89	106	110
Additions for tax positions of prior years	5	23	282
Reductions for tax positions of prior years	(141)	(56)	(49)
Settlements	(26)	(16)	(110)
Balance at December 31	\$ 1,442	\$ 1,515	\$ 1,458
Gross interest expense related to unrecognized tax benefits	\$ 62	\$ 34	\$ 39
Total accrued interest balance at December 31	233	190	165

We conduct business globally and, as a result, RTX 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 Canada, China, France, Germany, India, Poland, Saudi Arabia, Singapore, 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 2013.

As a result of the expiration of the U.S. federal income tax statute of limitations for RTX's 2019 tax year, we recognized a net income benefit of \$53 million in the fourth quarter of 2023, of which \$59 million is within Income tax expense.

The Examination Division of the IRS is concluding the examination phase of RTX (formerly United Technologies Corporation) tax years 2017 and 2018, pre-acquisition Rockwell Collins tax years 2016, 2017 and 2018, and pre-merger Raytheon Company tax years 2017, 2018 and 2019 as well as certain refund claims of Raytheon Company for tax years 2014, 2015 and 2016 filed prior to the Raytheon merger. The examination phase of these audits is expected to close in the first half of 2024. The Company will dispute certain IRS proposed adjustments for each exam at the Appeals Division of the IRS. The timing of any resolution at the Appeals Division is currently uncertain.

The Company believes that it is reasonably possible that the closure of the examination phase for the RTX 2017 and 2018 and Rockwell Collins 2016, 2017, and 2018 tax years will result in a net income benefit in the range of \$225 million to \$305 million. This range includes the effects of adjusting interest accruals and certain tax related indemnity receivables related to the separation and distributions of Carrier Global Corporation (Carrier) and Otis Worldwide Corporation (Otis). The tax components of this range are included in the revaluation range discussed below.

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. It is reasonably possible that a net reduction within the range of \$300 million to \$450 million of unrecognized tax benefits may occur within the next 12 months as a result of the revaluation of uncertain tax positions arising from developments in examinations, in appeals, or in the courts, or the closure of tax statutes.

NOTE 13: FINANCIAL INSTRUMENTS

We enter into derivative instruments primarily for risk management purposes, including derivatives designated as hedging instruments 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 present value of aggregate notional principal of our outstanding foreign currency hedges was \$15.8 billion and \$11.2 billion at December 31, 2023 and 2022, respectively. At December 31, 2023, all derivative contracts accounted for as cash flow hedges will mature by February 2034. Additional information pertaining to foreign exchange and hedging activities is included in "Note 1: Basis of Presentation and Summary of Accounting Principles."

The following table summarizes the fair value and presentation in the Consolidated Balance Sheet for derivative instruments as of December 31:

<i>(dollars in millions)</i>	Balance Sheet Location	2023		2022	
Derivatives designated as hedging instruments:					
Foreign exchange contracts	Other assets, current	\$	225	\$	67
	Other accrued liabilities		143		347
Derivatives not designated as hedging instruments:					
Foreign exchange contracts	Other assets, current	\$	83	\$	17
	Other accrued liabilities		37		39

The effect of cash flow hedging relationships on Accumulated other comprehensive income (loss) and on the Consolidated Statement of Operations in 2023 and 2022 are presented in “Note 18: Equity”. The amounts of gain or (loss) are attributable to foreign exchange contract activity and are primarily recorded as a component of Products sales when reclassified from Accumulated other comprehensive loss.

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.

As of December 31, 2023, our €500 million principal value of euro-denominated long-term debt qualifies as a net investment hedge against our investments in European businesses, which is deemed to be effective.

The effect of derivatives not designated as hedging instruments is included within Other income, net, on the Consolidated Statement of Operations and is not significant.

NOTE 14: FAIR VALUE MEASUREMENTS

The following tables provide the valuation hierarchy classification of assets and liabilities that are carried at fair value and measured on a recurring basis in our Consolidated Balance Sheet:

<i>(dollars in millions)</i>	December 31, 2023			
	Total	Level 1	Level 2	Level 3
Recurring fair value measurements:				
Marketable securities held in trusts	\$ 745	\$ 682	\$ 63	\$ —
Derivative assets	308	—	308	—
Derivative liabilities	180	—	180	—

<i>(dollars in millions)</i>	December 31, 2022			
	Total	Level 1	Level 2	Level 3
Recurring fair value measurements:				
Marketable securities held in trusts	\$ 774	\$ 713	\$ 61	\$ —
Derivative assets	84	—	84	—
Derivative liabilities	386	—	386	—

Valuation Techniques. 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 December 31, 2023, 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 Consolidated Balance Sheet at December 31:

<i>(dollars in millions)</i>	2023		2022	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Customer financing notes receivables	\$ 74	\$ 63	\$ 169	\$ 161
Long-term debt (excluding finance leases)	43,546	41,598	31,201	28,049

The following tables provide the valuation hierarchy classification of assets and liabilities that are not carried at fair value in our Consolidated Balance Sheet at December 31:

<i>(dollars in millions)</i>	2023			
	Total	Level 1	Level 2	Level 3
Customer financing notes receivable	\$ 63	\$ —	\$ 63	\$ —
Long-term debt (excluding finance leases)	41,598	—	37,559	4,039

<i>(dollars in millions)</i>	2022			
	Total	Level 1	Level 2	Level 3
Customer financing notes receivable	\$ 161	\$ —	\$ 161	\$ —
Long-term debt (excluding finance leases)	28,049	—	28,003	46

The fair value of our Short-term borrowings approximates the carrying value due to their short-term nature, with commercial paper classified as level 2 and other short-term borrowings classified as level 3 within the fair value hierarchy.

NOTE 15: VARIABLE INTEREST ENTITIES

Pratt & Whitney holds a 61% program share 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 engine program through involvement with the collaborators. Additionally, Pratt & Whitney, JAEC, and MTU are participants in the International Aero Engines, LLC (IAE LLC) collaboration, whose business purpose is to coordinate the design, development, manufacturing, and product support for the PW1100G-JM engine for the Airbus A320neo family of aircraft. Pratt & Whitney holds a 59% program share 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 as the primary beneficiary. IAE and IAE LLC have, therefore, been consolidated. Other collaborators participate in Pratt & Whitney's program share interest in IAE and IAE LLC. Pratt & Whitney's net program share interest in IAE and IAE LLC, after considering its sub-collaborator share, is 57% and 51%, respectively. The carrying amounts and classification of assets and liabilities for variable interest entities in our Consolidated Balance Sheet as of December 31, 2023 and 2022 are as follows:

<i>(dollars in millions)</i>	2023	2022
Current assets	\$ 9,309	\$ 7,609
Noncurrent assets	860	779
Total assets	\$ 10,169	\$ 8,388
Current liabilities	\$ 13,020	\$ 9,154
Noncurrent liabilities	31	19
Total liabilities	\$ 13,051	\$ 9,173

NOTE 16: GUARANTEES

We extend a variety of financial, market value, and product performance guarantees to third parties. These instruments expire on various dates through 2036. Additional guarantees of project performance for which there is no stated value also remain

outstanding. A portion of our third party guarantees are subject to indemnification for our benefit for any liabilities that could arise. As of December 31, 2023 and 2022, the following financial guarantees were outstanding:

<i>(dollars in millions)</i>	December 31, 2023		December 31, 2022	
	Maximum Potential Payment	Carrying Amount of Liability	Maximum Potential Payment	Carrying Amount of Liability
Commercial aerospace financing arrangements	\$ 288	\$ —	\$ 304	\$ —
Third party guarantees	386	1	335	1

We have made residual value and other guarantees related to various commercial aerospace customer financing arrangements. The estimated fair market values of the guaranteed assets equal or exceed the value of the related guarantees, net of existing reserves. Collaboration partners' share of these financing guarantees is \$135 million and \$140 million at December 31, 2023 and 2022, respectively.

