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, 2024

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 21, 2024, 145,695,342 shares of common stock were outstanding.

NORTHROP GRUMMAN CORPORATION

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CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS AND COMPREHENSIVE INCOME (Unaudited)

$ in millions, except per share amounts	Three Months Ended September 30		Nine Months Ended September 30	
	2024	2023	**2024**	2023
Sales				
Product	**$ 7,939**	$ 7,678	**$ 24,117**	$ 22,390
Service	**2,057**	2,097	**6,230**	6,262
Total sales	**9,996**	9,775	**30,347**	28,652
Operating costs and expenses				
Product	**6,280**	6,135	**19,079**	17,738
Service	**1,610**	1,599	**4,838**	4,848
General and administrative expenses	**986**	1,025	**3,149**	3,136
Total operating costs and expenses	**8,876**	8,759	**27,066**	25,722
Operating income	**1,120**	1,016	**3,281**	2,930
Other (expense) income				
Interest expense	**(161)**	(141)	**(461)**	(417)
Non-operating FAS pension benefit	**168**	132	**503**	397
Other, net	**61**	111	**142**	193
Earnings before income taxes	**1,188**	1,118	**3,465**	3,103
Federal and foreign income tax expense	**162**	181	**555**	512
Net earnings	**$ 1,026**	$ 937	**$ 2,910**	$ 2,591
Basic earnings per share	**$ 7.02**	$ 6.20	**$ 19.73**	$ 17.07
Weighted-average common shares outstanding, in millions	**146.2**	151.2	**147.5**	151.8
Diluted earnings per share	**$ 7.00**	$ 6.18	**$ 19.69**	$ 17.00
Weighted-average diluted shares outstanding, in millions	**146.5**	151.7	**147.8**	152.4
Net earnings (from above)	**$ 1,026**	$ 937	**$ 2,910**	$ 2,591
Other comprehensive income (loss), net of tax				
Change in cumulative translation adjustment	**2**	6	**2**	11
Change in other, net	**8**	(3)	**(10)**	(5)
Other comprehensive income (loss), net of tax	**10**	3	**(8)**	6
Comprehensive income	**$ 1,036**	$ 940	**$ 2,902**	$ 2,597

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, 2024**	December 31, 2023
Assets		
Cash and cash equivalents	**$ 3,326**	$ 3,109
Accounts receivable, net	**1,609**	1,454
Unbilled receivables, net	**6,518**	5,693
Inventoried costs, net	**1,646**	1,109
Prepaid expenses and other current assets	**1,233**	2,341
Total current assets	**14,332**	13,706
Property, plant and equipment, net of accumulated depreciation of $8,517 for 2024 and $7,964 for 2023	**10,078**	9,653
Operating lease right-of-use assets	**1,779**	1,818
Goodwill	**17,517**	17,517
Intangible assets, net	**268**	305
Deferred tax assets	**1,407**	1,020
Other non-current assets	**2,908**	2,525
Total assets	**$ 48,289**	$ 46,544
Liabilities		
Trade accounts payable	**$ 2,518**	$ 2,110
Accrued employee compensation	**1,924**	2,251
Advance payments and billings in excess of costs incurred	**3,157**	4,193
Other current liabilities	**5,502**	3,388
Total current liabilities	**13,101**	11,942
Long-term debt, net of current portion of $1,589 for 2024 and $70 for 2023	**14,689**	13,786
Pension and other postretirement benefit plan liabilities	**1,186**	1,290
Operating lease liabilities	**1,821**	1,892
Other non-current liabilities	**2,744**	2,839
Total liabilities	**33,541**	31,749
Commitments and contingencies (Note 7)		
Shareholders' equity		
Preferred stock, $1 par value; 10,000,000 shares authorized; no shares issued and outstanding	**—**	—
Common stock, $1 par value; 800,000,000 shares authorized; issued and outstanding: 2024—145,813,599 and 2023—150,109,271	**146**	150
Paid-in capital	**—**	—
Retained earnings	**14,738**	14,773
Accumulated other comprehensive loss	**(136)**	(128)
Total shareholders' equity	**14,748**	14,795
Total liabilities and shareholders' equity	**$ 48,289**	$ 46,544

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

NORTHROP GRUMMAN CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

$ in millions	Nine Months Ended September 30 **2024**	2023
Operating activities		
Net earnings	**$ 2,910**	$ 2,591
Adjustments to reconcile to net cash provided by operating activities:		
Depreciation and amortization	**956**	938
Stock-based compensation	**72**	64
Deferred income taxes	**(387)**	(298)
Net periodic pension and OPB income	**(339)**	(230)
Pension and OPB contributions	**(93)**	(108)
Changes in assets and liabilities:		
Accounts receivable, net	**(155)**	(256)
Unbilled receivables, net	**(825)**	(287)
Inventoried costs, net	**(542)**	(396)
Prepaid expenses and other assets	**(15)**	(127)
Accounts payable and other liabilities	**(915)**	(443)
Income taxes payable, net	**1,106**	40
Other, net	**37**	(43)
Net cash provided by operating activities	**1,810**	1,445
Investing activities		
Capital expenditures	**(951)**	(972)
Proceeds from sale of minority investment	**—**	157
Other, net	**—**	3
Net cash used in investing activities	**(951)**	(812)
Financing activities		
Net proceeds from issuance of long-term debt	**2,495**	1,995
Payments of long-term debt	**—**	(1,050)
Common stock repurchases	**(2,073)**	(1,154)
Cash dividends paid	**(887)**	(834)
Payments of employee taxes withheld from share-based awards	**(57)**	(51)
Other, net	**(120)**	(34)
Net cash used in financing activities	**(642)**	(1,128)
Increase (decrease) in cash and cash equivalents	**217**	(495)
Cash and cash equivalents, beginning of year	**3,109**	2,577
Cash and cash equivalents, end of period	**$ 3,326**	$ 2,082

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)

	Three Months Ended September 30		Nine Months Ended September 30	
$ in millions, except per share amounts	**2024**	2023	**2024**	2023
Common stock				
Beginning of period	**$ 146**	$ 151	**$ 150**	$ 153
Common stock repurchased	**—**	—	**(4)**	(2)
End of period	**146**	151	**146**	151
Paid-in capital				
Beginning of period	**—**	—	**—**	—
End of period	**—**	—	**—**	—
Retained earnings				
Beginning of period	**14,301**	15,485	**14,773**	15,312
Common stock repurchased	**(313)**	(232)	**(2,076)**	(1,162)
Net earnings	**1,026**	937	**2,910**	2,591
Dividends declared	**(302)**	(283)	**(885)**	(832)
Stock compensation	**26**	17	**16**	15
End of period	**14,738**	15,924	**14,738**	15,924
Accumulated other comprehensive loss				
Beginning of period	**(146)**	(150)	**(128)**	(153)
Other comprehensive income (loss), net of tax	**10**	3	**(8)**	6
End of period	**(136)**	(147)	**(136)**	(147)
Total shareholders' equity	**$ 14,748**	$ 15,928	**$ 14,748**	$ 15,928
Cash dividends declared per share	**$ 2.06**	$ 1.87	**$ 5.99**	$ 5.47

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

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 July 1, 2024, the company realigned the Strategic Deterrent Systems (SDS) division, which includes the Ground-Based Strategic Deterrent ("Sentinel") program, from Space Systems to Defense Systems. This realignment is reflected in the financial information contained in this report.

The 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. For classification of certain current assets and liabilities, we consider the duration of our customer contracts when defining our operating cycle, which is generally longer than one year.

Results reported in the financial statements are not necessarily indicative of results that may be expected for the entire year. The financial statements should be read in conjunction with the information contained in the company's 2023 Annual Report on Form 10-K.

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

Contract Estimates

Contract sales may include estimates of variable consideration, including cost or performance incentives (such as award and incentive fees), un-priced change orders, requests for equitable adjustment (REAs) and contract claims. 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. Net 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.

B-21 Program

In 2015, the U.S. Air Force awarded Northrop Grumman the B-21 contract, which includes a base contract for engineering and manufacturing development (EMD) and five low-rate initial production (LRIP) options for a baseline total of 21 aircraft. The EMD phase of the program is largely cost type and began at contract award. The LRIP options are largely fixed price and are expected to continue to be awarded and executed through approximately the end of the decade. In addition to the five LRIP options, Northrop Grumman and the U.S. Air

Force have established not to exceed (NTE) pricing for additional aircraft up to unit 40. The average NTE value for these subsequent lots is above the average unit price of the five LRIP lots, and the NTE lots include an economic price adjustment clause to help protect against certain inflationary pressures. Final terms, quantity, and pricing for these subsequent lots are not fully negotiated.

During the fourth quarter of 2023, we recognized a projected loss of $1.56 billion across the five LRIP options. During the third quarter of 2024, we again reviewed our estimated profitability on the program and made no significant changes to the previously recognized loss. The company's third quarter 2024 results reflect our current best estimate of our cost to complete the LRIP and NTE aircraft, as well as the outcome of ongoing discussions with our suppliers and our customer. If our estimated cost to complete the aircraft changes or our assumptions regarding contract performance, quantities, or funding to mitigate the impact of macroeconomic disruptions are resolved more or less favorably than what we have estimated, our financial position, results of operations and/or cash flows could be materially affected. As of September 30, 2024, the remaining loss accrual is $1.4 billion, of which $946 million is included in Other current liabilities with the remainder included in Other non-current liabilities.

Sentinel Program

In 2020, the U.S. Air Force awarded Northrop Grumman a $13.3 billion contract for the EMD phase of the Sentinel program. In January 2024, the U.S. Air Force provided congressional notification that the Sentinel program was under a Nunn-McCurdy breach review, which is required when total program cost estimates exceed certain defined thresholds. This notification, which had been driven primarily by increases in cost estimates for the Production and Deployment phases, commenced the process to achieve recertification for continuance of the program and update its baseline cost estimates. We are currently executing under a cost-type contract for the EMD phase, and the Production and Deployment phases are yet to be priced and negotiated.

