

**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 March 31, 2023

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

(State or other jurisdiction of
incorporation or organization)

80-0640649

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

2980 Fairview Park Drive

Falls Church, Virginia

(Address of principal executive offices)

22042

(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 April 24, 2023, 151,859,445 shares of common stock were outstanding.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS AND COMPREHENSIVE INCOME
(Unaudited)

<i>\$ in millions, except per share amounts</i>	Three Months Ended March 31	
	2023	2022
Sales		
Product	\$ 7,271	\$ 6,841
Service	2,030	1,956
Total sales	9,301	8,797
Operating costs and expenses		
Product	5,727	5,380
Service	1,589	1,544
General and administrative expenses	1,038	976
Total operating costs and expenses	8,354	7,900
Operating income	947	897
Other (expense) income		
Interest expense	(129)	(133)
Non-operating FAS pension benefit	132	376
Other, net	48	4
Earnings before income taxes	998	1,144
Federal and foreign income tax expense	156	189
Net earnings	\$ 842	\$ 955
Basic earnings per share	\$ 5.52	\$ 6.12
Weighted-average common shares outstanding, in millions	152.6	156.0
Diluted earnings per share	\$ 5.50	\$ 6.10
Weighted-average diluted shares outstanding, in millions	153.2	156.6
Net earnings (from above)	\$ 842	\$ 955
Other comprehensive income (loss), net of tax		
Change in cumulative translation adjustment	2	(2)
Change in other, net	—	(1)
Other comprehensive income (loss), net of tax	2	(3)
Comprehensive income	\$ 844	\$ 952

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

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CONDENSED CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
(Unaudited)

\$ in millions, except par value

	March 31, 2023	December 31, 2022
Assets		
Cash and cash equivalents	\$ 2,495	\$ 2,577
Accounts receivable, net	2,061	1,511
Unbilled receivables, net	6,215	5,983
Inventoried costs, net	1,115	978
Prepaid expenses and other current assets	924	1,439
Total current assets	12,810	12,488
Property, plant and equipment, net of accumulated depreciation of \$7,448 for 2023 and \$7,258 for 2022	8,838	8,800
Operating lease right-of-use assets	1,779	1,811
Goodwill	17,516	17,516
Intangible assets, net	364	384
Deferred tax assets	234	162
Other non-current assets	2,703	2,594
Total assets	\$ 44,244	\$ 43,755
Liabilities		
Trade accounts payable	\$ 2,136	\$ 2,587
Accrued employee compensation	1,646	2,057
Advance payments and billings in excess of costs incurred	3,211	3,609
Other current liabilities	3,490	3,334
Total current liabilities	10,483	11,587
Long-term debt, net of current portion of \$1,082 for 2023 and \$1,072 for 2022	13,770	11,805
Pension and other postretirement benefit plan liabilities	1,173	1,188
Operating lease liabilities	1,789	1,824
Other non-current liabilities	1,893	2,039
Total liabilities	29,108	28,443
Commitments and contingencies (Note 6)		
Shareholders' equity		
Preferred stock, \$1 par value; 10,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, \$1 par value; 800,000,000 shares authorized; issued and outstanding: 2023—151,950,074 and 2022—153,157,924	152	153
Paid-in capital	—	—
Retained earnings	15,135	15,312
Accumulated other comprehensive loss	(151)	(153)
Total shareholders' equity	15,136	15,312
Total liabilities and shareholders' equity	\$ 44,244	\$ 43,755

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

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CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

<i>\$ in millions</i>	Three Months Ended March 31	
	2023	2022
Operating activities		
Net earnings	\$ 842	\$ 955
Adjustments to reconcile to net cash used in operating activities:		
Depreciation and amortization	298	303
Stock-based compensation	19	18
Deferred income taxes	(205)	(201)
Net periodic pension and OPB income	(76)	(298)
Pension and OPB contributions	(40)	(36)
Changes in assets and liabilities:		
Accounts receivable, net	(550)	(246)
Unbilled receivables, net	(232)	(626)
Inventoried costs, net	(137)	(27)
Prepaid expenses and other assets	(54)	16
Accounts payable and other liabilities	(1,128)	(732)
Income taxes payable, net	576	361
Other, net	(15)	25
Net cash used in operating activities	(702)	(488)
Investing activities		
Capital expenditures	(309)	(244)
Other, net	—	(5)
Net cash used in investing activities	(309)	(249)
Financing activities		
Net proceeds from issuance of long-term debt	1,995	—
Common stock repurchases	(723)	(318)
Cash dividends paid	(270)	(251)
Payments of employee taxes withheld from share-based awards	(47)	(48)
Other, net	(26)	(2)
Net cash provided by (used in) financing activities	929	(619)
Decrease in cash and cash equivalents	(82)	(1,356)
Cash and cash equivalents, beginning of year	2,577	3,530
Cash and cash equivalents, end of period	\$ 2,495	\$ 2,174

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

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

<i>\$ in millions, except per share amounts</i>	Three Months Ended March 31	
	2023	2022
Common stock		
Beginning of period	\$ 153	\$ 156
Common stock repurchased	(1)	(1)
Shares issued for employee stock awards and options	—	1
End of period	152	156
Paid-in capital		
Beginning of period	—	—
End of period	—	—
Retained earnings		
Beginning of period	15,312	12,913
Common stock repurchased	(726)	(315)
Net earnings	842	955
Dividends declared	(265)	(246)
Stock compensation	(28)	(30)
End of period	15,135	13,277
Accumulated other comprehensive loss		
Beginning of period	(153)	(143)
Other comprehensive income (loss), net of tax	2	(3)
End of period	(151)	(146)
Total shareholders' equity	\$ 15,136	\$ 13,287
Cash dividends declared per share	\$ 1.73	\$ 1.57

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

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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.

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

Results reported in these financial statements are not necessarily indicative of results that may be expected for the entire year. These financial statements should be read in conjunction with the information contained in the company’s 2022 Annual Report on Form 10-K. During the first quarter of 2023, we changed the presentation of the components of other comprehensive income (loss), net of tax in the Unaudited condensed consolidated statement of earnings and comprehensive income. Prior period amounts have been recast to conform to current period presentation. This change in presentation had no impact on our previously reported comprehensive income in total.

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*

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.

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

<i>\$ in millions, except per share data</i>	Three Months Ended March 31	
	2023	2022
Revenue	\$ 62	\$ 209
Operating income	46	173
Net earnings ⁽¹⁾	36	137
Diluted earnings per share ⁽¹⁾	0.23	0.87

⁽¹⁾ Based on a 21 percent 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 March 31, 2022, we recorded a \$67 million favorable

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EAC adjustment on the engineering, manufacturing and development (EMD) phase of the B-21 program at Aeronautics Systems. No such adjustments were material to the financial statements during the three months ended March 31, 2023.

Backlog

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

Company backlog as of March 31, 2023 was \$77.5 billion. Of our March 31, 2023 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.

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 months ended March 31, 2023 and 2022 that was included in the contract liability balances at the beginning of each year was \$1.7 billion and \$1.4 billion, respectively.

Disaggregation of Revenue

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

Property, Plant, and Equipment

During the three months ended March 31, 2022, the company received lease incentives for landlord funded leasehold improvements of \$35 million related to a Space Systems real estate lease, which were recorded in PP&E and included in non-cash investing activities. During the three months ended March 31, 2022, the company acquired \$46 million of internal use software through long-term financing directly with the supplier. The software was recorded in PP&E as a non-cash investing activity and the related liability was recorded in long-term debt as a non-cash financing activity. Non-cash investing activities also include capital expenditures incurred but not yet paid of \$43 million and \$56 million as of March 31, 2023 and 2022, respectively.

Accumulated Other Comprehensive Loss

The components of accumulated other comprehensive loss, net of tax, are as follows:

<i>\$ in millions</i>	March 31, 2023	December 31, 2022
Cumulative translation adjustment	\$ (159)	\$ (161)
Other, net	8	8
Total accumulated other comprehensive loss	\$ (151)	\$ (153)

Related Party Transactions

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

Accounting Standards Updates

Accounting standards updates adopted and/or issued, but not effective until after March 31, 2023, are not expected to have a material effect on the company's unaudited condensed consolidated financial position, annual results of operations and/or cash flows.

2. EARNINGS PER SHARE, SHARE REPURCHASES AND DIVIDENDS ON COMMON STOCK**Basic Earnings Per Share**

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

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Diluted Earnings Per Share

Diluted earnings per share include the dilutive effect of awards granted to employees under stock-based compensation plans. The dilutive effect of these securities totaled 0.6 million shares for each of the three month periods ended March 31, 2023 and 2022.

Share Repurchases

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. As of March 31, 2023, \$10 million remained under this share repurchase authorization. By its terms, the 2021 Repurchase Program is set to expire when we have used all authorized funds for repurchases.

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"). By its terms, repurchases under the 2022 Repurchase Program will commence upon completion of the 2021 Repurchase Program and will expire when we have used all authorized funds for repurchases. As of March 31, 2023, there have been no repurchases under the 2022 Repurchase Program, and the company's total outstanding share repurchase authorization was \$2.0 billion.

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 is included as a reduction to Retained earnings on the unaudited condensed consolidated statement of financial position. The final number of shares to be repurchased will be based on the company's daily volume-weighted average share price during the term of the agreement, less a discount. The ASR is expected to be completed in the second quarter of 2023.

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)	
					Three Months Ended March 31	
					2023	2022
January 25, 2021	\$ 3,000	6.9	430.92		1.4	0.9
January 24, 2022	\$ 2,000	—	—		—	—

⁽¹⁾ Includes commissions paid.

Dividends on Common Stock

In May 2022, the company increased the quarterly common stock dividend 10 percent to \$1.73 per share from the previous amount of 1.57 per share.

3. INCOME TAXES

<i>\$ in millions</i>	Three Months Ended March 31	
	2023	2022
Federal and foreign income tax expense	\$ 156	\$ 189
<i>Effective income tax rate</i>	15.6 %	16.5 %

The first quarter 2023 effective tax rate (ETR) decreased to 15.6 percent from 16.5 percent principally due to higher current year ETR benefits associated with research credits and FDII deductions as well as favorable returns on tax-exempt marketable securities, partially offset by higher interest expense on unrecognized tax benefits. The company's first quarter 2023 ETR includes benefits of \$40 million for research credits and \$15 million for foreign

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derived intangible income (FDII). The company's first quarter 2022 ETR included benefits of \$41 million for research credits and \$15 million for FDII.

Taxes receivable, which are included in Prepaid expenses and other current assets in the unaudited condensed consolidated statements of financial position, were \$274 million as of March 31, 2023 and \$850 million as of December 31, 2022.

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 March 31, 2023, we have approximately \$1.7 billion in unrecognized tax benefits, including \$572 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 reasonably possible that within the next 12 months our unrecognized tax benefits related to these matters may increase by approximately \$120 million. Additionally, it is reasonably possible that within the next 12 months, unrecognized tax benefits claimed primarily related to California state apportionment in the company's 2007 to 2016 tax years may decline by up to \$100 million through administrative resolution with the California Franchise Tax Board.

Our current unrecognized tax benefits, which are included in Other current liabilities in the unaudited condensed consolidated statements of financial position, were \$769 million and \$728 million as of March 31, 2023 and December 31, 2022, 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 2014-2020 federal tax returns and refund claims related to its 2007-2016 federal tax returns are currently under Internal Revenue Service (IRS) examination. During the second quarter of 2022, the company's 2014-2016 federal income tax returns and refund claims related to its 2007-2016 federal tax returns reverted back from IRS Appeals to IRS examination for additional factual review.

4. FAIR VALUE OF FINANCIAL INSTRUMENTS

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

The company's derivative portfolio consists primarily of foreign currency forward contracts. Where model-derived valuations are appropriate, the company utilizes the income approach to determine the fair value 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:

<i>\$ in millions</i>	March 31, 2023				December 31, 2022			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Financial Assets								
Marketable securities	\$ 316	\$ —	\$ 8	\$ 324	\$ 310	\$ 1	\$ 8	\$ 319
Marketable securities valued using NAV				10				13
Total marketable securities	316	—	8	334	310	1	8	332
Derivatives	—	5	—	5	—	7	—	7

The notional value of the company's foreign currency forward contracts at March 31, 2023 and December 31, 2022 was \$237 million and \$221 million, respectively. The portion of notional value designated as a cash flow hedge at March 31, 2023 and December 31, 2022 was \$88 million and \$87 million, respectively.

The derivative fair values and related unrealized gains/losses at March 31, 2023 and December 31, 2022 were not material.

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There were no transfers of financial instruments into or out of Level 3 of the fair value hierarchy during the three months ended March 31, 2023.

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

Long-term Debt

The estimated fair value of long-term debt was \$14.4 billion and \$12.1 billion as of March 31, 2023 and December 31, 2022, 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 February 2023, the company issued \$2.0 billion of unsecured senior notes for general corporate purposes, which may include debt repayment (including our 3.25% senior notes due in 2023), 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 2033 Notes and the 2053 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.

5. INVESTIGATIONS, CLAIMS AND LITIGATION

The company is engaged in remediation activities relating to environmental conditions allegedly resulting from historic operations at the former United States Navy and Grumman facilities in Bethpage, New York. For over 20 years, the company has worked closely with the United States Navy, the United States Environmental Protection Agency, the New York State Department of Environmental Conservation (NYSDEC), the New York State Department of Health and other federal, state and local governmental authorities, to address legacy environmental conditions in Bethpage. In December 2019, the State of New York issued an Amended Record of Decision seeking to impose additional remedial requirements beyond measures the company previously had been taking. In December 2020, the parties reached a tentative agreement regarding the steps the company would take to implement the State's Amended Record of Decision and to resolve certain potential other claims, including for natural resource damages. On September 22, 2021, the State of New York issued for public comment a new consent decree reflecting the agreement. On December 7, 2021, the public comment period closed. On August 3, 2022, the court approved the consent decree. We have also reached agreements with the Department of Defense and the Bethpage and South Farmingdale Water Districts to resolve claims involving these parties. Those agreements have also been approved by the courts as necessary. The company continues to be involved in related disputes with the Towns of Oyster Bay and Hempstead.

We have incurred, and expect to continue to incur, as included in Note 6, substantial remediation costs related to the legacy Bethpage environmental conditions. 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 addition to disputes and legal proceedings related to environmental conditions and remediation at the site, we are a party to various individual lawsuits and a putative class action alleging personal injury and property damage in the Eastern District of New York. The filed individual lawsuits have been stayed, pending a court decision on class certification. 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.

In June 2018, the FTC issued a Decision and Order enabling the company's acquisition of OATK to proceed and providing generally for the company to continue to make solid rocket motors available to competing missile primes on a non-discriminatory basis. The company has taken and continues to take robust actions to help ensure compliance with the terms of the Order. Similarly, the Compliance Officer, appointed under the Order, and the FTC have taken and continue to take various actions to oversee compliance. In October 2019, the company received a civil investigative demand (CID) from the FTC requesting certain information relating to a potential issue regarding the company's compliance with the Order in connection with a then pending missile competition. The company promptly provided information in response to the request. In late 2021, the company resumed discussions with staff at the FTC regarding our response and their views on compliance issues. More recently, the company received and is

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responding to a follow-on CID. We cannot predict the outcome of those discussions, but we do not believe they are likely to have a material adverse effect on the company's unaudited condensed consolidated financial position as of March 31, 2023, or its annual results of operations and/or cash flows. We believe the company has been and continues to be in compliance with the Order.

The company received from the U.S. Department of Justice (DOJ) a criminal subpoena on December 9, 2022, and a civil investigative demand 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 CAS pension expense, which we have previously discussed in Note 6 below. The company is engaging with the government and responding to the requests. We cannot at this point predict the outcome of this matter.

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 March 31, 2023, or its annual results of operations and/or cash flows.

6. COMMITMENTS AND CONTINGENCIES

U.S. Government Cost Claims and Contingencies

From time to time, the company is advised of claims by the U.S. government concerning certain potential disallowed costs, plus, at times, penalties and interest. When such findings are presented, the company and U.S. government representatives engage in discussions to enable the company to evaluate the merits of these claims, as well as to assess the amounts being claimed. Where appropriate, provisions are made to reflect the company's estimated exposure for such potential disallowed costs. Such provisions are reviewed periodically using the most recent information available. The company believes it has adequately reserved for disputed amounts that are probable and reasonably estimable, and that the outcome of any such matters would not have a material adverse effect on its unaudited condensed consolidated financial position as of March 31, 2023, 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 have continued to exchange correspondence and engage with DCMA and DoD on this matter, including responding to requests for and providing additional information. As noted in Note 5 above, the company received from the the U.S. Department of Justice (DOJ) a criminal subpoena on December 9, 2022 and a civil investigative demand on February 2, 2023, both seeking information that appears related to the interest rate assumptions at issue in our discussions with DCMA. The company is engaging with the government and responding to the requests. We cannot at this point predict the outcome of this matter. The company is also continuing to engage with DCMA/DoD. As previously described, 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.

B-21 Low-Rate Initial Production Options

In 2015, the U.S. Air Force awarded to Northrop Grumman the B-21 contract, including a base contract for engineering, manufacturing, and design (EMD) and five low-rate initial production (LRIP) options. 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 be awarded and executed over the next decade. In the first quarter of 2023, we reviewed our estimated cost to complete the LRIP phase of the B-21 program. Principally due to the company's estimate of the impact macroeconomic factors may have on our cost to complete the LRIP options, as well as ongoing discussions with our suppliers and our customer, we continue to believe it is reasonably possible one or more of the LRIP options could be performed at a loss and the range of such loss across the five LRIP options is between \$0 and \$1.2 billion. As we

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do not currently believe a loss is probable on any of the LRIP options, we have not recognized any such loss in our financial results for the period ended March 31, 2023.

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 March 31, 2023 and December 31, 2022:

<i>\$ in millions</i>	Accrued Costs ⁽¹⁾⁽²⁾	Reasonably Possible Future Costs in Excess of Accrued Costs ⁽²⁾	Deferred Costs ⁽³⁾
March 31, 2023	\$ 570	\$ 357	\$ 498
December 31, 2022	565	353	486

⁽¹⁾ As of March 31, 2023, \$200 million is recorded in Other current liabilities and \$370 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 March 31, 2023, \$181 million is deferred in Prepaid expenses and other current assets and \$317 million is deferred in Other non-current assets. These amounts 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 March 31, 2023, 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 March 31, 2023, there were \$367 million of stand-by letters of credit and guarantees and \$79 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 March 31, 2023, 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 March 31, 2023, 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 March 31, 2023, the company was in compliance with all covenants under its credit agreements.

NORTHROP GRUMMAN CORPORATION
7. RETIREMENT BENEFITS

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

<i>\$ in millions</i>	Three Months Ended March 31			
	Pension Benefits		OPB	
	2023	2022	2023	2022
Components of net periodic benefit cost (benefit)				
Service cost	\$ 59	\$ 92	\$ 1	\$ 2
Interest cost	392	284	17	12
Expected return on plan assets	(524)	(660)	(21)	(28)
Net periodic benefit cost (benefit)	\$ (73)	\$ (284)	\$ (3)	\$ (14)

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:

<i>\$ in millions</i>	Three Months Ended March 31	
	2023	2022
Defined benefit pension plans	\$ 29	\$ 26
OPB plans	11	10
Defined contribution plans	215	199

8. STOCK COMPENSATION PLANS AND OTHER COMPENSATION ARRANGEMENTS
Stock Awards

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

<i>in millions</i>	Three Months Ended March 31	
	2023	2022
RSRs granted	0.1	0.1
RPSRs granted	0.1	0.2
Grant date aggregate fair value	\$ 100	\$ 88

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

Cash Awards

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

<i>\$ in millions</i>	Three Months Ended March 31	
	2023	2022
Minimum aggregate payout amount	\$ 34	\$ 32
Maximum aggregate payout amount	191	182

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.

