UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

	FORM 1	10-Q
	TERLY REPORT PURSUANT TO SECTION ANGE ACT OF 1934	ON 13 OR 15(d) OF THE SECURITIES
	For the Quarterly Period E	Inded March 31, 2022
	or	
	SITION REPORT PURSUANT TO SECTION ANGE ACT OF 1934	ON 13 OR 15(d) OF THE SECURITIES
	Commission File N	umber 1-16411
	NORTHROP GRUMM	AN CORPORATION
	(Exact name of registrant as	
	Delaware	80-0640649
	e or other jurisdiction of oration or organization)	(I.R.S. Employer Identification No.)
	Fairview Park Drive	
	lls Church, Virginia of principal executive offices)	22042 (Zip Code)
(Hadress o	(703) 280-	
	(Registrant's telephone numb	
Securities registered pursuar	nt 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
	nths (or for such shorter period that the registrant wa	be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 s required to file such reports), and (2) has been subject to such filing
Regulation S-T (§232.405 o		Interactive Data File required to be submitted pursuant to Rule 405 of or such shorter period that the registrant was required to submit such files).
	See the definitions of "large accelerated filer," "acce	elerated filer, a non-accelerated filer, a smaller reporting company or an elerated filer," "smaller reporting company" and "emerging growth
Large Accelerated Filer \boxtimes	Accelerated Filer \square	
Non-accelerated Filer \square	Smaller Reporting Company \square	
Emerging Growth Compan	у 🗆	
	oany, indicate by check mark if the registrant has electing standards provided pursuant to Section 13(a) of t	cted not to use the extended transition period for complying with any new he Exchange Act. \Box
Indicate by check mark whe Yes \square No \boxtimes	ther the registrant is a shell company (as defined in l	Rule 12b-2 of the Exchange Act).
	es outstanding of each of the issuer's classes of community, 603 shares of common stock were outstanding.	non stock, as of the latest practicable date.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS AND COMPREHENSIVE INCOME (Unaudited)

	Three Month	s End	Ended March 31		
\$ in millions, except per share amounts	2022		2021		
Sales					
Product	\$ 6,84	1 \$	7,022		
Service	1,950	õ	2,135		
Total sales	8,79	7	9,157		
Operating costs and expenses					
Product	5,38)	5,690		
Service	1,54	4	1,727		
General and administrative expenses	970	5	898		
Total operating costs and expenses	7,90)	8,315		
Gain on sale of business	_	-	1,980		
Operating income	89'	7	2,822		
Other (expense) income					
Interest expense	(133	3)	(155)		
Non-operating FAS pension benefit	37	5	367		
Other, net	•	4	(18)		
Earnings before income taxes	1,14	4	3,016		
Federal and foreign income tax expense	189	•	821		
Net earnings	\$ 95	5 \$	2,195		
Basic earnings per share	\$ 6.12	2 \$	13.46		
Weighted-average common shares outstanding, in millions	156.)	163.1		
Diluted earnings per share	\$ 6.10	0 \$	13.43		
Weighted-average diluted shares outstanding, in millions	156.	3	163.5		
Net earnings (from above)	\$ 95	5 \$	2,195		
Other comprehensive loss, net of tax					
Change in unamortized prior service credit	(1	l)	(2)		
Change in cumulative translation adjustment and other, net	(Z	2)	(1)		
Other comprehensive loss, net of tax	(3		(3)		
Comprehensive income	\$ 95	2 \$	2,192		

CONDENSED CONSOLIDATED STATEMENTS OF FINANCIAL POSITION (Unaudited)

\$ in millions, except par value	Ma	rch 31, 2022	December 31, 2021	
Assets				
Cash and cash equivalents	\$	2,174	\$	3,530
Accounts receivable, net		1,713		1,467
Unbilled receivables, net		6,118		5,492
Inventoried costs, net		838		811
Prepaid expenses and other current assets		713		1,126
Total current assets		11,556		12,426
Property, plant and equipment, net of accumulated depreciation of \$6,961 for 2022 and \$6,819 for 2021		8,017		7,894
Operating lease right-of-use assets		1,702		1,655
Goodwill		17,523		17,515
Intangible assets, net		533		578
Deferred tax assets		220		200
Other non-current assets		2,352		2,311
Total assets	\$	41,903	\$	42,579
Liabilities				
Trade accounts payable	\$	2,050	\$	2,197
Accrued employee compensation		1,532		1,993
Advance payments and billings in excess of costs incurred		2,876		3,026
Other current liabilities		2,392		2,314
Total current liabilities		8,850		9,530
Long-term debt, net of current portion of \$7 for 2022 and \$6 for 2021		12,825		12,777
Pension and other postretirement benefit plan liabilities		2,979		3,269
Operating lease liabilities		1,661		1,590
Deferred tax liabilities		310		490
Other non-current liabilities		1,991		1,997
Total liabilities		28,616		29,653
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: 2022—155,581,611 and 2021—156,284,423	L	156		156
Paid-in capital		_		_
Retained earnings		13,277		12,913
Accumulated other comprehensive loss		(146)		(143)
Total shareholders' equity		13,287		12,926
Total liabilities and shareholders' equity	\$	41,903	\$	42,579