In July 2024, the Sentinel program was recertified for continuation by the DoD upon completion of the Nunn-McCurdy breach review. In connection with the recertification, the DoD directed that the program be restructured, including plans for infrastructure related to the command and launch segment, which was the main driver of the increased cost estimates for the Production and Deployment phases. We are partnering with our customer to establish a new program baseline as part of the restructuring activities.

During the third quarter of 2024, we reviewed our estimated profitability on the Sentinel program and made no significant changes. The Sentinel EAC incorporates our best estimate of costs to complete the restructured EMD effort; however, if the outcome is more or less favorable than what we have estimated, our financial position, results of operations and/or cash flows could be materially affected.

Habitation and Logistics Outpost (HALO) Program

In 2021, the National Aeronautics and Space Administration (NASA) awarded Northrop Grumman Phase 5 of the HALO program to complete the design and development of HALO for NASA's Gateway program. At the request of NASA, Space Systems submitted an engineering change proposal (ECP) during the fourth quarter of 2023 for scope increases and other aspects of the HALO contract largely stemming from evolving Lunar Gateway architecture and mission requirements. During the third quarter of 2024, the company completed its negotiations with NASA and resolved the ECP.

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	**2024**	2023	**2024**	2023
Revenue	**$ 131**	$ 95	**$ 242**	$ 252
Operating income	**136**	58	**268**	180
Net earnings[(1)]	**107**	46	**212**	142
Diluted earnings per share[(1)]	**0.73**	0.30	**1.43**	0.93

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

EAC adjustments on a single performance obligation can have a significant 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 three months ended September 30, 2024, we recorded a $39 million favorable EAC adjustment on the HALO program at Space Systems related to the ECP resolution noted above. During the three months ended June 30, 2023, we recorded a $36 million unfavorable EAC adjustment on the HALO program.

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.

Company backlog as of September 30, 2024 was $84.8 billion. Of our September 30, 2024 backlog, we expect to recognize approximately 40 percent as revenue over the next 12 months and 65 percent as revenue over the next 24 months, with the remainder to be recognized thereafter.

During the first quarter of 2024, the company reduced unfunded backlog by $1.6 billion related to a termination for convenience in our restricted space business.

During the second quarter of 2024, the company reduced unfunded backlog by $0.7 billion related to a termination for convenience on the Next Generation Interceptor (NGI) program at Space Systems.

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, 2024 that was included in the December 31, 2023 contract liability balance was $354 million and $3.4 billion, respectively. The amount of revenue recognized for the three and nine months ended September 30, 2023 that was included in the December 31, 2022 contract liability balance was $358 million and $2.9 billion, respectively.

Disaggregation of Revenue
See Note 10 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
Non-cash investing activities include capital expenditures incurred but not yet paid of $251 million and $134 million as of September 30, 2024 and 2023, respectively.

Sale of Minority Investment
In July 2023, the company sold its minority investment in an Australian business for AUD $235 million (the equivalent of $157 million upon settlement). The sale resulted in a pre-tax gain of $97 million, which is reflected in Other, net on the unaudited condensed consolidated statements of earnings and comprehensive income for the three and nine months ended September 30, 2023. Proceeds from the sale are included in investing activities on the unaudited condensed consolidated statement of cash flows for the nine months ended September 30, 2023.

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

$ in millions	**September 30, 2024**	December 31, 2023
Cumulative translation adjustment	**$ (136)**	$ (138)
Other, net	**—**	10
Total accumulated other comprehensive loss	**$ (136)**	$ (128)

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

Accounting Standards Updates
On November 27, 2023, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2023-07 *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures.* Among other new disclosure requirements, ASU 2023-07 requires companies to disclose significant segment expenses that are regularly provided to the chief operating decision maker. ASU 2023-07 will be effective for annual periods beginning on January 1, 2024 and interim periods beginning on January 1, 2025. ASU 2023-07 must be applied retrospectively to all prior periods presented in the financial statements. We are continuing to evaluate the disclosure impact of ASU 2023-07; however, the standard will not have an impact on the company's consolidated financial position, results of operations and/or cash flows.

On December 14, 2023, the FASB issued ASU No. 2023-09 *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*. ASU 2023-09 requires companies to disclose, on an annual basis, specific categories in the effective tax rate reconciliation and provide additional information for reconciling items that meet a quantitative threshold. In addition, ASU 2023-09 requires companies to disclose additional information about income taxes paid. ASU 2023-09 will be effective for annual periods beginning January 1, 2025 and will be applied on a prospective basis with the option to apply the standard retrospectively. We are continuing to evaluate the disclosure impact of ASU 2023-09; however, the standard will not have an impact on the company's consolidated financial position, results of operations and/or cash flows.

On March 6, 2024, the SEC issued its final climate disclosure rule, which requires registrants to include climate-related disclosures in registration statements and annual reports. The final rule requires registrants to provide information about the financial statement impacts of severe weather events and other natural conditions. The final rule also requires certain disclosures related to risk management and governance over climate-related risks, material climate targets and goals, and material Scope 1 and Scope 2 greenhouse gas emissions. The requirements would be phased in beginning with fiscal year 2025. On April 4, 2024, the SEC voluntarily stayed the final rule pending the completion of judicial review of cases pending in the Eighth Circuit. We are continuing to evaluate the disclosure impact of the final rule.

Other accounting standards updates adopted and/or issued, but not effective until after September 30, 2024, are not expected to have a material effect on the company's consolidated financial position, 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 0.3 million shares for each of the three and nine months ended September 30, 2024. 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, 2023, respectively.

Share Repurchases
Share Repurchase Programs
On January 25, 2021, the company's board of directors authorized a share repurchase program of up to $3.0 billion of the company's common stock (the "2021 Repurchase Program"). Repurchases under the 2021 Repurchase Program commenced in October 2021 and were completed in April 2023.

On January 24, 2022, the company's board of directors authorized a new share repurchase program of up to an additional $2.0 billion in share repurchases of the company's common stock (the "2022 Repurchase Program"). Repurchases under the 2022 Repurchase Program commenced in April 2023 and were completed in February 2024.

On December 6, 2023, the company's board of directors authorized a new share repurchase program of up to an additional $2.5 billion in share repurchases of the company's common stock (the "2023 Repurchase Program"). Repurchases under the 2023 Repurchase Program commenced in February 2024 upon completion of the 2022 Repurchase Program. As of September 30, 2024, repurchases under the 2023 Repurchase Program totaled $0.9 billion; $1.6 billion remained under this share repurchase authorization. By its terms, the 2023 Repurchase Program will expire when we have used all authorized funds for repurchases.

Accelerated Share Repurchase Agreements
During the first quarter of 2023, the company entered into an accelerated share repurchase (ASR) agreement with Bank of America, N.A. (Bank of America) to repurchase $500 million of the company's common stock as part of the 2021 and 2022 Repurchase Programs. Under the agreement, we made a payment of $500 million to Bank of America and received an initial delivery of 0.9 million shares valued at $400 million that were immediately canceled by the company. The remaining balance of $100 million was settled on April 27, 2023 with a final delivery of 0.2 million shares from Bank of America. The final average purchase price was $458.28 per share.

During the first quarter of 2024, the company entered into an ASR agreement with Morgan Stanley & Co. LLC (Morgan Stanley) to repurchase $1.0 billion of the company's common stock as part of the 2022 Repurchase Program. Under the agreement, we made a payment of $1.0 billion to Morgan Stanley and received an initial delivery of 1.8 million shares valued at $800 million that were immediately canceled by the company. The remaining balance of $200 million was settled on May 1, 2024 with a final delivery of 0.4 million shares from Morgan Stanley. The final average purchase price was $455.73 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 **2024**	2023
January 25, 2021	$ 3,000	7.0	$ 431.05	April 2023	—	1.4
January 24, 2022[2]	$ 2,000	4.4	$ 455.01	February 2024	**2.5**	1.1
December 6, 2023	$ 2,500	2.0	$ 461.06		**2.0**	—

[1] As a part of the 2023 Repurchase Program, the board of directors approved that the purchases under this program, and the authorization under the 2022 Repurchase Program, be exclusive of brokerage commissions and other costs of execution, including taxes. Commissions paid are included for the 2021 Repurchase Program.

[2] The 2022 Repurchase Program completed in February 2024; however, it included the $1.0 billion ASR for which the final delivery of shares was outstanding at the end of the first quarter of 2024. On May 1, 2024, the company received a final delivery of 0.4 million shares for that ASR, which are included in the 2022 Repurchase Program authorization.

Dividends on Common Stock
In May 2024, the company increased the quarterly common stock dividend 10 percent to $2.06 per share from the previous amount of $1.87 per share.

3. INVENTORIED COSTS, NET

Inventoried costs, net consist of the following:

$ in millions	**September 30, 2024**	December 31, 2023
Contracts in process	**$ 1,076**	$ 647
Product inventory:		
Raw materials	**388**	338
Work in process	**115**	72
Finished goods	**67**	52
Total product inventory	**570**	462
Inventoried costs, net	**$ 1,646**	$ 1,109

4. INCOME TAXES

	Three Months Ended September 30		Nine Months Ended September 30	
$ in millions	**2024**	2023	**2024**	2023
Federal and foreign income tax expense	**$ 162**	$ 181	**$ 555**	$ 512
Effective income tax rate	**13.6 %**	16.2 %	**16.0 %**	16.5 %

Current Quarter

The company's third quarter 2024 effective tax rate (ETR) decreased to 13.6 percent from 16.2 percent in the prior year period principally driven by a net reduction in tax reserves largely due to a recent federal court decision, partially offset by higher interest expense on unrecognized tax benefits. The third quarter 2024 ETR includes benefits of $191 million for research credits, partially offset by $64 million of interest expense on unrecognized tax benefits and $41 million in tax expense related to foreign-derived intangible income (FDII). The third quarter 2023 ETR included benefits of $62 million for research credits and $19 million for FDII, partially offset by $21 million of interest expense on unrecognized tax benefits.