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9. SEGMENT INFORMATION

The following table presents sales and operating income by segment:

<i>\$ in millions</i>	Three Months Ended March 31	
	2023	2022
Sales		
Aeronautics Systems	\$ 2,515	\$ 2,703
Defense Systems	1,376	1,283
Mission Systems	2,563	2,497
Space Systems	3,350	2,855
Intersegment eliminations	(503)	(541)
Total sales	9,301	8,797
Operating income		
Aeronautics Systems	237	307
Defense Systems	160	155
Mission Systems	360	385
Space Systems	313	261
Intersegment eliminations	(68)	(71)
Total segment operating income	1,002	1,037
FAS/CAS operating adjustment	(21)	(46)
Unallocated corporate expense	(34)	(94)
Total operating income	\$ 947	\$ 897

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 U.S. Government Cost Accounting Standards (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

<i>\$ in millions</i>	Three Months Ended March 31			
	2023		2022	
	\$	% ⁽³⁾	\$	% ⁽³⁾
Aeronautics Systems				
U.S. government ⁽¹⁾	\$ 2,108	84 %	\$ 2,292	85 %
International ⁽²⁾	331	13 %	343	13 %
Other customers	11	— %	3	— %
Intersegment sales	65	3 %	65	2 %
Aeronautics Systems sales	2,515	100 %	2,703	100 %
Defense Systems				
U.S. government ⁽¹⁾	803	59 %	775	60 %
International ⁽²⁾	388	28 %	293	23 %
Other customers	16	1 %	16	1 %
Intersegment sales	169	12 %	199	16 %
Defense Systems sales	1,376	100 %	1,283	100 %
Mission Systems				
U.S. government ⁽¹⁾	1,935	75 %	1,794	72 %
International ⁽²⁾	376	15 %	433	17 %
Other customers	15	1 %	24	1 %
Intersegment sales	237	9 %	246	10 %
Mission Systems sales	2,563	100 %	2,497	100 %
Space Systems				
U.S. government ⁽¹⁾	3,166	95 %	2,708	94 %
International ⁽²⁾	71	2 %	72	3 %
Other customers	81	2 %	44	2 %
Intersegment sales	32	1 %	31	1 %
Space Systems sales	3,350	100 %	2,855	100 %
Total				
U.S. government ⁽¹⁾	8,012	86 %	7,569	86 %
International ⁽²⁾	1,166	13 %	1,141	13 %
Other customers	123	1 %	87	1 %
Total Sales	\$ 9,301	100 %	\$ 8,797	100 %

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

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

⁽³⁾ Percentages calculated based on total segment sales.

NORTHROP GRUMMAN CORPORATION
Sales by Contract Type

<i>\$ in millions</i>	Three Months Ended March 31			
	2023		2022	
	\$	% ⁽¹⁾	\$	% ⁽¹⁾
Aeronautics Systems				
Cost-type	\$ 1,231	50 %	\$ 1,276	48 %
Fixed-price	1,219	50 %	1,362	52 %
Intersegment sales	65		65	
Aeronautics Systems sales	2,515		2,703	
Defense Systems				
Cost-type	423	35 %	336	31 %
Fixed-price	784	65 %	748	69 %
Intersegment sales	169		199	
Defense Systems sales	1,376		1,283	
Mission Systems				
Cost-type	961	41 %	835	37 %
Fixed-price	1,365	59 %	1,416	63 %
Intersegment sales	237		246	
Mission Systems sales	2,563		2,497	
Space Systems				
Cost-type	2,446	74 %	1,983	70 %
Fixed-price	872	26 %	841	30 %
Intersegment sales	32		31	
Space Systems sales	3,350		2,855	
Total				
Cost-type	5,061	54 %	4,430	50 %
Fixed-price	4,240	46 %	4,367	50 %
Total Sales	\$ 9,301		\$ 8,797	

⁽¹⁾ Percentages calculated based on external customer sales.

NORTHROP GRUMMAN CORPORATION
Sales by Geographic Region

<i>\$ in millions</i>	Three Months Ended March 31			
	2023		2022	
	\$	% ⁽²⁾	\$	% ⁽²⁾
Aeronautics Systems				
United States	\$ 2,119	87 %	\$ 2,295	87 %
Asia/Pacific	147	6 %	190	7 %
Europe	174	7 %	137	5 %
All other ⁽¹⁾	10	— %	16	1 %
Intersegment sales	65		65	
Aeronautics Systems sales	2,515		2,703	
Defense Systems				
United States	819	67 %	791	73 %
Asia/Pacific	117	10 %	105	10 %
Europe	128	11 %	101	9 %
All other ⁽¹⁾	143	12 %	87	8 %
Intersegment sales	169		199	
Defense Systems sales	1,376		1,283	
Mission Systems				
United States	1,950	83 %	1,818	81 %
Asia/Pacific	92	4 %	139	6 %
Europe	200	9 %	225	10 %
All other ⁽¹⁾	84	4 %	69	3 %
Intersegment sales	237		246	
Mission Systems sales	2,563		2,497	
Space Systems				
United States	3,247	98 %	2,752	98 %
Asia/Pacific	20	1 %	29	1 %
Europe	45	1 %	40	1 %
All other ⁽¹⁾	6	— %	3	— %
Intersegment sales	32		31	
Space Systems sales	3,350		2,855	
Total				
United States	8,135	87 %	7,656	87 %
Asia/Pacific	376	4 %	463	5 %
Europe	547	6 %	503	6 %
All other ⁽¹⁾	243	3 %	175	2 %
Total Sales	\$ 9,301		\$ 8,797	

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

⁽²⁾ Percentages calculated based on external customer sales.

10. SUBSEQUENT EVENT

In April 2023, the company reached an agreement to sell its minority investment in an international business. The transaction, which is subject to final government approvals and closing conditions, is expected to be completed later this year. We currently expect to recognize a pre-tax gain of approximately \$100 million when the transaction closes.

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 March 31, 2023, and the related condensed consolidated statements of earnings and comprehensive income, cash flows, and changes in shareholders' equity for the three-month periods ended March 31, 2023 and 2022, and the related notes (collectively referred to as the "interim financial information"). Based on our review, we are not aware of any material modifications that should be made to the accompanying interim financial information for it to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries as of December 31, 2022, 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 25, 2023, 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, 2022, is fairly stated, in all material respects, in relation to the audited consolidated statement of financial position from which it has been derived.

Basis for Review Results

This interim financial information is the responsibility of the Company's management. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

/s/ Deloitte & Touche LLP
McLean, Virginia
April 26, 2023

NORTHROP GRUMMAN CORPORATION**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 2022 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 global events, including violence and unrest. The same is true for our suppliers and other business partners.

The conflict in Ukraine has increased global tensions and instability, highlighted threats and increased global demand, as well as further disrupted global supply chains and added costs. We have experienced a modest increase in demand for certain of our goods and services directly and indirectly related to the conflict in the Ukraine. We also have experienced a slight disruption to some of our programs and supply chain, including unanticipated cost growth, as a result of the conflict in Ukraine and economic sanctions. However, we do not have sizable business dealings in Russia or Ukraine, and do not anticipate significant adverse impacts directly from the ongoing conflict.

More broadly, the conflict in Ukraine and threats elsewhere have heightened tensions and highlighted security requirements globally, especially in Europe and the Pacific region, as well as the U.S. We have started to see, and expect to continue to see, increased demand for defense products and services from allies and partner nations, particularly in those areas. We are actively exploring both opportunities and risks.

Global Health Environment

Since at least March 2020, when it was first characterized as a global pandemic, COVID-19 has dramatically impacted and continues to impact the global health and economic environments, including millions of confirmed cases and deaths, business slowdowns or shutdowns, labor shortfalls, supply chain challenges, regulatory challenges, inflationary pressures and market volatility. We discussed in some detail in our Annual Reports on Form 10-K for the fiscal years ended December 31, 2020, 2021, and 2022, and subsequent SEC filings, the pandemic, its impacts and risks, and actions taken up to the time of each filing. In this Form 10-Q, we provide a further update.

In 2022, direct impacts of the COVID-19 pandemic on our business generally declined, and they have remained limited in the first quarter of 2023. While we cannot predict the future course of the pandemic or its consequences, we are not currently assuming significant additional direct COVID-19 related impacts on our business.

The company continues to work to monitor and address the pandemic, including its impact on our company, our employees, our customers, our suppliers and our communities. Our goals have been, and continue to be, to keep our employees safe, to lessen the potential adverse impacts, both health and economic, and to continue to position the company for long-term success. Like the communities in which we operate, our actions have varied, and will continue to vary, depending on the spread of COVID-19 and other illnesses, applicable government requirements, and the needs of our stakeholders.

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Global Economic Environment

In part as a result of the COVID-19 pandemic, the global economic environment has experienced, and continues to experience, extraordinary challenges, including high rates of inflation and inflationary pressures; widespread delays and disruptions in supply chains; workforce challenges, including labor shortages (especially in critical skill areas); and market volatility. These macroeconomic factors have contributed, and we expect will continue to contribute, to increased costs, delays 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 some of the challenges caused by the current macroeconomic environment on our business, including by taking steps to support our suppliers and small businesses and enhancing our workforce through extensive hiring, development and retention efforts. However, the broader macroeconomic environment, including inflationary pressures and supply chain challenges, continued adversely to affect the company's results for the quarter ended March 31, 2023. We cannot clearly predict how long these macroeconomic challenges will continue, how they will change over time, or what additional resources will be available, but we expect to see this challenging macroeconomic environment continue adversely to impact the global economy, our customers, our industry and our company in 2023.

In addition, increased interest rates, raising the cost of borrowing for governments, 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

On December 23, 2022, the President signed the National Defense Authorization Act (NDAA) for FY 2023, which supports approximately \$858 billion in FY 2023 funding for national defense, \$817 billion of which is for the DoD. In addition, the FY 2023 NDAA grants DoD discretionary authority under limited circumstances to provide extraordinary relief to contractors to address certain inflationary impacts, although the DoD has not yet exercised this authority.

On December 29, 2022, the President signed an Omnibus appropriations act for FY 2023 that provided \$858 billion for national defense programs, approximately \$45 billion more than the Administration initially requested for FY 2023 and approximately \$76 billion or 10 percent higher than what was appropriated in FY 2022. The Pentagon's portion of the overall national defense budget for FY 2023 is \$817 billion. It includes up to \$1 billion for extraordinary relief in FY 2023.

On March 9, 2023, the President proposed his budget for FY 2024 with \$886 billion for national defense programs, which included \$842 billion for the DoD, an increase of 3 percent, or \$25 billion, above the FY 2023 enacted levels. The request does not include supplemental defense spending associated with the conflict in Ukraine.

In addition to the U.S. national security budget detailed above, the U.S. has pledged over \$100 billion in security assistance to address the ongoing conflict in Ukraine across FY 2022 and FY 2023, including approximately \$50 billion in DoD spending. Assistance includes transfers of weapons systems from U.S. inventories, orders for production of additional weapons systems, both to backfill U.S. stockpiles and for Ukraine directly, and assistance from U.S. capabilities.

It is difficult to predict the specific course of future defense budgets. Current and future requirements related to the conflict in Ukraine, threats in the Pacific regions and other security priorities, as well as global inflation, the national debt, the costs of the pandemic 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. Current tensions within Congress and the wider U.S. political environment may also impact defense budgets, issues related to the national debt, and government spending more broadly.

We believe the current global security environment highlights the significant national security threats to our nation and our allies, and the need for strong deterrence and a robust defense capability. We believe our capabilities, particularly in space, C4ISR, missile defense, battle management, advanced weapons, 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.

In January 2023, the statutory debt ceiling was reached, and the Treasury Department reported that it began taking "extraordinary measures" to finance the government and avoid a breach of the debt ceiling. Issues related to the debt

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ceiling continue to be a subject of considerable debate. If the existing debt ceiling is not raised, we may be required to continue to perform for some period of time on certain of our U.S. Government contracts even if the U.S. Government is unable to make timely payments. An extended debt ceiling breach could negatively affect the availability and timing of funding for our programs, including the timely payment of our billings, and could delay or otherwise impact purchasing decisions and/or program execution by the U.S. Government. We expect statutory action will be needed in 2023 to increase or suspend the debt ceiling.

More broadly, we have seen, and expect to continue to see, an accelerated pace of new rulemakings, new and expanded uses of existing authorities, changing legal rulings and landscapes, and aggressive enforcement actions. These changes and the accelerated pace of change, not only impose additional obligations and risk, but also create further uncertainty regarding our operating environment.

The political environment, federal budget, debt ceiling and regulatory environment are expected to continue to be the subject of considerable debate, especially in light of the ongoing conflict in Ukraine and heightened global tensions, the inflationary environment and political tensions. The results of those debates could have material impacts on defense spending broadly and the company's programs in particular. We anticipate that the broader macroeconomic environment, with ongoing inflationary pressures, labor challenges, and supply chain disruption, among other considerations, will continue to play a significant role in the outcome of these debates and, in turn, on our industry and company.

CONSOLIDATED OPERATING RESULTS

Selected financial highlights are presented in the table below:

<i>\$ in millions, except per share amounts</i>	Three Months Ended March 31		% Change
	2023	2022	
Sales	\$ 9,301	\$ 8,797	6 %
Operating costs and expenses	8,354	7,900	6 %
<i>Operating costs and expenses as a % of sales</i>	89.8 %	89.8 %	
Operating income	947	897	6 %
<i>Operating margin rate</i>	10.2 %	10.2 %	
Federal and foreign income tax expense	156	189	(17)%
<i>Effective income tax rate</i>	15.6 %	16.5 %	
Net earnings	842	955	(12)%
Diluted earnings per share	\$ 5.50	\$ 6.10	(10)%

Sales

First quarter 2023 sales increased \$504 million, or 6 percent, due to higher sales at Space Systems, Defense Systems and Mission Systems, partially offset by lower sales at Aeronautics Systems. First quarter 2023 sales reflect continued strong demand.

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

Operating Income and Margin Rate

First quarter 2023 operating income increased \$50 million, or 6 percent, due to lower unallocated corporate expense and a reduction in the FAS/CAS operating adjustment, partially offset by lower segment operating income. First quarter 2023 operating margin rate of 10.2 percent was comparable to the prior year period.

First quarter 2023 G&A costs as a percentage of sales of 11.2 percent was comparable with the prior year period and reflects continued investments for future business opportunities.

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.

NORTHROP GRUMMAN CORPORATION**Federal and Foreign Income Taxes**

The first quarter 2023 ETR decreased to 15.6 percent from 16.5 percent principally due to higher current year ETR benefits associated with research credits and FDII deductions as well as favorable returns on tax-exempt marketable securities, partially offset by higher interest expense on unrecognized tax benefits. See Note 3 to the financial statements for additional information.

Net Earnings

First quarter 2023 net earnings decreased \$113 million, or 12 percent, primarily due to a \$244 million reduction in the non-operating FAS pension benefit, partially offset by higher operating income, a \$34 million increase in returns on marketable securities related to our non-qualified benefit plans, and a lower effective tax rate.

Diluted Earnings Per Share

First quarter 2023 diluted earnings per share decreased 10 percent, reflecting lower net earnings and a 2 percent reduction in weighted-average diluted shares outstanding.

SEGMENT OPERATING RESULTS**Basis of Presentation**

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

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

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).

NORTHROP GRUMMAN CORPORATION
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.

<i>\$ in millions</i>	Three Months Ended March 31		% Change
	2023	2022	
Operating income	\$ 947	\$ 897	6 %
Operating margin rate	10.2 %	10.2 %	
Reconciliation to segment operating income:			
CAS pension expense	(38)	(46)	(17)%
FAS pension service expense	59	92	(36)%
FAS/CAS operating adjustment	21	46	(54)%
Intangible asset amortization and PP&E step-up depreciation	30	60	(50)%
Other unallocated corporate expense	4	34	(88)%
Unallocated corporate expense	34	94	(64)%
Segment operating income	\$ 1,002	\$ 1,037	(3)%
Segment operating margin rate	10.8 %	11.8 %	

First quarter 2023 segment operating income decreased \$35 million, or 3 percent, and includes an approximately \$50 million reduction related to higher projected CAS pension costs on the company's fixed price contracts. Segment operating margin rate decreased to 10.8 percent from 11.8 percent and reflects lower operating margin rates at Aeronautics Systems, Mission Systems and Defense Systems, partially offset by a higher operating margin rate at Space Systems.

FAS/CAS Operating Adjustment

First quarter 2023 FAS/CAS operating adjustment decreased primarily due to lower FAS pension service expense resulting from changes in certain actuarial assumptions as of December 31, 2022.

Unallocated Corporate Expense (Income)

The decrease in unallocated corporate expense is primarily due to lower intangible asset amortization and PP&E step-up depreciation as well as a reduction in unallowable corporate costs.

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; the aggregate amounts are presented in the table below:

<i>\$ in millions</i>	Three Months Ended March 31	
	2023	2022
Favorable EAC adjustments	\$ 326	\$ 357
Unfavorable EAC adjustments	(280)	(184)
Net EAC adjustments	\$ 46	\$ 173

NORTHROP GRUMMAN CORPORATION

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

<i>\$ in millions</i>	Three Months Ended March 31	
	2023	2022
Aeronautics Systems	\$ (6)	\$ 103
Defense Systems	27	25
Mission Systems	57	57
Space Systems	(32)	(8)
Eliminations	—	(4)
Net EAC adjustments	\$ 46	\$ 173

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

NORTHROP GRUMMAN CORPORATION

AERONAUTICS SYSTEMS

<i>\$ in millions</i>	Three Months Ended March 31		% Change
	2023	2022	
Sales	\$ 2,515	\$ 2,703	(7)%
Operating income	237	307	(23)%
Operating margin rate	9.4 %	11.4 %	

Sales

First quarter 2023 sales decreased \$188 million, or 7 percent, due to lower volume in both Manned Aircraft and Autonomous Systems, including E-2, F-35, F/A-18 and Global Hawk, as well as lower volume on the Joint Surveillance and Target Attack Radar System (JSTARS) program as it nears completion. These decreases were partially offset by higher volume on restricted programs.

Operating Income

First quarter 2023 operating income decreased \$70 million, or 23 percent, due to a lower operating margin rate and lower sales. Operating margin rate decreased to 9.4 percent from 11.4 percent primarily due to lower net EAC adjustments. The prior year period includes a \$67 million favorable EAC adjustment on the engineering, manufacturing and development (EMD) phase of the B-21 program.

DEFENSE SYSTEMS

<i>\$ in millions</i>	Three Months Ended March 31		% Change
	2023	2022	
Sales	\$ 1,376	\$ 1,283	7 %
Operating income	160	155	3 %
Operating margin rate	11.6 %	12.1 %	

Sales

First quarter 2023 sales increased \$93 million, or 7 percent, due to higher volume in both business areas. Battle Management & Missile Systems sales increased primarily due to higher volume on the Integrated Air and Missile Defense Battle Command System (IBCS) program and ramp-up on the 120mm Tank Training ammunition program. Mission Readiness sales increased primarily due to higher volume on an international training program, partially offset by wind-down of the JSTARS program.

Operating Income

First quarter 2023 operating income increased \$5 million, or 3 percent, due to higher sales, partially offset by a lower operating margin rate. Operating margin rate decreased to 11.6 percent from 12.1 percent primarily due to lower net EAC adjustments at Battle Management & Missile Systems, partially offset by improved performance at Mission Readiness.

MISSION SYSTEMS

<i>\$ in millions</i>	Three Months Ended March 31		% Change
	2023	2022	
Sales	\$ 2,563	\$ 2,497	3 %
Operating income	360	385	(6)%
Operating margin rate	14.0 %	15.4 %	

NORTHROP GRUMMAN CORPORATION**Sales**

First quarter 2023 sales increased \$66 million, or 3 percent, and reflects higher volume in all four business areas, including higher restricted sales in the Networked Information Solutions business area as well as higher volume on the Surface Electronic Warfare Improvement Program (SEWIP), marine systems programs and infrared countermeasure programs. These increases were partially offset by lower volume on the Ground/Air Task Oriented Radar (G/ATOR) program and airborne radar programs, including F-35.

Operating Income

First quarter 2023 operating income decreased \$25 million, or 6 percent, due to a lower operating margin rate, partially offset by higher sales. Operating margin rate decreased to 14.0 percent from 15.4 percent principally due to changes in contract mix toward more cost-type content and a loss recognized in connection with an unconsolidated joint venture.

SPACE SYSTEMS

<i>\$ in millions</i>	Three Months Ended March 31		%
	2023	2022	Change
Sales	\$ 3,350	\$ 2,855	17 %
Operating income	313	261	20 %
<i>Operating margin rate</i>	9.3 %	9.1 %	

Sales

First quarter 2023 sales increased \$495 million, or 17 percent, due to higher volume in both business areas. Launch & Strategic Missiles sales increased primarily due to ramp-up on development programs, including a \$161 million increase on the Ground Based Strategic Deterrent (GBSD) program and higher volume on the Next Generation Interceptor (NGI) and Ground-based Midcourse Defense Weapon Systems (GWS) programs. Sales in the Space business area increased primarily due to higher volume on restricted programs, the Next-Generation Overhead Persistent Infrared Polar (NextGen Polar) program and the Space Development Agency (SDA) Tranche 1 Tracking Layer program. These increases were partially offset by lower volume for Commercial Resupply Services (CRS) missions.

