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

FORM 10-Q

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

For the Quarterly Period Ended September 30, 2021

or

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

Commission File Number 1-16411

NORTHROP GRUMMAN CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**80-0640649**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
2980 Fairview Park Drive **Falls Church, Virginia**	**22042**
(Address of principal executive offices)	(Zip Code)

(703) 280-2900
(Registrant’s telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	NOC	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act:

Large Accelerated Filer ☒ Accelerated Filer ☐

Non-accelerated Filer ☐ Smaller Reporting Company ☐

Emerging Growth Company ☐

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

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

Yes ☐ No ☒

Indicate the number of shares outstanding of each of the issuer’s classes of common stock, as of the latest practicable date.
As of October 25, 2021, 158,537,643 shares of common stock were outstanding.

NORTHROP GRUMMAN CORPORATION

TABLE OF CONTENTS

NORTHROP GRUMMAN CORPORATION

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS AND COMPREHENSIVE INCOME (Unaudited)

	Three Months Ended September 30		Nine Months Ended September 30	
$ in millions, except per share amounts	**2021**	2020	**2021**	2020
Sales				
Product	**$ 6,845**	$ 6,667	**$ 21,060**	$ 19,325
Service	**1,875**	2,416	**5,968**	7,262
Total sales	**8,720**	9,083	**27,028**	26,587
Operating costs and expenses				
Product	**5,352**	5,346	**16,662**	15,425
Service	**1,434**	1,897	**4,649**	5,774
General and administrative expenses	**891**	855	**2,788**	2,475
Total operating costs and expenses	**7,677**	8,098	**24,099**	23,674
Gain on sale of business	**—**	—	**1,980**	—
Operating income	**1,043**	985	**4,909**	2,913
Other (expense) income				
Interest expense	**(132)**	(154)	**(423)**	(433)
Non-operating FAS pension benefit	**367**	302	**1,101**	907
Other, net	**(3)**	34	**6**	36
Earnings before income taxes	**1,275**	1,167	**5,593**	3,423
Federal and foreign income tax expense	**212**	181	**1,298**	564
Net earnings	**$ 1,063**	$ 986	**$ 4,295**	$ 2,859
Basic earnings per share	**$ 6.65**	$ 5.91	**$ 26.63**	$ 17.11
Weighted-average common shares outstanding, in millions	**159.8**	166.8	**161.3**	167.1
Diluted earnings per share	**$ 6.63**	$ 5.89	**$ 26.55**	$ 17.05
Weighted-average diluted shares outstanding, in millions	**160.4**	167.3	**161.8**	167.7
Net earnings (from above)	**$ 1,063**	$ 986	**$ 4,295**	$ 2,859
Other comprehensive loss				
Change in unamortized prior service credit, net of tax	**(2)**	(10)	**(6)**	(31)
Change in cumulative translation adjustment and other, net	**(6)**	6	**(6)**	7
Other comprehensive loss, net of tax	**(8)**	(4)	**(12)**	(24)
Comprehensive income	**$ 1,055**	$ 982	**$ 4,283**	$ 2,835

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

NORTHROP GRUMMAN CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
(Unaudited)

$ in millions, except par value	**September 30, 2021**	December 31, 2020
Assets		
Cash and cash equivalents	**$ 4,055**	$ 4,907
Accounts receivable, net	**1,590**	1,501
Unbilled receivables, net	**5,674**	5,140
Inventoried costs, net	**872**	759
Prepaid expenses and other current assets	**737**	1,402
Assets of disposal group held for sale	**—**	1,635
Total current assets	**12,928**	15,344
Property, plant and equipment, net of accumulated depreciation of $6,811 for 2021 and $6,335 for 2020	**7,277**	7,071
Operating lease right-of-use assets	**1,552**	1,533
Goodwill	**17,516**	17,518
Intangible assets, net	**629**	783
Deferred tax assets	**418**	311
Other non-current assets	**2,026**	1,909
Total assets	**$ 42,346**	$ 44,469
Liabilities		
Trade accounts payable	**$ 2,184**	$ 1,806
Accrued employee compensation	**1,811**	1,997
Advance payments and billings in excess of costs incurred	**2,594**	2,517
Other current liabilities	**2,230**	3,002
Liabilities of disposal group held for sale	**—**	258
Total current liabilities	**8,819**	9,580
Long-term debt, net of current portion of $6 for 2021 and $742 for 2020	**12,774**	14,261
Pension and other postretirement benefit plan liabilities	**5,667**	6,498
Operating lease liabilities	**1,367**	1,343
Other non-current liabilities	**2,302**	2,208
Total liabilities	**30,929**	33,890
Commitments and contingencies (Note 6)		
Shareholders' equity		
Preferred stock, $1 par value; 10,000,000 shares authorized; no shares issued and outstanding	**—**	—
Common stock, $1 par value; 800,000,000 shares authorized; issued and outstanding: 2021—158,761,485 and 2020—166,717,179	**159**	167
Paid-in capital	**—**	58
Retained earnings	**11,398**	10,482
Accumulated other comprehensive loss	**(140)**	(128)
Total shareholders' equity	**11,417**	10,579
Total liabilities and shareholders' equity	**$ 42,346**	$ 44,469

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

NORTHROP GRUMMAN CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Nine Months Ended September 30	
$ in millions	**2021**	2020
Operating activities		
Net earnings	**$ 4,295**	$ 2,859
Adjustments to reconcile to net cash provided by operating activities:		
Depreciation and amortization	**908**	922
Stock-based compensation	**71**	61
Deferred income taxes	**(105)**	369
Gain on sale of business	**(1,980)**	—
Net periodic pension and OPB income	**(818)**	(612)
Pension and OPB contributions	**(108)**	(100)
Changes in assets and liabilities:		
Accounts receivable, net	**(133)**	(632)
Unbilled receivables, net	**(596)**	(386)
Inventoried costs, net	**(113)**	(70)
Prepaid expenses and other assets	**6**	(122)
Accounts payable and other liabilities	**49**	283
Income taxes payable, net	**663**	111
Other, net	**(14)**	20
Net cash provided by operating activities	**2,125**	2,703
Investing activities		
Divestiture of IT services business	**3,400**	—
Capital expenditures	**(682)**	(828)
Proceeds from sale of equipment to a customer	**84**	—
Other, net	**(3)**	—
Net cash provided by (used in) investing activities	**2,799**	(828)
Financing activities		
Net proceeds from issuance of long-term debt	**—**	2,239
Payments of long-term debt	**(2,236)**	(27)
Payments to credit facilities	**—**	(13)
Common stock repurchases	**(2,724)**	(490)
Cash dividends paid	**(737)**	(711)
Payments of employee taxes withheld from share-based awards	**(33)**	(66)
Other, net	**(46)**	(57)
Net cash (used in) provided by financing activities	**(5,776)**	875
(Decrease) increase in cash and cash equivalents	**(852)**	2,750
Cash and cash equivalents, beginning of year	**4,907**	2,245
Cash and cash equivalents, end of period	**$ 4,055**	$ 4,995

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

NORTHROP GRUMMAN CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(Unaudited)

$ in millions, except per share amounts	Three Months Ended September 30 **2021**	Three Months Ended September 30 2020	Nine Months Ended September 30 **2021**	Nine Months Ended September 30 2020
Common stock				
Beginning of period	**$ 160**	$ 167	**$ 167**	$ 168
Common stock repurchased	**(1)**	—	**(8)**	(1)
End of period	**159**	167	**159**	167
Paid-in capital				
Beginning of period	**—**	10	**58**	—
Common stock repurchased	**—**	—	**(60)**	—
Stock compensation	**—**	23	**2**	33
Other	**—**	(6)	**—**	(6)
End of period	**—**	27	**—**	27
Retained earnings				
Beginning of period	**11,144**	9,652	**10,482**	8,748
Common stock repurchased	**(587)**	—	**(2,676)**	(479)
Net earnings	**1,063**	986	**4,295**	2,859
Dividends declared	**(252)**	(244)	**(741)**	(709)
Stock compensation	**30**	—	**38**	(36)
Other	**—**	—	**—**	11
End of period	**11,398**	10,394	**11,398**	10,394
Accumulated other comprehensive loss				
Beginning of period	**(132)**	(117)	**(128)**	(97)
Other comprehensive loss, net of tax	**(8)**	(4)	**(12)**	(24)
End of period	**(140)**	(121)	**(140)**	(121)
Total shareholders' equity	**$ 11,417**	$ 10,467	**$ 11,417**	$ 10,467
Cash dividends declared per share	**$ 1.57**	$ 1.45	**$ 4.59**	$ 4.22

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

NORTHROP GRUMMAN CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

1. BASIS OF PRESENTATION

Principles of Consolidation and Reporting

These unaudited condensed consolidated financial statements (the “financial statements”) include the accounts of Northrop Grumman Corporation and its subsidiaries and joint ventures or other investments for which we consolidate the financial results (herein referred to as “Northrop Grumman,” the “company,” “we,” “us,” or “our”). Intercompany accounts, transactions and profits are eliminated in consolidation. Investments in equity securities and joint ventures where the company has significant influence, but not control, are accounted for using the equity method.

Effective January 30, 2021 (the “Divestiture date”), we completed the previously announced sale of our IT and mission support services business (the “IT services divestiture”) for $3.4 billion in cash and recorded a pre-tax gain on sale of $2.0 billion. The IT and mission support services business was comprised of the majority of the Information Solutions and Services (IS&S) division of Defense Systems (excluding our Vinnell Arabia business); select cyber, intelligence and missions support programs, which were part of the Cyber and Intelligence Mission Solutions (CIMS) division of Mission Systems; and the Space Technical Services business unit of Space Systems. The assets and liabilities of the IT and mission support services business were classified as held for sale in the consolidated statement of financial position as of December 31, 2020. Operating results include sales and operating income for the IT and mission support services business prior to the Divestiture date. Sales for the IT and mission support services business were $162 million for the nine months ended September 30, 2021 and $602 million and $1.7 billion for the three and nine months ended September 30, 2020, respectively. Pre-tax profit was $20 million for the nine months ended September 30, 2021, and $69 million and $180 million for the three and nine months ended September 30, 2020, respectively.

These financial statements are prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP” or “FAS”) and in accordance with the rules of the Securities and Exchange Commission (SEC) for interim reporting. The financial statements include adjustments of a normal recurring nature considered necessary by management for a fair presentation of the company’s unaudited condensed consolidated financial position, results of operations and cash flows.

The results reported in these financial statements are not necessarily indicative of results that may be expected for the entire year. These financial statements should be read in conjunction with the information contained in the company’s 2020 Annual Report on Form 10-K. During the first quarter of 2021, we changed the naming convention for our FAS/CAS pension accounts. The Net FAS (service)/CAS pension adjustment is now referred to as the FAS/CAS operating adjustment and the FAS (non-service) pension benefit is now referred to as the Non-operating FAS pension benefit. This change does not impact any current or previously reported amounts. During the second quarter of 2021, we changed the presentation of the retiree benefits components in the operating cash flow section of the Unaudited condensed consolidated statement of cash flows. Prior period amounts have been conformed to current period presentation and this change does not impact previously reported cash provided by operating activities.

The quarterly information is labeled using a calendar convention; that is, first quarter is consistently labeled as ending on March 31, second quarter as ending on June 30 and third quarter as ending on September 30. It is the company’s long-standing practice to establish actual interim closing dates using a “fiscal” calendar, in which we close our books on a Friday near these quarter-end dates in order to normalize the potentially disruptive effects of quarterly closings on business processes. This practice is only used at interim periods within a reporting year.

Accounting Estimates

Preparation of the financial statements requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingencies at the date of the financial statements, as well as the reported amounts of sales and expenses during the reporting period. Estimates have been prepared using the most current and best available information; however, actual results could differ materially from those estimates.

Revenue Recognition

The majority of our sales are derived from long-term contracts with the U.S. government for the development or production of goods, the provision of services, or a combination of both. We recognize revenue as control is transferred to the customer, either over time or at a point in time. For most of our contracts, control is effectively transferred during the period of performance, so we generally recognize revenue over time using the cost-to-cost method (cost incurred relative to total cost estimated at completion). The company believes this represents the most appropriate measurement towards satisfaction of our performance obligations. Revenue for contracts in which the control of goods produced does not transfer until delivery to the customer is recognized at a point in time (i.e., typically upon delivery).

Contract Estimates
Use of the cost-to-cost method requires us to make reasonably dependable estimates regarding the revenue and cost associated with the design, manufacture and delivery of our products and services. The company estimates profit on these contracts as the difference between total estimated sales and total estimated cost at completion and recognizes that profit as costs are incurred. Significant judgment is used to estimate total sales and cost at completion.

Contract sales may include estimates of variable consideration, including cost or performance incentives (such as award and incentive fees), contract claims and requests for equitable adjustment (REAs). Variable consideration is included in total estimated sales to the extent it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. We estimate variable consideration as the most likely amount to which we expect to be entitled.

We recognize changes in estimated contract sales or costs and the resulting changes in contract profit on a cumulative basis. Cumulative estimate-at-completion (EAC) adjustments represent the cumulative effect of the changes on current and prior periods; sales and operating margins in future periods are recognized as if the revised estimates had been used since contract inception. If it is determined that a loss is expected to result on an individual performance obligation, the entire amount of the estimable future loss, including an allocation of general and administrative expense, is charged against income in the period the loss is identified.

The following table presents the effect of aggregate net EAC adjustments:

	Three Months Ended September 30		Nine Months Ended September 30	
$ in millions, except per share data	**2021**	2020	**2021**	2020
Revenue	**$ 116**	$ 124	**$ 478**	$ 385
Operating income	**109**	123	**453**	359
Net earnings[(1)]	**86**	97	**358**	284
Diluted earnings per share[(1)]	**0.54**	0.58	**2.21**	1.69

(1) Based on a 21 percent statutory tax rate.