We also have obligations arising from sales of certain businesses and assets, including those from representations and warranties and related indemnities for environmental, health and safety, tax, and employment matters. The maximum potential payment related to these obligations is not a specified amount, as a number of the obligations do not contain financial caps. The carrying amount of liabilities related to these obligations were \$97 million at both December 31, 2023 and 2022. These primarily relate to environmental liabilities, which are included in our total environmental liabilities as further discussed in "Note 17: Commitments and Contingencies."

We accrue for costs associated with guarantees when it is probable that a liability has been incurred and the amount can be reasonably estimated. The most likely cost to be incurred is accrued based on an evaluation of currently available facts, and where no amount within a range of estimates is more likely, the minimum is accrued.

We also provide service and warranty policies on our products and extend performance and operating cost guarantees beyond our normal service and warranty policies on some of our products, particularly commercial aircraft engines. In addition, we incur discretionary costs to service our products in connection with specific product performance issues. Liabilities for performance and operating cost guarantees are based upon future product performance and durability, and are largely estimated based upon historical experience. Adjustments are made to accruals as claims data and historical experience warrant.

The changes in the carrying amount of service and product warranties and product performance guarantees for the years ended December 31 were as follows:

<i>(dollars in millions)</i>	2023	2022	2021
Balance as of January 1	\$ 1,109	\$ 1,157	\$ 1,057
Warranties and performance guarantees issued	305	264	380
Settlements	(308)	(284)	(272)
Other	(15)	(28)	(8)
Balance as of December 31	\$ 1,091	\$ 1,109	\$ 1,157

Product and service guarantees incurred in connection with long-term production contracts and certain aftermarket arrangements are generally accounted for within the contract estimates at completion.

NOTE 17: COMMITMENTS AND CONTINGENCIES

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, financial condition, or liquidity.

Environmental. Our operations are subject to environmental regulation by federal, state, and local authorities in the United States and regulatory authorities with jurisdiction over our foreign operations. 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 do not expect any additional liability to have a material adverse effect on our results of operations, financial condition, or liquidity. As of December 31, 2023 and 2022, we had \$760 million and \$798 million, respectively, reserved for environmental remediation. Additional information pertaining to environmental matters is included in "Note 1: Basis of Presentation and Summary of Accounting Principles."

Commercial Aerospace Financing and Other Commitments. We had commercial aerospace financing commitments and other contractual commitments of approximately \$14.6 billion and \$15.3 billion as of December 31, 2023 and 2022,

respectively, on a gross basis before reduction for our collaboration partners' share. Aircraft financing commitments, in the form of debt or lease financing, are provided to certain commercial aerospace customers. The extent to which the financing commitments will be utilized is not currently known, since customers may be able to obtain more favorable terms from other financing sources. We may also arrange for third-party investors to assume a portion of these commitments. The majority of financing commitments are collateralized arrangements. We may also lease aircraft and subsequently sublease the aircraft to customers under long-term non-cancelable operating leases, or pay deposits on behalf of our customers to secure production slots with the airframers (pre-delivery payments). Our financing commitments with customers are contingent upon maintenance of certain levels of financial condition by our customers. Associated risks on these commitments are mitigated due to the fact that 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 our customers. As a result, the fair value of these financing commitments is expected to equal the amounts funded.

We also have other contractual commitments to make payments to secure certain contractual rights to provide product on new aircraft platforms. The estimated amount and timing of these payments, which are generally based on future sales or engine flight hours, are reflected in "Other commercial aerospace commitments" in the table below. Payments made on these contractual commitments are included within intangible assets as exclusivity assets and are amortized over the term of underlying economic benefit. We have entered into certain collaboration arrangements, which may include participation by our collaboration partners in these commitments. In addition, in connection with our 2012 agreement to acquire Rolls-Royce's ownership and collaboration interests in IAE, additional payments are due to Rolls-Royce contingent upon each hour flown through June 2027 by the V2500-powered aircraft in service as of the acquisition date. These flight hour payments, which are considered in "Other commercial aerospace commitments" below, will be capitalized as collaboration intangible assets as payments are made.

The following is the expected maturity of our commercial aerospace industry commitments as of December 31, 2023:

<i>(dollars in millions)</i>	Committed	2024	2025	2026	2027	2028	Thereafter
Commercial aerospace financing commitments	\$ 4,584	\$ 1,358	\$ 1,674	\$ 1,179	\$ 373	\$ —	\$ —
Other commercial aerospace commitments	10,015	836	862	705	687	731	6,194
Collaboration partners' share	(5,942)	(822)	(1,040)	(818)	(457)	(317)	(2,488)
Total commercial aerospace commitments	\$ 8,657	\$ 1,372	\$ 1,496	\$ 1,066	\$ 603	\$ 414	\$ 3,706

Other Financing Arrangements. We have entered into standby letters of credit and surety bonds with financial institutions to meet various bid, performance, warranty, retention, and advance payment obligations for us or our affiliates. We enter into these agreements to assist certain affiliates in obtaining financing on more favorable terms, making bids on contracts and performing their contractual obligations. The stated values of these letters of credit agreements and surety bonds totaled \$3.4 billion as of December 31, 2023.

Offset Obligations. We have entered into industrial cooperation agreements, sometimes in the form of either offset agreements or ICIP agreements, as a condition to obtaining orders for our products and services from certain customers in foreign countries. At December 31, 2023, the aggregate amount of our offset agreements, both agreed to and anticipated to be agreed to, had an outstanding notional value of approximately \$12.3 billion. These agreements are designed to return economic value to the foreign country by requiring us to engage in activities supporting local defense or commercial industries, promoting a balance of trade, developing in-country technology capabilities, or addressing other local development priorities. Offset agreements may be satisfied through activities that do not require a direct cash payment, including transferring technology, providing manufacturing, training, and other consulting support to in-country projects, and the purchase by third parties (e.g., our vendors) of supplies from in-country vendors. These agreements may also be satisfied through our use of cash for activities such as subcontracting with local partners, purchasing supplies from in-country vendors, providing financial support for in-country projects, and making investments in local ventures. Such activities may also vary by country depending upon requirements as dictated by their governments. We typically do not commit to offset agreements until orders for our products or services are definitive. The amounts ultimately applied against our offset agreements are based on negotiations with the customers and typically require cash outlays that represent only a fraction of the notional value in the offset agreements. Offset programs usually extend over several or more years and may provide for penalties in the event we fail to perform in accordance with offset requirements. Historically, we have not been required to pay any penalties of significance.