Operating Income

First quarter 2023 operating income increased \$52 million, or 20 percent, due to higher sales and a higher operating margin rate. Operating margin rate increased to 9.3 percent from 9.1 percent primarily due to a higher operating margin rate at Launch & Strategic Missiles, including the sale of a license to a customer, partially offset by lower net EAC adjustments in the Space business area.

NORTHROP GRUMMAN CORPORATION
PRODUCT AND SERVICE ANALYSIS

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

<i>\$ in millions</i>	Three Months Ended March 31			
	2023		2022	
Segment Information:	Sales	Operating Costs and Expenses	Sales	Operating Costs and Expenses
Aeronautics Systems				
Product	\$ 1,907	\$ 1,740	\$ 2,045	\$ 1,804
Service	543	480	593	533
Intersegment eliminations	65	58	65	59
Total Aeronautics Systems	2,515	2,278	2,703	2,396
Defense Systems				
Product	678	598	610	527
Service	529	468	474	425
Intersegment eliminations	169	150	199	176
Total Defense Systems	1,376	1,216	1,283	1,128
Mission Systems				
Product	1,815	1,563	1,762	1,509
Service	511	441	489	396
Intersegment eliminations	237	199	246	207
Total Mission Systems	2,563	2,203	2,497	2,112
Space Systems				
Product	2,871	2,609	2,424	2,195
Service	447	400	400	371
Intersegment eliminations	32	28	31	28
Total Space Systems	3,350	3,037	2,855	2,594
Segment Totals				
Total Product	\$ 7,271	\$ 6,510	\$ 6,841	\$ 6,035
Total Service	2,030	1,789	1,956	1,725
Total Segment⁽¹⁾	\$ 9,301	\$ 8,299	\$ 8,797	\$ 7,760

⁽¹⁾ A reconciliation of segment operating income to total operating income is included in "Segment Operating Results."

NORTHROP GRUMMAN CORPORATION**Product Sales and Costs**

First quarter 2023 product sales increased \$430 million, or 6 percent, primarily due to an increase in product sales at Space Systems, partially offset by a decrease in product sales at Aeronautics Systems. The increase at Space Systems was driven by ramp-up on development programs, including GBSD and NGI, and higher volume on restricted programs, GWS, NextGen Polar and the SDA Tranche 1 Tracking Layer program. The decrease at Aeronautics Systems was driven by lower volume on the E-2, F-35, and Global Hawk programs.

First quarter 2023 product costs increased \$475 million, or 8 percent, consistent with the higher product sales described above and reflect a lower operating margin rate principally due to lower net EAC adjustments on Aeronautics Systems production programs.

Service Sales and Costs

First quarter 2023 service sales increased \$74 million, or 4 percent, primarily due to an increase in service sales at Defense Systems and Space Systems, partially offset by a decrease in service sales at Aeronautics Systems. The increase at Defense Systems was driven by higher volume on an international training program. The increase at Space Systems was principally due to higher volume on the Specialized Warfighter Development Contract (SWDC) program, restricted programs and the ICBM Ground Subsystem Support program. The decrease at Aeronautics Systems was driven by lower volume on the JSTARS program as it nears completion.

First quarter 2023 service costs increased \$64 million, or 4 percent, consistent with the higher service sales described above.

BACKLOG

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

Backlog consisted of the following as of March 31, 2023 and December 31, 2022:

<i>\$ in millions</i>	March 31, 2023			December 31, 2022		% Change in 2023
	Funded	Unfunded	Total Backlog	Total Backlog		
Aeronautics Systems	\$ 9,904	\$ 8,658	\$ 18,562	\$ 19,397		(4)%
Defense Systems	5,933	1,431	7,364	7,515		(2)%
Mission Systems	11,157	3,440	14,597	13,875		5%
Space Systems	12,302	24,648	36,950	37,956		(3)%
Total backlog	\$ 39,296	\$ 38,177	\$ 77,473	\$ 78,743		(2)%

New Awards

First quarter 2023 net awards totaled \$8.0 billion and backlog totaled \$77.5 billion. Significant first quarter new awards include \$3.2 billion for restricted programs (primarily at Mission Systems, Aeronautics Systems, and Space Systems), \$0.3 billion for ammunition programs at Defense Systems, \$0.3 billion for the Multi-Role Electronically Scanned Array (MESA) program and \$0.2 billion for SEWIP.

LIQUIDITY AND CAPITAL RESOURCES

We are focused on the efficient conversion of operating income into cash and 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 March 31, 2023, we had \$2.5 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 2023, we renewed our one-year \$500 million uncommitted

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credit facility. At March 31, 2023, there were no borrowings outstanding under these credit facilities. In February 2023, we issued \$2.0 billion of unsecured senior notes. We intend to use those proceeds for general corporate purposes, which may include debt repayment (including our 3.25% senior notes due in 2023), share repurchases and working capital.

COVID-19 and the CARES Act

Section 3610 of the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") authorized the government to reimburse qualifying contractors for certain costs of providing paid leave to employees as a result of COVID-19. The company has sought and may continue to seek recovery for certain COVID-19-related costs under Section 3610 of the CARES Act and through our contract provisions, though it is unclear what funds will be available and how much we will be able to recover. In addition, during 2020, the DoD increased the rate for certain progress payments from 80 percent to 90 percent for costs incurred and work performed on relevant contracts. Recently, the DoD has indicated it may revert to the 80 percent progress payment rate on prospectively awarded contracts. We expect this reversion may occur during 2023, but that it would not have a material impact on our 2023 cash from operations.

Internal Revenue Code (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 2022 cash from operations were reduced by approximately \$900 million for federal 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 2023 cash from operations by approximately \$720 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 adjusted 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:

<i>\$ in millions</i>	Three Months Ended March		% Change
	2023	2022	
Net earnings	\$ 842	\$ 955	(12)%
Non-cash items ⁽¹⁾	36	(178)	(120)%
Pension and OPB contributions	(40)	(36)	11%
Changes in trade working capital	(1,525)	(1,254)	22%
Other, net	(15)	25	(160)%
Net cash used in operating activities	\$ (702)	\$ (488)	44%

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

First quarter 2023 net cash used in operating activities increased \$214 million as compared with the same period in 2022 principally due to increases in trade working capital, largely related to the timing of vendor payments. The net use of cash during the first quarter is consistent with the company's historical timing of operating cash flows, which are generally more heavily weighted towards the second half of the year.

Adjusted Free Cash Flow

Adjusted free cash flow, as reconciled in the table below, is a non-GAAP measure defined as net cash provided by or used in operating activities, less capital expenditures, plus proceeds from the sale of equipment to a customer (not otherwise included in net cash provided by or used in operating activities) and the after-tax impact of discretionary pension contributions. Adjusted free cash flow includes proceeds from the sale of equipment to a customer as such proceeds were generated in a customer sales transaction. It also includes the after-tax impact of discretionary

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pension contributions for consistency and comparability of financial performance. This measure may not be defined and calculated by other companies in the same manner. We use adjusted free cash flow as a key factor in our planning for, and consideration of, acquisitions, the payment of dividends and stock repurchases. This non-GAAP measure may be useful to investors and other users of our financial statements as a supplemental measure of our cash performance, but should not be considered in isolation, as a measure of residual cash flow available for discretionary purposes, or as an alternative to operating cash flows presented in accordance with GAAP.

The table below reconciles net cash used in operating activities to adjusted free cash flow:

<i>\$ in millions</i>	Three Months Ended March		% Change
	2023	2022	
Net cash used in operating activities	\$ (702)	\$ (488)	44 %
Capital expenditures	(309)	(244)	27 %
Adjusted free cash flow	\$ (1,011)	\$ (732)	38 %

First quarter 2023 adjusted free cash flow decreased \$279 million as compared with the same period in 2022 due to higher net cash used in operating activities and an increase in capital expenditures.

Investing Cash Flow

First quarter 2023 net cash used in investing activities increased \$60 million as compared with the same period in 2022 principally due to higher capital expenditures.

Financing Cash Flow

First quarter 2023 net cash provided by financing activities was \$929 million compared to net cash used in financing activities of \$619 million in the prior year period principally due to the issuance of \$2.0 billion in long-term debt, partially offset by a \$405 million increase in share repurchases.

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

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

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

CRITICAL ACCOUNTING POLICIES, ESTIMATES AND JUDGMENTS

There have been no material changes to our critical accounting policies, estimates or judgments from those discussed in our 2022 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 2022 Annual Report on Form 10-K and from time to time in our other filings with the Securities and Exchange Commission (SEC). These risks and uncertainties are amplified by the global macroeconomic, health, security and political environments, including inflationary pressures, labor and supply chain challenges and the COVID-19 pandemic, which have caused and will continue to cause significant challenges, instability and uncertainty. They include:

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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 hostilities and 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 inflation, supply chain delays and disruptions, and labor challenges, 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 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

- impacts related to health epidemics, pandemics, including the COVID-19 pandemic, such as labor, supply chain or financial, schedule or cost impacts (without corresponding recovery), among other impacts
- 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
- environmental, social and governance matters, including especially climate change, their impacts on our company, our operations and our stakeholders (employees, suppliers, customers, shareholders and regulators), and changes in laws, regulations and priorities related to these issues
- 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 meet performance obligations under our contracts, including obligations that require innovative design capabilities, are technologically complex, require certain manufacturing expertise or are dependent on factors not wholly within our control
- 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

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- our ability to develop new products and technologies, progress digital transformation, and maintain technologies, facilities, and equipment to win new competitions and meet the needs of our customers

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 2022 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 March 31, 2023, 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 March 31, 2023, 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.

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PART II. OTHER INFORMATION

Item 1. Legal Proceedings

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

We are a party to various investigations, lawsuits, arbitration, claims, enforcement actions and other legal proceedings, including government investigations and claims, that arise in the ordinary course of our business. These types of matters could result in administrative, civil or criminal fines, penalties or other sanctions (which terms include judgments or convictions and consent or other voluntary decrees or agreements); compensatory, treble or other damages; non-monetary relief or actions; or other liabilities. Government regulations provide that certain allegations against a contractor may lead to suspension or debarment from future government contracts or suspension of export privileges for the company or one or more of its components. The nature of legal proceedings is such that we cannot assure the outcome of any particular matter. For additional information on pending matters, please see Notes 5 and 6 to the financial statements, and for further information on the risks we face from existing and future investigations, lawsuits, arbitration, claims, enforcement actions and other legal proceedings, please see “Risk Factors” in our 2022 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 2022 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 March 31, 2023.

Period	Total Number of Shares Purchased	Average Price Paid per Share ⁽¹⁾⁽²⁾	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)
January 1, 2023 - January 27, 2023	150,723	\$ 477.68	150,723	\$ 2,561
January 28, 2023 - February 24, 2023	1,049,133	443.06	1,049,133	2,096
February 25, 2023 - March 31, 2023	187,828	457.54	187,828	2,010
Total	1,387,684	\$ 448.78	1,387,684	\$ 2,010

⁽¹⁾ Includes commissions paid.

⁽²⁾ During the first quarter of 2023, the company entered into an accelerated share repurchase (ASR) agreement with Bank of America, N.A. to repurchase \$500 million of the company's common stock and received an initial delivery of shares representing 80 percent of the share repurchase agreement.

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.

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Item 6. Exhibits

- 4.1 [Eleventh Supplemental Indenture, dated as of February 8, 2023, between Northrop Grumman Corporation and The Bank of New York Mellon, as successor to JPMorgan Chase Bank, Trustee, to Indenture dated as of November 21, 2001 \(incorporated by reference to Exhibit 4.1 to Form 8-K filed February 8, 2023, File No. 001-16411\)](#)
 - 4.2 [Form of 4.700% Senior Note due 2033 \(included in Exhibit 4.1\) \(incorporated by reference to Exhibit 4.2 to Form 8-K filed February 8, 2023, File No. 001-16411\)](#)
 - 4.3 [Form of 4.950% Senior Note due 2053 \(included in Exhibit 4.1\) \(incorporated by reference to Exhibit 4.3 to Form 8-K filed February 8, 2023, File No. 001-16411\)](#)
 - *+10.1 [2023 Restricted Stock Rights Grant Agreement Specifying Terms and Conditions Applicable to 2023 Restricted Stock Rights Granted under the 2011 Long-Term Incentive Stock Plan](#)
 - *+10.2 [2023 Restricted Performance Stock Rights Grant Agreement Specifying Terms and Conditions Applicable to 2023 Restricted Performance Stock Rights Granted under the 2011 Long-Term Incentive Stock Plan](#)
 - *+10.3 [Group Personal Excess Liability Policy effective January 1, 2023](#)
 - *15 [Letter from Independent Registered Public Accounting Firm](#)
 - *31.1 [Certification of Kathy J. Warden pursuant to Section 302 of the Sarbanes-Oxley Act of 2002](#)
 - *31.2 [Certification of David F. Keffer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002](#)
 - **32.1 [Certification of Kathy J. Warden pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)
 - **32.2 [Certification of David F. Keffer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)
 - *101 Northrop Grumman Corporation Quarterly Report on Form 10-Q for the quarter ended March 31, 2023, 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)
- + Management contract or compensatory plan or arrangement
- * 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: April 26, 2023

NORTHROP GRUMMAN CORPORATION

2023 RESTRICTED STOCK RIGHTS GRANT AGREEMENT

This 2023 Restricted Stock Rights Grant Agreement (“Agreement”) applies to certain “Restricted Stock Rights” (“RSRs”) granted by Northrop Grumman Corporation (the “Company”) in 2023 under its 2011 Long-Term Incentive Stock Plan. If you were granted an RSR award by the Company in 2023, the date of grant of your RSR award (the “Grant Date”) and the number of RSRs applicable to your award are set forth in the letter from the Company announcing your RSR award (your “Grant Letter”) and are also reflected in the electronic stock plan award recordkeeping system (“Stock Plan System”) maintained by the Company or its designee. This Agreement applies only with respect to the 2023 RSR award, and you are subject to this Agreement upon accepting your grant. If you were granted an RSR award, you are referred to as the “Grantee” with respect to your award. Capitalized terms are generally defined in Section 12 below if not otherwise defined herein.

Each RSR represents a right to receive one share of the Company’s Common Stock, or cash of equivalent value as provided herein, subject to vesting as provided herein. The number of RSRs subject to your award is subject to adjustment as provided herein. The RSR award is subject to all of the terms and conditions set forth in this Agreement, and is further subject to all of the terms and conditions of the Plan, as it may be amended from time to time, and any rules adopted by the Committee, as such rules are in effect from time to time. If you do not formally accept your RSR award by entering into this Agreement in accordance with the instructions and time limit set forth in your Grant Letter, you will be deemed to have forfeited your RSR award.

1. Vesting; Issuance of Shares.

Subject to Sections 2, 3, 4 and 6 below, one hundred percent (100%) of the number of RSRs (and any Dividend Equivalents (as defined below)) subject to your award (subject to adjustment as provided in Section 6.1) shall vest upon the third anniversary of the Grant Date, provided that if the third anniversary of the Grant Date falls on a weekend or holiday, then the award shall vest on the next business day.

1.1 Payment of RSRs. Except as otherwise provided below, the Company shall pay an RSR subject to the award that vests (“Vested RSR”) (and related Dividend Equivalents) within 60 days following the vesting of the RSR on the third anniversary of the Grant Date. The Company shall pay such Vested RSRs in either an equivalent number of shares of Common Stock, or, in the discretion of the Committee, in cash or in a combination of shares of Common Stock and cash. In the event of a cash payment, the amount of the payment for each Vested RSR to be paid in cash will equal the Fair Market Value (as defined below) of a share of Common Stock as of the date that such RSR became vested.

1.2 Dividend Equivalents. The Grantee shall be entitled to payment for Dividend Equivalents (if any) with respect to any Vested RSRs. For purposes of this Agreement, “Dividend Equivalents” means the aggregate amount of dividends paid by the Company on a number of shares of Common Stock equivalent to the number of Vested RSRs during the period from the Grant date until the date the Vested RSRs are paid (without interest or other adjustments to reflect the time value of money). Dividend Equivalents (if any) will be paid at the same time as the Vested RSRs to which they relate are paid. Dividend Equivalents will be paid in cash.

2. Early Termination of Award; Termination of Employment.

2.1 General. The RSRs (and related Dividend Equivalents) subject to the award, to the extent not previously vested, shall terminate and become null and void if and when (a) the award terminates in connection with a Change in Control pursuant to Section 6 below, or (b) except as provided in Sections 2.6 and 2.7, and in Section 6, the Grantee ceases for any reason to be an employee of the Company or one of its subsidiaries.

2.2 Leave of Absence. Unless the Committee otherwise provides (at the time of the leave or otherwise), if the Grantee is granted a leave of absence by the Company, the Grantee (a) shall not be deemed to have incurred a termination of employment at the time such leave commences for purposes of the award, and (b) shall be deemed to be employed by the Company for the duration of such approved leave of absence for purposes of the award. A termination of employment shall be deemed to have occurred if the Grantee does not timely return to active employment upon the expiration of such approved leave or if the Grantee commences a leave that is not approved by the Company.

2.3 Salary Continuation. Subject to Section 2.2 above, the term “employment” as used herein means active employment by the Company and salary continuation without active employment (other than a leave of absence approved by the Company that is covered by Section 2.2) will not, in and of itself, constitute “employment” for purposes hereof (in the case of salary continuation without active employment, the Grantee’s cessation of active employee status shall, subject to Section 2.2, be deemed to be a termination of “employment” for purposes hereof). Furthermore, salary continuation will not, in and of itself, constitute a leave of absence approved by the Company for purposes of the award.

2.4 Sale or Spinoff of Subsidiary or Business Unit. For purposes of the RSRs (and related Dividend

Equivalents) subject to the award, a termination of employment of the Grantee shall be deemed to have occurred if the Grantee is employed by a subsidiary or business unit and that subsidiary or business unit is sold, spun off, or otherwise divested, the Grantee does not otherwise continue to be employed by the Company or one of its subsidiaries after such event, and the divested entity or business (or its successor or a parent company) does not assume the award in connection with such transaction. In the event of such a termination of employment, the termination shall be deemed to be an Early Retirement unless the Grantee was otherwise eligible at the time of termination for Normal Retirement (in which case, the termination shall be considered a Normal Retirement) treated as provided for in Section 2.7 (subject to Section 6).

2.5 Continuanace of Employment Required. Except as expressly provided in Section 2.6, Section 2.7 and in Section 6, the vesting of the RSRs (and related Dividend Equivalents) subject to the award requires continued employment through the third anniversary of the Grant Date as a condition to the vesting of any portion of the award. Employment for only a portion of the vesting period, even if a substantial portion, will not entitle the Grantee to any proportionate vesting or avoid or mitigate a termination of rights and benefits upon or following a termination of employment. Nothing contained in this Agreement, the Stock Plan System, or the Plan constitutes an employment commitment by the Company or any subsidiary, affects the Grantee's status (if the Grantee is otherwise an at-will employee) as an employee at will who is subject to termination without cause, confers upon the Grantee any right to continue in the employ of the Company or any subsidiary, or interferes in any way with the right of the Company or of any subsidiary to terminate such employment at any time.

2.6 Death or Disability. If the Grantee dies or incurs a Disability while employed by the Company or a subsidiary and such death or Disability occurs more than six months after the Grant Date, the outstanding and previously unvested RSRs (and related Dividend Equivalents) subject to the award shall vest as of the date of the Grantee's death or Disability, as applicable. RSRs (and related Dividend Equivalents) vesting under this Section shall be paid within 60 days following the earlier of (a) Grantee's death or (b) Grantee's Disability. In the event of the Grantee's death prior to the delivery of shares or other payment with respect to any vested RSRs (and related Dividend Equivalents), the Grantee's Successor shall be entitled to any payments to which the Grantee would have been entitled under this Agreement with respect to such vested and unpaid RSRs (and related Dividend Equivalents).