EAC adjustments on a single performance obligation can have a material effect on the company's financial statements. When such adjustments occur, we generally disclose the nature, underlying conditions and financial impact of the adjustments. During the third quarter of 2021, we recorded a $42 million unfavorable EAC adjustment on the F-35 program at Aeronautics Systems due to labor-related production inefficiencies largely driven by COVID-19-related impacts on the labor market and employee leave. No such adjustments were material to the financial statements during the three months ended September 30, 2020.

Backlog
Backlog represents the future sales we expect to recognize on firm orders received by the company and is equivalent to the company's remaining performance obligations at the end of each period. It comprises both funded backlog (firm orders for which funding is authorized and appropriated) and unfunded backlog. Unexercised contract options and indefinite delivery indefinite quantity (IDIQ) contracts are not included in backlog until the time an option or IDIQ task order is exercised or awarded.

Company backlog as of September 30, 2021 was $74.8 billion. Of our September 30, 2021 backlog, we expect to recognize approximately 40 percent as revenue over the next 12 months and 60 percent as revenue over the next 24 months, with the remainder to be recognized thereafter.

Contract Assets and Liabilities
For each of the company's contracts, the timing of revenue recognition, customer billings, and cash collections results in a net contract asset or liability at the end of each reporting period. Contract assets are equivalent to and reflected as Unbilled receivables in the unaudited condensed consolidated statements of financial position and are primarily related to long-term contracts where revenue recognized under the cost-to-cost method exceeds amounts billed to customers. Contract liabilities are equivalent to and reflected as Advance payments and billings in excess of costs incurred in the unaudited condensed consolidated statements of financial position. The amount of revenue recognized for the three and nine months ended September 30, 2021 that was included in the December 31, 2020

contract liability balances was $261 million and $1.8 billion, respectively. The amount of revenue recognized for the three and nine months ended September 30, 2020 that was included in the December 31, 2019 contract liability balance was $232 million and $1.5 billion, respectively.

Disaggregation of Revenue
See Note 9 for information regarding the company's sales by customer type, contract type and geographic region for each of our segments. We believe those categories best depict how the nature, amount, timing and uncertainty of our revenue and cash flows are affected by economic factors.

Property, Plant, and Equipment
In the fourth quarter of 2020, the company completed a sale of equipment to a customer on a restricted Aeronautics Systems program. During the nine months ended September 30, 2021, the company received cash payments of $84 million related to the equipment sale and included it in Proceeds from sale of equipment to a customer in the unaudited condensed consolidated statement of cash flows.

Non-cash investing activities include capital expenditures incurred but not yet paid of $105 million and $123 million as of September 30, 2021 and 2020, respectively.

Accumulated Other Comprehensive Loss
The components of accumulated other comprehensive loss are as follows:

$ in millions	**September 30, 2021**	December 31, 2020
Unamortized prior service credit, net of tax expense of $1 for 2021 and $3 for 2020	**$ 4**	$ 10
Cumulative translation adjustment and other, net	**(144)**	(138)
Total accumulated other comprehensive loss	**$ (140)**	$ (128)

Related Party Transactions
For all periods presented, the company had no material related party transactions.

Accounting Standards Updates
Accounting standards updates adopted and/or issued, but not effective until after September 30, 2021, are not expected to have a material effect on the company's unaudited condensed consolidated financial position, annual results of operations and/or cash flows.

2. EARNINGS PER SHARE, SHARE REPURCHASES AND DIVIDENDS ON COMMON STOCK

Basic Earnings Per Share
We calculate basic earnings per share by dividing net earnings by the weighted-average number of shares of common stock outstanding during each period.

Diluted Earnings Per Share
Diluted earnings per share include the dilutive effect of awards granted to employees under stock-based compensation plans. The dilutive effect of these securities totaled 0.6 million shares and 0.5 million shares for the three and nine months ended September 30, 2021, respectively. The dilutive effect of these securities totaled 0.5 million shares and 0.6 million shares for the three and nine months ended September 30, 2020, respectively.

Share Repurchases
On September 16, 2015, the company's board of directors authorized a share repurchase program of up to $4.0 billion of the company's common stock (the "2015 Repurchase Program"). On December 4, 2018, the company's board of directors authorized a share repurchase program of up to an additional $3.0 billion in share repurchases of the company's common stock (the "2018 Repurchase Program"). Repurchases under the 2015 Repurchase Program commenced in March 2016 and were completed in March 2020 at which time repurchases under the 2018 Repurchase Program commenced. As of September 30, 2021, repurchases under the 2018 Repurchase Program totaled $2.9 billion; $0.1 billion remained under this share repurchase authorization. By its terms, the 2018 Repurchase Program is set to expire when we have used all authorized funds for repurchases.

On January 25, 2021, the company's board of directors authorized a new share repurchase program of up to an additional $3.0 billion in share repurchases of the company's common stock (the "2021 Repurchase Program"). By its terms, repurchases under the 2021 Repurchase Program will commence upon completion of the 2018 Repurchase Program and will expire when we have used all authorized funds for repurchases.

During the first quarter of 2021, the company entered into an accelerated share repurchase (ASR) agreement with Goldman Sachs & Co. LLC (Goldman Sachs) to repurchase $2.0 billion of the company's common stock as part of the 2018 Repurchase Program. Under the agreement, we made a payment of $2.0 billion to Goldman Sachs and received an initial delivery of 5.9 million shares valued at $1.7 billion that were immediately canceled by the company. The remaining balance of $300 million was settled on June 1, 2021 with a final delivery of 0.2 million shares from Goldman Sachs. The final average purchase price was $327.29 per share.

Share repurchases take place from time to time, subject to market conditions and management's discretion, in the open market or in privately negotiated transactions. The company retires its common stock upon repurchase and, in the periods presented, has not made any purchases of common stock other than in connection with these publicly announced repurchase programs.

The table below summarizes the company's share repurchases to date under the authorizations described above:

Repurchase Program Authorization Date	Amount Authorized (in millions)	Total Shares Retired (in millions)	Average Price Per Share[1]	Date Completed	Shares Repurchased (in millions) Nine Months Ended September 30 2021	2020
September 16, 2015	$ 4,000	15.4	$ 260.33	March 2020	**—**	0.9
December 4, 2018	$ 3,000	8.6	$ 335.62		**8.1**	0.5
January 25, 2021	$ 3,000	—	—		**—**	—

[1] Includes commissions paid.

Dividends on Common Stock

In May 2021, the company increased the quarterly common stock dividend 8 percent to $1.57 per share from the previous amount of $1.45 per share.

3. INCOME TAXES

	Three Months Ended September 30		Nine Months Ended September 30	
$ in millions	**2021**	2020	**2021**	2020
Federal and foreign income tax expense	**$ 212**	$ 181	**$ 1,298**	$ 564
Effective income tax rate	**16.6 %**	15.5 %	**23.2 %**	16.5 %

Current Quarter

The third quarter 2021 effective tax rate (ETR) increased to 16.6 percent from 15.5 percent in the prior year period primarily due to lower benefits from foreign-derived intangible income (FDII). The company's third quarter 2021 ETR includes benefits of $43 million for research credits and $12 million for FDII. The company's third quarter 2020 ETR included benefits of $45 million for research credits and $30 million for FDII, which reflects additional benefits after final regulations issued in July 2020 clarified Foreign Military Sales qualify for the deduction.

Year to Date

The year to date 2021 ETR increased to 23.2 percent from 16.5 percent in the prior period primarily due to federal income taxes resulting from the IT services divestiture, including $250 million of income tax expense related to $1.2 billion of nondeductible goodwill in the divested business. The company's year to date 2021 ETR also includes additional tax expense related to a change made in tax revenue recognition on certain long-term contracts, which increased taxable income in years prior to the 2017 Tax Cuts and Jobs Act at a rate above the current statutory rate as well as benefits of $142 million for research credits and $32 million for FDII. The company's year to date 2020 ETR included benefits of $135 million for research credits and $46 million for FDII.

Taxes receivable, which are included in Prepaid expenses and other current assets in the unaudited condensed consolidated statements of financial position, were $123 million as of September 30, 2021 and $792 million as of December 31, 2020.

The company has recorded unrecognized tax benefits related to our methods of accounting associated with the timing of revenue recognition and related costs and the 2017 Tax Cuts and Jobs Act, which includes related final revenue recognition regulations issued in December 2020 under IRC Section 451(b) and procedural guidance issued in August 2021. It is reasonably possible that within the next 12 months our unrecognized tax benefits related to these matters may increase by approximately $100 million.

We file income tax returns in the U.S. federal jurisdiction and in various state and foreign jurisdictions. The Northrop Grumman 2017-2018 federal tax returns are currently under Internal Revenue Service (IRS) examination. During the third quarter of 2021, the company requested an appeal with the IRS for the Northrop Grumman 2014-2016 federal income tax returns and refund claims related to its 2007-2016 federal tax returns. In addition, legacy Orbital ATK federal tax returns for the year ended March 31, 2015, the nine-month transition period ended December 31, 2015 and calendar years 2016-2017 are currently under appeal with the IRS.

4. FAIR VALUE OF FINANCIAL INSTRUMENTS

The company holds a portfolio of marketable securities to partially fund non-qualified employee benefit plans. A portion of these securities are held in common/collective trust funds and are measured at fair value using net asset value (NAV) per share as a practical expedient; and therefore are not required to be categorized in the fair value hierarchy table below. Marketable securities are included in Other non-current assets in the unaudited condensed consolidated statements of financial position.

The company's derivative portfolio consists primarily of foreign currency forward contracts. Where model-derived valuations are appropriate, the company utilizes the income approach to determine the fair value and uses the applicable London Interbank Offered Rate (LIBOR) swap rates.

The following table presents the financial assets and liabilities the company records at fair value on a recurring basis identified by the level of inputs used to determine fair value:

	September 30, 2021			December 31, 2020		
$ in millions	**Level 1**	**Level 2**	**Total**	Level 1	Level 2	Total
Financial Assets						
Marketable securities	**$ 390**	**$ —**	**$ 390**	$ 377	$ 1	$ 378
Marketable securities valued using NAV			**16**			18
Total marketable securities	**390**	**—**	**406**	377	1	396
Derivatives	**—**	**3**	**3**	—	—	—

The notional value of the company's foreign currency forward contracts at September 30, 2021 and December 31, 2020 was $132 million and $133 million, respectively. At September 30, 2021 and December 31, 2020, no portion of the notional value was designated as a cash flow hedge.

The derivative fair values and related unrealized gains/losses at September 30, 2021 and December 31, 2020 were not material. There were no transfers of financial instruments into or out of Level 3 of the fair value hierarchy during the nine months ended September 30, 2021.

The carrying value of cash and cash equivalents and commercial paper approximates fair value.

Long-term Debt

The estimated fair value of long-term debt was $15.2 billion and $18.2 billion as of September 30, 2021 and December 31, 2020, respectively. We calculated the fair value of long-term debt using Level 2 inputs, based on interest rates available for debt with terms and maturities similar to the company's existing debt arrangements. The current portion of long-term debt is recorded in Other current liabilities in the unaudited condensed consolidated statements of financial position.

On September 2, 2021, the company completed an exchange offer to eligible holders of the outstanding notes of our direct wholly owned subsidiary, Northrop Grumman Systems Corporation ("NGSC") maturing through 2036. An aggregate principal amount of $422 million of the NGSC notes was exchanged for $422 million of Northrop Grumman Corporation notes with the same interest rates and maturity dates as the NGSC notes exchanged. Because the debt instruments are not substantially different, the exchange was treated as a debt modification for accounting purposes with no gain or loss recognized.

Repayments of Senior Notes

In March 2021, the company repaid $700 million of 3.50 percent unsecured notes upon maturity.

In March 2021, the company redeemed $1.5 billion of 2.55 percent unsecured notes due October 2022. The company recorded a pre-tax charge of $54 million principally related to the premium paid on the redemption, which was recorded in Other, net in the unaudited condensed consolidated statements of earnings and comprehensive income.

5. INVESTIGATIONS, CLAIMS AND LITIGATION

On May 4, 2012, the company commenced an action, *Northrop Grumman Systems Corp. v. United States*, in the U.S. Court of Federal Claims. This lawsuit relates to an approximately $875 million firm fixed-price contract awarded to the company in 2007 by the U.S. Postal Service (USPS) for the construction and delivery of flats sequencing systems (FSS) as part of the postal automation program. The FSS were delivered. The company's lawsuit seeks approximately $63 million for unpaid portions of the contract price, and approximately $115 million based on the company's assertions that, through various acts and omissions over the life of the contract, the USPS adversely affected the cost and schedule of performance and materially altered the company's obligations under the contract. The United States responded to the company's complaint with an answer, denying most of the company's claims, and counterclaims seeking approximately $410 million, less certain amounts outstanding under the contract. In the course of the litigation, the United States subsequently amended its counterclaim, reducing it to seek approximately $193 million. The principal counterclaim alleges that the company delayed its performance and caused damages to the USPS because USPS did not realize certain costs savings as early as it had expected. On February 3, 2020, after extensive discovery and motions practice, the parties commenced what was expected to be a seven-week trial. The first four weeks of trial concluded, but the court postponed the remaining estimated three weeks as a result of COVID-19-related concerns. After additional COVID-19-related interruptions, trial concluded on March 5, 2021. On October 12, 2021, the parties completed post-trial briefing, absent any further requests or unexpected developments. Although the ultimate outcome of this matter, including any possible loss, cannot be predicted or reasonably estimated at this time, the company intends to continue vigorously to pursue and defend the matter.