Government Oversight. 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. Our contracts with the U.S. government are also subject to audits. Agencies that oversee contract performance include: the Defense Contract Audit Agency (DCAA), the Defense Contract Management Agency (DCMA), the Inspectors General of the U.S. Department of Defense (DoD) and other departments and agencies, the Government Accountability Office (GAO), the Department of Justice (DOJ), and Congressional Committees. Other areas of our business operations may also be subject to audit and investigation by these and other agencies. From time to time, agencies investigate or conduct audits to determine whether our operations are being conducted in accordance with applicable requirements. Such investigations and audits may be initiated due to a number of reasons, including as a result of a whistleblower complaint. Such investigations and audits could result in administrative, civil or criminal liabilities, including repayments, fines, treble or other damages, forfeitures, restitution, or penalties being imposed upon us, the suspension of government export licenses, or the suspension or debarment from future U.S. government contracting. U.S. government investigations often take years to complete. 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. 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 in some cases 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. Our final allowable incurred costs for each year are also subject to audit and have, from time to time, resulted in disputes between us and the U.S. government, with litigation resulting at the Court of Federal Claims (COFC) or the Armed Services Board of Contract Appeals (ASBCA), or their related courts of appeals. In addition, the DOJ has, from time to time, convened grand juries to investigate possible irregularities by us. We also provide products and services to customers outside of the U.S., and those sales are subject to local government laws, regulations, and procurement policies and practices. Our compliance with such local government regulations or any applicable U.S. government regulations (e.g., the Foreign Corrupt Practices Act (FCPA) and International Traffic in Arms Regulations (ITAR)) may also be investigated or audited. In addition, we accrue for liabilities associated with those matters that are probable and can be reasonably estimated. The most likely liability 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. Other than as specifically disclosed in this Form 10-K, we do not expect these audits, investigations or disputes to have a material effect on our results of operations, financial condition, or liquidity, either individually or in the aggregate.

Tax Treatment of Carrier and Otis Dispositions. Management has determined that the distributions of Carrier and Otis on April 3, 2020, and certain related internal business separation transactions, qualified as tax-free under applicable law. In making these determinations, we applied the tax law in the relevant jurisdictions to our facts and circumstances and obtained tax rulings from the relevant taxing authorities, tax opinions, and/or other external tax advice related to the concluded tax treatment. If the completed distributions of Carrier or Otis or certain internal business separation transactions were to fail to qualify for tax-free treatment, the Company could be subject to significant liabilities, and there could be material adverse impacts on the Company's business, results of operations, financial condition, or liquidity in future reporting periods.

Pratt & Whitney Powder Metal Matter. Pratt & Whitney has determined that a rare condition in powder metal used to manufacture certain engine parts requires accelerated inspection of the PW1100 GTF fleet, which powers the A320neo. This determination was made pursuant to Pratt & Whitney's safety management system.

On August 4, 2023, Pratt & Whitney issued a special instruction (SI), to operators of PW1100 GTF powered A320neo aircraft, which required accelerated inspections and engine removals covering an initial subset of operational engines, no later than September 15, 2023. During the third quarter of 2023, through its safety management system, Pratt & Whitney continued its engineering and industrial assessment which resulted in an updated fleet management plan for the remaining PW1100 fleet. This updated plan requires a combination of part inspections and retirements for some high pressure turbine and high pressure compressor parts made from affected raw material. Guidance to affected operators was released via service bulletins (SB) and SI in November 2023 and this guidance is expected to be reflected in one or more airworthiness directives issued by the Federal Aviation Administration (FAA). Consistent with previous information, the actions are expected to result in significant incremental shop visits through the end of 2026. As a result, Pratt & Whitney expects a significant increase in aircraft on ground levels for the PW1100 powered A320neo fleet through 2026.

As a result of anticipated increased aircraft on ground levels and expected compensation to customers for this disruption, as well as incremental maintenance costs resulting from increased inspections and shop visits, Pratt & Whitney recorded a pre-tax operating profit charge in the third quarter of 2023 of \$2.9 billion, reflecting Pratt & Whitney's net 51% program share of the PW1100 program. This reflects our current best estimate of expected customer compensation for the estimated duration of the

disruption as well as the EAC adjustment impact of this matter to Pratt & Whitney's long-term maintenance contracts. The incremental costs to the business's long-term maintenance contracts include the estimated cost of additional inspections, replacement of parts, and other related impacts.

The \$2.9 billion charge is reflected in the Consolidated Statement of Operations as a reduction of sales of \$5.4 billion which was partially offset by a net reduction of cost of sales of \$2.5 billion primarily representing our partners' 49% share of this charge. This resulted in a net increase in Other accrued liabilities of \$2.8 billion, which principally relates to our 51% share of an accrual for expected customer compensation. There was no utilization of the accrual during the fourth quarter of 2023.

Other engine models within Pratt & Whitney's fleet contain parts manufactured with affected powder metal, and while Pratt & Whitney continues to evaluate the impact of this powder metal issue on other engine models within its fleet, we do not currently believe there will be any significant financial impact with respect to these other engine models. The financial impact of the powder metal issue is based on historical experience and is subject to various assumptions and judgments, most notably, the number and expected timing of shop visits, inspection results and scope of work to be performed, turnaround time, availability of parts, available capacity at overhaul facilities and outcomes of negotiations with impacted customers. While these assumptions reflect our best estimates at this time, they are subject to variability. Potential changes to these assumptions and actual incurred costs could significantly affect the estimates inherent in our financial statements and could have a material effect on the Company's results of operations for the periods in which they are recognized.

Legal Proceedings. The Company and its subsidiaries are subject to various contract pricing disputes, government investigations, and litigation matters across jurisdictions, updates to certain of which are set forth below.

Cost Accounting Standards Claims

As previously disclosed, in April 2019, a Divisional Administrative Contracting Officer (DACO) of the United States DCMA asserted a claim against Pratt & Whitney to recover alleged overpayments of approximately \$1.73 billion plus interest (\$1.04 billion at December 31, 2023). The claim is based on Pratt & Whitney's alleged noncompliance with Cost Accounting Standards (CAS) 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 ASBCA on June 7, 2019.