2.7 Termination of Employment Due to Retirement. If the Grantee ceases to be employed by the Company or one of its subsidiaries due to the Grantee's Early Retirement and such Early Retirement occurs more than six months after the Grant Date, the RSRs (and related Dividend Equivalents) subject to the award shall vest on a prorated basis. Such prorating of RSRs (and related Dividend Equivalents) shall be determined based on the number of days the Grantee was employed by the Company or a subsidiary in the period commencing with

the Grant Date through and including the date on which the Grantee is last employed by the Company or a subsidiary, over the number of calendar days in the period commencing with the Grant Date through and including the third anniversary of the Grant Date. Any remaining unvested RSRs (and related Dividend Equivalents), after giving effect to the foregoing acceleration of vesting, shall terminate immediately upon the Grantee's Early Retirement. If the Grantee ceases to be employed by the Company or one of its subsidiaries due to the Grantee's Normal Retirement and such Normal Retirement occurs more than six months after the Grant Date, the RSRs (and related Dividend Equivalents) subject to the award shall vest in full.

Subject to the following provisions of this paragraph, RSRs (and related Dividend Equivalents) vesting under this Section shall be paid within 60 days following the Grantee's Separation from Service. However, in the case of a Governmental Service Retirement by the Grantee, payment of the vested RSRs (and related Dividend Equivalents) will be made within 20 days after the Grantee's Early or Normal Retirement. If the Grantee is a Key Employee as of the date of the Grantee's Separation from Service, the Grantee shall not be entitled to payment of his or her vested RSRs (and related Dividend Equivalents) pursuant to this Section until the earlier of (and payment shall be made upon or promptly after, and in all events within thirty (30) days after, the first to occur of) (a) the date which is six (6) months and one day after the Grantee's Separation from Service, or (b) the date of the Grantee's death. The provisions of the preceding sentence shall only apply if, and to the extent, required to avoid the imputation of any tax, penalty or interest pursuant to Section 409A of the Code.

In determining the Grantee's eligibility for Early or Normal Retirement, service is measured by dividing (a) the number of days the Grantee was employed by the Company or a subsidiary in the period commencing with his or her last date of hire by the Company or a subsidiary through and including the date on which the Grantee is last employed by the Company or a subsidiary, by (b) 365. If the Grantee ceased to be employed by the Company or a subsidiary and was later rehired by the Company or a subsidiary, the Grantee's service prior to the break in service shall be disregarded in determining service for such purposes; provided that, if the Grantee's employment with the Company or a subsidiary had terminated due to the Grantee's Early Retirement, Normal Retirement, or by the Company or a subsidiary as part of a reduction in force (in each case, other than a termination by the Company or a subsidiary for Cause) and, within the two-year period following such termination of employment (the "break in service") the Grantee was subsequently rehired by the Company or a subsidiary, then the Grantee's period of service with the Company or a subsidiary prior to and ending with the break in service will be included in determining service for such purposes. In the event the Grantee is employed by a business that is acquired by the Company or a subsidiary, the Company shall have discretion to determine whether the Grantee's service prior to the acquisition will be included in determining service for such purposes.

3. Non-Transferability and Other Restrictions.

3.1 *Non-Transferability.* The award, as well as the RSRs (and related Dividend Equivalents) subject to the award, are non-transferable and shall not be subject in any manner to sale, transfer, anticipation, alienation, assignment, pledge, encumbrance or charge. The foregoing transfer restrictions shall not apply to transfers to the Company. Notwithstanding the foregoing, the Company may honor any transfer required pursuant to the terms of a court order in a divorce or similar domestic relations matter to the extent that such transfer does not adversely affect the Company's ability to register the offer and sale of the underlying shares on a Form S-8 Registration Statement and such transfer is otherwise in compliance with all applicable legal, regulatory and listing requirements.

3.2 *Forfeiture or Recoupment of Awards.* If, prior to payment or issuance of shares with respect to the award, Grantee's employment is terminated for Cause (or Grantee has engaged in misconduct that could have resulted in Grantee's termination of employment for Cause if Grantee had remained an employee), the Company may reduce or eliminate any payments or issuances of shares with respect to the award. Further, any payments or issuances of shares with respect to the award are subject to recoupment pursuant to the Company's Policy Regarding the Recoupment of Certain Performance-Based Compensation Payments as in effect from time to time, as well as any recoupment or similar provisions of applicable law, and the Grantee shall promptly make any reimbursement requested by the Board or Committee pursuant to such policy or applicable law with respect to the award. The Grantee agrees, by accepting the award, that the Company and its affiliates may deduct from any amounts it may owe the Grantee from time to time (such as wages or other compensation) to the extent of any amounts the Grantee is required to reimburse the Company pursuant to such policy or applicable law with respect to the award.

4. Post-Employment Conduct.

4.1 *Executive Leadership Team Contribution.* You acknowledge and agree that as a member of the Executive Leadership Team ("ELT"), you are involved in managing the global operations of the Company, incorporated in Delaware and headquartered in Virginia. You are involved in the most sensitive and proprietary matters affecting the Company, its subsidiaries, predecessors, and/or affiliates (collectively, "Northrop Grumman"), including from a technical, strategic and financial perspective, and are widely exposed to confidential, sensitive and proprietary information concerning Northrop Grumman's global operations, at the headquarters and each of the operating sectors, including in the areas of autonomous systems, cyber, C4ISR, space, strike, sensors, electronics, and logistics and modernization. Your job responsibilities require that you have a primary office location in Virginia and/or you spend substantial time at the corporate headquarters in Virginia, among other things, attending ELT and other leadership meetings, and managing operations and employees in Virginia. You occupy one of the most senior executive positions in the Company and have far-reaching access to highly confidential, valuable and

sensitive information, customer, vendor and employee relationships, intellectual property, strategic and tactical plans, and financial information and plans. The Company has a legitimate business interest in restricting your ability to compete in the specific manner set forth below. The Company has provided you this grant, subject to this Agreement and as consideration for the restrictive covenants set forth in this Section 4.

4.2 *Non-Competition.* For a period of twelve (12) months from the date of the termination of Grantee's employment for any reason (other than a Reduction-in-Force as determined at the Company's sole discretion) ("Termination"), you will not, directly or indirectly, oversee, control, participate in, or support the design, operation, research, manufacture, marketing, sale, or distribution of "Competitive Products and Services". For the purpose of this section, "Competitive Products and Services" shall mean products or services that compete for resources with, or are an alternative or potential alternative to, the products sold or services provided by Northrop Grumman, including without limitation products and services in the areas of autonomous systems, cyber, C4ISR, space, strike, sensors, electronics, and logistics and modernization.

4.3 *Non-Solicitation of Customers.* For a period of eighteen (18) months from your Termination, you shall not, directly or indirectly, solicit any customer, supplier, or teammate of Northrop Grumman with whom you engaged, or about whom you received confidential, sensitive, or proprietary information, in the course of your employment with Northrop Grumman, for purposes of providing products or services in competition with Northrop Grumman. In the case of a governmental, regulatory or administrative agency, commission, department or other governmental authority, the customer is determined by reference to the specific program offices or activities for which Northrop Grumman provides goods or services.

4.4 *Non-Solicitation of Employees.* For a period of twenty-four (24) months from your Termination, you shall not, directly or indirectly, solicit or offer to hire, any person who was, within a period of six months prior to your Termination, employed by Northrop Grumman, with whom you worked or about whom you received information in the course of your employment with Northrop Grumman.

4.5 *Non-Disparagement.* You will not issue or communicate any statement, whether verbal or written, or take any other action that disparages or may be interpreted to disparage the Company, its products, services, officers, directors, or employees; provided that the foregoing shall not apply to any truthful statements made in connection with a legal process, including government investigation, or as otherwise provided by law.

4.6 *Exceptions.* You may request an exception to the covenants in Sections 4.2, 4.3, or 4.4 by making a written request to the Company's Chief Human Resources Officer, with such exceptions being considered at the sole discretion of the Company and communicated in writing to you.

4.7 Reasonableness. You agree that the restrictions set forth in Sections 4.2, 4.3, and 4.4 are (i) reasonable and necessary in all respects, including duration, territory and scope of activity, in order to protect the Company's legitimate business interests, (ii) that the parties have attempted to limit your right to compete only to the extent necessary to protect the Company's legitimate business interests, and (iii) that you will be able to earn a livelihood without violating the restrictions in this section. It is the intent of the parties that the provisions of this section shall be enforced to the fullest extent permissible under applicable law. However, if any portion of Sections 4.2, 4.3, or 4.4 is deemed unenforceable, the parties agree that a court or arbitrator may revise the portion deemed unenforceable to the maximum extent possible to achieve the objective of the parties, and the remainder of the section shall remain in full force and affect.

4.8 Remedies. If you violate any provision in Section 4.2, 4.3, 4.4 and/or 4.5 of this section, the Company shall have the right to terminate without payment to you any unvested and/or unpaid RSRs (and associated Dividend Equivalents) and require that you immediately deliver to the Company an amount in cash equal to the aggregate Fair Market Value, determined as of the vesting and/or payment date of all RSRs already received, including any Dividend Equivalents, within one year prior to the breach. Further, you acknowledge and agree that a breach of any of the provisions of this section will result in immediate, irreparable, and continuing damage to the Company for which there is no adequate remedy at law, and the Company will be entitled to injunctive relief, a decree of specific performance, and other relief as may be proper, including monetary damages, to the maximum extent available.

5. Compliance with Laws; No Stockholder Rights Prior to Issuance.

The Company's obligation to make any payments or issue any shares with respect to the award is subject to full compliance with all then applicable requirements of law, the Securities and Exchange Commission, or other regulatory agencies having jurisdiction over the Company and its shares, and of any exchange upon which stock of the Company may be listed. The Grantee shall not have the rights and privileges of a stockholder, including without limitation the right to vote or receive dividends (except as expressly provided in this Agreement with respect to Dividend Equivalents), with respect to any shares which may be issued in respect of the RSRs until the date appearing on the certificate(s) for such shares (or, in the case of shares entered in book entry form, the date that the shares are actually recorded in such form for the benefit of the Grantee), if such shares become deliverable.

6. Adjustments; Change in Control.

6.1. Adjustments. The RSRs, Dividend Equivalents, and the shares subject to the award are subject to adjustment upon the occurrence of events such as stock splits, stock dividends and other changes in capitalization in accordance with Section 6(a) of the Plan.

6.2. Possible Acceleration on Change in Control. Notwithstanding the provisions of Section 2 hereof, and further subject to the Company's ability to terminate the award as provided in Section 6.3 below, the outstanding and previously unvested RSRs (and related Dividend Equivalents) subject to the award shall become fully vested as of the date of the Grantee's termination of employment if the termination occurs either within the Protected Period corresponding to a Change in Control of the Company or within twenty-four (24) calendar months following the date of a Change in Control of the Company, the Grantee's employment by the Company and its subsidiaries is involuntarily terminated by the Company and its subsidiaries for reasons other than Cause or by the Grantee for Good Reason.

Notwithstanding anything else contained herein to the contrary, the termination of the Grantee's employment (or other events giving rise to Good Reason) shall not entitle the Grantee to any accelerated vesting pursuant to this Section 6.2 if there is objective evidence that, as of the commencement of the Protected Period, the Grantee had specifically been identified by the Company as an employee whose employment would be terminated as part of a corporate restructuring or downsizing program that commenced prior to the Protected Period and such termination of employment was expected at that time to occur within six (6) months.

Payment of any RSRs (and related Dividend Equivalents) that vest under this Section will be made at the time provided for in Section 2.7 as though the termination of the Grantee's employment was due to a Normal Retirement.

6.3. Automatic Acceleration; Early Termination. If the Company undergoes a Change in Control triggered by clause (iii) or (iv) of the definition thereof and the Company is not the surviving entity and the successor to the Company (if any) (or a Parent thereof) does not agree in writing prior to the occurrence of the Change in Control to continue and assume the award following the Change in Control, or if for any other reason the award would not continue after the Change in Control, then upon the Change in Control the outstanding and previously unvested RSRs (and related Dividend Equivalents) subject to the award shall vest fully and completely. Unless the Committee expressly provides otherwise in the circumstances, no acceleration of vesting of the award shall occur pursuant to this Section 6.3 in connection with a Change in Control if either (a) the Company is the surviving entity, or (b) the successor to the Company (if any) (or a Parent thereof) agrees in writing prior to the Change in Control to assume the award. The Committee may make adjustments pursuant to Section 6(a) of the Plan and/or deem an acceleration of vesting of the award pursuant to this Section 6.3 to occur sufficiently prior to an event if necessary or deemed appropriate to permit the Grantee to realize the benefits intended to be conveyed with respect to the shares underlying the RSRs (and related Dividend Equivalents); provided, however, that, the Committee may reinstate the original terms of the award if the related event does not actually occur.

Payment of any RSRs (and related Dividend Equivalents) that vest under this Section 6.3 will be made

within 60 days of the third anniversary of the Grant Date unless, prior to such date: (i) the Grantee dies or has a Disability, in which case such payment will be made within 60 days of the Grantee's death or Disability, as the case may be, or (ii) the Grantee has a Separation from Service, in which case such payment will be made at the time provided for in Section 2.7 as though the termination of the Grantee's employment was due to a Normal Retirement.

7. Tax Matters.

7.1. Tax Withholding. The Company or the subsidiary which employs the Grantee shall be entitled to require, as a condition of making any payments or issuing any shares upon vesting of the RSRs (and related Dividend Equivalents), that the Grantee or other person entitled to such shares or other payment pay the minimum sums required to be withheld by federal, state, local or other applicable tax law with respect to such vesting or payment. Alternatively, the Company or such subsidiary, in its discretion, may make such provisions for the withholding of taxes as it deems appropriate (including, without limitation, withholding the taxes due from compensation otherwise payable to the Grantee or reducing the number of shares otherwise deliverable with respect to the award (valued at their then Fair Market Value) by the amount necessary to satisfy such statutory minimum withholding obligations).

7.2. Transfer Taxes. The Company will pay all federal and state transfer taxes, if any, and other fees and expenses in connection with the issuance of shares in connection with the vesting of the RSRs.

7.3. Compliance with Code. The Committee shall administer and construe the award in a manner designed to comply with the Code and to avoid adverse tax consequences under Code Section 409A.

7.4. Unfunded Arrangement. The right of the Grantee to receive payment under the award shall be an unsecured contractual claim against the Company. As such, neither the Grantee nor any Successor shall have any rights in or against any specific assets of the Company based on the award. Awards shall at all times be considered entirely unfunded for tax purposes.

7.5 Code Section 280G. Notwithstanding any other provision of this Agreement to the contrary, in the event that any amounts payable to you as a result of Section 6.2 or 6.3 hereof, either alone or together with amounts payable pursuant to any other plan, program or arrangement (a) constitute "parachute payments" within the meaning of Section 280G of the Code, and (b) but for this Section 7.5 would be subject to the excise tax imposed by Section 4999 of the Code or any comparable successor provisions (the "Excise Tax"), then the vesting acceleration provided in Section 6.2 or 6.3, as applicable, shall be either (a) provided to you in full, or (b) provided to you to such lesser extent that would result in no portion of the payments so accelerated being subject to the Excise Tax, whichever of the foregoing amounts, when taking into account applicable federal, state, local and foreign income and employment taxes, the Excise Tax, and any other applicable taxes, results in the receipt by you, on an after-tax basis, of the greatest amount of

benefits, notwithstanding that all or some portion of such benefits may be subject to the Excise Tax. All determinations required to be made under this Section 7.5 shall be made by a registered public accounting firm selected by the Company, which shall provide supporting calculations both to the Company and you no later than the date of the applicable Change in Control. In the event that the Payments are to be reduced pursuant to this Section 7.5, such Payments shall be reduced such that the reduction of compensation to be provided to the Executive as a result of this Section 7.5 is minimized. In applying this principle, the reduction shall be made in a manner consistent with the requirements of Section 409A and where two economically equivalent amounts are subject to reduction but payable at different times, such amounts shall be reduced on a pro rata basis but not below zero.

8. Choice of Law; Venue; Arbitration.

This agreement shall be governed by the laws of the State of Delaware. Any cause of action or claim arising out of or related to the terms and conditions applicable to this grant will be determined through final and binding arbitration, in accordance with Northrop Grumman Manual USHR 2-32, provided that the prevailing party in the arbitration shall be entitled to receive from the losing party reasonably incurred attorneys' fees and costs. You and the Company agree that any arbitration hearing and related proceedings shall be convened and conducted in Falls Church, VA. If you or the Company believes they require immediate relief to enforce or challenge this Agreement, before arbitration is commenced or concluded, either party may seek injunctive or other provisional equitable relief from a state or federal court in the Commonwealth of Virginia. All court actions or proceedings arising under this Agreement shall be heard in a state or federal court in the Commonwealth of Virginia. The Company and you hereby agree to the jurisdiction of the state and federal courts in the Commonwealth of Virginia and waive any right to object to such actions on grounds of venue, jurisdiction or convenience.

9. Committee Authority.

The Committee has the discretionary authority to determine any questions as to the date when the Grantee's employment terminated and the cause of such termination and to interpret any provision of this Agreement, the Grant Letter, the Stock Plan System, the Plan, and any other applicable rules. Any action taken by, or inaction of, the Committee relating to or pursuant to this Agreement, the Grant Letter, the Stock Plan System, the Plan, or any other applicable rules shall be within the absolute discretion of the Committee and shall be conclusive and binding on all persons.

10. Plan; Amendment.

The RSRs (and related Dividend Equivalents) subject to the award are governed by, and the Grantee's rights are subject to, all of the terms and conditions of the Plan and any other rules adopted by the Committee, as the foregoing may be amended from time to time. The Grantee shall have no rights with respect to any amendment of this Agreement or the Plan unless such

amendment is in writing and signed by a duly authorized officer of the Company. In the event of a conflict between the provisions of the Grant Letter and/or the Stock Plan System and the provisions of this Agreement and/or the Plan, the provisions of this Agreement and/or the Plan, as applicable, shall control.

11. Required Holding Period.

The holding requirements of this Section 11 shall apply to any Grantee who is an elected or appointed officer of the Company on the date Vested RSRs are paid (or, if earlier, on the date the Grantee's employment by the Company and its subsidiaries terminates for any reason). Any Grantee subject to this Section 11 shall not be permitted to sell, transfer, anticipate, alienate, assign, pledge, encumber or charge the number of shares equal to 50% of the total payout of Vested RSRs (net of taxes withheld) until the earlier of (A) the third anniversary of the date such shares of Common Stock are paid to the Grantee, (B) the date the Grantee's employment by the Company and its subsidiaries terminates due to the Grantee's death or Disability, (C) the occurrence of a Change in Control that results in termination and payment under Section 6.2 or 6.3 above, or (D) with respect to Grantee's entering a U.S. federal government position only, the latest of (i) the date the Grantee's employment with the Company terminates, or (ii) the date the Grantee formally accepts the government position in writing, or (iii) the date the government confirms the Grantee (for positions requiring nomination and confirmation). For purposes of this Section 11, the total payout of Vested RSRs shall be determined on a net basis after taking into account any shares otherwise deliverable with respect to the award that the Company withholds to satisfy tax obligations pursuant to Section 7.1. If Grantee is paid less than 50% of the total payout of Vested RSRs (net of taxes) in shares, then all of the shares received will be subject to the holding period requirements in this Section 11. Any shares of Common Stock received in respect of shares that are covered by the holding period requirements of this Section 11 (such as shares received in respect of a stock split or stock dividend) shall be subject to the same holding period requirements as the shares to which they relate.

12. Definitions.

Whenever used in this Agreement, the following terms shall have the meanings set forth below and, when the meaning is intended, the initial letter of the word is capitalized:

“**Board**” means the Board of Directors of the Company.

“**Cause**” means the occurrence of either or both of the following:

- (i) The Grantee's conviction for committing an act of fraud, embezzlement, theft, or other act constituting a felony (other than traffic related offenses, as a result of vicarious liability, or as a result of good faith actions as an officer of the Company); or

- (ii) Willful misconduct by the Grantee that causes financial or reputational harm to the Company. However, no act, or failure to act, on the Grantee's part shall be considered “willful” unless done, or omitted to be done, by the Grantee not in good faith and without reasonable belief that his or her action or omission was in the best interest of the Company.

“**Change in Control**” is used as defined in the Plan.

“**Code**” means the United States Internal Revenue Code of 1986, as amended.

“**Committee**” means the Company's Compensation Committee or any successor committee appointed by the Board to administer the Plan.

“**Common Stock**” means the Company's common stock.

“**Disability**” means, with respect to a Grantee, that the Grantee: (i) is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve months; or (ii) is, by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve months, receiving income replacement benefits for a period of not less than three months under an accident and health plan covering employees of the Grantee's employer; all construed and interpreted consistent with the definition of “Disability” set forth in Code Section 409A(a)(2)(C).