We are engaged in remediation activities relating to environmental conditions allegedly resulting from historic operations at the former United States Navy and Grumman facilities in Bethpage, New York. For over 20 years, we have worked closely with the United States Navy, the United States Environmental Protection Agency, the New York State Department of Environmental Conservation (NYSDEC), the New York State Department of Health and other federal, state and local governmental authorities, to address legacy environmental conditions in Bethpage. In December 2019, the State of New York issued an Amended Record of Decision seeking to impose additional remedial requirements beyond measures the company previously had been taking; the State also communicated that it was assessing potential natural resource damages. In December 2020, the parties reached a tentative agreement regarding the steps the company will take to implement the State's Amended Record of Decision and to resolve certain potential other claims, including for natural resource damages. On September 22, 2021, the State of New York issued for public comment a new consent decree reflecting the agreement. We understand that the State will next seek court approval of the consent decree. We have incurred, and expect to continue to incur, as included in Note 6, substantial remediation costs related to the legacy Bethpage environmental conditions. Applicable remediation standards and other requirements to which we are subject may continue to change, our costs may increase materially and those costs may not be fully recoverable. In addition, we are a party to various, and expect to become a party to additional, legal proceedings and disputes related to remediation, environmental impacts, costs, and the allowability of costs we incur, including with federal and state entities (including the Navy, Defense Contract Management Agency, the State, local municipalities and water districts) and insurance carriers, as well as class action and individual plaintiffs alleging personal injury and property damage and seeking both monetary and non-monetary relief. These Bethpage matters could result in additional costs, fines, penalties, sanctions, compensatory or other damages, determinations on allocation, allowability and coverage, and non-monetary relief. We are in discussions with the Department of Defense and the Bethpage Water District to explore whether claims involving these parties can be resolved at this stage. We cannot at this time predict or reasonably estimate the potential cumulative outcomes or ranges of possible liability of these aggregate Bethpage matters.

The company is a party to various other investigations, lawsuits, arbitration, claims, enforcement actions and other legal proceedings, including government investigations and claims, that arise in the ordinary course of our business. The nature of legal proceedings is such that we cannot assure the outcome of any particular matter. However, based on information available to the company to date, the company does not believe that the outcome of any of these other matters pending against the company is likely to have a material adverse effect on the company's unaudited condensed consolidated financial position as of September 30, 2021, or its annual results of operations and/or cash flows.

6. COMMITMENTS AND CONTINGENCIES

U.S. Government Cost Claims and Contingencies

From time to time, the company is advised of claims by the U.S. government concerning certain potential disallowed costs, plus, at times, penalties and interest. When such findings are presented, the company and U.S. government representatives engage in discussions to enable the company to evaluate the merits of these claims, as well as to assess the amounts being claimed. Where appropriate, provisions are made to reflect the company's estimated exposure for such potential disallowed costs. Such provisions are reviewed periodically using the most recent information available. The company believes it has adequately reserved for disputed amounts that are probable and reasonably estimable, and that the outcome of any such matters would not have a material adverse effect on its unaudited condensed consolidated financial position as of September 30, 2021, or its annual results of operations and/or cash flows.

The U.S. government has raised questions about an interest rate assumption used by the company to determine our CAS pension expense. On June 1, 2020, the government provided written notice that the assumptions the company used during the period 2013-2019 were potentially noncompliant with CAS. We submitted a formal response on July 31, 2020, which we believe demonstrates the appropriateness of the assumptions used. On November 24, 2020, the government replied to the company's response, disagreeing with our position and requesting additional input, which we provided on February 22, 2021. We are engaging further with the government. The sensitivity to changes in interest rate assumptions makes it reasonably possible the outcome of this matter could have a material adverse effect on our financial position, results of operations and/or cash flows, although we are not currently able to estimate a range of any potential loss.

Environmental Matters

The table below summarizes the amount accrued for environmental remediation costs, management's estimate of the amount of reasonably possible future costs in excess of accrued costs and the deferred costs expected to be recoverable through overhead charges on U.S. government contracts as of September 30, 2021 and December 31, 2020:

$ in millions	Accrued Costs(1)(2)	Reasonably Possible Future Costs in Excess of Accrued Costs(2)	Deferred Costs(3)
September 30, 2021	**$ 600**	**$ 366**	**$ 514**
December 31, 2020	614	346	529

(1) As of September 30, 2021, $235 million is recorded in Other current liabilities and $365 million is recorded in Other non-current liabilities.

(2) Estimated remediation costs are not discounted to present value. The reasonably possible future costs in excess of accrued costs do not take into consideration amounts expected to be recoverable through overhead charges on U.S. government contracts.

(3) As of September 30, 2021, $205 million is deferred in Prepaid expenses and other current assets and $309 million is deferred in Other non-current assets. These amounts are evaluated for recoverability on a routine basis.

Although management cannot predict whether new information gained as our environmental remediation projects progress, or as changes in facts and circumstances occur, will materially affect the estimated liability accrued, except with respect to Bethpage, we do not anticipate that future remediation expenditures associated with our currently identified projects will have a material adverse effect on the company's unaudited condensed consolidated financial position as of September 30, 2021, or its annual results of operations and/or cash flows.

With respect to Bethpage, as discussed in Note 5, in December 2019, the State of New York issued an Amended Record of Decision, seeking to impose additional remedial requirements beyond those the company previously had been taking; the State also communicated that it was assessing potential natural resource damages. In December 2020, the parties reached a tentative agreement regarding the steps the company will take to implement the State's Amended Record of Decision and to resolve certain potential other claims, including for natural resource damages. On September 22, 2021, the State of New York issued for public comment a new consent decree reflecting the agreement. We understand that the State will next seek court approval of the consent decree. As discussed in Note 5, the applicable remediation standards and other requirements to which we are subject may continue to change, our costs may increase materially, and those costs may not be fully recoverable.

Financial Arrangements

In the ordinary course of business, the company uses standby letters of credit and guarantees issued by commercial banks and surety bonds issued principally by insurance companies to guarantee the performance on certain obligations. At September 30, 2021, there were $476 million of stand-by letters of credit and guarantees and $69 million of surety bonds outstanding.

Commercial Paper

The company maintains a commercial paper program that serves as a source of short-term financing with capacity to issue unsecured commercial paper notes up to $2.0 billion. At September 30, 2021, there were no commercial paper borrowings outstanding.

Credit Facilities

The company maintains a five-year senior unsecured credit facility in an aggregate principal amount of $2.0 billion (the "2018 Credit Agreement") that matures in August 2024 and is intended to support the company's commercial paper program and other general corporate purposes. Commercial paper borrowings reduce the amount available for borrowing under the 2018 Credit Agreement. At September 30, 2021, there was no balance outstanding under this facility.

At September 30, 2021, the company was in compliance with all covenants under its credit agreements.

7. RETIREMENT BENEFITS

The cost to the company of its pension and other postretirement benefit (OPB) plans is shown in the following table:

	Three Months Ended September 30				Nine Months Ended September 30			
	Pension Benefits		OPB		Pension Benefits		OPB	
$ in millions	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020
Components of net periodic benefit cost (benefit)								
Service cost	**$ 104**	$ 102	**$ 4**	$ 4	**$ 311**	$ 306	**$ 12**	$ 13
Interest cost	**263**	307	**13**	17	**790**	920	**40**	50
Expected return on plan assets	**(627)**	(594)	**(26)**	(26)	**(1,884)**	(1,782)	**(79)**	(77)
Amortization of prior service (credit) cost	**(3)**	(15)	**—**	1	**(7)**	(45)	**(1)**	3
Net periodic benefit cost (benefit)	**$ (263)**	$ (200)	**$ (9)**	$ (4)	**$ (790)**	$ (601)	**$ (28)**	$ (11)

Employer Contributions

The company sponsors defined benefit pension and OPB plans, as well as defined contribution plans. We fund our defined benefit pension plans annually in a manner consistent with the Employee Retirement Income Security Act of 1974, as amended by the Pension Protection Act of 2006.

Contributions made by the company to its retirement plans are as follows:

	Three Months Ended September 30		Nine Months Ended September 30	
$ in millions	**2021**	2020	**2021**	2020
Defined benefit pension plans	**$ 26**	$ 24	**$ 79**	$ 70
OPB plans	**8**	7	**29**	30
Defined contribution plans	**99**	116	**476**	472

8. STOCK COMPENSATION PLANS AND OTHER COMPENSATION ARRANGEMENTS

Stock Awards

The following table presents the number of restricted stock rights (RSRs) and restricted performance stock rights (RPSRs) granted to employees under the company's long-term incentive stock plan and the grant date aggregate fair value of those stock awards for the periods presented:

	Nine Months Ended September 30	
in millions	**2021**	2020
RSRs granted	**0.1**	0.1
RPSRs granted	**0.2**	0.2
Grant date aggregate fair value	**$ 89**	$ 91

RSRs typically vest on the third anniversary of the grant date, while RPSRs generally vest and pay out based on the achievement of certain performance metrics over a three-year period.

Cash Awards

The following table presents the minimum and maximum aggregate payout amounts related to cash units (CUs) and cash performance units (CPUs) granted to employees in the periods presented:

	Nine Months Ended September 30	
$ in millions	**2021**	2020
Minimum aggregate payout amount	**$ 31**	$ 31
Maximum aggregate payout amount	**178**	175

CUs typically vest and settle in cash on the third anniversary of the grant date, while CPUs generally vest and pay out in cash based on the achievement of certain performance metrics over a three-year period.

9. SEGMENT INFORMATION

The following table presents sales and operating income by segment:

	Three Months Ended September 30		Nine Months Ended September 30	
$ in millions	**2021**	2020	**2021**	2020
Sales				
Aeronautics Systems	**$ 2,725**	$ 2,914	**$ 8,628**	$ 8,682
Defense Systems	**1,409**	1,859	**4,398**	5,626
Mission Systems	**2,436**	2,551	**7,613**	7,344
Space Systems	**2,681**	2,198	**7,950**	6,194
Intersegment eliminations	**(531)**	(439)	**(1,561)**	(1,259)
Total sales	**8,720**	9,083	**27,028**	26,587
Operating income				
Aeronautics Systems	**265**	294	**873**	867
Defense Systems	**175**	217	**529**	632
Mission Systems	**372**	370	**1,177**	1,070
Space Systems	**288**	224	**865**	635
Intersegment eliminations	**(65)**	(56)	**(197)**	(157)
Total segment operating income	**1,035**	1,049	**3,247**	3,047
FAS/CAS operating adjustment	**61**	108	**98**	316
Unallocated corporate (expense) income	**(53)**	(172)	**1,564**	(450)
Total operating income	**$ 1,043**	$ 985	**$ 4,909**	$ 2,913

FAS/CAS Operating Adjustment

For financial statement purposes, we account for our employee pension plans in accordance with FAS. However, the cost of these plans is charged to our contracts in accordance with the Federal Acquisition Regulation (FAR) and the related U.S. Government Cost Accounting Standards (CAS). The FAS/CAS operating adjustment, previously referred to as the net FAS (service)/CAS pension adjustment, reflects the difference between CAS pension expense included as cost in segment operating income and the service cost component of FAS expense included in total operating income.

Unallocated Corporate (Expense) Income

Unallocated corporate (expense) income includes the portion of corporate costs not considered allowable or allocable under applicable CAS or FAR, and therefore not allocated to the segments, such as changes in deferred state income taxes and a portion of management and administration, legal, environmental, compensation, retiree benefits, advertising and other corporate unallowable costs. Unallocated corporate (expense) income also includes costs not considered part of management’s evaluation of segment operating performance, such as amortization of purchased intangible assets and the additional depreciation expense related to the step-up in fair value of property, plant and equipment acquired through business combinations, as well as certain compensation and other costs.

During the first quarter of 2021, the $2.0 billion pre-tax gain on the sale of our IT services business and $192 million of unallowable state taxes and transaction costs associated with the divestiture were recorded in Unallocated corporate (expense) income.

Disaggregation of Revenue

Sales by Customer Type	Three Months Ended September 30				Nine Months Ended September 30			
	2021		2020		**2021**		2020	
$ in millions	**$**	**%**[(3)]	$	%[(3)]	**$**	**%**[(3)]	$	%[(3)]
Aeronautics Systems								
U.S. government[(1)]	**$ 2,312**	**85 %**	$ 2,491	85 %	**$ 7,366**	**85 %**	$ 7,329	84 %
International[(2)]	**360**	**13 %**	382	13 %	**1,110**	**13 %**	1,233	14 %
Other customers	**5**	**— %**	11	1 %	**15**	**— %**	35	1 %
Intersegment sales	**48**	**2 %**	30	1 %	**137**	**2 %**	85	1 %
Aeronautics Systems sales	**2,725**	**100 %**	2,914	100 %	**8,628**	**100 %**	8,682	100 %
Defense Systems								
U.S. government[(1)]	**877**	**62 %**	1,264	68 %	**2,749**	**63 %**	3,828	68 %
International[(2)]	**316**	**22 %**	307	17 %	**1,002**	**23 %**	963	17 %
Other customers	**10**	**1 %**	97	5 %	**61**	**1 %**	293	5 %
Intersegment sales	**206**	**15 %**	191	10 %	**586**	**13 %**	542	10 %
Defense Systems sales	**1,409**	**100 %**	1,859	100 %	**4,398**	**100 %**	5,626	100 %
Mission Systems								
U.S. government[(1)]	**1,756**	**72 %**	1,884	74 %	**5,491**	**71 %**	5,331	73 %
International[(2)]	**417**	**17 %**	455	18 %	**1,338**	**18 %**	1,406	19 %
Other customers	**19**	**1 %**	19	1 %	**49**	**1 %**	54	1 %
Intersegment sales	**244**	**10 %**	193	7 %	**735**	**10 %**	553	7 %
Mission Systems sales	**2,436**	**100 %**	2,551	100 %	**7,613**	**100 %**	7,344	100 %
Space Systems								
U.S. government[(1)]	**2,507**	**94 %**	2,020	92 %	**7,401**	**93 %**	5,734	93 %
International[(2)]	**92**	**3 %**	99	5 %	**301**	**4 %**	237	4 %
Other customers	**49**	**2 %**	54	2 %	**145**	**2 %**	144	2 %
Intersegment sales	**33**	**1 %**	25	1 %	**103**	**1 %**	79	1 %
Space Systems sales	**2,681**	**100 %**	2,198	100 %	**7,950**	**100 %**	6,194	100 %
Total								
U.S. government[(1)]	**7,452**	**85 %**	7,659	84 %	**23,007**	**85 %**	22,222	84 %
International[(2)]	**1,185**	**14 %**	1,243	14 %	**3,751**	**14 %**	3,839	14 %
Other customers	**83**	**1 %**	181	2 %	**270**	**1 %**	526	2 %
Total Sales	**$ 8,720**	**100 %**	$ 9,083	100 %	**$ 27,028**	**100 %**	$ 26,587	100 %

(1) Sales to the U.S. government include sales from contracts for which we are the prime contractor, as well as those for which we are a subcontractor and the ultimate customer is the U.S. government. Each of the company's segments derives substantial revenue from the U.S. government.