As previously disclosed, in December 2013, a DCMA DACO asserted a claim against Pratt & Whitney to recover alleged overpayments of approximately \$177 million plus interest (\$155 million at December 31, 2023). The claim is based on Pratt & Whitney's alleged noncompliance with CAS 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. On November 22, 2021, the ASBCA issued its written decision sustaining in part and denying in part Pratt & Whitney's appeal. The ASBCA rejected the DCMA's asserted measure of the cost of collaborator parts, and ruled substantially in Pratt & Whitney's favor on other liability issues. The ASBCA remanded the appeal to the parties for resolution of damages issues, which could require further proceedings at the ASBCA. On December 23, 2021, the DCMA filed a motion with the ASBCA seeking partial reconsideration of the November 22, 2021 decision. The motion for reconsideration was denied on August 29, 2022. On December 23, 2022, the DCMA filed an appeal to the United States Court of Appeals for the Federal Circuit. We continue to believe that the ASBCA's rejection of the DCMA's asserted measure of the cost of collaborator parts is well supported in fact and law and likely will be sustained. 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 CAS for calendar years 2013 through 2017. This second claim, which asserts the same measure of the cost of collaborator parts rejected by the ASBCA's recent decision, demands payment of \$269 million plus interest (\$123 million at December 31, 2023). Pratt & Whitney appealed this second claim to the ASBCA in January 2019. In December 2023, a DCMA DACO issued a third claim against Pratt & Whitney that similarly alleges that its method of determining the cost of collaborator parts does not comply with the CAS for calendar years 2018 through 2022. This third claim, which asserts the same measure of the cost of collaborator parts rejected by the ASBCA's prior decision, demands payment of \$277 million plus interest (\$52 million at December 31, 2023). Pratt & Whitney appealed this third claim to the ASBCA at the end of December 2023. Although subject to further litigation at the ASBCA and potentially further appellate proceedings, we continue to believe that the November 22, 2021 decision in the first claim will apply with equal legal effect to the second and third claims. Accordingly, we believe that the amounts demanded by the DCMA as set forth in the three claims are without legal basis and that any damages owed to the U.S. government for the three claims will not have a material adverse effect on our results of operations, financial condition, or liquidity.

Thales-Raytheon Systems and Related Matters

As previously disclosed, in 2019, Raytheon Company received a subpoena from the Securities and Exchange Commission (SEC) seeking information in connection with an investigation into whether there were improper payments made by Raytheon

Company, our joint venture known as Thales-Raytheon Systems (TRS), or anyone acting on their behalf, in connection with TRS or Raytheon Company contracts in certain Middle East countries since 2014. In the first quarter of 2020, the DOJ advised Raytheon Company it had opened a parallel criminal investigation. In the third quarter of 2020, Raytheon Company received an additional subpoena from the SEC, seeking information and documents as part of its ongoing investigation. The Company maintains a rigorous anti-corruption compliance program, and continues to cooperate fully with the SEC's and DOJ's inquiries, and to examine through our own investigation whether there were any improper payments or any such conduct that was in violation of Raytheon Company policy. Although the investigation of these issues remains ongoing, information indicating that such conduct has occurred with respect to certain contracts has been identified. However, at this time, the Company is unable to predict the outcome of the SEC's or DOJ's inquiries. Further, based on the information available to date, we cannot reasonably estimate the range of potential loss or impact to the business that may result, but do not believe that the results of these inquiries will have a material adverse effect on our results of operations, financial condition, or liquidity.

DOJ Investigation, Contract Pricing Disputes, and Related Civil Litigation

As previously disclosed, on October 8, 2020, the Company received a criminal subpoena from the DOJ seeking information and documents in connection with an investigation relating to financial accounting, internal controls over financial reporting, and cost reporting regarding Raytheon's business since 2009. The investigation involves multi-year contracts subject to governmental regulation, including potential civil defective pricing claims for certain Raytheon contracts entered into between 2011 and 2013. As part of the same investigation, on March 24, 2021, the Company received a second criminal subpoena from the DOJ seeking documents relating to a certain Raytheon contract entered into in 2017. We are cooperating fully with, and will continue to review the issues raised by, the DOJ's ongoing investigation. We continue to make substantial progress in our internal review of the issues raised by the DOJ investigation. Although we believe we have defenses to the potential claims, the Company has determined that there is a probable risk of liability for damages, interest, and potential penalties, and has accrued approximately \$300 million for this matter. We are currently unable to estimate an incremental loss, if any, which may result when the DOJ investigation is complete. Based on the information available to date, we do not believe the results of the DOJ investigation, or of any pending or potential civil litigation, will have a material adverse effect on our results of operations, financial condition, or liquidity.

Following the Company's initial disclosure of the DOJ subpoena, three shareholder derivative lawsuits were also filed in the United States District Court for the District of Delaware against the former Raytheon Company Board of Directors, the Company, and certain of its current and former executives, each alleging that defendants violated federal securities laws and breached their fiduciary duties by engaging in improper accounting practices, failing to implement sufficient internal financial and compliance controls, and making a series of false and misleading statements in regulatory filings. Those shareholder derivative lawsuits were consolidated. In December 2023, the consolidated action was further consolidated with certain newly filed derivative lawsuits related to the Powder Metal Matter, discussed below in "Powder Metal Disclosure Litigation and SEC Investigation". Plaintiffs in the consolidated action then filed an operative complaint that removed all claims and allegations connected to the Company's disclosure of the aforementioned DOJ subpoena, removing from the case that theory of relief against the former Raytheon Company Board of Directors, the Company, and the executives originally named in the consolidated lawsuit. The operative complaint now contains only allegations directed at certain former and current Directors and Officers of the Company related to the Powder Metal Matter, discussed below in "Powder Metal Disclosure Litigation and SEC Investigation".

UTC Equity Conversion Litigation

As previously disclosed, on December 6, 2022, a shareholder derivative lawsuit was filed in the Delaware Court of Chancery against the Company and certain current and former members of its Board of Directors, alleging that defendants breached their fiduciary duties in May 2020 by amending the method by which UTC equity awards were converted to certain Company equity awards following the separation of UTC into three independent, publicly traded companies. We believe that the lawsuit lacks merit. Based on the information available to date, we do not believe that this matter will have a material adverse effect on our results of operations, financial condition, or liquidity.

Civil Litigation Related to Employee Hiring Practices

Pratt & Whitney is one of multiple defendants in a putative class action lawsuit pending in the United States District Court for the District of Connecticut alleging that Pratt & Whitney and the other defendants agreed to restrict the hiring and recruiting of certain engineers and skilled laborers in a manner that violated federal antitrust laws. Plaintiffs seek to represent different purported classes of engineers and skilled laborers employed by Pratt & Whitney and other supplier-defendants since 2011, and are seeking to recover treble damages in an undetermined amount, plus attorneys' fees and costs of suit. We believe that the claims asserted lack merit. Based on the information available to date, we do not believe that this matter will have a material adverse effect on our results of operations, financial condition, or liquidity.

Powder Metal Disclosure Litigation and SEC Investigation

Following the Company's disclosures of a rare condition in powder metal used to manufacture certain Pratt & Whitney engine parts, two sets of civil actions were filed against RTX. First, two putative federal securities class action lawsuits were filed in the United States District Court for the District of Connecticut against the Company and certain current and former executives of the Company. The lawsuits allege that defendants violated federal securities laws by making material misstatements and omitting material facts relating to Pratt & Whitney's Geared Turbofan engine fleet, including the impact of the powder metal issue on the fleet, in various regulatory filings. The lawsuits were consolidated and remain pending. Second, three shareholder derivative lawsuits were filed against current and former Officers and Directors of the Company, two in the United States District Court for the District of Delaware and one in the United States District Court for the District of Connecticut, which has since been transferred to the District of Delaware. In addition, the complaint in the consolidated derivative action discussed above under "DOJ Investigation, Contract Pricing Disputes, and Related Civil Litigation" was amended to add allegations relating to the powder metal manufacturing matter. The four lawsuits have been consolidated in the District of Delaware, and a single operative complaint has been filed. The operative complaint alleges that the defendants caused the Company to make materially false and misleading statements relating to Pratt & Whitney's Geared Turbofan engines, and failed to maintain an adequate system of oversight, disclosure controls and procedures, and internal controls over financial reporting. Based on the information available to date, we do not believe that either matter will have a material adverse effect on our results of operations, financial condition, or liquidity.