“**Early Retirement**” means that the Grantee's employment terminates in any of the following circumstances, and other than a termination of employment that constitutes a Normal Retirement or occurs in connection with a termination by the Company or a subsidiary for Cause:

- (i) a termination of employment after the Grantee has attained age 55 with at least 10 years of service.
- (ii) a termination of employment by the Company or a subsidiary as part of a reduction in force and, at the time of such termination, the Grantee has attained age 53 with at least 10 years of service.
- (iii) a termination of employment by the Company or a subsidiary as part of a reduction in force and, at the time of such termination, the sum of the Grantee's age and years of service is at least 75.

“**Fair Market Value**” is used as defined in the Plan; provided, however, the Committee in determining such Fair Market Value for purposes of the award may utilize such other exchange, market, or listing as it deems appropriate.

“**Good Reason**” means, without the Grantee’s express written consent, the occurrence of any one or more of the following:

- (i) A material and substantial reduction in the nature or status of the Grantee’s authorities or responsibilities (when such authorities and/or responsibilities are viewed in the aggregate) from their level in effect on the day immediately prior to the start of the Protected Period, other than (A) an inadvertent act that is remedied by the Company promptly after receipt of notice thereof given by the Grantee, and/or (B) changes in the nature or status of the Grantee’s authorities or responsibilities that, in the aggregate, would generally be viewed by a nationally-recognized executive placement firm as resulting in the Grantee having not materially and substantially fewer authorities and responsibilities (taking into consideration the Company’s industry) when compared to the authorities and responsibilities applicable to the position held by the Grantee immediately prior to the start of the Protected Period. The Company may retain a nationally-recognized executive placement firm for purposes of making the determination required by the preceding sentence and the written opinion of the firm thus selected shall be conclusive as to this issue.

In addition, if the Grantee is a vice president, the Grantee’s loss of vice-president status will constitute “Good Reason”; provided that the loss of the title of “vice president” will not, in and of itself, constitute Good Reason if the Grantee’s lack of a vice president title is generally consistent with the manner in which the title of vice president is used within the Grantee’s business unit or if the loss of the title is the result of a promotion to a higher level office. For the purposes of the preceding sentence, the Grantee’s lack of a vice-president title will only be considered generally consistent with the manner in which such title is used if most persons in the business unit with authorities, duties, and responsibilities comparable to those of the Grantee immediately prior to the commencement of the Protected Period do not have the title of vice-president.

- (ii) A material reduction by the Company in the Grantee’s annualized rate of base salary as in effect at the start of the Protected Period, or as the same shall be increased from time to time.
- (iii) A material reduction in the aggregate value of the Grantee’s level of participation in any of the Company’s short and/or long-term incentive compensation plans (excluding stock-based incentive compensation plans), employee benefit or retirement plans, or policies, practices, or arrangements in which the Grantee participates immediately prior to the start of the Protected Period; provided, however, that a reduction in the aggregate value shall not be deemed to be “Good Reason” if the reduced value remains substantially consistent with the average level of

other employees who have positions commensurate with the position held by the Grantee immediately prior to the start of the Protected Period.

- (iv) A material reduction in the Grantee’s aggregate level of participation in the Company’s stock-based incentive compensation plans from the level in effect immediately prior to the start of the Protected Period; provided, however, that a reduction in the aggregate level of participation shall not be deemed to be “Good Reason” if the reduced level of participation remains substantially consistent with the average level of participation of other employees who have positions commensurate with the position held by the Grantee immediately prior to the start of the Protected Period.
- (v) The Grantee is informed by the Company that his or her principal place of employment for the Company will be relocated to a location that is greater than fifty (50) miles away from the Grantee’s principal place of employment for the Company at the start of the corresponding Protected Period; provided that, if the Company communicates an intended effective date for such relocation, in no event shall Good Reason exist pursuant to this clause (v) more than ninety (90) days before such intended effective date.

The Grantee’s right to terminate employment for Good Reason shall not be affected by the Grantee’s incapacity due to physical or mental illness. The Grantee’s continued employment shall not constitute a consent to, or a waiver of rights with respect to, any circumstances constituting Good Reason herein.

“**Governmental Service Retirement**” means an Early or Normal Retirement by the Grantee where the Grantee accepts a position in the federal government or a state or local government and an accelerated distribution under the award is permitted under Code Section 409A based on such government employment and related ethics rules.

“**Key Employee**” means an employee treated as a “specified employee” under Code section 409A(a)(2)(B)(i) of the Company or an Affiliated Company (i.e., a key employee (as defined in Code section 416(i) without regard to paragraph (5) thereof)) if the Company’s or an Affiliated Company’s stock is publicly traded on an established securities market or otherwise. The Company shall determine in accordance with a uniform Company policy which participants are Key Employees as of each December 31 in accordance with IRS regulations or other guidance under Section 409A. Such determination shall be effective for the twelve (12) month period commencing on April 1 of the following year.

“**Normal Retirement**” means that the Grantee terminates employment after attaining age 65 with at least 10 years of service (other than in connection with a termination by the Company or a subsidiary for Cause). In the case of a Grantee who is an officer of the Company subject to the Company’s mandatory

retirement at age 65 policy and who, at the applicable time, is not otherwise eligible for Normal Retirement as defined in the preceding sentence, "Normal Retirement" as to that Grantee means that the Grantee's employment is terminated pursuant to such mandatory retirement policy (regardless of the Grantee's years of service and other than in connection with a termination by the Company or a subsidiary for Cause).

"**Parent**" is used as defined in the Plan.

"**Plan**" means the Northrop Grumman 2011 Long-Term Incentive Stock Plan, as it may be amended from time to time.

The "**Protected Period**" corresponding to a Change in Control of the Company shall be a period of time determined in accordance with the following:

- (i) If the Change in Control is triggered by a tender offer for shares of the Company's stock or by the offeror's acquisition of shares pursuant to such a tender offer, the Protected Period shall commence on the date of the initial tender offer and shall continue through and including the date of the Change in Control; provided that in no case will the Protected Period commence earlier than the date that is six (6) months prior to the Change in Control.
- (ii) If the Change in Control is triggered by a merger, consolidation, or reorganization of the Company with or involving any other corporation, the Protected Period shall commence on the date that serious and substantial discussions first take place to effect the merger, consolidation, or reorganization and shall continue through and including the date of the Change in Control; provided that in no case will the Protected Period commence earlier than the date that is six (6) months prior to the Change in Control.
- (iii) In the case of any Change in Control not described in clause (i) or (ii) above, the Protected Period shall commence on the date that is six (6) months prior to the Change in Control and shall continue through and including the date of the Change in Control.

"**Separation from Service**" means when the Grantee dies, retires, or otherwise has a termination of employment with the Company and its subsidiaries that constitutes a "separation from service" within the meaning of United States Treasury Regulation Section 1.409A-1(h)(1), without regard to the optional alternative definitions available thereunder.

"**Successor**" means the person acquiring a Grantee's rights to a grant under the Plan by will or by the laws of descent or distribution.

NORTHROP GRUMMAN CORPORATION

2023 RESTRICTED PERFORMANCE STOCK RIGHTS GRANT AGREEMENT

This 2023 Restricted Performance Stock Rights Grant Agreement (“Agreement”) applies to certain “Restricted Performance Stock Rights” (“RPSRs”) granted by Northrop Grumman Corporation (the “Company”) in 2023 under its 2011 Long-Term Incentive Stock Plan. If you were granted an RPSR award by the Company in 2023, the date of grant of your RPSR award and the target number of RPSRs applicable to your award are set forth in the letter from the Company announcing your RPSR award (your “Grant Letter”) and are also reflected in the electronic stock plan award recordkeeping system (“Stock Plan System”) maintained by the Company or its designee. This Agreement applies only with respect to the 2023 RPSR award, and you are subject to this Agreement upon accepting your grant. If you were granted an RPSR award, you are referred to as the “Grantee” with respect to your award. Capitalized terms are generally defined in Section 12 below if not otherwise defined herein.

Each RPSR represents a right to receive one share of the Company’s Common Stock, or cash of equivalent value as provided herein subject to vesting as provided herein. The performance period applicable to your award is January 1, 2023 to December 31, 2025 (the “Performance Period”). The target number of RPSRs subject to your award is subject to adjustment as provided herein. The RPSR award is subject to all of the terms and conditions set forth in this Agreement, and is further subject to all of the terms and conditions of the Plan, as it may be amended from time to time, and any rules adopted by the Committee, as such rules are in effect from time to time. If you do not formally accept your RPSR award, by entering into this Agreement in accordance with the instructions and time limit set forth in your Grant Letter, you will be deemed to have forfeited your RPSR award.

1. Vesting; Payment of RPSRs

The RPSRs are subject to the vesting and payment provisions established by the Committee with respect to the Performance Period. RPSRs (and any Dividend Equivalents (as defined below)) that vest based on such provisions will be paid as provided below.

1.1. Performance-Based Vesting of RPSRs. Subject to Sections 2, 3, 4 and 6 below, the RPSRs subject to the award shall vest and become nonforfeitable based on the performance methodology and goals established by the Committee for the Performance Period. At the conclusion of the Performance Period, the Committee shall determine whether and the extent to which the performance goals have been achieved. The percentage of target RPSRs subject to the award (if any) that have vested for the Performance Period (the “Earnout Percentage”) shall be determined by the Committee based on the methodology and goals as established by the Committee, and its determination of the Earnout Percentage shall be conclusive and binding. Any RPSRs (and related Dividend Equivalents) subject to the award that are not vested as of the conclusion of the Performance Period after giving effect to the Committee’s determinations under this Section 1.1 shall terminate and become null and void as of the last day of the Performance Period.

1.2. Payment of RPSRs. The number of RPSRs payable at the conclusion of the Performance Period (“Vested RPSRs”) shall be determined by multiplying the Earnout Percentage by the target number of RPSRs subject to the award. The Vested RPSRs and any RPSRs that vest and become payable pursuant to Section 2 or 6 may be paid out in either an equivalent number of shares of Common Stock, or, in the discretion of the Committee, in cash or in a combination of shares of Common Stock and cash. In the event of a cash payment, the amount of payment for each Vested RPSR to be paid in cash will equal the Fair Market Value (as

defined below) of a share of Common Stock as of the date the Committee determines the extent to which the applicable RPSR performance criteria have been achieved. Vested RPSRs will be paid within 60 days of the vesting date, but in no event later than March 15 of the year following the last day of the Performance Period.

1.3. Dividend Equivalents. The Grantee shall be entitled to payment for Dividend Equivalents (if any) with respect to any Vested RPSRs and any RPSRs that vest and become payable pursuant to Section 2 or 6. For purposes of this Agreement, “Dividend Equivalents” means the aggregate amount of dividends paid by the Company on a number of shares of Common Stock equivalent to the number of Vested RPSRs (or the number of RPSRs that vest and become payable pursuant to Section 2 or 6) during the period from the beginning of the Performance Period until the date the Vested RPSRs (or the RPSRs that vest and become payable pursuant to Section 2 or 6) are paid, without interest or other adjustments to reflect the time value of money. For these purposes, any Vested RPSRs or RPSRs that vest and become payable pursuant to Section 2 or 6 in excess of the target number of RPSRs subject to the award shall be considered to have been granted at the beginning of the Performance Period. Dividend Equivalents (if any) will be paid at the same time as the Vested RPSRs (or the RPSRs that vest and become payable pursuant to Section 2 or 6) to which they relate are paid. Dividend Equivalents will be paid in cash.

2. Early Termination of Award; Termination of Employment

2.1 General. The RPSRs (and related Dividend Equivalents) subject to the award shall terminate and become null and void prior to the conclusion of the Performance Period if and when (a) the award terminates in connection with a Change in Control pursuant to Section 6 below, or (b) except as provided below in this

Section 2 and in Section 6, the Grantee ceases for any reason to be an employee of the Company or one of its subsidiaries.

2.2 Termination of Employment Due to Retirement, Death or Disability. The number of RPSRs (and related Dividend Equivalents) subject to the award shall vest on a prorated basis as provided herein if the Grantee's employment by the Company and its subsidiaries terminates due to the Grantee's Early Retirement, death, or Disability and, in each case, only if the Grantee has completed at least six (6) consecutive calendar months of employment with the Company or a subsidiary during the three-year Performance Period. Such prorating of RPSRs (and related Dividend Equivalents) shall be based on the number of calendar days the Grantee was actually employed by the Company or one of its subsidiaries over the number of calendar days in the Performance Period (the number of prorated RPSRs, the "Prorated RPSRs"). If the Grantee ceases to be employed by the Company or one of its subsidiaries due to the Grantee's Normal Retirement and such Normal Retirement occurs more than six (6) months after the Grant Date, the RPSRs will vest as if the employee had remained an employee for the full Performance Period. Any RPSRs (and related Dividend Equivalents) subject to the award that do not vest in accordance with this Section 2.2 upon a termination of the Grantee's employment due to Early Retirement or Normal Retirement (collectively "Retirement"), death or Disability shall terminate immediately upon such termination of employment.

Death or Disability. In the case of death or Disability (a) the Earnout Percentage of the Grantee's Prorated RPSRs (and related Dividend Equivalents) will be deemed to be 100% (target), regardless of actual performance, and (b) payment of the Prorated RPSRs (and related Dividend Equivalents) that vest pursuant to this Section 2.2 will be made within 60 days of the Grantee's death or Disability, but in no event later than March 15 of the year following the date of the death or Disability.

Retirement in General. Subject to the following provisions of this Section 2.2, in the case of Retirement, the Earnout Percentage will be used to calculate the Grantee's Vested RPSRs, and payment of the Vested RPSRs (and related Dividend Equivalents) will be made in accordance with Section 1.2 above.

In determining the Grantee's eligibility for Retirement, service is measured by dividing (a) the number of days the Grantee was employed by the Company or a subsidiary in the period commencing with his or her last date of hire by the Company or a subsidiary through and including the date on which the Grantee is last employed by the Company or a subsidiary, by (b) 365. If the Grantee ceased to be employed by the Company or a subsidiary and was later rehired by the Company or a subsidiary, the Grantee's service prior to the break in service shall be disregarded in determining service for such purposes; provided that, if the Grantee's employment with the Company or a subsidiary had terminated due to the Grantee's Retirement, or by the Company or a subsidiary as part of

a reduction in force (in each case, other than a termination by the Company or a subsidiary for Cause) and, within the two-year period following such termination of employment (the "break in service") the Grantee was subsequently rehired by the Company or a subsidiary, then the Grantee's period of service with the Company or a subsidiary prior to and ending with the break in service will be included in determining service for such purposes. In the event the Grantee is employed by a business that is acquired by the Company or a subsidiary, the Company shall have discretion to determine whether the Grantee's service prior to the acquisition will be included in determining service for such purposes.

Retirement Due to Government Service. In the case of a Governmental Service Retirement by the Grantee (a) the Performance Period used to calculate the Grantee's Vested RPSRs will be deemed to have ended as of the most recent date that performance has been measured by the Company with respect to the RPSRs prior to the Grantee's Retirement (but in no event shall such date be more than one year before the Grantee's Retirement), (b) the Earnout Percentage of the Grantee's Prorated RPSRs (and related Dividend Equivalents) will be determined based on actual performance for that short Performance Period, and (c) payment of the Prorated RPSRs that become Vested RPSRs (and Dividend Equivalents thereon) will be made within 20 days after Retirement.

2.3 Other Terminations of Employment. Subject to Section 6.2, all RPSRs (and related Dividend Equivalents) subject to the award shall terminate immediately upon a termination of the Grantee's employment: (a) for any reason other than due to the Grantee's Retirement, death or Disability; or (b) for Retirement, death or Disability, if the six-month employment requirement under Section 2.2 above is not satisfied.

2.4 Leave of Absence. Unless the Committee otherwise provides (at the time of the leave or otherwise), if the Grantee is granted a leave of absence by the Company, the Grantee (a) shall not be deemed to have incurred a termination of employment at the time such leave commences for purposes of the award, and (b) shall be deemed to be employed by the Company for the duration of such approved leave of absence for purposes of the award. A termination of employment shall be deemed to have occurred if the Grantee does not timely return to active employment upon the expiration of such approved leave or if the Grantee commences a leave that is not approved by the Company.

2.5 Salary Continuation. Subject to Section 2.4 above, the term "employment" as used herein means active employment by the Company and salary continuation without active employment (other than a leave of absence approved by the Company that is covered by Section 2.4) will not, in and of itself, constitute "employment" for purposes hereof (in the case of salary continuation without active employment, the Grantee's cessation of active employee status shall, subject to Section 2.4, be deemed to be a termination of "employment" for purposes hereof). Furthermore, salary continuation will not, in and of itself, constitute a leave

of absence approved by the Company for purposes of the award.

2.6 Sale or Spinoff of Subsidiary or Business Unit. For purposes of the RPSRs (and related Dividend Equivalents) subject to the award, a termination of employment of the Grantee shall be deemed to have occurred if the Grantee is employed by a subsidiary or business unit and that subsidiary or business unit is sold, spun off, or otherwise divested, the Grantee does not otherwise continue to be employed by the Company or one of its subsidiaries after such event, and the divested entity or business (or its successor or a parent company) does not assume the award in connection with such transaction. In the event of such a termination of employment, the termination shall be deemed to be a Retirement treated as provided for in Section 2.2 (subject to Section 6).

2.7 Continuance of Employment Required. Except as expressly provided in Section 2.2, Section 2.4 and in Section 6, the vesting of the RPSRs (and related Dividend Equivalents) subject to the award requires continued employment through the last day of the Performance Period as a condition to the vesting of any portion of the award. Employment for only a portion of the Performance Period, even if a substantial portion, will not entitle the Grantee to any proportionate vesting or avoid or mitigate a termination of rights and benefits upon or following a termination of employment. Nothing contained in this Agreement, the Grant Letter, the Stock Plan System, or the Plan constitutes an employment commitment by the Company or any subsidiary, affects the Grantee's status (if the Grantee is otherwise an at-will employee) as an employee at will who is subject to termination without cause, confers upon the Grantee any right to continue in the employ of the Company or any subsidiary, or interferes in any way with the right of the Company or of any subsidiary to terminate such employment at any time.

2.8 Death. In the event of the Grantee's death subsequent to the vesting of RPSRs but prior to the delivery of shares or other payment with respect to such RPSRs (and related Dividend Equivalents), the Grantee's Successor shall be entitled to any payments to which the Grantee would have been entitled under this Agreement with respect to such RPSRs.

3. Non-Transferability and Other Restrictions.

3.1 Non-Transferability. The award, as well as the RPSRs (and related Dividend Equivalents) subject to the award, are non-transferable and shall not be subject in any manner to sale, transfer, anticipation, alienation, assignment, pledge, encumbrance or charge. The foregoing transfer restrictions shall not apply to transfers to the Company. Notwithstanding the foregoing, the Company may honor any transfer required pursuant to the terms of a court order in a divorce or similar domestic relations matter to the extent that such transfer does not adversely affect the Company's ability to register the offer and sale of the underlying shares on a Form S-8 Registration Statement and such transfer is otherwise in compliance with all applicable legal, regulatory and listing requirements.

3.2 Forfeiture or Recoupment of Awards. If, prior to payment or issuance of shares with respect to the award, Grantee's employment is terminated for Cause (or Grantee has engaged in misconduct that could have resulted in Grantee's termination of employment for Cause if Grantee had remained an employee), the Company may reduce or eliminate any payments or issuances of shares with respect to the award. Further, any payments or issuances of shares with respect to the award are subject to recoupment pursuant to the Company's Policy Regarding the Recoupment of Certain Performance-Based Compensation Payments as in effect from time to time as well as any recoupment or similar provisions of applicable law, and the Grantee shall promptly make any reimbursement requested by the Board or Committee pursuant to such policy or applicable law with respect to the award. The Grantee agrees, by accepting the award, that the Company and its affiliates may deduct from any amounts it may owe the Grantee from time to time (such as wages or other compensation) to the extent of any amounts the Grantee is required to reimburse the Company pursuant to such policy or applicable law with respect to the award.