(2) International sales include sales from contracts for which we are the prime contractor, as well as those for which we are a subcontractor and the ultimate customer is an international customer. These sales include foreign military sales contracted through the U.S. government.

(3) Percentages calculated based on total segment sales.

NORTHROP GRUMMAN CORPORATION

Sales by Contract Type	Three Months Ended September 30				Nine Months Ended September 30			
	2021		2020		**2021**		2020	
$ in millions	**$**	**%(1)**	$	%(1)	**$**	**%(1)**	$	%(1)
Aeronautics Systems								
Cost-type	**$ 1,358**	**51 %**	$ 1,436	50 %	**$ 4,110**	**48 %**	$ 4,205	49 %
Fixed-price	**1,319**	**49 %**	1,448	50 %	**4,381**	**52 %**	4,392	51 %
Intersegment sales	**48**		30		**137**		85	
Aeronautics Systems sales	**2,725**		2,914		**8,628**		8,682	
Defense Systems								
Cost-type	**433**	**36 %**	549	33 %	**1,376**	**36 %**	1,759	35 %
Fixed-price	**770**	**64 %**	1,119	67 %	**2,436**	**64 %**	3,325	65 %
Intersegment sales	**206**		191		**586**		542	
Defense Systems sales	**1,409**		1,859		**4,398**		5,626	
Mission Systems								
Cost-type	**746**	**34 %**	948	40 %	**2,419**	**35 %**	2,689	40 %
Fixed-price	**1,446**	**66 %**	1,410	60 %	**4,459**	**65 %**	4,102	60 %
Intersegment sales	**244**		193		**735**		553	
Mission Systems sales	**2,436**		2,551		**7,613**		7,344	
Space Systems								
Cost-type	**1,931**	**73 %**	1,563	72 %	**5,800**	**74 %**	4,429	72 %
Fixed-price	**717**	**27 %**	610	28 %	**2,047**	**26 %**	1,686	28 %
Intersegment sales	**33**		25		**103**		79	
Space Systems sales	**2,681**		2,198		**7,950**		6,194	
Total								
Cost-type	**4,468**	**51 %**	4,496	49 %	**13,705**	**51 %**	13,082	49 %
Fixed-price	**4,252**	**49 %**	4,587	51 %	**13,323**	**49 %**	13,505	51 %
Total Sales	**$ 8,720**		$ 9,083		**$ 27,028**		$ 26,587	

(1) Percentages calculated based on external customer sales.

NORTHROP GRUMMAN CORPORATION

Sales by Geographic Region	Three Months Ended September 30				Nine Months Ended September 30			
	2021		2020		**2021**		2020	
$ in millions	**$**	**%(2)**	$	%(2)	**$**	**%(2)**	$	%(2)
Aeronautics Systems								
United States	**$ 2,317**	**87 %**	$ 2,502	87 %	**$ 7,381**	**86 %**	$ 7,364	86 %
Asia/Pacific	**239**	**9 %**	217	7 %	**722**	**9 %**	626	7 %
Europe	**108**	**4 %**	129	5 %	**335**	**4 %**	445	5 %
All other(1)	**13**	**— %**	36	1 %	**53**	**1 %**	162	2 %
Intersegment sales	**48**		30		**137**		85	
Aeronautics Systems sales	**2,725**		2,914		**8,628**		8,682	
Defense Systems								
United States	**887**	**74 %**	1,361	82 %	**2,810**	**74 %**	4,121	81 %
Asia/Pacific	**107**	**9 %**	103	6 %	**336**	**9 %**	292	6 %
Europe	**78**	**6 %**	73	4 %	**233**	**6 %**	213	4 %
All other(1)	**131**	**11 %**	131	8 %	**433**	**11 %**	458	9 %
Intersegment sales	**206**		191		**586**		542	
Defense Systems sales	**1,409**		1,859		**4,398**		5,626	
Mission Systems								
United States	**1,775**	**81 %**	1,903	81 %	**5,540**	**81 %**	5,385	79 %
Asia/Pacific	**114**	**5 %**	122	5 %	**372**	**5 %**	489	7 %
Europe	**233**	**11 %**	253	11 %	**744**	**11 %**	669	10 %
All other(1)	**70**	**3 %**	80	3 %	**222**	**3 %**	248	4 %
Intersegment sales	**244**		193		**735**		553	
Mission Systems sales	**2,436**		2,551		**7,613**		7,344	
Space Systems								
United States	**2,556**	**97 %**	2,074	96 %	**7,546**	**97 %**	5,878	96 %
Asia/Pacific	**10**	**— %**	5	— %	**39**	**— %**	15	— %
Europe	**79**	**3 %**	90	4 %	**256**	**3 %**	212	4 %
All other(1)	**3**	**— %**	4	— %	**6**	**— %**	10	— %
Intersegment sales	**33**		25		**103**		79	
Space Systems sales	**2,681**		2,198		**7,950**		6,194	
Total								
United States	**7,535**	**87 %**	7,840	86 %	**23,277**	**86 %**	22,748	86 %
Asia/Pacific	**470**	**5 %**	447	5 %	**1,469**	**5 %**	1,422	5 %
Europe	**498**	**6 %**	545	6 %	**1,568**	**6 %**	1,539	6 %
All other(1)	**217**	**2 %**	251	3 %	**714**	**3 %**	878	3 %
Total Sales	**$ 8,720**		$ 9,083		**$ 27,028**		$ 26,587	

(1) All other is principally comprised of the Middle East.

(2) Percentages calculated based on external customer sales.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
Northrop Grumman Corporation
Falls Church, Virginia

Results of Review of Interim Financial Information

We have reviewed the accompanying condensed consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries (the “Company”) as of September 30, 2021, and the related condensed consolidated statements of earnings and comprehensive income and changes in shareholders’ equity for the three-month and nine-month periods ended September 30, 2021 and 2020, and of cash flows for the nine-month periods ended September 30, 2021 and 2020, and the related notes (collectively referred to as the “interim financial information”). Based on our review, we are not aware of any material modifications that should be made to the accompanying interim financial information for it to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries as of December 31, 2020, and the related consolidated statements of earnings and comprehensive income, changes in shareholders’ equity, and cash flows for the year then ended (not presented herein); and in our report dated January 27, 2021, we expressed an unqualified opinion on those consolidated financial statements, which included an explanatory paragraph regarding the Company’s change in its method of accounting for leases in 2019 due to the adoption of ASC 842, *Leases*. In our opinion, the information set forth in the accompanying condensed consolidated statement of financial position as of December 31, 2020, is fairly stated, in all material respects, in relation to the audited consolidated statement of financial position from which it has been derived.

Basis for Review Results

This interim financial information is the responsibility of the Company’s management. We are a public accounting firm registered with the 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 reviews in accordance with standards of the PCAOB. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

/s/ Deloitte & Touche LLP
McLean, Virginia
October 27, 2021

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

OVERVIEW

Northrop Grumman Corporation (herein referred to as "Northrop Grumman," the "company," "we," "us," or "our") is a leading global aerospace and defense company. We use our broad portfolio of capabilities and technologies to create and deliver innovative platforms, systems and solutions in space; manned and autonomous airborne systems, including strike; strategic deterrence systems; hypersonics; missile defense; weapons systems; cyber; command, control, communications and computers, intelligence, surveillance and reconnaissance (C4ISR); and logistics and modernization. We participate in many high-priority defense and government programs in the United States (U.S.) and abroad. We conduct most of our business with the U.S. government, principally the Department of Defense (DoD) and intelligence community. We also conduct business with other governments, including foreign governments, and commercial customers.

The following discussion should be read along with the financial statements included in this Form 10-Q, as well as our 2020 Annual Report on Form 10-K, which provides additional information on our business and the environment in which we operate and our operating results.

Divestiture of IT and Mission Support Services Business

Effective January 30, 2021 (the "Divestiture date"), we completed the previously announced sale of our IT and mission support services business (the "IT services divestiture") for $3.4 billion in cash and recorded a pre-tax gain on sale of $2.0 billion. The IT and mission support services business was comprised of the majority of the Information Solutions and Services (IS&S) division of Defense Systems (excluding our Vinnell Arabia business); select cyber, intelligence and missions support programs, which were part of the Cyber and Intelligence Mission Solutions (CIMS) division of Mission Systems; and the Space Technical Services business unit of Space Systems. Operating results include sales and operating income for the IT and mission support services business prior to the Divestiture date.

COVID-19

Coronavirus disease 2019, which was first reported in late 2019, and subsequent variants (collectively "COVID-19" or the "pandemic"), have dramatically impacted the global health and economic environment, including millions of confirmed cases and deaths, business slowdowns or shutdowns, labor shortfalls, supply chain challenges, regulatory challenges, and market volatility. We discuss in some detail in our Annual Report on Form 10-K, and subsequent SEC filings, the pandemic, its impacts and risks, and actions taken up to the time of filing. In this Form 10-Q, we provide a further update. We continue closely to monitor and address the developments, including the impact on our company, our employees, our customers, our suppliers and our communities. The company continues to consider and be guided by health data and evolving guidance from the Centers for Disease Control and Prevention (CDC), in particular, as well as other health organizations globally, federal, state and local governmental authorities, and our customers, among others. During the course of this year, COVID-19 case rates and the health impacts of the pandemic have fluctuated dramatically in different communities in the U.S. and globally. We have continued to see a prolonged impact on the economy, our industry, and our company, with increased challenges for customers and suppliers, labor shortages (including greater leave-taking), supply chain challenges, and increasing inflation, among other impacts. We expect these and other impacts to continue and they could worsen, depending on the future course of the pandemic and actions taken in connection with it.

In the U.S., the Food and Drug Administration issued emergency use authorization for COVID-19 vaccines and the government began extensive efforts to administer them. The company also has taken various steps to facilitate vaccination access for our employees, in accordance with federal guidance. We have provided paid leave and flexibility for employees to get vaccinated, and strongly encouraged our workforce to take care of themselves and their colleagues. In September 2021, the White House issued an executive order and guidance from the Safer Federal Workforce Task Force broadly requiring many U.S.-based federal contractors to be fully vaccinated by December 8, 2021 (with exceptions including where an employee is legally entitled to an accommodation). We are taking steps to comply with the executive order, guidance, and related contract terms, broadly requiring vaccination among our U.S.-based employees. We are continuing to evaluate these evolving requirements, especially as our customers determine when and how to implement new contractual obligations, but we cannot at this stage predict the various impacts they may have on our workforce, our suppliers, or our company. The Occupational Safety and Health Administration has said it is developing an emergency temporary standard for employers with 100 or more employees to ensure their workers are fully vaccinated or undergo weekly testing. State and local governments are also taking actions related to the pandemic, imposing additional and varying requirements on industry. These evolving government requirements, including regarding a vaccine mandate, along with the broader impacts of the continuing pandemic, could significantly impact our workforce and performance, as well as those of our suppliers, and result in costs that we may not be able to recover fully. The company continues to take robust actions globally to protect the health, safety and well-being of our employees, and to serve our customers with continued performance. We also continue to take steps to support our suppliers, with a particular focus on critical small and midsized business partners, including passing through increased progress payments from the DoD to our suppliers and accelerating payments to certain suppliers.

The company's third quarter 2021 revenue and operating income were affected by the impact of the COVID-19 pandemic on the company and the broader economic environment, including through a tightened labor market, elevated levels of employee leave, evolving government requirements, and supply chain challenges. These factors could worsen and affect further our ability (and that of our suppliers) to maintain a qualified workforce and to perform fully for our customers (including with respect to cost and schedule), with reduced sales and additional liabilities, losses and costs, that we may not be able to recover fully. Our employees, customers and suppliers, the company, our economy and our global community continue to face both continuing and new or evolving challenges, including related to the vaccine mandate, and we cannot predict how this dynamic situation will evolve or the impact it will have on the company, or our financial position, results of operations and/or cash flows. For further information on the pandemic and the potential impact to the company of COVID-19, see "Liquidity and Capital Resources" below and "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our 2020 Annual Report on Form 10-K and Quarterly Reports on Form 10-Q.

U.S. Political and Economic Environment

On May 28, 2021, the Administration released its budget request for fiscal year (FY) 2022. The budget proposes $753 billion for national defense programs and $770 billion in non-defense discretionary funding, and continues to be the subject of debate in Congress. The Administration's budget request includes funding for the American Jobs Plan, a $2.3 trillion infrastructure and economic recovery plan, and the American Families Plan, a $1.8 trillion education and economic support plan. If some or all of these plans are enacted, they may have broader implications for the defense industry, our customers' budgets and priorities, and the overall economic environment, including the national debt. It is difficult to predict the specific course of future defense budgets. However, the threat to national security remains very substantial and we believe that our capabilities, particularly in space, missiles, missile defense, hypersonics, counter-hypersonics, survivable aircraft and mission systems should help our customers to meet the threats and, as a result, continue to allow for long-term profitable growth in our business.