On November 7, 2023 and January 30, 2024, the Company received subpoenas from the SEC seeking engineering, operational, organizational, accounting, and financial documents in connection with an investigation relating to the Company's disclosures in 2023 of issues arising from Pratt & Whitney's use of powder metal in manufacturing various engine parts, its identification of certain risks associated with those manufacturing processes, and corrective actions identified by Pratt & Whitney to mitigate those risks. The Company is cooperating with the SEC and is responding to the subpoenas. At this time, we are unable to predict the timing or outcome of this SEC investigation.

Where appropriate, we have recorded loss contingency accruals for the above-referenced matters, and the amounts individually, or in the aggregate, are not material.

Other. As described in "Note 16: Guarantees," 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 results of operations, financial condition, or liquidity.

NOTE 18: EQUITY

Common Stock - Share Repurchases. On October 24, 2023, we entered into ASR agreements with certain financial institution counterparties to repurchase shares of our common stock for an aggregate purchase price of \$10 billion. Pursuant to the ASR agreements, we made aggregate payments of \$10 billion on October 26, 2023, and received initial deliveries of approximately 108.4 million shares of our common stock at a price of \$78.38 per share, representing approximately 85% of the shares expected to be repurchased. The aggregate purchase price was recorded as a reduction to shareowners' equity, consisting of a \$8.5 billion increase in treasury stock and a \$1.5 billion decrease in common stock. We funded the payments with borrowings under a bridge credit agreement, which was repaid with the proceeds from term loan facilities, proceeds from issuances of long-term debt in the fourth quarter of 2023 and cash on hand. See "Note 9: Borrowings and Lines of Credit" for additional information.

The final number of shares to be repurchased will be based on the average of the daily volume-weighted average prices of our common stock during the term of the ASR agreements, less a discount and subject to adjustments pursuant to the terms and conditions of the ASR agreements. Upon final settlement of the ASR, under certain circumstances, each of the counterparties may be required to deliver additional shares of common stock, or we may be required to deliver shares of common stock or to make a cash payment to the counterparties, at our election. The final settlement of each transaction under the ASR agreements

is scheduled to occur no later than the third quarter of 2024 and in each case may be accelerated at the option of the applicable counterparty.

Accumulated Other Comprehensive Loss. A summary of the changes in each component of Accumulated other comprehensive (loss) income, net of tax is provided below:

<i>(dollars in millions)</i>	Foreign Currency Translation	Defined Benefit Pension and Postretirement Plans	Unrealized Hedging (Losses) Gains	Accumulated Other Comprehensive (Loss) Income
Balance at December 31, 2020	\$ 710	\$ (4,483)	\$ 39	\$ (3,734)
Other comprehensive income (loss) before reclassifications, net	(647)	3,210	(226)	2,337
Amounts reclassified, pre-tax	—	258	(28)	230
Tax benefit (expense)	(14)	(813)	79	(748)
Balance at December 31, 2021	\$ 49	\$ (1,828)	\$ (136)	\$ (1,915)
Other comprehensive income (loss) before reclassifications, net	(1,050)	1,225	(246)	(71)
Amounts reclassified, pre-tax	2	129	103	234
Tax benefit (expense)	(6)	(308)	48	(266)
Balance at December 31, 2022	\$ (1,005)	\$ (782)	\$ (231)	\$ (2,018)
Other comprehensive income (loss) before reclassifications, net	562	(1,041)	278	(201)
Amounts reclassified, pre-tax	—	(568)	80	(488)
Tax benefit (expense)	3	365	(80)	288
Balance at December 31, 2023	\$ (440)	\$ (2,026)	\$ 47	\$ (2,419)

Amounts reclassified that relate to our defined benefit pension and postretirement plans include the amortization of prior service costs and actuarial net gains or losses recognized during each period presented. These costs are recorded as components of net periodic pension income for each period presented. See “Note 10: Employee Benefit Plans” 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 Consolidated Balance Sheet, between liabilities and equity, at the greater of redemption value or initial carrying value.

NOTE 19: STOCK-BASED COMPENSATION

RTX’s long-term incentive plans authorize various types of market and performance based incentive awards that may be granted to officers and key employees. The RTX Corporation 2018 Long-Term Incentive Plan, as amended and restated (2018 LTIP) was approved by shareowners on April 26, 2021. A total of 156.3 million shares have been authorized for issuance pursuant to awards under the 2018 LTIP including shares assumed from predecessor plans and adjustments associated with the separation of Carrier and Otis. As of December 31, 2023, approximately 63.3 million shares remain available for awards under the 2018 LTIP. The 2018 LTIP does not contain aggregate annual award limits, however, it sets an annual award limit per participant. The 2018 LTIP will expire after all authorized shares have been awarded or April 26, 2031, whichever is sooner.

Under the 2018 LTIP, the exercise price of awards is set on the grant date and may not be less than the fair market value per share on that date. Generally, stock appreciation rights and stock options have a term of ten years and a three-year vesting period, subject to limited exceptions. In the event of retirement, annual stock appreciation rights, stock options, and restricted stock units (RSUs) held for more than one year may become vested and exercisable, subject to certain terms and conditions. LTIP awards with performance-based vesting generally have a minimum three-year vesting period and vest based on actual performance against pre-established metrics. In the event of retirement, performance-based awards held for more than one year, remain eligible to vest based on actual performance relative to performance goals. We have historically repurchased shares of our common stock in an amount at least equal to the number of shares issued under our equity compensation arrangements and will continue to evaluate this policy in conjunction with our overall share repurchase program.

We measure the cost of all share-based payments, including stock options and stock appreciation rights, at fair value on the grant date and recognize this cost in the Consolidated Statement of Operations, net of expected forfeitures, as follows:

<i>(dollars in millions)</i>	2023	2022	2021
Total compensation cost recognized	\$ 425	\$ 420	\$ 442

The associated future income tax benefit recognized was \$80 million, \$91 million, and \$83 million for the years ended December 31, 2023, 2022, and 2021, respectively.

For the years ended December 31, 2023, 2022, and 2021, the amount of cash received from the exercise of stock options was \$22 million, \$20 million, and \$7 million, respectively, with an associated tax benefit realized of \$27 million, \$32 million, and \$42 million, respectively. In addition, for the years ended December 31, 2023, 2022, and 2021, the associated tax benefit realized from the vesting of performance share units (PSUs), restricted stock awards, and RSUs was \$57 million, \$80 million, and \$44 million, respectively.