Year to Date

The company's year to date 2024 ETR decreased to 16.0 percent from 16.5 percent in the prior year period principally driven by a net reduction in tax reserves largely due to a recent federal court decision, partially offset by higher interest expense on unrecognized tax benefits. The year to date 2024 ETR includes benefits of $280 million for research credits, partially offset by $110 million of interest expense on unrecognized tax benefits and $11 million in tax expense related to FDII. The year to date 2023 ETR included benefits of $140 million for research credits and $48 million for FDII, partially offset by $48 million of interest expense on unrecognized tax benefits.

Taxes receivable, which are included in Prepaid expenses and other current assets in the unaudited condensed consolidated statements of financial position, were $402 million as of September 30, 2024 and $1.5 billion as of December 31, 2023.

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. As of September 30, 2024, we have approximately $2.1 billion in unrecognized tax benefits, including $938 million related to our position on IRC Section 451(b). If these matters, including our position on IRC Section 451(b), are unfavorably resolved, there could be a material impact on our future cash flows. It is also reasonably possible that within the next 12 months our unrecognized tax benefits related to these matters may decrease by approximately $700 million, reflecting our best estimate of the most likely outcome of ongoing IRS negotiations.

Our current unrecognized tax benefits, which are included in Other current liabilities in the unaudited condensed consolidated statements of financial position, were $1.2 billion and $964 million as of September 30, 2024 and December 31, 2023, respectively, with the remainder of our unrecognized tax benefits included within Other non-current liabilities.

We file income tax returns in the U.S. federal jurisdiction and in various state and foreign jurisdictions. The Northrop Grumman 2018-2020 federal tax returns are currently under Internal Revenue Service (IRS) examination. During the second quarter of 2023, the company entered into an agreed Revenue Agent's Report ("RAR") for certain matters related to the company's 2014-2017 federal income tax returns, resulting in a $90 million reduction to our unrecognized tax benefits and an immaterial impact to income tax expense. The matters not addressed by the agreed RAR related to the company's 2014-2017 federal income tax returns and refund claims related to its 2007-2016 federal tax returns are currently under review by the IRS Appeals Office.

The Organization for Economic Co-operation and Development has issued Pillar Two model rules for a new global minimum tax of 15% effective January 1, 2024. While it is uncertain whether the United States will enact legislation to adopt Pillar Two, certain countries in which we operate have adopted legislation, and other countries are in the process of introducing legislation to implement Pillar Two. Pillar Two had no impact on our third quarter or year to date 2024 effective tax rate, and we do not currently expect Pillar Two to significantly impact our effective tax rate going forward.

5. 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; therefore, they are not 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 using internal models based on observable market inputs.

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, 2024				December 31, 2023			
$ in millions	**Level 1**	**Level 2**	**Level 3**	**Total**	Level 1	Level 2	Level 3	Total
Financial Assets								
Marketable securities	**$ 339**	**$ —**	**$ 14**	**$ 353**	$ 321	$ 1	$ 8	$ 330
Marketable securities valued using NAV				**8**				9
Total marketable securities	**339**	**—**	**14**	**361**	321	1	8	339
Derivatives	**—**	**3**	**—**	**3**	—	5	—	5

The notional value of the company's foreign currency forward contracts at September 30, 2024 and December 31, 2023 was $399 million and $286 million, respectively. The portion of notional value designated as a cash flow hedge at September 30, 2024 and December 31, 2023 was $269 million and $162 million, respectively.

The derivative fair values and related unrealized gains/losses at September 30, 2024 and December 31, 2023 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, 2024.

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

Long-term Debt

The estimated fair value of the company's long-term debt was $16.1 billion and $13.4 billion as of September 30, 2024 and December 31, 2023, 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.

Unsecured Senior Notes

In January 2024, the company issued $2.5 billion of unsecured senior notes for general corporate purposes, including debt repayment, share repurchases, and working capital, as follows:

- $500 million of 4.60% senior notes due 2029 (the "2029 Notes"),
- $850 million of 4.90% senior notes due 2034 (the "2034 Notes"), and
- $1.15 billion of 5.20% senior notes due 2054 (the "2054 Notes").

In February 2023, the company issued $2.0 billion of unsecured senior notes for general corporate purposes, including debt repayment, share repurchases, and working capital, as follows:

- $1.0 billion of 4.70% senior notes due 2033 (the "2033 Notes") and
- $1.0 billion of 4.95% senior notes due 2053 (the "2053 Notes").

We refer to the 2029 Notes, 2033 Notes, 2034 Notes, 2053 Notes and 2054 Notes together, as the "notes." Interest on the notes is payable semi-annually in arrears. The notes are generally subject to redemption, in whole or in part, at the company's discretion at any time, or from time to time, prior to maturity at a redemption price equal to the greater of 100% of the principal amount of the notes to be redeemed or an applicable "make-whole" amount, plus accrued and unpaid interest.

6. INVESTIGATIONS, CLAIMS AND LITIGATION

For over 25 years, the company has worked closely with the United States Navy, the United States Environmental Protection Agency, the New York State Department of Environmental Conservation, the New York State Department of Health and other federal, state and local governmental authorities, to address environmental conditions allegedly resulting from historic operations at the former United States Navy and Grumman facilities in Bethpage, New York. We have incurred, and expect to continue to incur, as included in Note 7, substantial remediation costs related to these Bethpage environmental conditions, including potential costs relating to unanticipated developments such as new discoveries of potential contaminants. It is also possible that applicable remediation standards and other requirements to which we are subject may continue to change, and that our costs may increase materially. In 2022, we resolved several disputes and regulatory proceedings concerning the scope and allocation of remediation responsibilities and costs related to this site and we continue remediation consistent with agreements through which those disputes were resolved. The company continues to be involved in other remediation-related disputes, none of which are material individually or in the aggregate. We are also a party to various individual lawsuits and a putative class action in the Eastern District of New York alleging personal injury and property damage related to the legacy Bethpage environmental conditions. The court has stayed the filed individual lawsuits, pending its decision on class certification, which the court will undertake if an ongoing mediation between the parties is unsuccessful. We are also a party, and may become a party, to other lawsuits brought by or against insurance carriers, and by other individual plaintiffs and/or putative classes, as well as other parties. We cannot at this time predict or reasonably estimate the potential cumulative outcomes or ranges of possible liability of these Bethpage lawsuits.

The company received from the U.S. Department of Justice (DOJ) a criminal subpoena on December 9, 2022, and a civil investigative demand (CID) on February 2, 2023, both seeking information regarding financial and cost accounting and controls that appears focused on the interest rate assumptions the company used to determine our U.S. Government Cost Accounting Standards (CAS) pension expense, which we discuss in Note 7 below. The company is engaging with the government and responding to the requests. We cannot at this point predict the outcome of these 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, 2024, or its annual results of operations and/or cash flows.

7. 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, 2024, or its annual results of operations and/or cash flows.

In 2019, the Defense Contract Management Agency (DCMA) raised questions about an interest rate assumption used by the company to determine our CAS pension expense. On June 1, 2020, DCMA 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 believed demonstrates the appropriateness of the assumptions used. On November 24, 2020, DCMA replied to the company’s response, disagreeing with our position and requesting additional input, which we provided on February 22, 2021. We subsequently continued to exchange correspondence and engage with DCMA on this matter, including responding to requests for and providing additional information. On February 15, 2024, DCMA sent to the company a Contracting Officer’s determination of noncompliance with CAS, which is an interim, non-final determination, and the parties engaged in discussions. As noted in Note 6 above, the company received from the DOJ a criminal subpoena on December 9, 2022 and a CID on

February 2, 2023, both seeking information that appears related to the interest rate assumptions at issue in our discussions with DCMA. The company has responded to requests and expects to continue discussions with the DOJ and DCMA as these matters progress.We cannot at this point predict the outcome of these matters. The sensitivity to changes in interest rate assumptions makes it reasonably possible the outcome of the DCMA 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, 2024 and December 31, 2023:

$ in millions	Accrued Costs(1)(2)	Reasonably Possible Future Costs in Excess of Accrued Costs(2)	Deferred Costs(3)
September 30, 2024	**$ 568**	**$ 380**	**$ 530**
December 31, 2023	584	387	518

(1) As of September 30, 2024, $213 million is recorded in Other current liabilities and $355 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, 2024, $203 million is deferred in Prepaid expenses and other current assets and $327 million is deferred in Other non-current assets. These amounts reflect a $26 million increase during the second quarter of 2024 in our estimated recovery of certain environmental remediation costs and are evaluated for recoverability on a routine basis.

Although management cannot predict whether (i) new information gained as our environmental remediation projects progress, (ii) changes in remediation standards or other requirements to which we are subject, or (iii) other changes in facts and circumstances will materially affect the estimated liability accrued, 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, 2024, or its annual results of operations and/or cash flows.

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, 2024, there were $469 million of stand-by letters of credit and guarantees and $272 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 $2.5 billion. At September 30, 2024, 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 $2.5 billion (the "2022 Credit Agreement") that matures in August 2027 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 2022 Credit Agreement. At September 30, 2024, there were no borrowings outstanding under this facility.

The 2022 Credit Agreement contains generally customary terms and conditions, including covenants restricting the company's ability to sell all or substantially all of its assets, merge or consolidate with another entity or undertake other fundamental changes and incur liens. The company also cannot permit the ratio of its debt to capitalization (as set forth in the credit agreement) to exceed 65 percent.

At September 30, 2024, the company was in compliance with all covenants under its credit agreements.