FY 2022 appropriations have not been enacted, to date, and, on September 30, 2021, a continuing resolution was enacted, providing funding generally at FY 2021 levels through December 3, 2021. The Congress' FY 2022 deliberations have demonstrated broad support for national security, and in key pieces of legislation, have proposed increased funding for national defense above the Administration's budget request. It remains uncertain whether and, if so, when the government will approve FY 2022 appropriations, with which programs funded at what levels, and for how long the government will operate under a continuing resolution, with potential impacts on our programs and new starts, in particular.

On October 14, 2021, the statutory debt limit was increased by $480 billion, which reportedly allows the Treasury Department to finance the government through approximately early December 2021. If the debt limit is not lifted, or further increased, and the debt ceiling is breached, there may be significant consequences for our customers and programs, and we may be required to continue to perform for some period of time on certain of our U.S. Government contracts even if the U.S. Government is unable to make timely payments.

The political environment, federal budget and debt ceiling are expected to continue to be the subject of considerable debate, which could have material impacts on defense spending broadly and the company's programs in particular.

For further information on the risks we face from the current political and economic environment, see "Risk Factors" in our 2020 Annual Report on Form 10-K.

CONSOLIDATED OPERATING RESULTS

For purposes of the operating results discussion below, we assess our performance using certain financial measures that are not calculated in accordance with GAAP. Organic sales is defined as total sales excluding sales attributable to the company's IT services divestiture. This measure may be useful to investors and other users of our financial statements as a supplemental measure in evaluating the company’s underlying sales growth as well as in providing an understanding of our ongoing business and future sales trends by presenting the company’s sales before the impact of divestiture activity.

Transaction-adjusted net earnings and transaction-adjusted earnings per share (transaction-adjusted EPS) exclude impacts related to the IT services divestiture, including the gain on sale of the business, associated federal and state income tax expenses, transaction costs, and the make-whole premium for early debt redemption. They also exclude the impact of mark-to-market pension and OPB (“MTM”) expense and related tax impacts, which are generally only recognized during the fourth quarter. These non-GAAP measures may be useful to investors and other users of our financial statements as supplemental measures in evaluating the company’s underlying financial performance by presenting the company’s operating results before the non-operational impact of divestiture activity and pension and OPB actuarial gains and losses. These measures are also consistent with how management views the underlying performance of the business as the impact of the IT services divestiture and MTM accounting are not considered in management’s assessment of the company’s operating performance or in its determination of incentive compensation awards.

We reconcile these non-GAAP financial measures to their most directly comparable GAAP financial measures below. These non-GAAP measures may not be defined and calculated by other companies in the same manner and should not be considered in isolation or as an alternative to operating results presented in accordance with GAAP.

Selected financial highlights are presented in the table below:

	Three Months Ended September 30		%	Nine Months Ended September 30		%
$ in millions, except per share amounts	**2021**	2020	**Change**	**2021**	2020	**Change**
Sales	**$ 8,720**	$ 9,083	**(4)%**	**$ 27,028**	$ 26,587	**2 %**
Operating costs and expenses	**7,677**	8,098	**(5)%**	**24,099**	23,674	**2 %**
Operating costs and expenses as a % of sales	***88.0 %***	*89.2 %*		***89.2 %***	*89.0 %*	
Gain on sale of business	**—**	—	**NM**	**1,980**	—	**NM**
Operating income	**1,043**	985	**6 %**	**4,909**	2,913	**69 %**
Operating margin rate	***12.0 %***	*10.8 %*		***18.2 %***	*11.0 %*	
Federal and foreign income tax expense	**212**	181	**17 %**	**1,298**	564	**130 %**
Effective income tax rate	***16.6 %***	*15.5 %*		***23.2 %***	*16.5 %*	
Net earnings	**1,063**	986	**8 %**	**4,295**	2,859	**50 %**
Diluted earnings per share	**$ 6.63**	$ 5.89	**13 %**	**$ 26.55**	$ 17.05	**56 %**

Sales

The tables below reconcile sales to organic sales:

	Three Months Ended September 30						
	2021			2020			
$ in millions	**Sales**	**IT services sales**	**Organic sales**	Sales	IT services sales	Organic sales	**Organic sales % change**
Aeronautics Systems	**$ 2,725**	**$ —**	**$ 2,725**	$ 2,914	$ —	$ 2,914	**(6)%**
Defense Systems	**1,409**	**—**	**1,409**	1,859	(425)	1,434	**(2)%**
Mission Systems	**2,436**	**—**	**2,436**	2,551	(133)	2,418	**1 %**
Space Systems	**2,681**	**—**	**2,681**	2,198	(48)	2,150	**25 %**
Intersegment eliminations	**(531)**	**—**	**(531)**	(439)	4	(435)	
Total	**$ 8,720**	**$ —**	**$ 8,720**	$ 9,083	$ (602)	$ 8,481	**3 %**

	Nine Months Ended September 30						
	2021			2020			
$ in millions	**Sales**	**IT services sales**	**Organic sales**	Sales	IT services sales	Organic sales	**Organic sales % change**
Aeronautics Systems	**$ 8,628**	**$ —**	**$ 8,628**	$ 8,682	$ —	$ 8,682	**(1)%**
Defense Systems	**4,398**	**(106)**	**4,292**	5,626	(1,230)	4,396	**(2)%**
Mission Systems	**7,613**	**(42)**	**7,571**	7,344	(394)	6,950	**9 %**
Space Systems	**7,950**	**(16)**	**7,934**	6,194	(135)	6,059	**31 %**
Intersegment eliminations	**(1,561)**	**2**	**(1,559)**	(1,259)	13	(1,246)	
Total	**$ 27,028**	**$ (162)**	**$ 26,866**	$ 26,587	$ (1,746)	$ 24,841	**8 %**

Current Quarter

Third quarter 2021 sales decreased $363 million, or 4 percent, due to lower sales at Defense Systems and Missions Systems, principally due to the impact of the IT services divestiture, and lower sales at Aeronautics Systems, partially offset by 22 percent sales growth at Space Systems. Third quarter 2021 sales were affected by the impact of COVID-19 on the broader economic environment, including a tight labor market, elevated levels of employee leave, and supply chain challenges. Third quarter 2021 organic sales increased $239 million, or 3 percent.

Year to Date

Year to date 2021 sales increased $441 million, or 2 percent, primarily due to higher sales at Space Systems and Mission Systems, partially offset by lower sales at Defense Systems, principally due to the impact of the IT services divestiture. Year to date 2021 organic sales increased $2.0 billion, or 8 percent. As a result of the company using a fiscal calendar convention for interim reporting periods (as described in Note 1 to the financial statements), year to date 2021 sales at each sector benefited approximately 2 percent from three additional working days when compared to the prior year period.

See “Segment Operating Results” below for further information by segment and “Product and Service Analysis” for product and service detail. See Note 9 to the financial statements for information regarding the company’s sales by customer type, contract type and geographic region for each of our segments.

Operating Income and Margin Rate
Current Quarter
Third quarter 2021 operating income increased $58 million, or 6 percent, primarily due to lower unallocated corporate expense, partially offset by a lower FAS/CAS operating adjustment. Third quarter 2021 operating margin rate increased to 12.0 percent reflecting a higher segment operating margin rate in addition to the items above.

Third quarter 2021 general and administrative (G&A) costs as a percentage of sales increased to 10.2 percent from 9.4 percent in the prior year period primarily due to an increase in investments for future business opportunities as well as the timing of indirect cost recognition during the quarter.

Year to Date
Year to date 2021 operating income increased $2.0 billion, or 69 percent, primarily due to the IT services divestiture, including the $2.0 billion pre-tax gain on sale and $192 million of unallocated corporate expense for unallowable state taxes and transaction costs. Operating income also increased due to lower non-divestiture-related unallocated corporate expenses and higher segment operating income, partially offset by a lower FAS/CAS operating adjustment. Year to date 2021 operating margin rate increased to 18.2 percent reflecting the items above.

Year to date 2021 G&A costs as a percentage of sales increased to 10.3 percent from 9.3 percent in the prior year period primarily due to an increase in investments for future business opportunities as well as the timing of indirect cost recognition during the year.

See “Segment Operating Results” below for further information by segment. For information regarding product and service operating costs and expenses, see “Product and Service Analysis” below.

Federal and Foreign Income Taxes
Current Quarter
The third quarter 2021 effective tax rate (ETR) increased to 16.6 percent from 15.5 percent in the prior year period primarily due to lower benefits from foreign-derived intangible income. See Note 3 to the financial statements for additional information.

Year to Date
The year to date 2021 ETR increased to 23.2 percent from 16.5 percent in the prior period primarily due to federal income taxes resulting from the IT services divestiture. See Note 3 to the financial statements for additional information.

Net Earnings

The table below reconciles net earnings to transaction-adjusted net earnings:

$ in millions	Three Months Ended September 30 2021	Three Months Ended September 30 2020	% Change	Nine Months Ended September 30 2021	Nine Months Ended September 30 2020	% Change
Net earnings	**$ 1,063**	$ 986	**8 %**	**$ 4,295**	$ 2,859	**50 %**
Gain on sale of business	**—**	—	**NM**	**(1,980)**	—	**NM**
State tax impact[1]	**—**	—	**NM**	**160**	—	**NM**
Transaction costs	**—**	—	**NM**	**32**	—	**NM**
Make-whole premium	**—**	—	**NM**	**54**	—	**NM**
Federal tax impact of items above[2]	**—**	—	**NM**	**614**	—	**NM**
Adjustment, net of tax	**$ —**	$ —	**NM**	**$ (1,120)**	$ —	**NM**
Transaction-adjusted net earnings	**$ 1,063**	$ 986	**8 %**	**$ 3,175**	$ 2,859	**11 %**

(1) The state tax impact includes $62 million of incremental tax expense related to $1.2 billion of nondeductible goodwill in the divested business.

(2) The federal tax impact was calculated by applying the 21 percent federal statutory rate to the adjustment items and also includes $250 million of incremental tax expense related to $1.2 billion of nondeductible goodwill in the divested business.

Current Quarter

Third quarter 2021 net earnings increased $77 million, or 8 percent, primarily due to an increase in non-operating FAS pension benefit and higher operating income, partially offset by an increase in income tax expense.

Year to Date

Year to date 2021 net earnings increased $1.4 billion, or 50 percent, primarily due to the IT services divestiture. Transaction-adjusted net earnings increased $316 million or 11 percent, primarily due to higher segment operating income and an increase in non-operating FAS pension benefit, partially offset by an increase in income tax expense.

Diluted Earnings Per Share

The table below reconciles diluted earnings per share to transaction-adjusted EPS:

	Three Months Ended September 30 2021	Three Months Ended September 30 2020	% Change	Nine Months Ended September 30 2021	Nine Months Ended September 30 2020	% Change
Diluted EPS	**$ 6.63**	$ 5.89	**13 %**	**$ 26.55**	$ 17.05	**56 %**
Gain on sale of business per share	**—**	—	**NM**	**(12.24)**	—	**NM**
State tax impact per share[1]	**—**	—	**NM**	**0.99**	—	**NM**
Transaction costs per share	**—**	—	**NM**	**0.20**	—	**NM**
Make-whole premium per share	**—**	—	**NM**	**0.33**	—	**NM**
Federal tax impact of line items above per share[2]	**—**	—	**NM**	**3.79**	—	**NM**
Adjustment, net of tax per share	**$ —**	$ —	**NM**	**$ (6.93)**	$ —	**NM**
Transaction-adjusted EPS	**$ 6.63**	$ 5.89	**13 %**	**$ 19.62**	$ 17.05	**15 %**

(1) The state tax impact includes $62 million of incremental tax expense related to $1.2 billion of nondeductible goodwill in the divested business.

(2) The federal tax impact was calculated by applying the 21 percent federal statutory rate to the adjustment items and also includes $250 million of incremental tax expense related to $1.2 billion of nondeductible goodwill in the divested business.

Current Quarter

Third quarter 2021 diluted earnings per share increased 13 percent, reflecting an 8 percent increase in net earnings and a 4 percent reduction in weighted-average diluted shares outstanding.

Year to Date

Year to date 2021 diluted earnings per share increased 56 percent, principally due to a $6.93 increase associated with the IT services divestiture. Transaction-adjusted earnings per share increased $2.57, or 15 percent, reflecting an 11 percent increase in transaction-adjusted net earnings and a 4 percent reduction in weighted-average diluted shares outstanding.

SEGMENT OPERATING RESULTS

Basis of Presentation

The company is aligned in four operating sectors, which also comprise our reportable segments: Aeronautics Systems, Defense Systems, Mission Systems and Space Systems. We present our sectors in the following business areas, which are reported in a manner reflecting core capabilities:

Aeronautics Systems	Defense Systems	Mission Systems	Space Systems
Autonomous Systems	Battle Management & Missile Systems	Airborne Multifunction Sensors	Launch & Strategic Missiles
Manned Aircraft	Mission Readiness	Maritime/Land Systems & Sensors	Space
		Navigation, Targeting & Survivability	
		Networked Information Solutions	

Effective during the first quarter of 2021 within Mission Systems, the businesses of the former Cyber & Intelligence Mission Solutions business area that remained with Northrop Grumman after the IT services divestiture were merged with the Communications business unit and F-35 Communications, Navigation and Identification programs within the former Airborne, Sensors & Networks business area to form the Networked Information Solutions business area. The Airborne Sensors & Networks business area was then renamed the Airborne Multifunction Sensors business area to better reflect its new portfolio. This change had no impact on the segment operating results of Mission Systems as a whole.

This section discusses segment sales, operating income and operating margin rates. In evaluating segment operating performance, we look primarily at changes in sales and operating income. Where applicable, significant fluctuations in operating performance attributable to individual contracts or programs, or changes in a specific cost element across multiple contracts, are described in our analysis. Based on this approach and the nature of our operations, the discussion of results of operations below first focuses on our four segments before distinguishing between products and services. Changes in sales are generally described in terms of volume, while changes in margin rates are generally described in terms of performance and/or contract mix. For purposes of this discussion, volume generally refers to increases or decreases in sales or cost from production/service activity levels and performance generally refers to non-volume related changes in profitability. Contract mix generally refers to changes in the ratio of contract type and/or lifecycle (e.g., cost-type, fixed-price, development, production, and/or sustainment).