At December 31, 2023, there was \$298 million of total unrecognized compensation cost related to non-vested equity awards granted under long-term incentive plans. This cost is expected to be recognized ratably over a weighted-average period of 2.1 years.

A summary of the transactions under our long-term incentive plans for the year ended December 31, 2023 follows.

<i>(shares and units in thousands)</i>	Stock Options		Stock Appreciation Rights		Performance Share Units		Restricted Stock and RSUs	
	Shares	Average Price ⁽¹⁾	Shares	Average Price ⁽¹⁾	Units	Average Price ⁽²⁾	Units	Average Price ⁽²⁾
Outstanding at:								
December 31, 2022	1,657	\$ 80.67	32,032	\$ 81.04	2,150	\$ 83.52	9,757	\$ 78.40
Granted	90	97.65	2,664	97.66	965	96.39	3,353	97.33
Exercised / earned	(271)	79.80	(3,190)	80.97	(3)	87.36	(2,789)	70.13
Cancelled	(15)	91.68	(351)	91.10	(111)	92.16	(591)	84.93
December 31, 2023	1,461	\$ 81.72	31,155	\$ 82.36	3,001	\$ 87.33	9,730	\$ 86.53

(1) Weighted-average exercise price per share.

(2) Weighted-average grant date fair value per share.

The weighted-average grant date fair value of stock options and stock appreciation rights granted during 2023, 2022, and 2021 was \$24.66, \$21.80, and \$15.60, respectively. The weighted-average grant date fair value of performance share units, which vest upon achieving certain performance metrics, granted during 2023, 2022, and 2021 was \$96.39, \$96.15, and \$73.75, respectively. The total fair value of awards vested during 2023, 2022, and 2021 was \$273 million, \$346 million, and \$287 million, respectively. The total intrinsic value (which is the amount by which the stock price exceeded the exercise price on the date of exercise) of stock options and stock appreciation rights exercised during 2023, 2022, and 2021 was \$46 million, \$110 million, and \$54 million, respectively. The total intrinsic value (which is the stock price at vesting multiplied by the number of underlying shares) of performance share units and other restricted awards vested was \$263 million, \$427 million, and \$256 million during 2023, 2022, and 2021, respectively.

The following table summarizes information about equity awards outstanding that are vested and expected to vest as well as equity awards outstanding that are exercisable at December 31, 2023:

<i>(shares in thousands; aggregate intrinsic value in millions)</i>	Equity Awards Vested and Expected to Vest				Equity Awards That Are Exercisable			
	Awards	Average Price ⁽¹⁾	Aggregate Intrinsic Value	Remaining Term ⁽²⁾	Awards	Average Price ⁽¹⁾	Aggregate Intrinsic Value	Remaining Term ⁽²⁾
Stock Options	1,459	\$ 81.69	\$ 8	4.95	1,241	\$ 80.18	\$ 7	4.38
Stock Appreciation Rights	31,037	82.31	166	5.20	24,430	80.04	150	4.37
Performance Share Units	2,962	87.22	249	1.00				
Restricted Stock and RSUs	9,431	86.38	794	1.37				

(1) Weighted-average exercise price per share.

(2) Weighted-average contractual remaining term in years.

The fair value of each option award is estimated on the date of grant using a binomial lattice model. The following table indicates the assumptions used in estimating fair value for awards granted during 2023, 2022, and 2021. Lattice-based option models incorporate ranges of assumptions for inputs; those ranges are as follows:

	2023	2022	2021
Expected volatility	26.2%	27.9%	29.9%
Weighted-average volatility	26 %	28 %	30 %
Expected term (in years)	6.7	6.5	6.5
Expected dividend yield	2.3 %	2.2 %	2.6 %
Risk-free rate	3.6% - 4.8%	0.02% - 2.1%	0.04% - 1.2%

Expected volatilities are based on the returns of our stock, including implied volatilities from traded options on our stock for the binomial lattice model. We use historical data to estimate equity award exercise and employee termination behavior within the valuation model. The expected term represents an estimate of the period of time equity awards are expected to remain outstanding. The risk-free rate is based on the term structure of interest rates at the time of equity award grant.

NOTE 20: SEGMENT FINANCIAL DATA

Our 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. As previously announced, effective July 1, 2023, we streamlined the structure of our core businesses to three principal business segments: Collins Aerospace (Collins), Pratt & Whitney, and Raytheon. All segment information is reflective of this new structure and prior period information has been recast to conform to our current period presentation.

Collins Aerospace is a leading global provider of technologically advanced aerospace and defense products and aftermarket service solutions for civil and military aircraft manufacturers, commercial airlines, and regional, business and general aviation, as well as for defense and commercial space operations. Collins designs, manufactures and supplies electric power generation, management and distribution systems, environmental control systems, flight control systems, air data and aircraft sensing systems, engine control systems, engine components, engine nacelle systems, including thrust reversers and mounting pylons, interior and exterior aircraft lighting, aircraft cargo systems, evacuation systems, landing systems (including landing gear, wheels and braking systems), communication, navigation, surveillance systems, fire and ice detection and protection systems, actuation systems, integrated avionics, and propeller systems. Collins also designs, manufactures, and supports complete cabin interiors, including seating, oxygen systems, food and beverage preparation, storage and galley systems, lavatory, and wastewater management systems. Collins' solutions support human space exploration with environmental control and power systems and extravehicular activity suits. Collins also provides connected aviation solutions and services through worldwide voice and data communication networks, airport systems and integrations, and air traffic management solutions. Collins supports government and defense customer missions by providing systems solutions for connected battlespace, test and training range systems, crew escape systems, and simulation and training. Aftermarket services include spare parts, overhaul and repair, engineering and technical support, training and fleet management solutions, asset management services, and information management services.

Pratt & Whitney is among the world's leading suppliers of aircraft engines for commercial, military, business jet, and general aviation customers. Pratt & Whitney's Commercial Engines and Military Engines businesses design, develop, produce, and maintain families of large engines for wide- and narrow-body and large regional aircraft for commercial customers and for fighter, bomber, tanker, and transport aircraft for military customers. Pratt & Whitney's small engine business, Pratt & Whitney Canada, is among the world's leading suppliers of engines powering regional airlines, general and business aviation, as well as helicopters. Pratt & Whitney also produces, sells, and services military and commercial auxiliary power units. Pratt & Whitney provides fleet management services and aftermarket maintenance, repair, and overhaul services in all of these segments.