4. Post-Employment Conduct.

4.1 Executive Leadership Team Contribution. You acknowledge and agree that as a member of the Executive Leadership Team ("ELT"), you are involved in managing the global operations of the Company, incorporated in Delaware and headquartered in Virginia. You are involved in the most sensitive and proprietary matters affecting the Company, its subsidiaries, predecessors, and/or affiliates (collectively, "Northrop Grumman"), including from a technical, strategic and financial perspective, and are widely exposed to confidential, sensitive and proprietary information concerning Northrop Grumman's global operations, at the headquarters and each of the operating sectors, including in the areas of autonomous systems, cyber, C4ISR, space, strike, sensors, electronics, and logistics and modernization. Your job responsibilities require that you have a primary office location in Virginia and/or you spend substantial time at the corporate headquarters in Virginia, among other things, attending ELT and other leadership meetings, and managing operations and employees in Virginia. You occupy one of the most senior executive positions in the Company and have far-reaching access to highly confidential, valuable and sensitive information, customer, vendor and employee relationships, intellectual property, strategic and tactical plans, and financial information and plans. The Company has a legitimate business interest in restricting your ability to compete in the specific manner set forth below. The Company has provided you this grant, subject to this Agreement and as consideration for the restrictive covenants set forth in this Section 4.

4.2 Non-Competition. For a period of twelve (12) months from the date of the termination of Grantee's employment for any reason (other than a Reduction-in-Force as determined at the Company's sole discretion) ("Termination"), you will not, directly or indirectly, oversee, control, participate in, or support the design, operation, research, manufacture, marketing, sale, or distribution of "Competitive Products and Services". For

the purpose of this section, “Competitive Products and Services” shall mean products or services that compete for resources with or are an alternative or potential alternative to, the products sold or services provided by Northrop Grumman, including without limitation products and services in the areas of autonomous systems, cyber, C4ISR, space, strike, sensors, electronics, and logistics and modernization.

4.3 Non-Solicitation of Customers. For a period of eighteen (18) months from your Termination, you shall not, directly or indirectly, solicit any customer, supplier, or teammate of Northrop Grumman with whom you engaged, or about whom you received confidential, sensitive, or proprietary information, in the course of your employment with Northrop Grumman, for purposes of providing products or services in competition with Northrop Grumman. In the case of a governmental, regulatory or administrative agency, commission, department or other governmental authority, the customer is determined by reference to the specific program offices or activities for which Northrop Grumman provides goods or services.

4.4 Non-Solicitation of Employees. For a period of twenty-four (24) months from your Termination, you shall not, directly or indirectly, solicit or offer to hire, any person who was, within a period of six months prior to your Termination, employed by Northrop Grumman, with whom you worked or about whom you received information in the course of your employment with Northrop Grumman.

4.5 Non-Disparagement. You will not issue or communicate any statement, whether verbal or written, or take any other action that disparages or may be interpreted to disparage the Company, its products, services, officers, directors, or employees; provided that the foregoing shall not apply to any truthful statements made in connection with a legal process, including government investigation or as otherwise provided by law.

4.6 Exceptions. You may request an exception to the covenants in Sections 4.2, 4.3, or 4.4 by making a written request to the Company’s Chief Human Resources Officer, with such exceptions being considered at the sole discretion of the Company and communicated in writing to you.

4.7 Reasonableness. You agree that the restrictions set forth in Sections 4.2, 4.3, and 4.4 are (i) reasonable and necessary in all respects, including duration, territory and scope of activity, in order to protect the Company’s legitimate business interests, (ii) that the parties have attempted to limit your right to compete only to the extent necessary to protect the Company’s legitimate business interests, and (iii) that you will be able to earn a livelihood without violating the restrictions in this section. It is the intent of the parties that the provisions of this section shall be enforced to the fullest extent permissible under applicable law. However, if any portion of Section 4.2, 4.3, or 4.4 is deemed unenforceable, the parties agree that a court or arbitrator may revise the portion deemed unenforceable to the

maximum extent possible to achieve the objective of the parties, and the remainder of the section shall remain in full force and affect.

4.8 Remedies. If you violate any provision in Section 4.2, 4.3, 4.4, and/or 4.5 of this section, the Company shall have the right to terminate without payment to you any unvested and/or unpaid RPSRs (and associated Dividend Equivalents) and require that you immediately deliver to the Company an amount in cash equal to the aggregate Fair Market Value, determined as of the vesting and/or payment date of all RPSRs already received, including any Dividend Equivalents, within one year prior to the breach. Further, you acknowledge and agree that a breach of any of the provisions of this section will result in immediate, irreparable, and continuing damage to the Company for which there is no adequate remedy at law, and the Company will be entitled to injunctive relief, a decree of specific performance, and other relief as may be proper, including monetary damages, to the maximum extent available.

5. Compliance with Laws; No Stockholder Rights Prior to Issuance.

The Company’s obligation to make any payments or issue any shares with respect to the award is subject to full compliance with all then applicable requirements of law, the Securities and Exchange Commission, or other regulatory agencies having jurisdiction over the Company and its shares, and of any exchange upon which stock of the Company may be listed. The Grantee shall not have the rights and privileges of a stockholder, including without limitation the right to vote or receive dividends (except as expressly provided in this Agreement with respect to Dividend Equivalents), with respect to any shares which may be issued in respect of the RPSRs until the date appearing on the certificate(s) for such shares (or, in the case of shares entered in book entry form, the date that the shares are actually recorded in such form for the benefit of the Grantee), if such shares become deliverable.

6. Adjustments; Change in Control.

6.1 Adjustments. The RPSRs and the shares subject to the award are subject to adjustment upon the occurrence of events such as stock splits, stock dividends and other changes in capitalization in accordance with Section 6(a) of the Plan. In addition, for RPSRs that do not use a relative total shareholder return metric as the applicable performance criterion, the applicable performance criteria and goals are subject to adjustment pursuant to Section 8 of the Plan. Any such adjustment or determination not to make any adjustment shall be conclusive and binding.

6.2 Possible Acceleration on Change in Control. Notwithstanding the provisions of Section 2 hereof, and further subject to the Company’s ability to terminate the award as provided in Section 6.3 below, the Grantee shall be entitled to vesting of the award as provided below in the event of the Grantee’s termination of employment if at the time of the termination, the termination occurs either within the Protected Period corresponding to a Change in Control of the Company or

within twenty-four (24) calendar months following the date of a Change in Control of the Company, and the Grantee's employment by the Company and its subsidiaries is involuntarily terminated by the Company and its subsidiaries for reasons other than Cause or by the Grantee for Good Reason.

Notwithstanding anything else contained herein to the contrary, the termination of the Grantee's employment (or other events giving rise to Good Reason) shall not entitle the Grantee to any accelerated vesting pursuant to this Section 6.2 if there is objective evidence that, as of the commencement of the Protected Period, the Grantee had specifically been identified by the Company as an employee whose employment would be terminated as part of a corporate restructuring or downsizing program that commenced prior to the Protected Period and such termination of employment was expected at that time to occur within six (6) months.

In the event the Grantee is entitled to payment in accordance with the foregoing provisions of this Section 6.2, then the Grantee will be eligible for payment of a number of RPSRs (and related Dividend Equivalents) determined in accordance with the following formula: (a) the Earnout Percentage determined in accordance with Section 1 but calculated based on performance for the portion of the three-year Performance Period ending on the last day of the month coinciding with or immediately preceding the date of the termination of the Grantee's employment, multiplied by (b) the target number of RPSRs subject to the award. Payment of any amount due under this Section 6.2 will be made within 60 days of the date of the termination of Grantee's employment, but in no event later than March 15th of the year following the Grantee's termination of employment.

6.3 Automatic Acceleration; Early Termination. If the Company undergoes a Change in Control triggered by clause (iii) or (iv) of the definition thereof and the Company is not the surviving entity and the successor to the Company (if any) (or a Parent thereof) does not agree in writing prior to the occurrence of the Change in Control to continue and assume the award following the Change in Control, or if for any other reason the award would not continue after the Change in Control, then upon the Change in Control the Grantee shall be entitled to a payment of the RPSRs (and related Dividend Equivalents) as provided below and the award shall terminate. Unless the Committee expressly provides otherwise in the circumstances, no acceleration of vesting of the award shall occur pursuant to this Section 6.3 in connection with a Change in Control if either (a) the Company is the surviving entity, or (b) the successor to the Company (if any) (or a Parent thereof) agrees in writing prior to the Change in Control to assume the award. The Committee may make adjustments pursuant to Section 6(a) of the Plan and/or deem an acceleration of vesting of the award pursuant to this Section 6.3 to occur sufficiently prior to an event if necessary or deemed appropriate to permit the Grantee to realize the benefits intended to be conveyed with respect to the shares underlying the award; provided, however, that, the Committee may reinstate the original terms of the award if the related event does not actually occur.

In the event the Grantee is entitled to a payment in accordance with the foregoing provisions of this Section 6.3, then the Grantee will be eligible for payment of a number of RPSRs (and related Dividend Equivalents) determined in accordance with the following formula: (a) the Earnout Percentage determined in accordance with Section 1 but calculated based on performance for the portion of the three-year Performance Period ending on the date of the Change in Control of the Company, multiplied by (b) the target number of RPSRs subject to the award. Payment of any amount due under this Section 6.3 will be made within 60 days of the Change of Control, but in no event later than March 15 of the year following the Change in Control. In the event the Grantee is employed by the Company or a subsidiary immediately prior to the Change in Control and is entitled to payment in accordance with the foregoing provisions of this Section 6.3, then this Section 6.3 shall control as to the amount and timing of the payment of the award notwithstanding anything in Section 2.2 or 6.2 to the contrary. In the event of the Grantee's Retirement pursuant to Section 2.2 prior to a Change in Control described in the first paragraph of this Section 6.3 in which the award is to be terminated, the Earnout Percentage shall no longer be based on the portion of the Performance Period otherwise considered for purposes of Section 2.2 but shall instead be calculated based on performance for the portion of the three-year Performance Period ending on the date of the Change in Control of the Company.

7. Tax Matters.

7.1 Tax Withholding. The Company or the subsidiary which employs the Grantee shall be entitled to require, as a condition of making any payments or issuing any shares upon vesting of the RPSRs and related Dividend Equivalents, that the Grantee or other person entitled to such shares or other payment pay the minimum sums required to be withheld by federal, state, local or other applicable tax law with respect to such vesting or payment. Alternatively, the Company or such subsidiary, in its discretion, may make such provisions for the withholding of taxes as it deems appropriate (including, without limitation, withholding the taxes due from compensation otherwise payable to the Grantee or reducing the number of shares otherwise deliverable with respect to the award (valued at their then Fair Market Value) by the amount necessary to satisfy such statutory minimum withholding obligations).

7.2 Transfer Taxes. The Company will pay all federal and state transfer taxes, if any, and other fees and expenses in connection with the issuance of shares in connection with the vesting of the RPSRs.

7.3 Compliance. This Agreement is designed to be exempt from Code Section 409A, and the Committee shall administer and construe the award in such a way as to be exempt from and to avoid adverse tax consequences under Code Section 409A.

7.4 Unfunded Arrangement. The right of the Grantee to receive payment under the award shall be an unsecured contractual claim against the Company. As such, neither the Grantee nor any Successor shall have

any rights in or against any specific assets of the Company based on the award. Awards shall at all times be considered entirely unfunded for tax purposes.

7.5 Code Section 280G. Notwithstanding any other provision of this Agreement to the contrary, in the event that any amounts payable to you as a result of Section 6.2 or 6.3 hereof, either alone or together with amounts payable pursuant to any other plan, program or arrangement (a) constitute “parachute payments” within the meaning of Section 280G of the Code, and (b) but for this Section 7.5 would be subject to the excise tax imposed by Section 4999 of the Code or any comparable successor provisions (the “Excise Tax”), then the vesting acceleration provided in Section 6.2 or 6.3, as applicable, shall be either (a) provided to you in full, or (b) provided to you to such lesser extent that would result in no portion of the payments so accelerated being subject to the Excise Tax, whichever of the foregoing amounts, when taking into account applicable federal, state, local and foreign income and employment taxes, the Excise Tax, and any other applicable taxes, results in the receipt by you, on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such benefits may be subject to the Excise Tax. All determinations required to be made under this Section 7.5 shall be made by a registered public accounting firm selected by the Company, which shall provide supporting calculations both to the Company and you no later than the date of the applicable Change in Control. In the event that the Payments are to be reduced pursuant to this Section 7.5, such Payments shall be reduced such that the reduction of compensation to be provided to the Executive as a result of this Section 7.5 is minimized. In applying this principle, the reduction shall be made in a manner consistent with the requirements of Section 409A and where two economically equivalent amounts are subject to reduction but payable at different times, such amounts shall be reduced on a pro rata basis but not below zero.

8. Choice of Law; Venue; Arbitration.

This agreement shall be governed by the laws of the State of Delaware. Any cause of action or claim arising out of or related to the terms and conditions applicable to this grant will be determined through final and binding arbitration, in accordance with Northrop Grumman Manual USHR 2-32, provided that the prevailing party in the arbitration shall be entitled to receive from the losing party reasonably incurred attorneys’ fees and costs. You and the Company agree that any arbitration hearing and related proceedings shall be convened and conducted in Falls Church, VA. If you or the Company believes they require immediate relief to enforce or challenge this Agreement, before arbitration is commenced or concluded, either party may seek injunctive or other provisional equitable relief from a state or federal court in the Commonwealth of Virginia. All court actions or proceedings arising under this Agreement shall be heard in a state or federal court in the Commonwealth of Virginia. The Company and you hereby agree to the jurisdiction of the state and federal courts in the Commonwealth of Virginia and waive any right to object to such actions on grounds of venue, jurisdiction or convenience.

9. Committee Authority.

The Committee has the discretionary authority to determine any questions as to the date when the Grantee’s employment terminated and the cause of such termination and to interpret any provision of this Agreement, the Grant Letter, the Stock Plan System, the Plan, and any other applicable rules. Any action taken by, or inaction of, the Committee relating to or pursuant to this Agreement, the Grant Letter, the Stock Plan System, the Plan, or any other applicable rules shall be within the absolute discretion of the Committee and shall be conclusive and binding on all persons.

10. Plan; Amendment.

The RPSRs (and related Dividend Equivalents) subject to the award are governed by, and the Grantee’s rights are subject to, all of the terms and conditions of the Plan and any other rules adopted by the Committee, as the foregoing may be amended from time to time. The Grantee shall have no rights with respect to any amendment of this Agreement or the Plan unless such amendment is in writing and signed by a duly authorized officer of the Company. In the event of a conflict between the provisions of the Grant Letter and/or the Stock Plan System and the provisions of this Agreement and/or the Plan, the provisions of this Agreement and/or the Plan, as applicable, shall control.

11. Required Holding Period.

The holding requirements of this Section 11 shall apply to any Grantee who is an elected or appointed officer of the Company on the date any RPSRs are paid (or, if earlier, on the date the Grantee’s employment by the Company and its subsidiaries terminates for any reason). Any Grantee subject to this Section 11 shall not be permitted to sell, transfer, anticipate, alienate, assign, pledge, encumber or charge the number of shares equal to 50% of the total payout of Vested RPSRs (net of taxes withheld) until the earlier of (A) the third anniversary of the date such shares of Common Stock are paid to the Grantee, (B) the date the Grantee’s employment by the Company and its subsidiaries terminates due to the Grantee’s death or Disability, (C) the occurrence of a Change in Control that results in termination and payment under Section 6.2 or 6.3 above, or (D) with respect to Grantee’s entering a U.S. federal government position only, the latest of (i) the date the Grantee’s employment with the Company terminates, or (ii) the date the Grantee formally accepts the government position in writing, or (iii) the date the government confirms the Grantee (for positions requiring nomination and confirmation). Should the Grantee’s employment by the Company and its subsidiaries terminate (regardless of the reason for such termination, but other than due to the Grantee’s death or Disability or a Change in Control related termination under Section 6.2 or entering a U.S. federal government position), such holding period requirement shall not apply as to any shares acquired upon payment of RPSRs to the extent such payment is made more than one year after such termination of employment. (For purposes of clarity, in such circumstances the holding period requirement will apply as to any shares acquired upon payment of RPSRs within

one year after such a termination of employment.) For purposes of this Section 11, the total payout of Vested RPSRs shall be determined on a net basis after taking into account any shares otherwise deliverable with respect to the award that the Company withholds to satisfy tax obligations pursuant to Section 7.1. If Grantee is paid less than 50% of the total payout of Vested RPSRs (net of taxes) in shares, then all of the shares received will be subject to the holding period requirements in this Section 11. Any shares of Common Stock received in respect of shares that are covered by the holding period requirements of this Section 11 (such as shares received in respect of a stock split or stock dividend) shall be subject to the same holding period requirements as the shares to which they relate.

12. Definitions.

Whenever used in this Agreement, the following terms shall have the meanings set forth below and, when the meaning is intended, the initial letter of the word is capitalized:

“**Board**” means the Board of Directors of the Company.

“**Cause**” means the occurrence of either or both of the following:

- (i) The Grantee’s conviction for committing an act of fraud, embezzlement, theft, or other act constituting a felony (other than traffic related offenses, as a result of vicarious liability, or as a result of good faith actions as an officer of the Company); or
- (ii) Willful misconduct by the Grantee that causes financial or reputational harm to the Company. However, no act, or failure to act, on the Grantee’s part shall be considered “willful” unless done, or omitted to be done, by the Grantee not in good faith and without reasonable belief that his or her action or omission was in the best interest of the Company.

“**Change in Control**” is used as defined in the Plan.

“**Code**” means the United States Internal Revenue Code of 1986, as amended.

“**Committee**” means the Company’s Compensation Committee or any successor committee appointed by the Board to administer the Plan.

“**Common Stock**” means the Company’s common stock.

“**Disability**” means, with respect to a Grantee, that the Grantee: (i) is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve months; or (ii) is, by reason of any medically determinable physical or mental impairment which can be expected to result in death or

can be expected to last for a continuous period of not less than twelve months, receiving income replacement benefits for a period of not less than three months under an accident and health plan covering employees of the Grantee’s employer.

“**Early Retirement**” means that the Grantee’s employment terminates in any of the following circumstances, and other than a termination of employment that constitutes a Normal Retirement or occurs in connection with a termination by the Company or a subsidiary for Cause:

- (i) a termination of employment after the Grantee has attained age 55 with at least 10 years of service.
- (ii) a termination of employment by the Company or a subsidiary as part of a reduction in force and, at the time of such termination, the Grantee has attained age 53 with at least 10 years of service.
- (iii) a termination of employment by the Company or a subsidiary as part of a reduction in force and, at the time of such termination, the sum of the Grantee’s age and years of service is at least 75.

“**Fair Market Value**” is used as defined in the Plan; provided, however, the Committee in determining such Fair Market Value for purposes of the award may utilize such other exchange, market, or listing as it deems appropriate.

“**Good Reason**” means, without the Grantee’s express written consent, the occurrence of any one or more of the following:

- (i) A material and substantial reduction in the nature or status of the Grantee’s authorities or responsibilities (when such authorities and/or responsibilities are viewed in the aggregate) from their level in effect on the day immediately prior to the start of the Protected Period, other than (A) an inadvertent act that is remedied by the Company promptly after receipt of notice thereof given by the Grantee, and/or (B) changes in the nature or status of the Grantee’s authorities or responsibilities that, in the aggregate, would generally be viewed by a nationally-recognized executive placement firm as resulting in the Grantee having not materially and substantially fewer authorities and responsibilities (taking into consideration the Company’s industry) when compared to the authorities and responsibilities applicable to the position held by the Grantee immediately prior to the start of the Protected Period. The Company may retain a nationally-recognized executive placement firm for purposes of making the determination required by the preceding sentence and the written opinion of the firm thus selected shall be conclusive as to this issue.

In addition, if the Grantee is a vice president, the Grantee’s loss of vice-president status will constitute “Good Reason”; provided that the loss of the title of “vice president” will not, in and of itself, constitute Good Reason if the Grantee’s lack of a vice president title is generally

consistent with the manner in which the title of vice president is used within the Grantee's business unit or if the loss of the title is the result of a promotion to a higher level office. For the purposes of the preceding sentence, the Grantee's lack of a vice-president title will only be considered generally consistent with the manner in which such title is used if most persons in the business unit with authorities, duties, and responsibilities comparable to those of the Grantee immediately prior to the commencement of the Protected Period do not have the title of vice-president.