8. 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	**2024**	2023	**2024**	2023	**2024**	2023	**2024**	2023
Components of net periodic benefit cost (benefit)								
Service cost	**$ 60**	$ 59	**$ 1**	$ 2	**$ 179**	$ 177	**$ 3**	$ 4
Interest cost	**381**	392	**15**	17	**1,144**	1,176	**46**	50
Expected return on plan assets	**(549)**	(524)	**(21)**	(22)	**(1,647)**	(1,573)	**(64)**	(64)
Net periodic benefit cost (benefit)	**$ (108)**	$ (73)	**$ (5)**	$ (3)	**$ (324)**	$ (220)	**$ (15)**	$ (10)

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	**2024**	2023	**2024**	2023
Defined benefit pension plans	**$ 17**	$ 26	**$ 66**	$ 80
OPB plans	**7**	7	**27**	28
Defined contribution plans	**136**	126	**517**	487

9. 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	**2024**	2023
RSRs granted	**0.1**	0.1
RPSRs granted	**0.2**	0.1
Grant date aggregate fair value	**$ 109**	$ 102

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 and market conditions 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	**2024**	2023
Minimum aggregate payout amount	**$ 35**	$ 34
Maximum aggregate payout amount	**200**	192

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.

10. SEGMENT INFORMATION

The following table presents sales and operating income by segment:

	Three Months Ended September 30		Nine Months Ended September 30	
$ in millions	**2024**	2023	**2024**	2023
Sales				
Aeronautics Systems	**$ 2,878**	$ 2,766	**$ 8,810**	$ 7,876
Defense Systems	**2,084**	2,050	**6,227**	6,058
Mission Systems	**2,823**	2,628	**8,255**	7,832
Space Systems	**2,870**	2,953	**9,021**	8,775
Intersegment eliminations	**(659)**	(622)	**(1,966)**	(1,889)
Total sales	**9,996**	9,775	**30,347**	28,652
Operating income				
Aeronautics Systems	**298**	283	**890**	798
Defense Systems	**196**	201	**614**	605
Mission Systems	**390**	386	**1,129**	1,147
Space Systems	**345**	302	**979**	840
Intersegment eliminations	**(83)**	(83)	**(261)**	(247)
Total segment operating income	**1,146**	1,089	**3,351**	3,143
FAS/CAS operating adjustment	**20**	(20)	**32**	(62)
Unallocated corporate expense	**(46)**	(53)	**(102)**	(151)
Total operating income	**$ 1,120**	$ 1,016	**$ 3,281**	$ 2,930
Other (expense) income				
Interest expense	**(161)**	(141)	**(461)**	(417)
Non-operating FAS pension benefit	**168**	132	**503**	397
Other, net	**61**	111	**142**	193
Earnings before income taxes	**$ 1,188**	$ 1,118	**$ 3,465**	$ 3,103

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 applicable Federal Acquisition Regulation (FAR) and CAS requirements. The FAS/CAS operating 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

Unallocated corporate expense includes the portion of corporate costs not considered allowable or allocable under the applicable FAR and CAS requirements, 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 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.

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Disaggregation of Revenue

Sales by Customer Type	Three Months Ended September 30				Nine Months Ended September 30			
	2024		2023		**2024**		2023	
$ in millions	**$**	**%[3]**	$	%[3]	**$**	**%[3]**	$	%[3]
Aeronautics Systems								
U.S. government[1]	**$ 2,382**	**83 %**	$ 2,331	84 %	**$ 7,443**	**85 %**	$ 6,654	85 %
International[2]	**430**	**15 %**	377	14 %	**1,174**	**13 %**	1,016	13 %
Other customers	**6**	**— %**	4	— %	**15**	**— %**	23	— %
Intersegment sales	**60**	**2 %**	54	2 %	**178**	**2 %**	183	2 %
Aeronautics Systems sales	**2,878**	**100 %**	2,766	100 %	**8,810**	**100 %**	7,876	100 %
Defense Systems								
U.S. government[1]	**1,541**	**74 %**	1,476	72 %	**4,633**	**74 %**	4,351	72 %
International[2]	**311**	**15 %**	358	17 %	**912**	**15 %**	1,103	18 %
Other customers	**15**	**1 %**	19	1 %	**55**	**1 %**	55	1 %
Intersegment sales	**217**	**10 %**	197	10 %	**627**	**10 %**	549	9 %
Defense Systems sales	**2,084**	**100 %**	2,050	100 %	**6,227**	**100 %**	6,058	100 %
Mission Systems								
U.S. government[1]	**2,093**	**74 %**	1,917	73 %	**6,033**	**73 %**	5,729	73 %
International[2]	**427**	**15 %**	432	16 %	**1,308**	**16 %**	1,262	16 %
Other customers	**28**	**1 %**	16	1 %	**65**	**1 %**	58	1 %
Intersegment sales	**275**	**10 %**	263	10 %	**849**	**10 %**	783	10 %
Mission Systems sales	**2,823**	**100 %**	2,628	100 %	**8,255**	**100 %**	7,832	100 %
Space Systems								
U.S. government[1]	**2,606**	**91 %**	2,707	92 %	**8,245**	**92 %**	7,963	91 %
International[2]	**50**	**2 %**	72	2 %	**171**	**2 %**	226	3 %
Other customers	**107**	**3 %**	66	2 %	**293**	**3 %**	212	2 %
Intersegment sales	**107**	**4 %**	108	4 %	**312**	**3 %**	374	4 %
Space Systems sales	**2,870**	**100 %**	2,953	100 %	**9,021**	**100 %**	8,775	100 %
Total								
U.S. government[1]	**8,622**	**86 %**	8,431	86 %	**26,354**	**87 %**	24,697	86 %
International[2]	**1,218**	**12 %**	1,239	13 %	**3,565**	**12 %**	3,607	13 %
Other customers	**156**	**2 %**	105	1 %	**428**	**1 %**	348	1 %
Total Sales	**$ 9,996**	**100 %**	$ 9,775	100 %	**$ 30,347**	**100 %**	$ 28,652	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.

Sales by Contract Type	Three Months Ended September 30				Nine Months Ended September 30			
	2024		2023		**2024**		2023	
$ in millions	**$**	**%[1]**	$	%[1]	**$**	**%[1]**	$	%[1]
Aeronautics Systems								
Cost-type	**$ 1,296**	**46 %**	$ 1,370	51 %	**$ 3,990**	**46 %**	$ 3,920	51 %
Fixed-price	**1,522**	**54 %**	1,342	49 %	**4,642**	**54 %**	3,773	49 %
Intersegment sales	**60**		54		**178**		183	
Aeronautics Systems sales	**2,878**		2,766		**8,810**		7,876	
Defense Systems								
Cost-type	**990**	**53 %**	1,007	54 %	**2,933**	**52 %**	3,017	55 %
Fixed-price	**877**	**47 %**	846	46 %	**2,667**	**48 %**	2,492	45 %
Intersegment sales	**217**		197		**627**		549	
Defense Systems sales	**2,084**		2,050		**6,227**		6,058	
Mission Systems								
Cost-type	**1,216**	**48 %**	1,002	42 %	**3,390**	**46 %**	2,920	41 %
Fixed-price	**1,332**	**52 %**	1,363	58 %	**4,016**	**54 %**	4,129	59 %
Intersegment sales	**275**		263		**849**		783	
Mission Systems sales	**2,823**		2,628		**8,255**		7,832	
Space Systems								
Cost-type	**1,750**	**63 %**	1,882	66 %	**5,429**	**62 %**	5,717	68 %
Fixed-price	**1,013**	**37 %**	963	34 %	**3,280**	**38 %**	2,684	32 %
Intersegment sales	**107**		108		**312**		374	
Space Systems sales	**2,870**		2,953		**9,021**		8,775	
Total								
Cost-type	**5,252**	**53 %**	5,261	54 %	**15,742**	**52 %**	15,574	54 %
Fixed-price	**4,744**	**47 %**	4,514	46 %	**14,605**	**48 %**	13,078	46 %
Total Sales	**$ 9,996**		$ 9,775		**$ 30,347**		$ 28,652	

[1] Percentages calculated based on external customer sales.

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Sales by Geographic Region	Three Months Ended September 30				Nine Months Ended September 30			
	2024		2023		**2024**		2023	
$ in millions	**$**	**%[2]**	$	%[2]	**$**	**%[2]**	$	%[2]
Aeronautics Systems								
United States	**$ 2,388**	**85 %**	$ 2,335	86 %	**$ 7,458**	**86 %**	$ 6,677	87 %
Asia/Pacific	**195**	**7 %**	163	6 %	**495**	**6 %**	448	6 %
Europe	**224**	**8 %**	204	8 %	**653**	**8 %**	543	7 %
All other[1]	**11**	**— %**	10	— %	**26**	**— %**	25	— %
Intersegment sales	**60**		54		**178**		183	
Aeronautics Systems sales	**2,878**		2,766		**8,810**		7,876	
Defense Systems								
United States	**1,556**	**83 %**	1,495	81 %	**4,688**	**84 %**	4,406	80 %
Asia/Pacific	**79**	**4 %**	93	5 %	**243**	**4 %**	324	6 %
Europe	**179**	**10 %**	146	8 %	**536**	**10 %**	406	7 %
All other[1]	**53**	**3 %**	119	6 %	**133**	**2 %**	373	7 %
Intersegment sales	**217**		197		**627**		549	
Defense Systems sales	**2,084**		2,050		**6,227**		6,058	
Mission Systems								
United States	**2,121**	**83 %**	1,933	82 %	**6,098**	**82 %**	5,787	83 %
Asia/Pacific	**98**	**4 %**	98	4 %	**346**	**5 %**	310	4 %
Europe	**246**	**10 %**	246	10 %	**727**	**10 %**	712	10 %
All other[1]	**83**	**3 %**	88	4 %	**235**	**3 %**	240	3 %
Intersegment sales	**275**		263		**849**		783	
Mission Systems sales	**2,823**		2,628		**8,255**		7,832	
Space Systems								
United States	**2,713**	**98 %**	2,773	97 %	**8,538**	**98 %**	8,175	97 %
Asia/Pacific	**6**	**— %**	22	1 %	**30**	**1 %**	67	1 %
Europe	**36**	**1 %**	44	2 %	**112**	**1 %**	127	2 %
All other[1]	**8**	**1 %**	6	— %	**29**	**— %**	32	— %
Intersegment sales	**107**		108		**312**		374	
Space Systems sales	**2,870**		2,953		**9,021**		8,775	
Total								
United States	**8,778**	**88 %**	8,536	87 %	**26,782**	**88 %**	25,045	87 %
Asia/Pacific	**378**	**4 %**	376	4 %	**1,114**	**4 %**	1,149	4 %
Europe	**685**	**7 %**	640	7 %	**2,028**	**7 %**	1,788	7 %
All other[1]	**155**	**1 %**	223	2 %	**423**	**1 %**	670	2 %
Total Sales	**$ 9,996**		$ 9,775		**$ 30,347**		$ 28,652	