Raytheon is a leading provider of defensive and offensive threat detection, tracking and mitigation capabilities for U.S. and foreign government and commercial customers. Raytheon designs, develops, and provides advanced capabilities in integrated air and missile defense, smart weapons, missiles, advanced sensors and radars, interceptors, space-based systems, hypersonics, and missile defense across land, air, sea, and space. Raytheon provides air-to-air and air-to-ground sensors, command and control and weapons including the Advanced Medium Range Air-to-Air Missile (AMRAAM), StormBreaker smart weapon, Long Range Stand Off Weapon (LRSO), and the Early Warning Radar. Raytheon also provides advanced naval sensors, command and control and weapons including classified naval radars, the Next Generation Jammer (NGJ), shipboard missiles including the Tomahawk and Standard Missile 6 (SM-6), air-to-air missiles such as the AIM-9X SIDEWINDER missile, and integrated systems such as the SPY-6 radar. In addition, Raytheon provides advanced systems and products that span layered land and integrated air and missile defense, including the proven Patriot air and missile defense system, the Lower Tier Air and

Missile Defense Sensor (LTAMDS), the National Advanced Surface-to-Air Missile System (NASAMS), Javelin, Excalibur, Stinger, and High-Energy Lasers. Raytheon also provides technologically advanced sensors, satellites and interceptors, including the AN/TPY-2 radar, and Standard Missile 3 (SM-3). Raytheon delivers integrated space solutions including sensors, mission orchestration, satellite control, and software. Raytheon also focuses on the development and early introduction of next-generation technologies and systems, including hypersonics, counter-hypersonics, next-generation radars, sensor experimentation and electro-optical/infrared (EO/IR) advancements, and aligns products that use shared technologies, including fire control radars, surveillance radars, EO/IR, space-qualified satellite components, and electronics.

Segment Information. Total sales and operating profit by segment include inter-segment sales which are generally recorded at cost-plus a specified fee or at a negotiated fixed price. These pricing arrangements may result in margins different than what the purchasing segment realizes on the ultimate third-party sales.

We present a FAS/CAS operating adjustment outside of segment results, which represents the difference between the service cost component of our pension and PRB expense under the Financial Accounting Standards (FAS) requirements of U.S. GAAP and our pension and PRB expense under U.S. government Cost Accounting Standards (CAS) primarily related to our Raytheon segment. While the ultimate liability for pension and PRB costs under FAS and CAS is similar, the pattern of cost recognition is different. Over time, we generally expect to recover the related Raytheon pension and PRB liabilities through the pricing of our products and services to the U.S. government. Collins and Pratt & Whitney generally record pension and PRB expense on a FAS basis. In connection with the segment realignment, prior period results were recast in order to maintain the segment cost recognition patterns described above.

Acquisition accounting adjustments include the amortization of acquired intangible assets related to acquisitions, the amortization of the property, plant, and equipment fair value adjustment acquired through acquisitions, the amortization of customer contractual obligations related to loss making or below market contracts acquired, and goodwill impairment, if applicable. These adjustments are not considered part of management's evaluation of segment results.

Segment information for the years ended December 31 are as follows:

<i>(dollars in millions)</i>	Net Sales			Operating Profit (Loss)			Operating Profit (Loss) Margins		
	2023	2022	2021	2023	2022	2021	2023	2022	2021
Collins Aerospace	\$ 26,253	\$ 23,052	\$ 21,152	\$ 3,825	\$ 2,816	\$ 2,380	14.6 %	12.2 %	11.3 %
Pratt & Whitney ⁽²⁾	18,296	20,530	18,150	(1,455)	1,075	454	(8.0)%	5.2 %	2.5 %
Raytheon	26,350	25,176	26,611	2,379	2,448	3,399	9.0 %	9.7 %	12.8 %
Total segment	70,899	68,758	65,913	4,749	6,339	6,233	6.7 %	9.2 %	9.5 %
Eliminations and other ⁽¹⁾	(1,979)	(1,684)	(1,525)	(42)	(23)	4			
Corporate expenses and other unallocated items ⁽³⁾	—	—	—	(275)	(318)	(552)			
FAS/CAS operating adjustment	—	—	—	1,127	1,399	1,654			
Acquisition accounting adjustments	—	—	—	(1,998)	(1,893)	(2,203)			
Consolidated	\$ 68,920	\$ 67,074	\$ 64,388	\$ 3,561	\$ 5,504	\$ 5,136	5.2 %	8.2 %	8.0 %

(1) Includes the operating results of certain smaller operations.

(2) 2023 includes the impacts of the Powder Metal Matter.

(3) 2022 and 2021 included the net expenses related to the U.S. Army's LTAMDS program. Beginning in 2023, LTAMDS results are included in the Raytheon segment.

<i>(dollars in millions)</i>	Total Assets		Capital Expenditures			Depreciation & Amortization		
	2023	2022	2023	2022	2021	2023	2022	2021
Collins Aerospace ⁽¹⁾	\$ 72,085	\$ 70,404	\$ 628	\$ 671	\$ 697	\$ 724	\$ 756	\$ 741
Pratt & Whitney ⁽¹⁾	40,723	36,205	1,025	949	700	736	724	642
Raytheon ⁽¹⁾	44,929	45,666	637	563	558	544	526	504
Total segment	157,737	152,275	2,290	2,183	1,955	2,004	2,006	1,887
Corporate, eliminations, and other	4,132	6,589	125	105	179	126	101	155
Acquisition accounting adjustments						2,081	2,001	2,515
Consolidated	\$ 161,869	\$ 158,864	\$ 2,415	\$ 2,288	\$ 2,134	\$ 4,211	\$ 4,108	\$ 4,557

(1) Total assets include acquired intangible assets and the property, plant and equipment fair value adjustment. Related amortization expense is included in Acquisition accounting adjustments.

Geographic External Sales by Origin and Long-Lived Assets. Geographic external sales are attributed to the geographic regions based on their location of origin. U.S. external sales include export sales to commercial customers outside the U.S., as well as sales to the U.S. government, commercial and affiliated customers, which are known to be for resale to customers outside the U.S. Long-lived assets are Fixed assets, net attributed to the specific geographic regions.

<i>(dollars in millions)</i>	External Net Sales			Long-Lived Assets	
	2023	2022	2021	2023	2022
United States ⁽¹⁾	\$ 57,539	\$ 57,869	\$ 55,837	\$ 12,646	\$ 12,162
International					
Europe	4,849	3,874	3,630	1,207	1,132
Asia Pacific	2,182	1,778	1,748	808	801
Middle East and North Africa	492	173	136	103	113
Other regions	3,858	3,380	3,037	984	962
Consolidated	\$ 68,920	\$ 67,074	\$ 64,388	\$ 15,748	\$ 15,170

(1) 2023 external net sales includes the reduction in sales from the Powder Metal Matter.

Disaggregation of Revenue. We also disaggregate our contracts from customers by geographic region based on customer location, by type of customer, and by sales type. Our geographic region based on customer location uses end user customer location where known or practical to determine, or in instances where the end user customer is not known or not practical to determine, uses “ship to” location as the customer location. In addition, for our Raytheon segment, we disaggregate our contracts from customers by contract type. We believe these categories best depict how the nature, amount, timing and uncertainty of our revenue and cash flows are affected by economic factors.