Segment Operating Income and Margin Rate

Segment operating income, as reconciled in the table below, and segment operating margin rate (segment operating income divided by sales) are non-GAAP (accounting principles generally accepted in the United States of America) measures that reflect total earnings from our four segments, including allocated pension expense we have recognized under the Federal Acquisition Regulation (FAR) and the related U.S. Government Cost Accounting Standards (CAS), and excluding FAS pension service expense and unallocated corporate items (certain corporate-level expenses, which are not considered allowable or allocable under requirements in the applicable CAS or FAR, and costs not considered part of management's evaluation of segment operating performance). These non-GAAP measures may be useful to investors and other users of our financial statements as supplemental measures in evaluating the financial performance and operational trends of our sectors. These measures may not be defined and calculated by other companies in the same manner and should not be considered in isolation or as alternatives to operating results presented in accordance with GAAP.

	Three Months Ended September 30		%	Nine Months Ended September 30		%
$ in millions	**2021**	2020	**Change**	**2021**	2020	**Change**
Segment operating income	**$ 1,035**	$ 1,049	**(1)%**	**$ 3,247**	$ 3,047	**7 %**
Segment operating margin rate	***11.9 %***	*11.5 %*		***12.0 %***	*11.5 %*	
CAS pension expense	**165**	210	**(21)%**	**409**	622	**(34)%**
Less: FAS pension service expense	**(104)**	(102)	**2 %**	**(311)**	(306)	**2 %**
FAS/CAS operating adjustment	**61**	108	**(44)%**	**98**	316	**(69)%**
Gain on sale of business	**—**	—	**NM**	**1,980**	—	**NM**
IT services divestiture – unallowable state taxes and transaction costs	**—**	—	**NM**	**(192)**	—	**NM**
Intangible asset amortization and PP&E step-up depreciation	**(62)**	(81)	**(23)%**	**(191)**	(240)	**(20)%**
Other unallocated corporate expense	**9**	(91)	**(110)%**	**(33)**	(210)	**(84)%**
Unallocated corporate (expense) income	**(53)**	(172)	**(69)%**	**1,564**	(450)	**(448)%**
Operating income	**$ 1,043**	$ 985	**6 %**	**$ 4,909**	$ 2,913	**69 %**

Current Quarter

Third quarter 2021 segment operating income decreased $14 million, or 1 percent, due to lower sales, partially offset by a higher segment operating margin rate. Third quarter 2020 segment operating income from the IT services business was $69 million. Lower operating income at Defense Systems, principally due to the impact of the IT services divestiture, and Aeronautics Systems was partially offset by higher operating income at Space Systems. Segment operating margin rate increased to 11.9 percent from 11.5 percent due to higher operating margin rates at Mission Systems, Defense Systems and Space Systems, partially offset by a lower operating margin rate at Aeronautics Systems.

Year to Date

Year to date 2021 segment operating income increased $200 million, or 7 percent, due to higher sales and a higher segment operating margin rate. Higher operating income at Space Systems and Mission Systems was partially offset by lower operating income at Defense Systems due to the impact of the IT services divestiture. Year to date 2021 segment operating income from the IT services business was $20 million as compared to $180 million in the prior year period. Year to date 2021 segment operating income includes a first quarter 2021 benefit of approximately $100 million due to the impact of lower overhead rates on the company's fixed price contracts. The lower projected overhead rates were principally driven by a reduction in projected CAS pension costs as well as operational performance at the sectors, which more than offset lower business base due to the IT services divestiture. Segment operating margin rate increased to 12.0 percent from 11.5 percent and reflects higher operating margin rates at all four sectors largely as a result of the items discussed above.

FAS/CAS Operating Adjustment

Third quarter 2021 and year to date 2021 FAS/CAS operating adjustment decreased primarily due to lower CAS pension expense resulting from favorable plan asset returns in 2020 and changes in certain CAS actuarial assumptions as of December 31, 2020. Third quarter 2021 CAS pension expense also reflects a $44 million benefit from updated demographic information.

Unallocated Corporate (Expense) Income

Current Quarter

The decrease in third quarter 2021 unallocated corporate expense is due, in part, to a $60 million benefit from insurance settlements related to shareholder litigation involving the former Orbital ATK prior to the company's acquisition, that was resolved in June 2019. Unallocated corporate expense also decreased due to a change in deferred state income taxes related to our methods of timing of revenue recognition and related costs as well as lower intangible asset amortization and PP&E step-up depreciation.

Year to Date

The increase in year to date 2021 unallocated corporate (expense) income is primarily due to a $2.0 billion pre-tax gain on the sale of our IT services business, partially offset by $192 million of unallowable state taxes and transaction costs associated with the divestiture. Unallocated corporate (expense) income also increased due to the current quarter items described above, as well as a net increase in deferred state tax assets related to certain state tax legislation adopted in 2020 that places temporary limitations on tax credits and a change in tax revenue recognition on certain contracts.

Net EAC Adjustments - We record changes in estimated contract earnings at completion (net EAC adjustments) using the cumulative catch-up method of accounting. Net EAC adjustments can have a significant effect on reported sales and operating income and the aggregate amounts are presented in the table below:

	Three Months Ended September 30		Nine Months Ended September 30	
$ in millions	**2021**	2020	**2021**	2020
Favorable EAC adjustments	**$ 273**	$ 271	**$ 930**	$ 788
Unfavorable EAC adjustments	**(164)**	(148)	**(477)**	(429)
Net EAC adjustments	**$ 109**	$ 123	**$ 453**	$ 359

Net EAC adjustments by segment are presented in the table below:

	Three Months Ended September 30		Nine Months Ended September 30	
$ in millions	**2021**	2020	**2021**	2020
Aeronautics Systems	**$ (2)**	$ —	**$ 67**	$ 34
Defense Systems	**37**	58	**95**	119
Mission Systems	**43**	58	**192**	196
Space Systems	**33**	10	**103**	15
Eliminations	**(2)**	(3)	**(4)**	(5)
Net EAC adjustments	**$ 109**	$ 123	**$ 453**	$ 359

For purposes of the discussion in the remainder of this Segment Operating Results section, references to operating income and operating margin rate reflect segment operating income and segment operating margin rate, respectively.

AERONAUTICS SYSTEMS	Three Months Ended September 30		%	Nine Months Ended September 30		%
$ in millions	**2021**	2020	**Change**	**2021**	2020	**Change**
Sales	**$ 2,725**	$ 2,914	**(6)%**	**$ 8,628**	$ 8,682	**(1)%**
Operating income	**265**	294	**(10)%**	**873**	867	**1 %**
Operating margin rate	***9.7 %***	*10.1 %*		***10.1 %***	*10.0 %*	

Sales

Current Quarter

Third quarter 2021 sales decreased $189 million, or 6 percent, due to lower volume in both Manned Aircraft and Autonomous Systems, including restricted programs, F-35, the B-2 Defensive Management Systems Modernization (DMS) program and certain Global Hawk programs.

Year to Date
Year to date 2021 sales decreased $54 million, or 1 percent, due to lower volume at Autonomous Systems, which was partially offset by higher volume at Manned Aircraft. Lower A350 production activity, and lower volume on B-2 DMS and certain Global Hawk programs, was partially offset by higher volume on E-2 and restricted programs.

Operating Income
Current Quarter
Third quarter 2021 operating income decreased $29 million, or 10 percent, due to lower sales and a lower operating margin rate. Operating margin rate decreased to 9.7 percent from 10.1 percent principally due to a $42 million unfavorable EAC adjustment on F-35 due to labor-related production inefficiencies largely driven by COVID-19-related impacts on the labor market and employee leave. This was partially offset by higher net favorable EAC adjustments at Autonomous Systems.

Year to Date
Year to date 2021 operating income was consistent with the prior year period and operating margin rate increased to 10.1 percent from 10.0 percent principally due to higher net favorable EAC adjustments, which were largely driven by the first quarter 2021 reduction in overhead rates, partially offset by the unfavorable F-35 adjustment discussed above.

DEFENSE SYSTEMS	Three Months Ended September 30		**%**	Nine Months Ended September 30		**%**
$ in millions	**2021**	2020	**Change**	**2021**	2020	**Change**
Sales	**$ 1,409**	$ 1,859	**(24)%**	**$ 4,398**	$ 5,626	**(22)%**
Operating income	**175**	217	**(19)%**	**529**	632	**(16)%**
Operating margin rate	***12.4 %***	*11.7 %*		***12.0 %***	*11.2 %*	

Sales
Current Quarter
Third quarter 2021 sales decreased $450 million, or 24 percent, primarily due to a $425 million reduction in sales related to the IT services divestiture. Third quarter 2021 organic sales decreased $25 million, or 2 percent, principally due to the close-out of the contract at the Army's Lake City ammunition plant (Lake City), partially offset by higher volume on several Mission Readiness programs, including the U.S. Customs and Border Protection P-3 (CBP P-3) program.

Year to Date
Year to date 2021 sales decreased $1.2 billion, or 22 percent, primarily due to a $1.1 billion reduction in sales related to the IT services divestiture. Year to date 2021 organic sales decreased $104 million, or 2 percent, principally due to the close-out of Lake City, partially offset by higher volume on several programs including the Guided Missile Launch Rocket System, Republic of Korea Global Hawk Contractor Logistics Support (ROK Global Hawk CLS), CBP P-3, B-2 sustainment and advanced fuzes.

Operating Income
Current Quarter
Third quarter 2021 operating income decreased $42 million, or 19 percent, primarily due to the impact of the IT services divestiture. Operating margin rate increased to 12.4 percent from 11.7 percent and reflects improved performance at Battle Management and Missile Systems due to changes in mix as a result of recent contract completions, partially offset by lower net favorable EAC adjustments.

Year to Date
Year to date 2021 operating income decreased $103 million, or 16 percent, primarily due to the impact of the IT services divestiture. Operating margin rate increased to 12.0 percent from 11.2 percent primarily due to improved performance at Battle Management and Missile Systems and lower net favorable EAC adjustments as described above.

MISSION SYSTEMS	Three Months Ended September 30		%	Nine Months Ended September 30		%
$ in millions	**2021**	2020	**Change**	**2021**	2020	**Change**
Sales	**$ 2,436**	$ 2,551	**(5)%**	**$ 7,613**	$ 7,344	**4 %**
Operating income	**372**	370	**1 %**	**1,177**	1,070	**10 %**
Operating margin rate	***15.3 %***	*14.5 %*		***15.5 %***	*14.6 %*	

Sales

Current Quarter

Third quarter 2021 sales decreased $115 million, or 5 percent, due to a $133 million reduction in sales related to the IT services divestiture. Third quarter 2021 organic sales increased $18 million, or 1 percent. Navigation, Targeting and Survivability sales increased primarily due to higher intercompany volume on the ramp up of the Ground Based Strategic Deterrent (GBSD) program. Maritime/Land Systems and Sensors sales increased principally due to higher volume on land systems, including the Ground/Air Task-Oriented Radar (G/ATOR) program. Networked Information Solutions sales decreased primarily due to lower volume on F-35 and restricted programs, partially offset by higher volume on the Joint Counter Radio-Controlled Improvised Explosive Device Electronic Warfare (JCREW) program.

Year to Date

Year to date 2021 sales increased $269 million, or 4 percent, due to higher volume across the sector, partially offset by a $352 million reduction in sales related to the IT services divestiture. Year to date 2021 organic sales increased $621 million, or 9 percent. Maritime/Land Systems and Sensors sales increased primarily due to higher volume on land systems, including G/ATOR, and higher marine systems, restricted and international volume. Navigation, Targeting and Survivability sales increased principally due to higher intercompany volume on GBSD ramp up as well as higher volume on infrared countermeasures and targeting programs. Airborne Multifunction Sensors sales increased principally due to higher airborne radar volume, including on the Scalable Agile Beam Radar (SABR) program, and higher restricted volume. Networked Information Solutions sales increased principally due to higher volume on electronic warfare programs, including JCREW.

Operating Income

Current Quarter

Third quarter 2021 operating income was consistent with the prior year period and reflects a higher operating margin rate and lower sales. Operating margin rate increased to 15.3 percent from 14.5 percent principally due to improved performance and changes in contract mix toward more fixed-price content, largely as a result of the IT services divestiture, partially offset by lower net favorable EAC adjustments.

Year to Date

Year to date 2021 operating income increased $107 million, or 10 percent, due to higher sales volume and a higher operating margin rate. Operating margin rate increased to 15.5 percent from 14.6 percent and reflects improved performance, the favorable resolution of certain government accounting matters in the second quarter of 2021 and mix changes largely related to the IT services divestiture, as discussed above.

SPACE SYSTEMS	Three Months Ended September 30		%	Nine Months Ended September 30		%
$ in millions	**2021**	2020	**Change**	**2021**	2020	**Change**
Sales	**$ 2,681**	$ 2,198	**22 %**	**$ 7,950**	$ 6,194	**28 %**
Operating income	**288**	224	**29 %**	**865**	635	**36 %**
Operating margin rate	***10.7 %***	*10.2 %*		***10.9 %***	*10.3 %*	

Sales

Current Quarter

Third quarter 2021 sales increased $483 million, or 22 percent, due to higher sales in both the Launch & Strategic Missiles and Space business areas, partially offset by a $48 million reduction in sales related to the IT services divestiture. Third quarter 2021 organic sales increased $531 million, or 25 percent. Launch & Strategic Missiles sales increased primarily due to ramp-up on development programs, such as GBSD and the Next Generation Interceptor (NGI) program. Space sales were driven by higher volume on restricted programs.