[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, 2024, 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, 2024 and 2023, and of cash flows for the nine-month periods ended September 30, 2024 and 2023 and the related notes (collectively referred to as the “interim financial information”). Based on our reviews, we are not aware of any material modifications that should be made to the accompanying interim financial information for it to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries as of December 31, 2023, 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 24, 2024, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying condensed consolidated statement of financial position as of December 31, 2023, 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 the standards of the PCAOB. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

/s/ Deloitte & Touche LLP
McLean, Virginia
October 23, 2024

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 technology company. We deliver a broad range of products, services and solutions to United States (U.S.) and international customers, and principally to the U.S Department of Defense (DoD) and intelligence community. Our broad portfolio is aligned to support national security priorities and our solutions equip our customers with capabilities they need to connect, protect and advance humanity.

The company is a leading provider of space systems, advanced aircraft, missile defense, advanced weapons and long-range fires capabilities, mission systems, networking and communications, strategic deterrence systems, and breakthrough technologies, such as artificial intelligence, advanced computing and cyber. We are focused on competing and winning programs that enable continued growth, performing on our commitments and affordably delivering capability our customers need. With the investments we've made in advanced technologies, combined with our talented workforce and digital transformation capabilities, Northrop Grumman is well positioned to meet our customers' needs today and in the future.

The following discussion should be read along with the financial statements included in this Form 10-Q, as well as “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” “Liquidity and Capital Resources,” “Quantitative and Qualitative Disclosures About Market Risks” and “Risk Factors” in our 2023 Annual Report on Form 10-K, which provides additional information on our business, the environment in which we operate and our operating results.

Global Security Environment

The U.S. and its allies continue to face a global security environment of heightened tensions and instability, threats from state and non-state actors, including in particular major global powers, as well as terrorist organizations, increasing nuclear tensions, diverse regional security concerns and political instability. The market for defense products, services and solutions globally is driven by these complex and evolving security challenges, considered in the broader context of political and socioeconomic circumstances and priorities. Our operations and financial performance, as well as demand for our products and services, are impacted by these events, including global unrest. The same is true for our suppliers and other business partners.

The ongoing conflicts in Ukraine and the escalating hostilities in the Middle East and threats elsewhere, particularly in the Pacific region, have increased global tensions and instability and highlighted security requirements globally, including in Europe, the Middle East and the Pacific region, as well as the U.S. These conflicts have resulted in and may continue to result in increased demand for defense products and services from allies and partner nations, particularly in those areas. For example, we have experienced, and, while difficult to predict, may continue to experience, an increase in demand for certain of our products and services directly and indirectly related to the conflict in Ukraine. Sales may occur directly or through the U.S. if it provides increased military assistance and support to Ukraine. We have not experienced, and do not anticipate experiencing, significant adverse financial impacts directly from the ongoing conflicts in Ukraine or the Middle East.

We believe the current global security environment highlights the significant national security threats to the U.S. and its allies, and the need for strong deterrence and robust defense capabilities, and are actively evaluating both opportunities and risks associated with this environment. We believe our capabilities, particularly in space, C4ISR, missile defense, battle management, advanced weapons, strategic deterrence, and survivable aircraft and mission systems should help our customers in the U.S. and globally defend against current and future threats and, as a result, continue to allow for long-term profitable business growth.

Global Economic Environment

Over the past several years, the global economic environment has experienced extraordinary challenges, including inflationary pressures; widespread delays and disruptions in supply chains; business slowdowns or shutdowns; workforce challenges and labor shortfalls; and market volatility. These macroeconomic factors have contributed, and we expect will continue to contribute, to increased costs, delays, disruptions and other performance challenges, as well as increased competing demands for limited resources to address such increased costs and other challenges, for our company, our suppliers and partners, and our customers. We continue to work hard to mitigate challenges caused by the macroeconomic environment on our business. We are seeing positive progress in the supply chain as on-time deliveries and quality have improved. In remaining areas of pressure, we are proactively working with our suppliers to ensure we meet our contract commitments. Although certain pockets of our business were adversely affected by the broader macroeconomic environment during the third quarter of 2024, the overall financial impact on our company has continued to subside.

In addition, although the federal funds interest rate decreased in the third quarter of 2024, an overall increase in interest rates in recent years has raised the cost of borrowing for governments, and if rates were to increase again, it could further impact government spending priorities (in the U.S. and allied countries, in particular), including their demand for defense products. Economic tensions and changes in international trade policies, including higher tariffs on imported goods and materials and renegotiation of free trade agreements, could also further impact the global market for defense products, services and solutions.

U.S. Political, Budget and Regulatory Environment

The U.S. continues to face an uncertain and evolving political, budget and regulatory environment. In particular, it is difficult to predict the specific course of future defense budgets. Current and future requirements related to the conflicts in Ukraine and the Middle East, threats in the Pacific regions and other security priorities, as well as global inflation, the national debt, and other domestic priorities, among other things, in the U.S. and globally, will continue to impact our customers' budgets, spending and priorities, and our industry. The U.S. political environment, including the U.S. election cycle, may also impact defense budgets and priorities, issues related to the national debt, and government spending more broadly. We anticipate that issues related to budgetary priorities and defense spending levels, the debt ceiling, and the spending caps imposed by the Fiscal Responsibility Act of 2023 (FRA), particularly with respect to discretionary spending, will continue to be a subject of considerable debate, with a potentially significant impact on our programs and the company.

On March 11, 2024, the Administration released its budget request for FY 2025. The request included $895 billion for national security, $850 billion of which is for the DoD. FY 2025 appropriations have not been enacted and, on September 26, 2024, the President signed into law a continuing resolution (CR) to carry forward FY 2024 funding levels into FY 2025 while negotiations continue regarding full-year appropriations. The CR runs through December 20, 2024. It remains uncertain when the government will approve final FY 2025 appropriations, and the levels of funding that FY 2025 appropriations will provide. Government operations under an extended CR could have potential impacts on our programs and new starts, in particular.

On March 23, 2024, the President signed into law the Further Consolidated Appropriations Act for FY 2024, which provided funding for government agencies, including $825 billion for the DoD, through September 30, 2024. On April 24, 2024, the President signed into law bills providing $95 billion in supplemental funding for Ukraine, Israel and Indo-Pacific, which include $67 billion in DoD funding for the restock of U.S. munitions and additional capacity.

The political environment, federal budget, debt ceiling and regulatory environment, including potential tax reform, are expected to continue to be the subject of considerable debate, especially in light of the ongoing conflicts and heightened global tensions, the macroeconomic environment and political tensions. The results of those debates could have material impacts on defense spending broadly and the company's programs in particular.

CONSOLIDATED OPERATING RESULTS

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	**2024**	2023	**Change**	**2024**	2023	**Change**
Sales	**$ 9,996**	$ 9,775	**2 %**	**$ 30,347**	$ 28,652	**6 %**
Operating costs and expenses	**8,876**	8,759	**1 %**	**27,066**	25,722	**5 %**
Operating costs and expenses as a % of sales	***88.8 %***	*89.6 %*		***89.2 %***	*89.8 %*	
Operating income	**1,120**	1,016	**10 %**	**3,281**	2,930	**12 %**
Operating margin rate	***11.2 %***	*10.4 %*		***10.8 %***	*10.2 %*	
Federal and foreign income tax expense	**162**	181	**(10)%**	**555**	512	**8 %**
Effective income tax rate	***13.6 %***	*16.2 %*		***16.0 %***	*16.5 %*	
Net earnings	**1,026**	937	**9 %**	**2,910**	2,591	**12 %**
Diluted earnings per share	**$ 7.00**	$ 6.18	**13 %**	**$ 19.69**	$ 17.00	**16 %**

Sales

Current Quarter

Third quarter 2024 sales increased $221 million, or 2 percent, due to higher sales at Mission Systems, Aeronautics Systems and Defense Systems, partially offset by lower sales at Space Systems largely driven by a reduction of $224 million associated with wind-down of our work on the restricted space and NGI programs, as previously disclosed. Third quarter 2024 sales reflect continued strong demand for our products and services.

Year to Date

Year to date 2024 sales increased $1.7 billion, or 6 percent, due to higher sales at all four sectors, including 12 percent growth at Aeronautics Systems.

See “Segment Operating Results” below for further information by segment and “Product and Service Analysis” for product and service detail. See Note 10 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 2024 operating income increased $104 million, or 10 percent, primarily due to $57 million of higher segment operating income and a $40 million increase in the FAS/CAS operating adjustment. Operating margin rate increased to 11.2 percent from 10.4 percent primarily due to benefits associated with the FAS/CAS operating adjustment and a higher segment operating margin rate.

Third quarter 2024 general and administrative (G&A) costs as a percentage of sales decreased to 9.9 percent from 10.5 percent in the prior year period primarily due to cost management and higher sales.