- (ii) A material reduction by the Company in the Grantee's annualized rate of base salary as in effect on the first to occur of the start of the Performance Period or the start of the Protected Period, or as the same shall be increased from time to time.
- (iii) A material reduction in the aggregate value of the Grantee's level of participation in any of the Company's short and/or long-term incentive compensation plans (excluding stock-based incentive compensation plans), employee benefit or retirement plans, or policies, practices, or arrangements in which the Grantee participates immediately prior to the start of the Protected Period provided; however, that a reduction in the aggregate value shall not be deemed to be "Good Reason" if the reduced value remains substantially consistent with the average level of other employees who have positions commensurate with the position held by the Grantee immediately prior to the start of the Protected Period.
- (iv) A material reduction in the Grantee's aggregate level of participation in the Company's stock-based incentive compensation plans from the level in effect immediately prior to the start of the Protected Period; provided, however, that a reduction in the aggregate level of participation shall not be deemed to be "Good Reason" if the reduced level of participation remains substantially consistent with the average level of participation of other employees who have positions commensurate with the position held by the Grantee immediately prior to the start of the Protected Period.
- (v) The Grantee is informed by the Company that his or her principal place of employment for the Company will be relocated to a location that is greater than fifty (50) miles away from the Grantee's principal place of employment for the Company at the start of the corresponding Protected Period; provided that, if the Company communicates an intended effective date for such relocation, in no event shall Good Reason exist pursuant to this clause (v) more than ninety (90) days before such intended effective date.

The Grantee's right to terminate employment for Good Reason shall not be affected by the Grantee's

incapacity due to physical or mental illness. The Grantee's continued employment shall not constitute a consent to, or a waiver of rights with respect to, any circumstances constituting Good Reason herein.

"Governmental Service Retirement" means a Retirement by the Grantee where the Grantee accepts a position in the federal government or a state or local government and an accelerated distribution under the award is permitted under Code Section 409A based on such government employment and related ethics rules.

"Normal Retirement" means that the Grantee terminates employment after attaining age 65 with at least 10 years of service (other than in connection with a termination by the Company or a subsidiary for Cause). In the case of a Grantee who is an officer of the Company subject to the Company's mandatory retirement at age 65 policy and who, at the applicable time, is not otherwise eligible for Normal Retirement as defined in the preceding sentence, "Normal Retirement" as to that Grantee means that the Grantee's employment is terminated pursuant to such mandatory retirement policy (regardless of the Grantee's years of service and other than in connection with a termination by the Company or a subsidiary for Cause).

"Parent" is used as defined in the Plan.

"Plan" means the Northrop Grumman 2011 Long-Term Incentive Stock Plan, as it may be amended from time to time.

The **"Protected Period"** corresponding to a Change in Control of the Company shall be a period of time determined in accordance with the following:

- (i) If the Change in Control is triggered by a tender offer for shares of the Company's stock or by the offeror's acquisition of shares pursuant to such a tender offer, the Protected Period shall commence on the date of the initial tender offer and shall continue through and including the date of the Change in Control; provided that in no case will the Protected Period commence earlier than the date that is six (6) months prior to the Change in Control.
- (ii) If the Change in Control is triggered by a merger, consolidation, or reorganization of the Company with or involving any other corporation, the Protected Period shall commence on the date that serious and substantial discussions first take place to effect the merger, consolidation, or reorganization and shall continue through and including the date of the Change in Control; provided that in no case will the Protected Period commence earlier than the date that is six (6) months prior to the Change in Control.
- (iii) In the case of any Change in Control not described in clause (i) or (ii) above, the Protected Period shall commence on the date that is six (6) months prior to the Change in Control and shall continue through and include the date of the Change in Control.

“**Successor**” means the person acquiring a Grantee’s rights to a grant under the Plan by will or by the laws of descent or distribution.

GROUP PERSONAL EXCESS LIABILITY POLICY

INTRODUCTION

This is your Chubb Group Personal Excess Liability Policy. Together with your Coverage Summary, it explains your coverages and other conditions of your insurance in detail.

This policy is a contract between you and us. READ YOUR POLICY CAREFULLY and keep it in a safe place.

Agreement

We agree to provide the insurance described in this policy in return for the premium paid by you or the Sponsoring Organization and your compliance with the policy conditions.

Definitions

In this policy, we use words in their plain English meaning. Words with special meanings are defined in the part of the policy where they are used. The few defined terms used throughout the policy are defined here:

You means the individual who is a member of the Defined Group shown as the Insured named in the Coverage Summary.

Spouse means a partner in marriage or a partner in a civil union recognized under state law and who lives with you.

We and us mean the insurance company named in the Coverage Summary.

Family member means your spouse or domestic partner or other relative who lives with you, or any other person under 25 in your care or your relative's care who lives with you.

Domestic partner means a person in a legal or personal relationship with you, who lives with you and shares a common domestic life with you, and meeting all of the benefits eligibility criteria as defined by the Sponsoring Organization.

Sponsoring Organization means the entity, corporation, partnership or sole proprietorship sponsoring and defining the criteria for qualification as an Insured.

Policy means your entire Group Personal Excess Liability Policy, including the Coverage Summary.

Coverage Summary means the most recent Coverage Summary we issued to you, including any endorsements.

Occurrence means an accident or offense to which this insurance applies and which begins within the policy period. Continuous or repeated exposure to substantially the same general conditions unless excluded is considered to be one occurrence.

Business means any employment, trade, occupation, profession, or farm operation including the raising or care of animals or any activities intended to realize a benefit or financial gain engaged in on a full-time, part-time or occasional basis.

Defined Group means those individuals meeting the criteria for qualification as an Insured as defined by the Sponsoring Organization and accepted by us.

Follow form means we cover damages to the extent they are both covered under the Required Primary Underlying Insurance and, not excluded under this policy. Also, the amount of coverage, defense coverages, cancellation and "other insurance" provisions of this policy supersede and replace the similar provisions contained in such other policies. When this policy is called upon to pay losses in excess of required primary underlying policies exhausted by payment of claims, we do not provide broader coverage than provided by such policies. When no primary underlying coverage exists, the extent of coverage provided on a follow form basis will be determined as if the required primary underlying insurance had been purchased from us.

Covered person means:

- you or a family member;
- any person using a vehicle or watercraft covered under this policy with permission from you or a family member with respect to their legal responsibility arising out of its use;
- any other person who is a covered person under your Required Primary Underlying Insurance;
- any person or organization with respect to their legal responsibility for covered acts or omissions of you or a family member; or
- any combination of the above.

Damages mean the sum that is paid or is payable to satisfy a claim settled by us or resolved by judicial procedure or by a compromise we agree to in writing.

Personal injury means the following injuries, and resulting death:

- bodily injury;
- shock, mental anguish, or mental injury;
- false arrest, false imprisonment, or wrongful detention;
- wrongful entry or eviction;
- malicious prosecution or humiliation; and
- libel, slander, defamation of character, or invasion of privacy.

Bodily injury means physical bodily harm, including sickness or disease that results from it, and required care, loss of services and resulting death.

Property damage means physical injury to or destruction of tangible property and the resulting loss of its use. Tangible property includes the cost of recreating or replacing stocks, bonds, deeds, mortgages, bank deposits, and similar instruments, but does not include the value represented by such instruments. Tangible property does not include the cost of recreating or replacing any software, data or other information that is in electronic form.

Registered vehicle means any motorized land vehicle not described in "unregistered vehicle."

Unregistered vehicle means:

- any motorized land vehicle not designed for or required to be registered for use on public roads;
- any motorized land vehicle which is in dead storage at your residence;
- any motorized land vehicle used solely on and to service your residence premises;
- any motorized land vehicle used to assist the disabled that is not designed for or required to be registered for use on public roads; or
- golf carts.

GROUP PERSONAL EXCESS COVERAGE

This part of your Group Personal Excess Liability Policy provides you or a family member with liability coverage in excess of your underlying insurance anywhere in the world unless stated otherwise or an exclusion applies.

Payment for a Loss

Amount of coverage

The amount of coverage for liability is shown in the Coverage Summary. We will pay on your behalf up to that amount for covered damages from any one occurrence, regardless of how many claims, homes, vehicles, watercraft, or people are involved in the occurrence.

Any costs we pay for legal expenses (see **Defense coverages**) are in addition to the amount of coverage.

Underlying Insurance

We will pay only for covered damages in excess of all underlying insurance covering those damages, even if the underlying coverage is for more than the minimum amount.

"Underlying insurance" includes all liability coverage that applies to the covered damages, except for other insurance purchased in excess of this policy.

Required primary underlying insurance

Regardless of whatever other primary underlying insurance may be available in the event of a claim or loss, it is a condition of your policy that you and your family members must maintain in full effect primary underlying liability insurance of the types and in at least the amounts set forth below unless a different amount is shown in your Coverage Summary, covering your personal liability and to the extent you or a family member have such liability exposures, all vehicles and watercraft you or your family members own, or rent for longer than 60 days, or have furnished for longer than 60 days, as follows:

Personal liability(homeowners) for personal injury and property damage in the minimum amount of \$300,000 each occurrence.

Registered vehicles in the minimum amount of:

- \$250,000/\$500,000 bodily injury and \$100,000 property damage;
- \$300,000/\$300,000 bodily injury and \$100,000 property damage; or
- \$300,000 single limit each occurrence.

Unregistered vehicles in the minimum amount of \$300,000 bodily injury and property damage each occurrence.

Registered vehicles with less than four wheels and motorhomes in the minimum amount of:

- \$250,000/\$500,000 bodily injury and \$100,000 property damage;
- \$300,000/\$300,000 bodily injury and \$100,000 property damage; or
- \$300,000 single limit each occurrence.

Watercraft less than 26 feet and 50 engine rated horsepower or less for bodily injury and property damage in the minimum amount of \$300,000 each occurrence.

Watercraft 26 feet or longer or more than 50 engine rated horsepower for bodily injury and property damage in the minimum amount of \$500,000 each occurrence.

Uninsured motorists/underinsured motorist protection in the minimum amounts of:

- \$250,000/\$500,000 bodily injury and \$100,000 property damage;
- \$300,000/\$300,000 bodily injury and \$100,000 property damage; or
- \$300,000 single limit each occurrence.

With respect to you and your family members residing outside of the United States, the required primary underlying insurance limits of liability shall be the same limits of liability as shown above, unless you and your family members reside in a country where the minimum required primary underlying insurance limits of liability are not available. In these countries, you and your family members must maintain in full effect primary underlying liability insurance limits equal to the maximum limits of liability available in that country for all coverages up to the minimum required primary underlying limits shown in the Coverage Summary under Required Primary Underlying Insurance.

Failure by you or your family members to comply with this condition, or failure of any of your primary underlying insurers due to insolvency or bankruptcy, shall not invalidate this policy. In the event of any such failure, we shall only be liable in excess of the foregoing minimum amounts and to no greater extent with respect to coverages, amounts and defense costs than we would have been had this failure not occurred.

You must also give notice of losses and otherwise cooperate and comply with the terms and conditions of such primary underlying insurance.

We cover damages a covered person is legally obligated to pay for bodily injury and property damage, caused by an occurrence:

- in excess of damages covered by the underlying insurance; or
- from the first dollar of damage where no underlying insurance is required under this policy and no underlying insurance exists; or
- from the first dollar of damage where underlying insurance is required under this policy but no coverage is provided by the underlying insurance for a particular occurrence;
-

unless stated otherwise or an exclusion applies. Exclusions to this coverage are described in Exclusions.

Excess uninsured motorists/underinsured motorist protection

This coverage is in effect only if excess uninsured motorists/underinsured motorists protection is shown in the Coverage Summary.

We cover damages for bodily injury and property damage a covered person is legally entitled to receive from the owner or operator of an uninsured motorized/underinsured motorized land vehicle. We cover these damages in excess of the underlying insurance or the Required Primary Underlying Insurance, whichever is greater, if they are caused by an occurrence during the policy period, unless otherwise stated.

Amount of coverage. The maximum amount of excess uninsured motorists/underinsured motorists protection available for any one occurrence is the excess uninsured motorists/underinsured motorists protection amount shown in the Coverage Summary regardless of the number of vehicles covered by the Required Primary Underlying Insurance. We will not pay more than this amount in any one occurrence for covered damages regardless of how many claims, vehicles or people are involved in the occurrence. This coverage will follow form.

Uninsured motorists/underinsured motorists protection arbitration

If we and a covered person disagree whether that person is legally entitled to recover damages from the owner or operator of an uninsured motor vehicle/underinsured motor vehicle, or do not agree as to the amount of damages, either party may make a written demand for arbitration. In this event, each party will select an arbitrator. The two arbitrators will select a third. If they cannot agree on a third arbitrator within 45 days, either may request that the arbitration be submitted to the American Arbitration Association. When the covered person's recovery exceeds the minimum limit specified in the applicable jurisdiction's financial responsibility law, each party will pay the expenses it incurs, and bear the expenses of the third arbitrator equally. Otherwise, we will bear all the expenses of the arbitration.

Unless both parties agree otherwise, arbitration will take place in the county and state in which the covered person lives. Local rules of law as to procedure and evidence will apply. A decision agreed to by two arbitrators will be binding unless the recovery amount for bodily injury exceeds the minimum limit specified by the applicable jurisdiction's financial responsibility law. If the amount exceeds that limit, either party may demand the right to a trial. This demand must be made within 60 days of the arbitrator's decision. If this demand is not made, the amount of damages agreed to by the arbitrators will be binding.

Uninsured/underinsured liability coverage

This coverage is in effect only if excess uninsured motorists/underinsured motorists protection is shown in the Coverage Summary.

We cover up to a maximum of \$1 million for bodily injury and personal injury you or a family member are legally entitled to receive from an uninsured or underinsured negligent person caused by an occurrence, unless stated otherwise or an exclusion applies. We will not pay more than this amount for covered damages from any one occurrence, regardless of how many claims or people are involved in the occurrence. This coverage is excess over the total of any other collectible insurance that covers damages from the occurrence.

All the exclusions under the Group Personal Excess Liability Coverage are applicable to this Uninsured/underinsured liability coverage, and where used, the definition of you or a family member is extended to include negligent person. This coverage also does not apply to damages from an occurrence arising out of any business activities; any activities involving business property or the sale or transfer of property; or the ownership, maintenance, use, loading, unloading, or towing of any motor vehicle, watercraft, or aircraft. In addition, this coverage does not apply to damages from an occurrence arising from any employment related harassment, termination, demotion, breach of an oral or written employment contract or agreement or violation of any state or federal wrongful employment practices act or similar law.

We also do not cover any fines, penalties, taxes, punitive, exemplary or multiplied damages, or any claim or suit seeking non monetary relief, including but not limited to, injunctive relief, declaratory relief or other equitable remedies.

"Negligent person" means an identifiable natural person by legal name who is not a family member, and who is legally responsible for damages sustained by you or a family member caused by an occurrence.

Duplication of coverage. We will not make a duplicate payment for any portion of damages for which payment has been made by or on behalf of persons who may be legally responsible, or otherwise covered by any other collectible insurance. Nor will we pay for any portion of damages if you or a family member is entitled to receive payment for the same portion of damages under any workers' compensation law, disability benefits law or similar law.

Defense coverages

We will defend a covered person against any suit seeking covered damages for personal injury or property damage that is either:

- not covered by any underlying insurance; or
- covered by an underlying policy. This will apply to each Defense Coverage as it has been exhausted by payment of claims.

We provide this defense at our expense, with counsel of our choice, even if the suit is groundless, false, or fraudulent. We may investigate, negotiate, and settle any such claim or suit at our discretion.

As part of our investigation, defense, negotiation, or settlement, we will pay:

- all premiums on appeal bonds required in any suit we defend;
- all premiums on bonds to release attachments for any amount up to the amount of coverage (but we are not obligated to apply for or furnish any bond);
- all expenses incurred by us;
- all costs taxed against a covered person;
- all interest accruing after a judgment is entered in a suit we defend on only that part of the judgment we are responsible for paying. We will not pay interest accruing after we have paid the judgment up to the amount of coverage;
- all prejudgment interest awarded against a covered person on that part of the judgment we pay or offer to pay.
 - We will not pay any prejudgment interest based on that period of time after we make an offer to pay the amount of coverage;
- all earnings lost by each covered person at our request, up to \$25,000;
- other reasonable expenses incurred by a covered person at our request; and
- the cost of bail bonds required of a covered person because of a covered loss.

In jurisdictions where we may be prevented by local law from carrying out these Defense Coverages, we will pay only those defense expenses that we agree in writing to pay and that are incurred by you.

Extra Coverages

In addition to covering damages and defense costs, we also provide other related coverages. These coverages are in addition to the amount of coverage for damages and defense costs unless stated otherwise.

Shadow defense coverage

If we are defending you or a family member in a suit seeking covered damages, we will pay reasonable expenses you or a family member incur up to \$10,000 or the amount shown in the Coverage Summary for a law firm of your choice to review and monitor the defense. However any recommendation by your personal attorney is not binding on us. We will pay these costs provided that you obtain prior approval from us before incurring any fees or expenses.

Identity fraud

We will pay for your or a family member's identity fraud expenses, up to a maximum of \$25,000, for each identity fraud occurrence.

"Identity fraud" means the act of knowingly transferring or using, without lawful authority, your or a family member's means of identity which constitutes a violation of federal law or a crime under any applicable state or local law.

"Identity fraud occurrence" means any act or series of acts of identity fraud by a person or group commencing in the policy period.

"Identity fraud expenses" means:

- the costs for notarizing affidavits or similar documents for law enforcement agencies, financial institutions or similar credit grantors, and credit agencies;
- the costs for sending certified mail to law enforcement agencies, financial institutions or similar credit grantors, and credit agencies;
- the loan application fees for reapplying for loan(s) due to the rejection of the original application because the lender received incorrect credit information;
- the telephone expenses for calls to businesses, law enforcement agencies, financial institutions or similar credit grantors, and credit agencies;
- earnings lost by you or a family member as a result of time off from work to complete fraud affidavits, meet with law enforcement agencies, credit agencies, merchants, or legal counsel;
- the reasonable attorney fees incurred with prior notice to us for:
- the defense of you or a family member against any suit(s) by businesses or their collection agencies;
- the removal of any criminal or civil judgements wrongly entered against you or a family member;
- any challenge to the information in your or a family member's consumer credit report; and
- the reasonable fees incurred with prior notice to us by an identity fraud mitigation entity to:
- provide services for the activities described above;
- restore accounts or credit standing with financial institutions or similar credit grantors and credit agencies; and
- monitor for up to one year the effectiveness of the fraud mitigation and to detect additional identity fraud activity after the first identify fraud occurrence.

However, such monitoring must begin no later than one year after you or a family member first report an identity fraud occurrence to us.

However, "identity fraud expenses" does not include expenses incurred due to any fraudulent, dishonest or criminal act by a covered person or any person acting with a covered person, or by any authorized representative of a covered person, whether acting alone or in collusion with others.

"Identity fraud mitigation entity" means a company that principally provides professional, specialized services to counter identity fraud for individuals or groups of individuals, or a financial institution that provides similar services.

In addition to the duties described in Policy Terms, Liability Conditions, Your duties after a loss, you shall notify an applicable law enforcement agency.

Kidnap expenses

We will pay up to a maximum of \$100,000 for kidnap expenses you or a family member incurs solely and directly as a result of a kidnap and ransom occurrence. In addition, we also will pay up to \$25,000 to any person for information not otherwise available leading to the arrest and conviction of any person(s) who kidnaps you, a family member or a covered relative. The following are not eligible to receive this reward payment:

- you or a family member; or
- a covered relative who witnessed the occurrence.

"Kidnap and ransom occurrence" means the actual or alleged wrongful taking of:

- you;
- one or more family members; or
- one or more covered relatives while visiting or legally traveling with you or a family member;
- from anywhere in the world except those places listed on the United States State Department Bureau of Consular Affairs Travel Warnings list at the time of the occurrence. The occurrence must include a demand for ransom payment which would be paid by you or a family member in exchange for the release of the kidnapped person(s).

"Kidnap expenses" means the reasonable costs for:

- a professional negotiator;
- a professional security consultant;
- professional security guard services;
- a professional public relations consultant;
- travel, meals, lodging and phone expenses incurred by you or a family member;
- advertising, communications and recording equipment;
- related medical, cosmetic, psychiatric and dental expenses incurred by a kidnapped person within 12 months from that person's release;
- attorneys fees;
- a professional forensic analyst;
- earnings lost by you or a family member, up to \$25,000.

However, "kidnap expenses" does not include expenses incurred due to any kidnap and ransom occurrence caused by:

- you or a family member;
- a covered relative;
- any guardian, or former guardian of you, a family member or covered relative;
- any estranged spouse or domestic partner, or former spouse or domestic partner of you or a family member;
- any person unrelated to you or a family member who lives with you or a family member or has ever lived with you or a family member for 6 or more months, other than a domestic employee, residential staff, or a person employed by you or a family member for farm work; or
- a civil authority,
 - or any person acting on behalf of any of the above, whether acting alone or in collusion with others.