Year to Date
Year to date 2021 sales increased $1.8 billion, or 28 percent, due to higher sales in both the Launch & Strategic Missiles and Space business areas, partially offset by a $119 million reduction in sales related to the IT services divestiture. Year to date 2021 organic sales increased $1.9 billion, or 31 percent. Launch & Strategic Missiles sales increased primarily due to ramp-up on development programs, such as GBSD and NGI, as well as higher volume on hypersonics and Commercial Resupply Services (CRS) programs. Space sales were driven by higher volume on restricted programs, Artemis and the Next Generation Overhead Persistent Infrared (Next Gen OPIR) program.

Operating Income
Current Quarter
Third quarter 2021 operating income increased $64 million, or 29 percent, due to higher sales volume and a higher operating margin rate. Operating margin rate increased to 10.7 percent from 10.2 percent principally due to higher net favorable EAC adjustments, which were largely driven by improved performance on restricted programs.

Year to Date
Year to date 2021 operating income increased $230 million, or 36 percent, due to higher sales volume and a higher operating margin rate. Operating margin rate increased to 10.9 percent from 10.3 percent primarily due to higher net favorable EAC adjustments, which were largely driven by improved performance on commercial space programs and the first quarter 2021 reduction in overhead rates.

PRODUCT AND SERVICE ANALYSIS

The following table presents product and service sales and operating costs and expenses by segment:

	Three Months Ended September 30				Nine Months Ended September 30			
$ in millions	**2021**		2020		**2021**		2020	
Segment Information:	**Sales**	**Operating Costs and Expenses**	Sales	Operating Costs and Expenses	**Sales**	**Operating Costs and Expenses**	Sales	Operating Costs and Expenses
Aeronautics Systems								
Product	**$ 2,233**	**$ 2,023**	$ 2,469	$ 2,231	**$ 7,241**	**$ 6,527**	$ 7,390	$ 6,677
Service	**444**	**393**	415	362	**1,250**	**1,104**	1,207	1,062
Intersegment eliminations	**48**	**44**	30	27	**137**	**124**	85	76
Total Aeronautics Systems	**2,725**	**2,460**	2,914	2,620	**8,628**	**7,755**	8,682	7,815
Defense Systems								
Product	**618**	**532**	735	661	**1,939**	**1,687**	2,258	2,041
Service	**585**	**523**	933	812	**1,873**	**1,664**	2,826	2,469
Intersegment eliminations	**206**	**179**	191	169	**586**	**518**	542	484
Total Defense Systems	**1,409**	**1,234**	1,859	1,642	**4,398**	**3,869**	5,626	4,994
Mission Systems								
Product	**1,766**	**1,498**	1,735	1,506	**5,300**	**4,506**	4,889	4,168
Service	**426**	**354**	623	511	**1,578**	**1,302**	1,902	1,635
Intersegment eliminations	**244**	**212**	193	164	**735**	**628**	553	471
Total Mission Systems	**2,436**	**2,064**	2,551	2,181	**7,613**	**6,436**	7,344	6,274
Space Systems								
Product	**2,228**	**1,991**	1,728	1,550	**6,580**	**5,865**	4,788	4,277
Service	**420**	**371**	445	401	**1,267**	**1,126**	1,327	1,211
Intersegment eliminations	**33**	**31**	25	23	**103**	**94**	79	71
Total Space Systems	**2,681**	**2,393**	2,198	1,974	**7,950**	**7,085**	6,194	5,559
Segment Totals								
Total Product	**$ 6,845**	**$ 6,044**	$ 6,667	$ 5,948	**$ 21,060**	**$ 18,585**	$ 19,325	$ 17,163
Total Service	**1,875**	**1,641**	2,416	2,086	**5,968**	**5,196**	7,262	6,377
Total Segment[(1)]	**$ 8,720**	**$ 7,685**	$ 9,083	$ 8,034	**$ 27,028**	**$ 23,781**	$ 26,587	$ 23,540

[(1)] A reconciliation of segment operating income to total operating income is included in “Segment Operating Results.”

Product Sales and Costs

Current Quarter

Third quarter 2021 product sales increased $178 million, or 3 percent, primarily due to an increase in product sales at Space Systems, partially offset by decreases in product sales at Aeronautics Systems and Defense Systems. The increase at Space Systems was principally due to ramp-up on GBSD and NGI. The decrease at Aeronautics Systems was driven by lower volume on restricted programs and F-35. The decrease at Defense Systems was primarily driven by the close-out of Lake City.

Third quarter 2021 product costs increased $96 million, or 2 percent, consistent with the increase in product sales above.

Year to Date

Year to date 2021 product sales increased $1.7 billion, or 9 percent, principally due to an increase in product sales at Space Systems and Mission Systems, partially offset by a decrease at Defense Systems. The increase at Space Systems was primarily driven by higher volume on GBSD, restricted programs, Artemis, Next Gen OPIR and NGI. The increase at Mission Systems was driven by higher volume across the sector. The decrease at Defense Systems was primarily driven by the close-out of Lake City.

Year to date 2021 product costs increased $1.4 billion, or 8 percent, consistent with the higher product sales described above.

Service Sales and Costs

Current Quarter

Third quarter 2021 service sales decreased $541 million, or 22 percent, primarily due to the IT services divestiture. Third quarter 2020 sales from the IT services business, which were largely included in service sales, were $602 million. The reductions associated with the IT services divestiture were partially offset by higher volume on the CBP P-3 program at Defense Systems.

Third quarter 2021 service costs decreased $445 million, or 21 percent, consistent with the lower service sales above.

Year to Date

Year to date 2021 service sales decreased $1.3 billion, or 18 percent, primarily due to the IT services divestiture. Year to date 2021 sales from the IT services business, which were largely included in service sales, were $162 million as compared to $1.7 billion in the prior year period. The reductions associated with the IT services divestiture were partially offset by higher volume on the ROK Global Hawk CLS and CBP P-3 programs at Defense Systems.

Year to date 2021 service costs decreased $1.2 billion, or 19 percent, consistent with the lower services sales described above.

BACKLOG

Backlog represents the future sales we expect to recognize on firm orders received by the company and is equivalent to the company's remaining performance obligations at the end of each period. It comprises both funded backlog (firm orders for which funding is authorized and appropriated) and unfunded backlog. Unexercised contract options and indefinite delivery indefinite quantity (IDIQ) contracts are not included in backlog until the time an option or IDIQ task order is exercised or awarded. Backlog is converted into sales as costs are incurred or deliveries are made.

Backlog consisted of the following as of September 30, 2021 and December 31, 2020:

	September 30, 2021			December 31, 2020	
$ in millions	**Funded**	**Unfunded**	**Total Backlog**	Total Backlog	% Change in 2021
Aeronautics Systems	**$ 9,115**	**$ 9,938**	**$ 19,053**	$ 24,002	**(21)%**
Defense Systems	**5,786**	**529**	**6,315**	8,131	**(22)%**
Mission Systems	**9,375**	**3,942**	**13,317**	13,805	**(4)%**
Space Systems	**6,003**	**30,137**	**36,140**	35,031	**3 %**
Total backlog	**$ 30,279**	**$ 44,546**	**$ 74,825**	$ 80,969	**(8)%**

New Awards

Third quarter and year to date 2021 net awards totaled $6.9 billion and $22.3 billion, respectively, and backlog totaled $74.8 billion. Significant third quarter new awards include $1.8 billion for restricted programs, principally at Space and Mission Systems, $0.9 billion for NASA's Habitation and Logistics Outpost (HALO) module and $0.5 billion for F-35. In connection with the IT services divestiture, the company reduced backlog by $1.4 billion during the first quarter of 2021 ($1.0 billion at Defense Systems, $0.2 billion at Mission Systems and $0.2 billion at Space Systems).

LIQUIDITY AND CAPITAL RESOURCES

We endeavor to ensure efficient conversion of operating income into cash and to increase shareholder value through cash deployment activities. In addition to our cash position, we use various financial measures to assist in capital deployment decision-making, including cash provided by operating activities and adjusted free cash flow, a non-GAAP measure described in more detail below.

At September 30, 2021, we had $4.1 billion in cash and cash equivalents. Effective January 30, 2021, we completed the IT services divestiture for $3.4 billion cash. Proceeds were primarily used in the first quarter of 2021 for a $2.0 billion accelerated share repurchase and to fund redemption of $1.5 billion of the company's 2.55 percent unsecured notes due October 2022. In April 2021, we renewed our one-year $500 million uncommitted credit facility.

The Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") established a program with provisions to allow U.S. companies to defer the employer's portion of social security taxes between March 27, 2020 and December 31, 2020 and pay such taxes in two installments in 2021 and 2022. Our first installment of deferred social security taxes of approximately $200 million is due in the fourth quarter of 2021. Under Section 3610, the CARES Act also authorized the government to reimburse qualifying contractors for certain costs of providing paid leave to employees as a result of COVID-19. The company continues to seek, and anticipates continuing to seek, recovery for certain COVID-19-related costs under Section 3610 of the CARES Act and through our contract provisions, though it is unclear how much we will be able to recover. In addition, the U.S. Department of Defense (DoD) has, to date, taken steps to increase the rate for certain progress payments from 80 percent to 90 percent for costs incurred and work performed on relevant contracts.

Cash and cash equivalents and cash generated from operating activities, supplemented by borrowings under credit facilities, commercial paper and/or in the capital markets, if needed, are expected to be sufficient to fund our operations for at least the next 12 months.

Operating Cash Flow

The table below summarizes key components of cash flow provided by operating activities:

	Nine Months Ended September 30		%
$ in millions	**2021**	2020	**Change**
Net earnings	**$ 4,295**	$ 2,859	**50 %**
Gain on sale of business	**(1,980)**	—	**NM**
Non-cash items[1]	**56**	740	**(92)%**
Pension and OPB contributions	**(108)**	(100)	**8 %**
Changes in trade working capital	**(124)**	(816)	**(85)%**
Other, net	**(14)**	20	**(170)%**
Net cash provided by operating activities	**$ 2,125**	$ 2,703	**(21)%**

[1] Includes depreciation and amortization, non-cash lease expense, stock based compensation expense, deferred income taxes and net periodic pension and OPB income.

Year to date 2021 cash provided by operating activities decreased $578 million principally due to $588 million of federal and state taxes paid in connection with the IT services divestiture.

Adjusted Free Cash Flow

Adjusted free cash flow, as reconciled in the table below, is a non-GAAP measure defined as net cash provided by or used in operating activities less capital expenditures, plus proceeds from the sale of equipment to a customer (not otherwise included in net cash provided by or used in operating activities) and the after-tax impact of discretionary pension contributions. Adjusted free cash flow includes proceeds from the sale of equipment to a customer as such proceeds were generated in a customer sales transaction. It also includes the after-tax impact of discretionary pension contributions for consistency and comparability of financial performance. This measure may not be defined and calculated by other companies in the same manner. We use adjusted free cash flow as a key factor in our planning for, and consideration of, acquisitions, the payment of dividends and stock repurchases. This non-GAAP measure may be useful to investors and other users of our financial statements as a supplemental measure of our cash performance, but should not be considered in isolation, as a measure of residual cash flow available for discretionary purposes, or as an alternative to operating cash flows presented in accordance with GAAP.

The table below reconciles net cash provided by operating activities to adjusted free cash flow:

	Nine Months Ended September 30		%
$ in millions	**2021**	2020	**Change**
Net cash provided by operating activities	**$ 2,125**	$ 2,703	**(21)%**
Capital expenditures	**(682)**	(828)	**(18)%**
Proceeds from sale of equipment to a customer	**84**	—	**NM**
Adjusted free cash flow	**$ 1,527**	$ 1,875	**(19)%**

Year to date 2021 adjusted free cash flow decreased $348 million due to lower net cash provided by operating activities, partially offset by a decrease in capital expenditures and the receipt of additional proceeds from the fourth quarter 2020 sale of equipment to a customer.

Investing Cash Flow

Year to date 2021 net cash provided by investing activities was $2.8 billion compared to net cash used in investing activities of $828 million in the prior year period, principally due to $3.4 billion in cash received from the sale of our IT services business during the first quarter of 2021.

Financing Cash Flow

Year to date 2021 net cash used in financing activities was $5.8 billion compared to net cash provided by financing activities of $875 million in the prior year period, principally due to $2.7 billion of share repurchases, $2.2 billion in debt repayments and $737 million of dividends paid in the current year period as compared to $2.2 billion of net proceeds from the issuance of long-term debt, $490 million of share repurchases and $711 million of dividends paid in the prior year period.

Credit Facilities, Commercial Paper and Financial Arrangements - See Note 6 to the financial statements for further information on our credit facilities, commercial paper and our use of standby letters of credit and guarantees.

Share Repurchases - See Note 2 to the financial statements for further information on our share repurchase programs.

Long-term Debt - See Note 4 to the financial statements for further information.

CRITICAL ACCOUNTING POLICIES, ESTIMATES AND JUDGMENTS

There have been no material changes to our critical accounting policies, estimates or judgments from those discussed in our 2020 Annual Report on Form 10-K.

ACCOUNTING STANDARDS UPDATES

See Note 1 to our financial statements for further information on accounting standards updates.