Year to Date

Year to date 2024 operating income increased $351 million, or 12 percent, due to $208 million of higher segment operating income, a $94 million increase in the FAS/CAS operating adjustment and $49 million of lower unallocated corporate expense. Operating margin rate increased to 10.8 percent from 10.2 percent primarily due to benefits associated with the FAS/CAS operating adjustment and lower unallocated corporate expense.

Year to date 2024 G&A costs as a percentage of sales decreased to 10.4 percent from 10.9 percent in the prior year period primarily due to higher sales.

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 company’s third quarter 2024 ETR decreased to 13.6 percent from 16.2 percent in the prior year period principally driven by a net reduction in tax reserves largely due to a recent federal court decision, partially offset by higher interest expense on unrecognized tax benefits.

Year to Date

The year to date 2024 ETR decreased to 16.0 percent from 16.5 percent in the prior year period principally driven by a net reduction in tax reserves largely due to a recent federal court decision, partially offset by higher interest expense on unrecognized tax benefits.

See Note 4 to the financial statements for additional information.

Net Earnings

Current Quarter

Third quarter 2024 net earnings increased $89 million, or 9 percent, primarily due to $104 million of higher operating income, a $36 million increase in the non-operating FAS pension benefit and a lower effective tax rate, partially offset by a $97 million gain recognized in the prior year upon the sale of a minority investment.

Year to Date

Year to date 2024 net earnings increased $319 million, or 12 percent, primarily due to $351 million of higher operating income and a $106 million increase in the non-operating FAS pension benefit, partially offset by a $97 million gain recognized in the prior year upon the sale of a minority investment and $44 million of higher interest expense.

Diluted Earnings Per Share

Current Quarter

Third quarter 2024 diluted earnings per share increased 13 percent, reflecting a 9 percent increase in net earnings and a 3 percent reduction in weighted-average diluted shares outstanding.

Year to Date

Year to date 2024 diluted earnings per share increased 16 percent, reflecting a 12 percent increase in net earnings and a 3 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.

Effective July 1, 2024, the company realigned the Strategic Deterrent Systems (SDS) division, which includes the Sentinel program, from Space Systems to Defense Systems. This realignment is reflected in the accompanying financial information.

Operating Performance Assessment and Reporting

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).

We periodically record losses and restructure contract terms, conditions and pricing for certain programs. For additional information on the B-21, Sentinel and HALO programs, please see Note 1 to the financial statements.

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 measures that reflect the combined operating income of our four segments less the operating income associated with intersegment sales. Segment operating income includes pension expense allocated to our sectors under FAR and CAS and excludes FAS pension service expense and unallocated corporate items (certain corporate-level expenses, which are not considered allowable or allocable under applicable FAR and CAS requirements, 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	**2024**	2023	**Change**	**2024**	2023	**Change**
Operating income	**$ 1,120**	$ 1,016	**10 %**	**$ 3,281**	$ 2,930	**12 %**
Operating margin rate	***11.2 %***	*10.4 %*		***10.8 %***	*10.2 %*	
Reconciliation to segment operating income:						
CAS pension expense	**(80)**	(39)	**105 %**	**(211)**	(115)	**83 %**
FAS pension service expense	**60**	59	**2 %**	**179**	177	**1 %**
FAS/CAS operating adjustment	**(20)**	20	**NM**	**(32)**	62	**NM**
Intangible asset amortization and PP&E step-up depreciation	**23**	31	**(26)%**	**72**	92	**(22)%**
Other unallocated corporate expense	**23**	22	**5 %**	**30**	59	**(49)%**
Unallocated corporate expense	**46**	53	**(13)%**	**102**	151	**(32)%**
Segment operating income	**$ 1,146**	$ 1,089	**5 %**	**$ 3,351**	$ 3,143	**7 %**
Segment operating margin rate	***11.5 %***	*11.1 %*		***11.0 %***	*11.0 %*	

Current Quarter
Third quarter 2024 segment operating income increased $57 million, or 5 percent, primarily due to a higher segment operating margin rate and higher sales. Segment operating margin rate increased to 11.5 percent and reflects higher operating margin rates at Space Systems and Aeronautics Systems, partially offset by lower operating margin rates at Mission Systems and Defense Systems.

Year to Date
Year to date 2024 segment operating income increased $208 million, or 7 percent, primarily due to higher sales. Segment operating margin rate was comparable to the prior year period and reflects a higher operating margin rate at Space Systems, partially offset by a lower operating margin rate at Mission Systems.

FAS/CAS Operating Adjustment
Third quarter 2024 and year to date 2024 FAS/CAS operating adjustment reflects higher CAS pension expense largely driven by plan asset returns in prior years and changes in certain CAS actuarial assumptions as of December 31, 2023.

Unallocated Corporate Expense
Current Quarter
The decrease in third quarter 2024 unallocated corporate expense is primarily due to lower intangible asset amortization and PP&E step-up depreciation.

Year to Date
The decrease in year to date 2024 unallocated corporate expense is primarily due to lower intangible asset amortization and PP&E step-up depreciation and a loss recognized in the prior year in connection with the divestiture of a small international subsidiary.

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 segment operating income and margin rate.

The aggregate favorable and unfavorable EAC adjustments are presented in the table below:

	Three Months Ended September 30		Nine Months Ended September 30	
$ in millions	**2024**	2023	**2024**	2023
Favorable EAC adjustments	**$ 369**	$ 331	**$ 1,091**	$ 981
Unfavorable EAC adjustments	**(233)**	(273)	**(823)**	(801)
Net EAC adjustments	**$ 136**	$ 58	**$ 268**	$ 180

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

	Three Months Ended September 30		Nine Months Ended September 30	
$ in millions	**2024**	2023	**2024**	2023
Aeronautics Systems	**$ 48**	$ 37	**$ 160**	$ 73
Defense Systems	**10**	14	**50**	64
Mission Systems	**16**	32	**11**	127
Space Systems	**60**	(23)	**50**	(80)
Eliminations	**2**	(2)	**(3)**	(4)
Net EAC adjustments	**$ 136**	$ 58	**$ 268**	$ 180

AERONAUTICS SYSTEMS	Three Months Ended September 30		%	Nine Months Ended September 30		%
$ in millions	**2024**	2023	**Change**	**2024**	2023	**Change**
Sales	**$ 2,878**	$ 2,766	**4 %**	**$ 8,810**	$ 7,876	**12 %**
Operating income	**298**	283	**5 %**	**890**	798	**12 %**
Operating margin rate	***10.4 %***	*10.2 %*		***10.1 %***	*10.1 %*	

Sales

Current Quarter

Third quarter 2024 sales increased $112 million, or 4 percent, primarily due to higher F-35 production volume largely driven by the timing of materials, increased E-2 fleet sustainment and modernization work, higher Triton LRIP production volume and an increase in Global Hawk sustainment activities. These increases were partially offset by lower restricted sales.

Year to Date

Year to date 2024 sales increased $934 million, or 12 percent, primarily due to higher restricted sales, a $300 million increase in F-35 production and sustainment volume due, in part, to the timing of materials, a $137 million increase in Triton LRIP production volume, a $129 million increase in E-2 fleet sustainment and modernization work, and higher volume on Global Hawk sustainment activities.

Operating Income

Current Quarter

Third quarter 2024 operating income increased $15 million, or 5 percent, due to higher sales and a higher operating margin rate. Operating margin rate increased to 10.4 percent from 10.2 percent principally due to higher net EAC adjustments, largely driven by improved performance and cost efficiencies on certain mature production programs.

Year to Date

Year to date 2024 operating income increased $92 million, or 12 percent, due to higher sales and increased net EAC adjustments, largely driven by improved performance and cost efficiencies on certain mature production programs, partially offset by sales growth on low margin restricted programs.

NORTHROP GRUMMAN CORPORATION

DEFENSE SYSTEMS	Three Months Ended September 30		%	Nine Months Ended September 30		%
$ in millions	**2024**	2023	**Change**	**2024**	2023	**Change**
Sales	**$ 2,084**	$ 2,050	**2 %**	**$ 6,227**	$ 6,058	**3 %**
Operating income	**196**	201	**(2)%**	**614**	605	**1 %**
Operating margin rate	***9.4 %***	*9.8 %*		***9.9 %***	*10.0 %*	

Sales

Current Quarter

Third quarter 2024 sales increased $34 million, or 2 percent, primarily due to higher volume on the Sentinel program, ramp-up on the Stand-in Attack Weapon (SiAW) program and higher volume on certain military ammunition programs. These increases were partially offset by lower volume due to the completion of an international training program and lower volume on the Special Electronic Mission Aircraft (SEMA) program as that program nears completion.

Year to Date

Year to date 2024 sales increased $169 million, or 3 percent, primarily due to a $115 million increase on certain military ammunition programs, a $112 million increase on the Guided Multiple Launch Rocket System (GMLRS) program driven by the timing of materials and increased order quantities, a $108 million increase on SiAW as the program ramps, and higher volume on the Sentinel program. These increases were partially offset by a $212 million decrease due to the completion of an international training program and lower volume on the SEMA program as it nears completion.

Operating Income

Current Quarter

Third quarter 2024 operating income decreased $5 million, or 2 percent, due to a lower operating margin rate, partially offset by higher sales. Operating margin rate decreased to 9.4 percent from 9.8 percent principally due to lower net EAC adjustments and changes in contract mix.

Year to Date

Year to date 2024 operating income increased $9 million, or 1 percent, principally due to higher sales. Operating margin rate was comparable to the prior period.

MISSION SYSTEMS	Three Months Ended September 30		%	Nine Months Ended September 30		%
$ in millions	**2024**	2023	**Change**	**2024**	2023	**Change**
Sales	**$ 2,823**	$ 2,628	**7 %**	**$ 8,255**	$ 7,832	**5 %**
Operating income	**390**	386	**1 %**	**1,129**	1,147	**(2)%**
Operating margin rate	***13.8 %***	*14.7 %*		***13.7 %***	*14.6 %*	

Sales

Current Quarter

Third quarter 2024 sales increased $195 million, or 7 percent, primarily due to higher volume on restricted advanced microelectronics and technology programs, increased marine systems sales due, in part, to the timing of materials, and higher Ground/Air Task Oriented Radar (G/ATOR) volume due to continued ramp-up on full-rate production (FRP) awards.