Segment sales disaggregated by geographic region based on customer location for the years ended December 31 are as follows:

<i>(dollars in millions)</i>	2023				
	Collins Aerospace	Pratt & Whitney	Raytheon	Other	Total
United States	\$ 13,185	\$ 11,403	\$ 20,187	\$ 106	\$ 44,881
Europe	6,423	5,433	1,642	3	13,501
Asia Pacific	2,625	4,227	2,196	1	9,049
Middle East and North Africa	684	539	2,014	—	3,237
Other regions	1,377	2,095	181	—	3,653
Powder Metal Matter	—	(5,401)	—	—	(5,401)
Consolidated net sales	24,294	18,296	26,220	110	68,920
Inter-segment sales	1,959	—	130	(2,089)	—
Business segment sales	\$ 26,253	\$ 18,296	\$ 26,350	\$ (1,979)	\$ 68,920

<i>(dollars in millions)</i>	2022				
	Collins Aerospace	Pratt & Whitney	Raytheon	Other	Total
United States	\$ 11,944	\$ 10,433	\$ 18,643	\$ 170	\$ 41,190
Europe	5,455	4,211	1,442	3	11,111
Asia Pacific	2,165	3,775	2,116	1	8,057
Middle East and North Africa	510	450	2,639	—	3,599
Other regions	1,256	1,658	203	—	3,117
Consolidated net sales	21,330	20,527	25,043	174	67,074
Inter-segment sales	1,722	3	133	(1,858)	—
Business segment sales	\$ 23,052	\$ 20,530	\$ 25,176	\$ (1,684)	\$ 67,074

<i>(dollars in millions)</i>	2021				
	Collins Aerospace	Pratt & Whitney	Raytheon	Other	Total
United States	\$ 11,669	\$ 9,034	\$ 19,139	\$ 169	\$ 40,011
Europe	4,488	3,488	1,619	3	9,598
Asia Pacific	2,040	3,885	2,043	1	7,969
Middle East and North Africa	483	441	3,455	—	4,379
Other regions	933	1,302	196	—	2,431
Consolidated net sales	19,613	18,150	26,452	173	64,388
Inter-segment sales	1,539	—	159	(1,698)	—
Business segment sales	\$ 21,152	\$ 18,150	\$ 26,611	\$ (1,525)	\$ 64,388

Segment sales disaggregated by type of customer for the years ended December 31 are as follows:

<i>(dollars in millions)</i>	2023				
	Collins Aerospace	Pratt & Whitney ⁽²⁾	Raytheon	Other	Total
Sales to the U.S. government ⁽¹⁾	\$ 6,357	\$ 5,206	\$ 19,965	\$ 100	\$ 31,628
Foreign military sales through the U.S. government	304	1,442	3,228	—	4,974
Foreign government direct commercial sales	1,110	515	2,620	4	4,249
Commercial aerospace and other commercial sales ⁽²⁾	16,523	11,133	407	6	28,069
Consolidated net sales	24,294	18,296	26,220	110	68,920
Inter-segment sales	1,959	—	130	(2,089)	—
Business segment sales	\$ 26,253	\$ 18,296	\$ 26,350	\$ (1,979)	\$ 68,920

(1) Excludes foreign military sales through the U.S. government.

(2) Includes the reduction in sales from the Powder Metal Matter.

<i>(dollars in millions)</i>	2022				
	Collins Aerospace	Pratt & Whitney	Raytheon	Other	Total
Sales to the U.S. government ⁽¹⁾	\$ 6,484	\$ 5,272	\$ 18,394	\$ 167	\$ 30,317
Foreign military sales through the U.S. government	372	1,115	3,555	—	5,042
Foreign government direct commercial sales	1,063	474	2,786	4	4,327
Commercial aerospace and other commercial sales	13,411	13,666	308	3	27,388
Consolidated net sales	21,330	20,527	25,043	174	67,074
Inter-segment sales	1,722	3	133	(1,858)	—
Business segment sales	\$ 23,052	\$ 20,530	\$ 25,176	\$ (1,684)	\$ 67,074

(1) Excludes foreign military sales through the U.S. government.

<i>(dollars in millions)</i>	2021				
	Collins Aerospace	Pratt & Whitney	Raytheon	Other	Total
Sales to the U.S. government ⁽¹⁾	\$ 7,016	\$ 5,140	\$ 18,854	\$ 167	\$ 31,177
Foreign military sales through the U.S. government	309	1,273	3,963	1	5,546
Foreign government direct commercial sales	1,223	541	3,227	2	4,993
Commercial aerospace and other commercial sales	11,065	11,196	408	3	22,672
Consolidated net sales	19,613	18,150	26,452	173	64,388
Inter-segment sales	1,539	—	159	(1,698)	—
Business segment sales	\$ 21,152	\$ 18,150	\$ 26,611	\$ (1,525)	\$ 64,388

(1) Excludes foreign military sales through the U.S. government.

The largest contributor to our Commercial aerospace and other commercial sales is Airbus. Sales to Airbus primarily relate to Pratt & Whitney and Collins products, and prior to discounts and incentives were approximately 17%, 14%, and 12% of total net sales in 2023, 2022, and 2021, respectively. Total net sales in 2023 includes the reduction in sales from the Powder Metal Matter.

Segment sales disaggregated by sales type for the years ended December 31 are as follows:

<i>(dollars in millions)</i>	2023				
	Collins Aerospace	Pratt & Whitney ⁽¹⁾	Raytheon	Other	Total
Products	\$ 19,034	\$ 8,579	\$ 21,847	\$ 111	\$ 49,571
Services	5,260	9,717	4,373	(1)	19,349
Consolidated net sales	24,294	18,296	26,220	110	68,920
Inter-segment sales	1,959	—	130	(2,089)	—
Business segment sales	\$ 26,253	\$ 18,296	\$ 26,350	\$ (1,979)	\$ 68,920

(1) Includes the reduction in sales from the Powder Metal Matter.

<i>(dollars in millions)</i>	2022				
	Collins Aerospace	Pratt & Whitney	Raytheon	Other	Total
Products	\$ 16,917	\$ 12,411	\$ 21,276	\$ 169	\$ 50,773
Services	4,413	8,116	3,767	5	16,301
Consolidated net sales	21,330	20,527	25,043	174	67,074
Inter-segment sales	1,722	3	133	(1,858)	—
Business segment sales	\$ 23,052	\$ 20,530	\$ 25,176	\$ (1,684)	\$ 67,074

<i>(dollars in millions)</i>	2021				
	Collins Aerospace	Pratt & Whitney	Raytheon	Other	Total
Products	\$ 15,648	\$ 11,189	\$ 22,264	\$ 169	\$ 49,270
Services	3,965	6,961	4,188	4	15,118
Consolidated net sales	19,613	18,150	26,452	173	64,388
Inter-segment sales	1,539	—	159	(1,698)	—
Business segment sales	\$ 21,152	\$ 18,150	\$ 26,611	\$ (1,525)	\$ 64,388

Raytheon segment sales disaggregated by contract type for the years ended December 31 are as follows:

<i>(dollars in millions)</i>	2023	2022	2021
Fixed-price	\$ 13,164	\$ 12,910	\$ 14,270
Cost-type	13,056	12,133	12,182
Consolidated net sales	26,220	25,043	26,452
Inter-segment sales	130	133	159
Business segment sales	\$ 26,350	\$ 25,176	\$ 26,611