FORWARD-LOOKING STATEMENTS AND PROJECTIONS

This Form 10-Q and the information we are incorporating by reference contain statements that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “will,” “expect,” “anticipate,” “intend,” “may,” “could,” “should,” “plan,” “project,” “forecast,” “believe,” “estimate,” “outlook,” “trends,” “goals” and similar expressions generally identify these forward-looking statements. Forward-looking statements include, among other things, statements relating to our future financial condition, results of operations and/or cash flows. Forward-looking statements are based upon assumptions, expectations, plans and projections that we believe to be reasonable when made, but which may change over time. These statements are not guarantees of future performance and inherently involve a wide range of risks and uncertainties that are difficult to predict. Specific risks that could cause actual results to differ materially from those expressed or implied in these forward-looking statements include, but are not limited to, those identified and discussed more fully in the section entitled “Risk Factors” in our 2020 Annual Report on Form 10-K and from time to time in our other filings with the Securities and Exchange Commission (SEC). These risks and uncertainties are amplified by the global COVID-19 pandemic and the related effects on the broader economic environment, which have caused and will continue to cause significant challenges, instability and uncertainty. They include:

- the impact of the COVID-19 pandemic (or future health epidemics, pandemics or similar outbreaks), and the related effects on the broader economic environment, on our business, including our ability to maintain a qualified workforce, the potential for worker absenteeism and leave taking, facility closures, work slowdowns or stoppages, labor shortages, supply chain challenges, evolving and varying government requirements, including related to a vaccine mandate, additional costs and liabilities for which we are not compensated, performance challenges, program delays, our ability to recover costs under contracts, changing government funding and acquisition priorities and processes, changing government payment rules and practices, insurance challenges, and potential impacts on access to capital, the markets and the fair value of our assets
- our dependence on the U.S. government for a substantial portion of our business
- significant delays or reductions in appropriations for our programs, and U.S. government funding and program support more broadly
- investigations, claims, disputes, enforcement actions, litigation and/or other legal proceedings
- the use of estimates when accounting for our contracts and the effect of contract cost growth and/or changes in estimated contract revenues and costs
- our exposure to additional risks as a result of our international business, including risks related to geopolitical and economic factors, suppliers, laws and regulations
- the improper conduct of employees, agents, subcontractors, suppliers, business partners or joint ventures in which we participate and the impact on our reputation and our ability to do business
- cyber and other security threats or disruptions faced by us, our customers or our suppliers and other partners
- the performance and financial viability of our subcontractors and suppliers and the availability and pricing of raw materials and components
- changes in procurement and other laws, regulations, contract terms and practices applicable to our industry, findings by the U.S. government as to our compliance with such requirements, and changes in our customers’ business practices globally
- increased competition within our markets and bid protests
- the ability to maintain a qualified workforce with the required security clearances and requisite skills
- our ability to meet performance obligations under our contracts, including obligations that require innovative design capabilities, are technologically complex, require certain manufacturing expertise or are dependent on factors not wholly within our control
- environmental matters, including unforeseen environmental costs and government and third party claims
- natural disasters
- the adequacy and availability of our insurance coverage, customer indemnifications or other liability protections
- products and services we provide related to hazardous and high risk operations, including the production and use of such products, which subject us to various environmental, regulatory, financial, reputational and other risks
- the future investment performance of plan assets, changes in actuarial assumptions associated with our pension and other postretirement benefit plans and legislative or other regulatory actions impacting our pension and postretirement benefit obligations
- our ability appropriately to exploit and/or protect intellectual property rights

- our ability to develop new products and technologies and maintain technologies, facilities, and equipment to win new competitions and meet the needs of our customers
- unanticipated changes in our tax provisions or exposure to additional tax liabilities
- changes in business conditions that could impact business investments and/or recorded goodwill or the value of other long-lived assets

You are urged to consider the limitations on, and risks associated with, forward-looking statements and not unduly rely on the accuracy of forward-looking statements. These forward-looking statements speak only as of the date this report is first filed or, in the case of any document incorporated by reference, the date of that document. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law.

CONTRACTUAL OBLIGATIONS

There have been no material changes to our contractual obligations from those discussed in our 2020 Annual Report on Form 10-K.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There have been no material changes to our market risks from those discussed in our 2020 Annual Report on Form 10-K.

Item 4. Controls and Procedures

DISCLOSURE CONTROLS AND PROCEDURES

Our principal executive officer (Chairman, Chief Executive Officer and President) and principal financial officer (Corporate Vice President and Chief Financial Officer) have evaluated the company’s disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) of the Securities Exchange Act of 1934 (the Exchange Act)) as of September 30, 2021, and have concluded that these controls and procedures are effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms. These disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the reports that we file or submit is accumulated and communicated to management, including the principal executive officer and the principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

During the three months ended September 30, 2021, no changes occurred in our internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We have provided information about certain legal proceedings in which we are involved in Notes 5 and 6 to the financial statements.

We are a party to various investigations, lawsuits, arbitration, claims, enforcement actions and other legal proceedings, including government investigations and claims, that arise in the ordinary course of our business. These types of matters could result in administrative, civil or criminal fines, penalties or other sanctions (which terms include judgments or convictions and consent or other voluntary decrees or agreements); compensatory, treble or other damages; non-monetary relief or actions; or other liabilities. Government regulations provide that certain allegations against a contractor may lead to suspension or debarment from future government contracts or suspension of export privileges for the company or one or more of its components. The nature of legal proceedings is such that we cannot assure the outcome of any particular matter. For additional information on pending matters, please see Notes 5 and 6 to the financial statements, and for further information on the risks we face from existing and future investigations, lawsuits, arbitration, claims, enforcement actions and other legal proceedings, please see “Risk Factors” in our 2020 Annual Report on Form 10-K.

Consistent with SEC Regulation S-K Item 103, we have elected to disclose those environmental proceedings with a governmental entity as a party where the company reasonably believes such proceeding would result in monetary sanctions, exclusive of interest and costs, of $1.0 million or more.

Item 1A. Risk Factors

For a discussion of our risk factors please see the section entitled “Risk Factors” in our 2020 Annual Report on Form 10-K.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The table below summarizes our repurchases of common stock during the three months ended September 30, 2021.

Period	Total Number of Shares Purchased	Average Price Paid per Share[1]	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased under the Plans or Programs ($ in millions)
July 3, 2021 - July 30, 2021	379,145	$ 363.79	379,145	$ 3,555
July 31, 2021 - August 27, 2021	531,862	363.23	531,862	3,362
August 28, 2021 - October 1, 2021	719,372	356.93	719,372	3,105
Total	1,630,379	$ 360.58	1,630,379	$ 3,105

[1] Includes commissions paid.

Share repurchases take place from time to time, subject to market conditions and management’s discretion, in the open market or in privately negotiated transactions. The company retires its common stock upon repurchase and, in the periods presented, has not made any purchases of common stock other than in connection with these publicly announced repurchase programs.

See Note 2 to the financial statements for further information on our share repurchase programs.

NORTHROP GRUMMAN CORPORATION

Item 6. Exhibits

2.1 Agreement and Plan of Merger among Titan II, Inc. (formerly Northrop Grumman Corporation), Northrop Grumman Corporation (formerly New P, Inc.) and Titan Merger Sub Inc., dated March 30, 2011 (incorporated by reference to Exhibit 10.1 to Form 8-K filed April 4, 2011, File No. 001-16411)

2.2 Separation and Distribution Agreement dated as of March 29, 2011, among Titan II, Inc. (formerly Northrop Grumman Corporation), Northrop Grumman Corporation (formerly New P, Inc.), Huntington Ingalls Industries, Inc., Northrop Grumman Shipbuilding, Inc. and Northrop Grumman Systems Corporation (incorporated by reference to Exhibit 10.2 to Form 8-K filed April 4, 2011, File No. 001-16411)

2.3 Agreement and Plan of Merger, dated as of September 17, 2017, among Northrop Grumman Corporation, Neptune Merger, Inc. and Orbital ATK, Inc. (incorporated by reference to Exhibit 2.1 to Form 8-K filed September 18, 2017)

2.4 Transaction Agreement, dated as of April 28, 2014, among Alliant Techsystems Inc., Vista Spinco Inc., Vista Merger Sub Inc. and Orbital Sciences Corporation (incorporated by reference to Exhibit 2.1 to Alliant Techsystems Inc. (now known as Northrop Grumman Innovation Systems, Inc.) Form 8-K filed May 2, 2014)

4.1 Twelfth Supplemental Indenture, dated as of August 25, 2021, to the Indenture dated as of May 1, 1986, by and among Northrop Grumman Systems Corporation, Northrop Grumman Corporation and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 4.1 to Form 8-K filed August 27, 2021)

4.2 Thirteenth Supplemental Indenture, dated as of August 25, 2021, to the Indenture dated as of May 1, 1986, by and among Northrop Grumman Systems Corporation, Northrop Grumman Corporation and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 4.2 to Form 8-K filed August 27, 2021)

4.3 Tenth Supplemental Indenture, dated as of September 2, 2021, between Northrop Grumman Corporation and The Bank of New York Mellon, as successor to JPMorgan Chase Bank, Trustee, to Indenture dated as of November 2, 2001 (incorporated by reference to Exhibit 4.1 to Form 8-K filed September 3, 2021)

4.4 Form of 7.875% Senior Note due 2026 (incorporated by reference to Exhibit A in Exhibit 4.1 to Form 8-K filed September 3, 2021)

4.5 Form of 7.750% Senior Note due 2026 (incorporated by reference to Exhibit B in Exhibit 4.1 to Form 8-K filed September 3, 2021)

4.6 Form of 6.650% Senior Note due 2028 (incorporated by reference to Exhibit C in Exhibit 4.1 to Form 8-K filed September 3, 2021)

4.7 Form of 7.750% Senior Note due 2029 (incorporated by reference to Exhibit D in Exhibit 4.1 to Form 8-K filed September 3, 2021)

4.8 Form of 7.750% Senior Note due 2031 (incorporated by reference to Exhibit E in Exhibit 4.1 to Form 8-K filed September 3, 2021)

4.9 Form of 6.980% Senior Note due 2036 (incorporated by reference to Exhibit F in Exhibit 4.1 to Form 8-K filed September 3, 2021)

4.10 Registration Rights Agreement, dated as of September 2, 2021, between Northrop Grumman Corporation and BofA Securities, Inc., BNP Paribas Securities Corp. and Wells Fargo Securities, LLC, as dealer managers (incorporated by reference to Exhibit 4.8 to Form 8-K filed September 3, 2021)

10.1 First Amendment to Guarantee, dated as of August 25, 2021, to the Guarantee dated as of March 27, 2003, by and among Northrop Grumman Systems Corporation, Northrop Grumman Corporation and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 10.1 to Form 8-K filed August 27, 2021)

NORTHROP GRUMMAN CORPORATION

*15	Letter from Independent Registered Public Accounting Firm
*31.1	Certification of Kathy J. Warden pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*31.2	Certification of David F. Keffer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
**32.1	Certification of Kathy J. Warden pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
**32.2	Certification of David F. Keffer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
*101	Northrop Grumman Corporation Quarterly Report on Form 10-Q for the quarter ended September 30, 2021, formatted as inline XBRL (Extensible Business Reporting Language): (i) the Cover Page, (ii) Condensed Consolidated Statements of Earnings and Comprehensive Income, (iii) Condensed Consolidated Statements of Financial Position, (iv) Condensed Consolidated Statements of Cash Flows, (v) Condensed Consolidated Statements of Changes in Shareholders' Equity, and (vi) Notes to Condensed Consolidated Financial Statements. The instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
*104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Filed with this report

** Furnished with this report

NORTHROP GRUMMAN CORPORATION

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

NORTHROP GRUMMAN CORPORATION
(Registrant)

By: **/s/ Michael A. Hardesty**

Michael A. Hardesty
Corporate Vice President, Controller and
Chief Accounting Officer
(Principal Accounting Officer)

Date: October 27, 2021

NORTHROP GRUMMAN CORPORATION

EXHIBIT 15

LETTER FROM INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Northrop Grumman Corporation
2980 Fairview Park Drive
Falls Church, Virginia 22042

We have reviewed, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the unaudited interim financial information of Northrop Grumman Corporation and subsidiaries for the periods ended September 30, 2021, and 2020, as indicated in our report dated October 27, 2021; because we did not perform an audit, we expressed no opinion on that information.

We are aware that our report referred to above, which is included in your Quarterly Report on Form 10-Q for the quarter ended September 30, 2021, is incorporated by reference in Registration Statement Nos. 033-59815, 033-59853, 333-67266, 333-100179, 333-107734, 333-121104, 333-125120, 333-127317, and 333-175798 on Form S-8; and Registration Statement No. 333-237504 on Form S-3.

We also are aware that the aforementioned report, pursuant to Rule 436(c) under the Securities Act of 1933, is not considered a part of the Registration Statement prepared or certified by an accountant or a report prepared or certified by an accountant within the meaning of Sections 7 and 11 of that Act.

/s/ Deloitte & Touche LLP
McLean, Virginia
October 27, 2021

NORTHROP GRUMMAN CORPORATION

EXHIBIT 31.1

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Kathy J. Warden, certify that:

1. I have reviewed this report on Form 10-Q of Northrop Grumman Corporation ("company");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the company's most recent fiscal quarter (the company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: October 27, 2021

/s/ Kathy J. Warden
Kathy J. Warden
Chairman, Chief Executive Officer and President

NORTHROP GRUMMAN CORPORATION

EXHIBIT 31.2

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, David F. Keffer, certify that:

1. I have reviewed this report on Form 10-Q of Northrop Grumman Corporation (“company”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the company’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the company’s internal control over financial reporting that occurred during the company's most recent fiscal quarter (the company’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the company’s internal control over financial reporting; and
5. The company’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company’s auditors and the audit committee of the company’s board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company’s ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: October 27, 2021

/s/ David F. Keffer
David F. Keffer
Corporate Vice President and Chief Financial Officer

NORTHROP GRUMMAN CORPORATION

EXHIBIT 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Northrop Grumman Corporation (the “company”) on Form 10-Q for the period ended September 30, 2021, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Kathy J. Warden, Chairman, Chief Executive Officer and President of the company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the company.

Date: October 27, 2021

/s/ **Kathy J. Warden**

Kathy J. Warden
Chairman, Chief Executive Officer and President

NORTHROP GRUMMAN CORPORATION

EXHIBIT 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Northrop Grumman Corporation (the “company”) on Form 10-Q for the period ended September 30, 2021, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, David F. Keffer, Corporate Vice President and Chief Financial Officer of the company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the company.

Date: October 27, 2021

/s/ David F. Keffer

David F. Keffer
Corporate Vice President and Chief Financial Officer