Year to Date

Year to date 2024 sales increased $423 million, or 5 percent, primarily due to higher volume on restricted advanced microelectronics and technology programs, the timing of materials on marine systems programs and FRP ramp-up on G/ATOR. These increases were partially offset by lower sales on the Scalable Agile Beam Radar (SABR) and F-35 programs.

Operating Income

Current Quarter

Third quarter 2024 operating income increased $4 million, or 1 percent, due to higher sales, partially offset by a lower operating margin rate. Operating margin rate decreased to 13.8 percent from 14.7 percent primarily due to lower net EAC adjustments and changes in contract mix toward more cost-type content.

Year to Date
Year to date 2024 operating income decreased $18 million, or 2 percent, due to a lower operating margin rate, partially offset by higher sales. Operating margin rate decreased to 13.7 percent from 14.6 percent, primarily due to lower net EAC adjustments on certain airborne radar production programs due, in part, to production inefficiencies that have driven higher labor costs, as well as changes in contract mix toward more cost-type content. These decreases were partially offset by sales growth on higher margin advanced microelectronics programs.

SPACE SYSTEMS	Three Months Ended September 30		**% Change**	Nine Months Ended September 30		**% Change**
$ in millions	**2024**	2023		**2024**	2023	
Sales	**$ 2,870**	$ 2,953	**(3)%**	**$ 9,021**	$ 8,775	**3 %**
Operating income	**345**	302	**14 %**	**979**	840	**17 %**
Operating margin rate	***12.0 %***	*10.2 %*		***10.9 %***	*9.6 %*	

Sales
Current Quarter
Third quarter 2024 sales decreased $83 million, or 3 percent, primarily due to wind-down of our work on the restricted space and NGI programs, which reduced sales by $224 million. This reduction was partially offset by a $129 million increase on Space Development Agency (SDA) satellite programs and higher sales across our remaining restricted space portfolio.

Year to Date
Year to date 2024 sales increased $246 million, or 3 percent, primarily due to a $322 million increase on SDA satellite programs, a $123 million increase on HALO, and higher materials volume on the GEM 63 program in support of Amazon’s Project Kuiper. These increases were partially offset by $365 million of lower sales associated with wind-down of our work on the restricted space and NGI programs. Lower sales associated with the wind-down of our work on the restricted space program were largely offset by higher sales across our remaining restricted space portfolio.

Operating Income
Current Quarter
Third quarter 2024 operating income increased $43 million, or 14 percent, due to a higher operating margin rate, which more than offset lower sales. Operating margin rate increased to 12.0 percent from 10.2 percent principally due to an improvement in net EAC adjustments, partially offset by a $16 million benefit in the prior year from insurance recoveries in our commercial space business.

Year to Date
Year to date 2024 operating income increased $139 million, or 17 percent, due to a higher operating margin rate and higher sales. Operating margin rate increased to 10.9 percent from 9.6 percent principally due to an improvement in net EAC adjustments, partially offset by a $16 million benefit in the prior year from insurance recoveries in our commercial space business.

PRODUCT AND SERVICE ANALYSIS

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

$ in millions	Three Months Ended September 30				Nine Months Ended September 30			
	2024		2023		**2024**		2023	
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	**$ 2,131**	**$ 1,921**	$ 2,102	$ 1,902	**$ 6,573**	**$ 5,951**	$ 5,934	$ 5,368
Service	**687**	**605**	610	533	**2,059**	**1,811**	1,759	1,546
Intersegment eliminations	**60**	**54**	54	48	**178**	**158**	183	164
Total Aeronautics Systems	**2,878**	**2,580**	2,766	2,483	**8,810**	**7,920**	7,876	7,078
Defense Systems								
Product	**1,431**	**1,304**	1,305	1,196	**4,231**	**3,856**	3,819	3,482
Service	**436**	**394**	548	480	**1,369**	**1,207**	1,690	1,486
Intersegment eliminations	**217**	**190**	197	173	**627**	**550**	549	485
Total Defense Systems	**2,084**	**1,888**	2,050	1,849	**6,227**	**5,613**	6,058	5,453
Mission Systems								
Product	**2,014**	**1,747**	1,841	1,590	**5,793**	**5,037**	5,490	4,726
Service	**534**	**451**	524	431	**1,613**	**1,372**	1,559	1,301
Intersegment eliminations	**275**	**235**	263	221	**849**	**717**	783	658
Total Mission Systems	**2,823**	**2,433**	2,628	2,242	**8,255**	**7,126**	7,832	6,685
Space Systems								
Product	**2,363**	**2,077**	2,430	2,210	**7,520**	**6,706**	7,147	6,494
Service	**400**	**351**	415	344	**1,189**	**1,056**	1,254	1,106
Intersegment eliminations	**107**	**97**	108	97	**312**	**280**	374	335
Total Space Systems	**2,870**	**2,525**	2,953	2,651	**9,021**	**8,042**	8,775	7,935
Segment Totals								
Total Product	**$ 7,939**	**$ 7,049**	$ 7,678	$ 6,898	**$ 24,117**	**$ 21,550**	$ 22,390	$ 20,070
Total Service	**2,057**	**1,801**	2,097	1,788	**6,230**	**5,446**	6,262	5,439
Total Segment(1)	**$ 9,996**	**$ 8,850**	$ 9,775	$ 8,686	**$ 30,347**	**$ 26,996**	$ 28,652	$ 25,509

(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 2024 product sales increased $261 million, or 3 percent, primarily due to an increase in product sales at Mission Systems and Defense Systems, partially offset by a decrease in product sales at Space Systems. The increases were principally due to higher restricted sales at Mission Systems and higher volume on Sentinel, SiAW and certain military ammunition programs at Defense Systems. The Space Systems decrease was principally due to wind-down of our work on the restricted space and NGI programs, partially offset by higher volume on the SDA T2TL programs at Space Systems.

Third quarter 2024 product costs increased $151 million, or 2 percent, consistent with the higher product sales described above and reflect a higher operating margin rate principally due to higher net EAC adjustments on Space Systems product programs.

Year to Date
Year to date 2024 product sales increased $1.7 billion, or 8 percent, primarily due to an increase in product sales at all four sectors. The increase was principally driven by higher volume on restricted programs, F-35, E-2 and Triton at Aeronautics Systems, higher volume on SiAW, certain military ammunition programs and GMLRS at Defense Systems, sales growth on SDA T2TL, HALO and GEM 63 at Space Systems, and higher restricted sales, partially offset by lower SABR and F-35 volume, at Mission Systems.

Year to date 2024 product costs increased $1.5 billion, or 7 percent, consistent with the higher product sales described above and reflect a higher operating margin rate principally due to higher net EAC adjustments on Space Systems product programs.

Service Sales and Costs
Current Quarter
Third quarter 2024 service sales decreased $40 million, or 2 percent, primarily due to a decrease in service sales at Defense Systems principally due to the completion of an international training program and lower volume on SEMA, partially offset by an increase in service sales at Aeronautics Systems driven by higher volume on restricted programs.

Third quarter 2024 service costs increased $13 million, or 1 percent, reflecting a lower operating margin rate principally due to a $16 million prior year benefit for insurance recoveries at Space Systems, changes in contract mix at Defense Systems and lower net EAC adjustments on Mission Systems service programs.

Year to Date
Year to date 2024 service sales decreased $32 million, or 1 percent, primarily due to a decrease in service sales at Defense Systems principally due to the completion of an international training program and lower volume on SEMA, partially offset by an increase in service sales at Aeronautics Systems driven by higher volume on restricted programs and Global Hawk.

Year to date 2024 service costs were comparable with the prior year period reflecting a lower operating margin rate principally due to lower net EAC adjustments on Mission Systems service programs, as well as a $16 million prior year benefit for insurance recoveries at Space Systems.

BACKLOG

Backlog consisted of the following as of September 30, 2024 and December 31, 2023:

	September 30, 2024			December 31, 2023	
$ in millions	**Funded**	**Unfunded**	**Total Backlog**	Total Backlog	% Change in 2024
Aeronautics Systems	**$ 10,018**	**$ 8,541**	**$ 18,559**	$ 19,583	**(5)%**
Defense Systems	**10,171**	**17,398**	**27,569**	20,198	**36 %**
Mission Systems	**11,625**	**5,256**	**16,881**	16,108	**5 %**
Space Systems	**7,854**	**13,937**	**21,791**	28,341	**(23)%**
Total backlog	**$ 39,668**	**$ 45,132**	**$ 84,800**	$ 84,230	**1 %**

Third quarter and year to date 2024 net awards totaled $11.7 billion and $33.3 billion, respectively, and backlog totaled $84.8 billion. Significant third quarter new awards include $2.7 billion for restricted programs (primarily at Mission Systems, Aeronautics Systems, and Space Systems), $1.6 billion for E-2 and $0.7 billion for certain military ammunition programs.

During the first quarter of 2024, the company reduced unfunded backlog by $1.6 billion related to a termination for convenience in our restricted space business.

During the second quarter of 2024, the company reduced unfunded backlog by $0.7 billion related to a termination for convenience on the Next Generation Interceptor (NGI) program at Space Systems.

LIQUIDITY AND CAPITAL RESOURCES

We are focused on the efficient conversion of operating income into cash to provide for the company’s material cash requirements, including working capital needs, satisfaction of contractual commitments, funding of our pension and OPB plans, investment in our business through capital expenditures, and shareholder return through dividend payments and share repurchases.