"Covered relative" means the following relatives of you, or a spouse or domestic partner who lives with you, or any family member:

- children, their children or other descendants of theirs;
- parents, grandparents or other ancestors of theirs; or
- siblings, their children or other descendants of theirs;

who do not live with you, including spouses or domestic partners of all of the above. Parents, grandparents and other ancestors include adoptive parents, stepparents and stepgrandparents.

Reputational injury. If we are defending you or a family member in a suit seeking covered damages, we will pay reasonable and necessary fees or expenses that you or a family member incur for services provided by a reputation management firm to minimize potential injury to the reputation of you or a family member solely as a result of personal injury or property damage, caused by an occurrence if:

- the reputational injury is reported to us as soon as reasonably possible but not later than 30 days after the personal injury or property damage occurrence; and
- you obtain approval of the reputation management firm from us before incurring any fees or expenses, unless stated otherwise or an exclusion applies. There is no deductible for this coverage.

A Reputation management firm means a professional public relations consulting firm, a professional security consulting firm or a professional media management consulting firm.

The maximum amount of coverage for Reputational injury available for any one occurrence is \$25,000 or the amount shown in the Coverage Summary. We will not pay more than this amount in any one occurrence for covered damages regardless of how many claims or people are involved in the occurrence.

The maximum annual amount of coverage for Reputational injury shown in the Coverage Summary is the most we will pay for the sum of all covered damages you or a family member incur during the policy period regardless of the number of claims, people, or occurrences.

This coverage does not apply to loss caused by a wrongful employment act covered by Employment Practices Liability Insurance.

Exclusions

These exclusions apply to your Group Personal Excess Liability Coverage, unless stated otherwise.

Aircraft. We do not cover any damages arising out of the ownership, maintenance, use, loading, unloading, or towing of any aircraft, except aircraft chartered with crew by you. We do not cover any property damages to aircraft rented to, owned by, or in the care, custody or control of a covered person.

Hovercraft. We do not cover any damages arising out of the ownership, maintenance, use, loading, unloading or towing of any hovercraft. We do not cover any property damages to hovercraft rented to, owned by, or in the care, custody or control of a covered person.

Motorized land vehicle racing or track usage. We do not cover any damages arising out of the ownership, maintenance or use of any motorized land vehicle:

- during any instruction, practice, preparation for, or participation in, any competitive, prearranged or organized racing, speed contest, rally, gymkhana, sports event, stunting activity, or timed event of any kind; or
- on a racetrack, test track or other course of any kind.

Watercraft and aircraft racing or track usage. We do not cover any damages arising out of the ownership, maintenance or use of any watercraft or aircraft during any instruction, practice, preparation for, or participation in, any competitive, prearranged or organized racing, speed contest, rally, sports event, stunting activity or timed event of any kind. This exclusion does not apply to you or a family member for sailboat racing even if the sailboat is equipped with an auxiliary motor.

Motorized land vehicle-related jobs. We do not cover any damages arising out of the ownership, maintenance, or use of a motorized land vehicle by any person who is employed or otherwise engaged in the business of selling, repairing, servicing, storing, parking, testing, or delivering motorized land vehicles. This exclusion does not apply to you, a family member, or your employee or an employee of a family member for damages arising out of the ownership, maintenance or use of a motorized land vehicle owned by, rented to, or furnished to you or a family member.

Watercraft related jobs. We do not cover any damages arising out of the ownership, maintenance, or use of a watercraft by any person who is engaged by or employed by, or is operating a marina, boat repair yard, shipyard, yacht club, boat sales agency, boat service station, or other similar organization. This exclusion does not apply to damages arising out of the ownership, maintenance, or use of a watercraft by you, a family member, or your or a family member's captain or full time paid crew member maintaining or using this watercraft with permission from you or a family member.

Motorized land vehicle and watercraft loading. We do not cover any person or organization, other than you or a family member or your or a family member's employees, with respect to the loading or unloading of motorized land vehicles or watercraft.

Workers' compensation or disability. We do not cover any damages a covered person is legally:

- required to provide; or
 - voluntarily provides under any:
- workers' compensation;
- disability benefits;
- unemployment compensation; or
- other similar laws.

But we do provide coverage in excess over any other insurance for damages you or a family member is legally required to pay for bodily injury to a domestic employee of a residence covered under the Required Primary Underlying Insurance which are not compensable under workers' compensation, unless another exclusion applies.

Director's liability. We do not cover any damages for any covered person's actions or failure to act as an officer or member of a board of directors of any corporation or organization. However, we do cover such damages if you are or a family member is an officer or member of a board of directors of a:

- homeowner, condominium or cooperative association; or

- not for profit corporation or organization for which he or she is not compensated; unless another exclusion applies.

Damage to covered person's property. We do not cover any person for property damage to property owned by any covered person.

Damage to property in your care. We do not cover any person for property damage to property rented to, occupied by, used by, or in the care of any covered person, to the extent that the covered person is required by contract to provide insurance. But we do cover such damages for loss caused by fire, smoke, or explosion unless another exclusion applies.

Wrongful employment act. We do not cover any damages arising out of a wrongful employment act. A wrongful employment act means any employment discrimination, sexual harassment, or wrongful termination of any residential staff actually or allegedly committed or attempted by a covered person while acting in the capacity as an employer, that violates applicable employment law of any federal, state, or local statute, regulation, ordinance, or common law of the United States of America, its territories or possessions, or Puerto Rico.

Employment discrimination as it relates solely to a wrongful employment act means a violation of applicable employment discrimination law protecting any residential staff based on his or her race, color, religion, creed, age, sex, disability, national origin or other status according to any federal, state, or local statute, regulation, ordinance, or common law of the United States of America, its territories or possessions, or Puerto Rico.

Sexual harassment as it relates solely to a wrongful employment act means unwelcome sexual advances, requests for sexual favors, or other conduct of a sexual nature that:

- is made a condition of employment of any residential staff;
- is used as a basis for employment decisions;
- interferes with performance of any residential staffs duties; or
- creates an intimidating, hostile, or offensive working environment.

Wrongful termination as it relates solely to a wrongful employment act means:

- the actual or constructive termination of employment of any residential staff by you or a family member in violation of applicable employment law; or
- breach of duty and care when you or a family member terminates an employment relationship with any residential staff.

Residential staff as it relates solely to a wrongful employment act means your or a family member's employee who is:

- employed by you or a family member, or through a firm under an agreement with you or a family member, to perform duties related only to a covered person's domestic, personal, or business pursuits covered under this part of your policy;
- compensated for labor or services directed by you or a family member; and
- employed regularly to work 15 or more hours per week.

Residential staff includes a temporary worker. Residential staff does not include an independent contractor or any covered person.

Temporary worker as it relates solely to a wrongful employment act means your or a family member's employee who is:

- employed by you or a family member, or through a firm under an agreement with you or a family member, to perform duties related only to a covered person's domestic, personal, or business pursuits covered under this part of your policy;
- compensated for labor or services directed by you or a family member; and
- employed to work 15 or more hours per week to substitute for any residential staff on leave or to meet seasonal or short- term workload demands for 30 consecutive days or longer during a 6 month period.

Temporary worker does not include an independent contractor or any covered person.

Discrimination. We do not cover any damages arising out of discrimination due to age, race, color, sex, creed, national origin, or any other discrimination.

Intentional acts. We do not cover any damages arising out of a willful, malicious, fraudulent or dishonest act or any act intended by any covered person to cause personal injury or property damage, even if the injury or damage is of a different degree or type than actually intended or expected. But we do cover such damages if the act was intended to protect people or property unless another exclusion applies. An intentional act is one whose consequences could have been foreseen by a reasonable person.

Molestation, misconduct or abuse. We do not cover any damages arising out of any actual, alleged or threatened:

- sexual molestation;
- sexual misconduct or harassment; or
- abuse.

Nonpermissive use. We do not cover any person who uses a motorized land vehicle or watercraft without permission from you or a family member.

Business pursuits. We do not cover any damages arising out of a covered person's business pursuits, investment or other for-profit activities, for the account of a covered person or others, or business property except on a follow form basis.

But we do cover damages arising out of volunteer work for an organized charitable, religious or community group, an incidental business away from home, incidental business at home, incidental business property, incidental farming, or residence premises conditional business liability unless another exclusion applies. We also cover damages arising out of your or a family member's ownership, maintenance, or use of a private passenger motor vehicle in business activities other than selling, repairing, servicing, storing, parking, testing, or delivering motorized land vehicles.

Unless stated otherwise in your Coverage Summary:

"Incidental business away from home" is a self-employed sales activity, or a self-employed business activity normally undertaken by person under the age of 18 such as newspaper delivery, babysitting, caddying, and lawn care. Either of these activities must:

- not yield gross revenues in excess of \$15,000 in any year;
- have no employees subject to worker's compensation or other similar disability laws;
- conform to local, state, and federal laws.

"Incidental business at home" is a business activity, other than farming, conducted on your residence premises which must:

- not yield gross revenues in excess of \$15,000, in any year, except for the business activity of managing one's own personal investments;
- have no employees subject to worker's compensation or other similar disability laws;
- conform to local, state, and federal laws.

"Incidental business property" is limited to the rental or holding for rental, to be used as a residence, of a condominium or cooperative unit owned by you or a family member, an apartment unit rented to you or a family member, a one or two family dwelling owned by you or a family member, or a three or four family dwelling owned and occupied by you or a family member. We provide this coverage only for premises covered under the Required Primary Underlying Insurance unless the rental or holding for rental is for:

- a residence of yours or a family member's that is occasionally rented and that is used exclusively as a residence; or
- part of a residence of yours or a family member's by one or two roomers or boarders; or
- part of a residence of yours or a family member's as an office, school, studio, or private garage.

"Incidental farming" is a farming activity which meets all of the following requirements:

- is incidental to your or a family member's use of the premises as a residence;
- does not involve employment of others for more than 1,500 hours of farm work during the policy period;

- does not produce more than \$25,000 in gross annual revenue from agricultural operations;
- and with respect to the raising or care of animals:
- does not produce more than \$50,000 in gross annual revenues;
- does not involve more than 25 sales transactions during the policy period;
- does not involve the sale of more than 50 animals during the policy period.

"Residence premises conditional business liability" is limited to business or professional activities when legally conducted by you or a family member at your residence. We provide coverage only for personal injury or property damage arising out of the physical condition of that residence if:

- you or a family member do not have any employees involved in your business or professional activities who are subject to workers' compensation or other similar disability laws; or, if you or a family member are a doctor or dentist, you do not have more than two employees subject to such laws;
- you or a family member do not earn annual gross revenues in excess of \$5,000, if you or a family member are a home day care provider.

We do not cover damages or consequences resulting from business or professional care or services performed or not performed.

The following additional exclusion applies only to "incidental farming" as described under the exclusion, Business pursuits.

Contamination. We do not cover any actual or alleged damages arising out of the discharge, dispersal, seepage, migration or release or escape of pollutants. Nor do we cover any cost or expense arising out of any request, demand or order to:

- extract pollutants from land or water;
- remove, restore or replace polluted or contaminated land or water; or
- test for, monitor, clean up, remove, contain, treat, detoxify or neutralize pollutants, or in any way respond to or assess the effects of pollutants.

However, this exclusion does not apply if the discharge, dispersal, seepage, migration, release or escape is sudden and accidental. A "pollutant" is any solid, liquid, gaseous or thermal irritant or contaminant, including smoke (except smoke from a hostile fire), vapor, soot, fumes, acids, alkalis, chemicals and waste. A "contaminant" is an impurity resulting from the mixture of or contact of a substance with a foreign substance. "Waste" includes materials to be disposed of, recycled, reconditioned or reclaimed.

Financial guarantees. We do not cover any damages for any covered person's financial guarantee of the financial performance of any covered person, other individual or organization.

Professional services. We do not cover any damages for any covered person's performing or failure to perform professional services, or for professional services for which any covered person is legally responsible or licensed.

Acts of war. We do not cover any damages caused directly or indirectly by war, undeclared war, civil war, insurrection, rebellion, revolution, warlike acts by military forces or personnel, the destruction or seizure of property for a military purpose, or the consequences of any of these actions.

Contractual liability. We do not cover any assessments charged against a covered person as a member of a homeowners, condominium or cooperative association. We also do not cover any damages arising from contracts or agreements made in connection with any covered person's business. Nor do we cover any liability for unwritten contracts, or contracts in which the liability of others is assumed after a covered loss.

Covered person's or dependent's personal injury. We do not cover any damages for personal injury for any covered person or their dependents where the ultimate beneficiary is the offending party or defendant. We also do not cover any damages for personal injury for which you can be held legally liable, in any way, to a family member, your spouse or domestic partner or for which a family member, your spouse or domestic partner can be held legally liable, in any way, to you.

However, we do cover damages for bodily injury arising out of the use of a motorized land vehicle for which you can be held legally liable to a family member, your spouse or domestic partner or for which a family member, your spouse or domestic partner can be held legally liable to you to the extent that coverage is provided under this policy. This coverage applies only to the extent such damages are covered by primary underlying insurance and exceed the limits of insurance required for that motorized land vehicle under the Required Primary Underlying Insurance provisions of this policy.

Liability for dependent care. We do not cover any damages for personal injury for which a covered person's only legal liability is by virtue of a contract or other responsibility for a dependent's care.

Illness. We do not cover personal injury or property damage resulting from any illness, sickness or disease transmitted intentionally or unintentionally by a covered person to anyone, or any consequence resulting from that illness, sickness or disease. We also do not cover any damages for personal injury resulting from the fear of contracting any illness, sickness or disease, or any consequence resulting from the fear of contracting any illness, sickness or disease.

Fungi and mold. We do not cover any actual or alleged damages or medical expenses arising out of mold, the fear of mold, or any consequences resulting from mold or the fear of mold. "Mold" means fungi, mold, mold spores, mycotoxins, and the scents and other byproducts of any of these.

Nuclear or radiation hazard. We do not cover any damages caused directly or indirectly by nuclear reaction, radiation, or radioactive contamination, regardless of how it was caused.

POLICY TERMS

This part of your Group Personal Excess Liability Policy explains the conditions that apply to your policy.

General Conditions

These conditions apply to your policy in general, and to each coverage provided in the policy.

Policy period

The effective dates of your policy are shown in the Coverage Summary. Those dates begin at 12:01 a.m. standard time at the mailing address shown.

All coverages on this policy apply only to occurrences that take place while this policy is in effect.

Transfer of rights

If we make a payment under this policy, we will assume any recovery rights a covered person has in connection with that loss, to the extent we have paid for the loss.

All of your rights of recovery will become our rights to the extent of any payment we make under this policy. A covered person will do everything necessary to secure such rights; and do nothing after a loss to prejudice such rights. However, you may waive any rights of recovery from another person or organization for a covered loss in writing before the loss occurs.

Concealment or fraud

We do not provide coverage if you or any covered person has intentionally concealed or misrepresented any material fact relating to this policy before or after a loss.

Application of coverage

Coverage applies separately to each covered person. However, this provision does not increase the amount of coverage for any one occurrence.

Assignment

You cannot transfer your interest in this policy to anyone else unless we agree in writing to the transfer.

Policy changes

This policy can be changed only by a written amendment we issue.

Bankruptcy or insolvency

We will meet all our obligations under this policy regardless of whether you, your estate, or anyone else or their estate becomes bankrupt or insolvent.

In case of death

In the event of your death, coverage will be provided until the end of the policy period or policy anniversary date, whichever occurs first, for any surviving member of your household who is a covered person at the time of death. We will also cover your legal representative or any person having proper temporary custody of your property.

Liberalization

We may extend or broaden the coverage provided by this policy. If we do this during the policy period or within 60 days before it begins, without increasing the premium, then the extended or broadened coverage will apply to occurrences after the effective date of the extended or broadened coverage.

Conforming to state law

If any provision of this policy conflict<; with any applicable laws of the state you live in, this policy is amended to conform to those laws.

Conforming to trade sanction laws

This policy does not apply to the extent that trade or economic sanctions or other laws or regulations prohibit us from providing insurance.

Liability Conditions

These conditions apply to all liability coverages in this policy.

Other Insurance

This insurance is excess over any other insurance except for those policies that

- are written specifically to cover excess over the amount of coverage that applies in this policy; and
- schedule this policy as underlying insurance.

Your duties after a loss

In case of an accident or occurrence, the covered person shall perform the following duties that apply:

Notification. You must notify us or your agent or broker as soon as possible.

Assistance. You must provide us with all available information. This includes any suit papers or other documents which help us in the event that we defend you.

Cooperation. You must cooperate with us fully in any legal defense. This may include any association by us with the covered person in defense of a claim reasonably likely to involve us.

Examination. A person making a claim under this policy must submit as often as we reasonably require:

- to physical exams by physicians we select, which we will pay for; and
- to examination under oath and subscribe the same; and authorize us to obtain:
 - medical reports; and
 - other pertinent records.

Appeals

If a covered person, or any primary insurer, does not appeal a judgment for covered damages, we may choose to do so. We will then become responsible for all expenses, taxable costs, and interest arising out of the appeal. However, the amount of coverage for damages will not be increased.

Special Conditions

In the event of conflict with any other conditions of your policy, these conditions supersede.

Legal action against us

You agree not to bring action against us unless you have first complied with all conditions of this policy.

You also agree not to bring any action against us until the amount of damages you are legally obligated to pay has been finally determined after an actual trial or appeal, if any, or by a written agreement between you, us and the claimant. No person or organization has any right under this policy to bring us into any action to determine the liability of a covered person.

Notice of cancellation and coverage termination conditions

The Sponsoring Organization may cancel this policy by returning it to us or notifying us in writing at any time subject to the following:

- the Sponsoring Organization must notify us in advance of the requested cancellation date; and
- the Sponsoring Organization must provide proof of notification to each member of the Defined Group covered under this policy.

We may cancel this policy or any part of it subject to the following conditions. Our right to cancel applies to each coverage or limit in this policy. In the event we cancel this policy, we are under no obligation to provide you with an opportunity to purchase equivalent coverage.

Within 60 days. When this policy or any part of it has been in effect for less than 60 days, we may cancel with 30 days notice for any reason.

Non payment of premium. We may cancel this policy or any part of it with 10 days notice if the Sponsoring Organization or you fail to pay the premium by the due date, regardless of whether the premium is payable to us, to our agent, or under any financial credit.

Misrepresentation. We may cancel this policy or any part of it with 30 days notice if the coverage was obtained through misrepresentation, fraudulent statements, or omissions or concealment of a fact that is relevant to the acceptance of the risk or to the hazard we assumed.

Increase in hazard. We may cancel this policy or any part of it with 30 days notice if there has been a substantial change in the risk which increases the chance of loss after insurance coverage has been issued or renewed, including but not limited to an increase in exposure due to rules, legislation, or court decision.

Procedure. To cancel this policy or any part of it, we must notify you in writing. This notice will be mailed to the Sponsoring Organization at the mailing address shown in the Coverage Summary and we will obtain a certificate of mailing. This notice will include the date the cancellation is to take effect.

Termination. Should an individual for any reason no longer qualify as a member of the Defined Group, coverage will cease sixty (60) days from the date that individual no longer qualifies as a member of the Defined Group, or the policy expiration or cancellation date, whichever comes first.

Refund. In the event of cancellation by the Sponsoring Organization or us, we will refund any unearned premium on the effective date of cancellation, or as soon as possible afterwards to the Sponsoring Organization. The unearned premium will be computed short rate for the unexpired term of the policy.

LETTER FROM INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

April 26, 2023

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 April 26, 2023, 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 March 31, 2023, is incorporated by reference in Registration Statement Nos. 033-59815, 033-59853, 333-67266, 333-100179, 333-107734, 333-121104, 333-125120, 333-127317, and 333-175798 on Form S-8, 333-270497 on Form S-3, and 333-264549 on Form S-4.

/s/ Deloitte & Touche LLP
McLean, Virginia

**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: April 26, 2023

/s/ Kathy J. Warden

Kathy J. Warden
Chair, Chief Executive Officer and President

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

I, David F. Keffer, certify that:

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

Date: April 26, 2023

/s/ **David F. Keffer**

David F. Keffer

Corporate Vice President and Chief Financial Officer

**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 March 31, 2023, 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: April 26, 2023

/s/ Kathy J. Warden

Kathy J. Warden
Chair, Chief Executive Officer and President

**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 March 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, David F. Keffer, Corporate Vice President and Chief Financial Officer of the company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the company.

Date: April 26, 2023

/s/ David F. Keffer

David F. Keffer
Corporate Vice President and Chief Financial Officer