At September 30, 2024, we had $3.3 billion in cash and cash equivalents. We expect cash and cash equivalents and cash generated from operating activities, supplemented by borrowings under credit facilities, commercial paper and/or in the capital markets through our shelf registration with the SEC, if needed, to be sufficient to provide liquidity to the company in the short-term and long-term. The company has a five-year senior unsecured credit facility in an aggregate principal amount of $2.5 billion, and in April 2024, we renewed our one-year $500 million uncommitted credit facility. At September 30, 2024, there were no borrowings outstanding under these credit facilities. In January 2024, we issued $2.5 billion of unsecured senior notes for general corporate purposes, including debt repayment, share repurchases and working capital.

IRC Section 174

Beginning in 2022, the Tax Cuts and Jobs Act of 2017 ("TCJA") eliminated the option to deduct research and development expenditures in the current year and requires taxpayers to amortize them over five years pursuant to IRC Section 174. Our 2023 cash from operations were reduced by approximately $500 million for federal estimated tax payments we made related to Section 174. In the future, Congress may consider legislation that would defer the amortization requirement to later years, possibly with retroactive effect. In the meantime, we expect to continue to make additional federal tax payments based on the current Section 174 tax law, which we estimate will reduce our 2024 cash from operations by approximately $350 million. The impact of Section 174 on our cash from operations depends on the amount of research and development expenditures incurred by the company and whether the IRS issues guidance on the provision which differs from our current interpretation, among other things.

Cash Flow Measures

In addition to our cash position, we consider various cash flow measures in capital deployment decision-making, including cash provided by operating activities and free cash flow, a non-GAAP measure described in more detail below.

Operating Cash Flow

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

	Nine Months Ended September 30		%
$ in millions	**2024**	2023	**Change**
Net earnings	**$ 2,910**	$ 2,591	**12 %**
Non-cash items[1]	**302**	474	**(36)%**
Pension and OPB contributions	**(93)**	(108)	**(14)%**
Changes in trade working capital	**(1,346)**	(1,469)	**(8)%**
Other, net	**37**	(43)	**NM**
Net cash provided by operating activities	**$ 1,810**	$ 1,445	**25 %**

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

Year to date 2024 net cash provided by operating activities increased $365 million as compared with the same period in 2023 primarily due to higher net earnings and improved trade working capital, largely driven by lower net federal tax payments, partially offset by the timing of billings and cash collections.

Free Cash Flow

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, and may not be defined and calculated by other companies in the same manner. We use 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 free cash flow:

$ in millions	Nine Months Ended September 30 2024	2023	% Change
Net cash provided by operating activities	**$ 1,810**	$ 1,445	**25 %**
Capital expenditures	**(951)**	(972)	**(2)%**
Free cash flow	**$ 859**	$ 473	**82 %**

Year to date 2024 free cash flow increased $386 million, or 82 percent, as compared with the same period in 2023 principally due to higher net cash provided by operating activities.

Investing Cash Flow

Year to date 2024 net cash used in investing activities increased $139 million, or 17 percent, as compared with the same period in 2023 principally due to $157 million of proceeds received in the prior year from the sale of a minority investment, partially offset by lower capital expenditures largely driven by timing.

Financing Cash Flow

Year to date 2024 net cash used in financing activities decreased $486 million, or 43 percent, as compared with the same period in 2023, primarily due to $1.05 billion of fewer debt repayments and a $500 million increase in proceeds from long-term debt, partially offset by a $919 million increase in share repurchases and a $53 million increase in dividends paid.

Credit Facilities, Commercial Paper and Financial Arrangements - See Note 7 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 5 to the financial statements for further information.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

There have been no material changes to our critical accounting policies and estimates from those discussed in our 2023 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,” “guidance,” “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 2023 Annual Report on Form 10-K and from time to time in our other filings with the SEC. They include:

Industry and Economic Risks

- our dependence on the U.S. government for a substantial portion of our business
- significant delays or reductions in appropriations and/or for our programs, and U.S. government funding and program support more broadly, including as a result of a prolonged continuing resolution and/or government shutdown, and/or related to the global security environment or other global events
- significant delays or reductions in payments as a result of or related to a breach of the debt ceiling

- the use of estimates when accounting for our contracts and the effect of contract cost growth and our efforts to recover or offset such costs and/or changes in estimated contract costs and revenues, including as a result of inflationary pressures, labor shortages, supply chain challenges and/or other macroeconomic factors, and risks related to management's judgments and assumptions in estimating and/or projecting contract revenue and performance which may be inaccurate
- continued pressures from macroeconomic trends, including on costs, schedules, performance and ability to meet expectations
- increased competition within our markets and bid protests

Legal and Regulatory Risks

- investigations, claims, disputes, enforcement actions, litigation (including criminal, civil and administrative) and/or other legal proceedings
- the improper conduct of employees, agents, subcontractors, suppliers, business partners or joint ventures in which we participate, including the impact on our reputation and our ability to do business
- changes in procurement and other laws, SEC, DoD and other rules and regulations, contract terms and practices applicable to our industry, findings by the U.S. government as to our compliance with such requirements, more aggressive enforcement of such requirements and changes in our customers' business practices globally
- environmental matters, including climate change, unforeseen environmental costs and government and third party claims
- unanticipated changes in our tax provisions or exposure to additional tax liabilities

Business and Operational Risks

- cyber and other security threats or disruptions faced by us, our customers or our suppliers and other partners, and changes in related regulations
- our ability to attract and retain a qualified, talented and diverse workforce with the necessary security clearances to meet our performance obligations
- the performance and viability of our subcontractors and suppliers and the availability and pricing of raw materials and components, particularly with inflationary pressures, increased costs, shortages in labor and financial resources, supply chain disruptions, and extended material lead times
- impacts related to health epidemics and pandemics and similar outbreaks
- our exposure to additional risks as a result of our international business, including risks related to global security, geopolitical and economic factors, misconduct, suppliers, laws and regulations
- our ability to innovate, develop new products and technologies, progress and benefit from digital transformation and maintain technologies to meet the needs of our customers
- natural disasters
- 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
- our ability appropriately to exploit and/or protect intellectual property rights

General and Other Risk Factors

- the adequacy and availability of, and ability to obtain, insurance coverage, customer indemnifications or other liability protections
- the future investment performance of plan assets, gains or losses associated with changes in valuation of marketable securities related to our non-qualified benefit plans, 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
- changes in business conditions that could impact business investments and/or recorded goodwill or the value of other long-lived assets, and other potential future liabilities

We urge you 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.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There have been no material changes to our market risks from those discussed in our 2023 Annual Report on Form 10-K.

Item 4. Controls and Procedures

DISCLOSURE CONTROLS AND PROCEDURES

Our principal executive officer (Chair, 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, 2024, 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, 2024, 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 6 and 7 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 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 6 and 7 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 2023 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 2023 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, 2024.

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)
June 29, 2024 - July 26, 2024	283,079	$ 437.69	283,079	$ 1,750
July 27, 2024 - August 23, 2024	185,039	$ 495.77	185,039	1,658
August 24, 2024 - September 27, 2024	182,754	$ 520.80	182,754	1,563
Total	650,872	$ 477.54	650,872	$ 1,563

[1] Excludes commissions paid and other costs of execution, including taxes.

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.

Item 5. Other Information

Consistent with Item 408 of Regulation S-K, the following table reflects Rule 10b5-1 trading arrangements and non-Rule 10b5-1 trading arrangements (as defined in Item 408) entered into by any director or officer (as defined in Rule 16a-1(f) of the Exchange Act) during the quarter ended September 30, 2024.

Name (Title)	Type of Trading Arrangement	Date of Adoption	Expiration Date of Trading Arrangement	Aggregate Number of Securities to Be Purchased or Sold
Kathy J. Warden (Chair, Chief Executive Officer and President)	Rule 10b5-1 Trading Arrangement	August 22, 2024	Until January 31, 2025 or such earlier date upon the completion of all trades under the plan or the occurrence of such other termination events as specified in the plan.	Sale of 15,000 shares of common stock
Benjamin R. Davies (Corporate Vice President and President, Defense Systems)	Rule 10b5-1 Trading Arrangement	August 6, 2024	Until March 14, 2025 or such earlier date upon the completion of all trades under the plan or the occurrence of such other termination events as specified in the plan.	Sale of 1,449 shares of common stock Sale of shares to be received upon payout of 2022 RPSRs and RSRs[(1)]

(1) The aggregate number of shares to be sold will depend, in part, on future company performance.

NORTHROP GRUMMAN CORPORATION

Item 6. Exhibits

*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 Kenneth B. Crews 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 Kenneth B. Crews 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, 2024, 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 23, 2024

NORTHROP GRUMMAN CORPORATION

EXHIBIT 15

LETTER FROM INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

October 23, 2024

The Board of Directors and Shareholders of Northrop Grumman Corporation

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

We are aware that our report dated October 23, 2024, on our review of the interim financial information of Northrop Grumman Corporation and subsidiaries appearing in this Quarterly Report on Form 10-Q for the quarter ended September 30, 2024, is incorporated by reference in Registration Statement Nos. 033-59815, 033-59853, 333-67266, 333-100179, 333-107734, 333-121104, 333-125120, 333-127317, 333-175798, 333-273482, and 333-281008 on Form S-8, 333-270497 on Form S-3, and 333-264549 on Form S-4.

/s/ Deloitte & Touche LLP
McLean, Virginia

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 23, 2024

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

NORTHROP GRUMMAN CORPORATION

EXHIBIT 31.2

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

I, Kenneth B. Crews, 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 23, 2024

/s/ Kenneth B. Crews
Kenneth B. Crews
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, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Kathy J. Warden, Chair, 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 23, 2024

/s/ Kathy J. Warden
Kathy J. Warden
Chair, 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, 2024, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Kenneth B. Crews, 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 23, 2024

/s/ Kenneth B. Crews
Kenneth B. Crews
Corporate Vice President and Chief Financial Officer