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

	Thr	ee Months E	nths Ended March			
\$ in millions		2022		2021		
Operating activities						
Net earnings	\$	955	\$	2,195		
Adjustments to reconcile to net cash used in operating activities:						
Depreciation and amortization		303		294		
Stock-based compensation		18		18		
Deferred income taxes		(201)		1		
Gain on sale of business		_		(1,980)		
Net periodic pension and OPB income		(298)		(272)		
Pension and OPB contributions		(36)		(38)		
Changes in assets and liabilities:						
Accounts receivable, net		(246)		(253)		
Unbilled receivables, net		(626)		(357)		
Inventoried costs, net		(27)		(101)		
Prepaid expenses and other assets		16		(38)		
Accounts payable and other liabilities		(732)		(589)		
Income taxes payable, net		361		1,028		
Other, net		25		26		
Net cash used in operating activities		(488)		(66)		
Investing activities						
Divestiture of IT services business		_		3,400		
Capital expenditures		(244)		(205)		
Other, net		(5)		1		
Net cash (used in) provided by investing activities		(249)		3,196		
Financing activities						
Payments of long-term debt		_		(2,200)		
Common stock repurchases		(318)		(2,000)		
Cash dividends paid		(251)		(238)		
Payments of employee taxes withheld from share-based awards		(48)		(30)		
Other, net		(2)		(52)		
Net cash used in financing activities		(619)		(4,520)		
Decrease in cash and cash equivalents		(1,356)		(1,390)		
Cash and cash equivalents, beginning of year		3,530		4,907		
Cash and cash equivalents, end of period	\$	2,174	\$	3,517		

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

	Thi	ree Months l	∃nde	d March 31
\$ in millions, except per share amounts		2022		2021
Common stock				
Beginning of period	\$	156	\$	167
Common stock repurchased		(1)		(6)
Shares issued for employee stock awards and options		1		_
End of period		156		161
Paid-in capital				
Beginning of period		_		58
Common stock repurchased		_		(39)
Stock compensation				(11)
End of period		_		8
Retained earnings				
Beginning of period		12,913		10,482
Common stock repurchased		(315)		(1,955)
Net earnings		955		2,195
Dividends declared		(246)		(235)
Stock compensation		(30)		
End of period		13,277		10,487
Accumulated other comprehensive loss				
Beginning of period		(143)		(128)
Other comprehensive loss, net of tax		(3)		(3)
End of period		(146)		(131)
Total shareholders' equity	\$	13,287	\$	10,525
Cash dividends declared per share	\$	1.57	\$	1.45

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

1. BASIS OF PRESENTATION

Principles of Consolidation and Reporting

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

Effective January 30, 2021 (the "Divestiture date"), we completed the sale of our IT and mission support services business (the "IT services divestiture") for \$3.4 billion in cash and recorded a pre-tax gain on sale of \$2.0 billion. The IT and mission support services business was comprised of the majority of the former Information Solutions and Services (IS&S) division of Defense Systems (excluding the Vinnell Arabia business); select cyber, intelligence and missions support programs, which were part of the former Cyber and Intelligence Mission Solutions (CIMS) division of Mission Systems; and the former Space Technical Services business unit of Space Systems. Operating results include sales and operating income for the IT and mission support services business prior to the Divestiture date. Sales and pre-tax profit for the IT and mission support services business were \$162 million and \$20 million for the three months ended March 31, 2021, respectively.

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

The results reported in these financial statements are not necessarily indicative of results that may be expected for the entire year. These financial statements should be read in conjunction with the information contained in the company's 2021 Annual Report on Form 10-K. During the second quarter of 2021, we changed the presentation of the retiree benefits components in the operating cash flow section of the unaudited condensed consolidated statement of cash flows. Prior period amounts have been conformed to current period presentation and this change does not impact previously reported cash provided by operating activities.

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

Accounting Estimates

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

Revenue Recognition

Contract Estimates

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

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

	Three Months Ended March						
n millions, except per share data		2022		2021			
Revenue	\$	209	\$	202			
Operating income		173		190			
Net earnings ⁽¹⁾		137		150			
Diluted earnings per share ⁽¹⁾		0.87		0.92			

⁽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 EAC adjustment on the engineering, manufacturing and development phase of the B-21 program at Aeronautics Systems largely related to performance incentives. No such adjustments were material to the financial statements during the three months ended March 31, 2021.

Backloa

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, 2022 was \$75.8 billion. Of our March 31, 2022 backlog, we expect to recognize approximately 40 percent as revenue over the next 12 months and 60 percent as revenue over the next 24 months, with the remainder to be recognized thereafter.

Contract Assets and Liabilities

For each of the company's contracts, the timing of revenue recognition, customer billings, and cash collections results in a net contract asset or liability at the end of each reporting period. Contract assets are equivalent to and reflected as Unbilled receivables in the unaudited condensed consolidated statements of financial position and are primarily related to long-term contracts where revenue recognized under the cost-to-cost method exceeds amounts billed to customers. Contract liabilities are equivalent to and reflected as Advance payments and billings in excess of costs incurred in the unaudited condensed consolidated statements of financial position. The amount of revenue recognized for the three months ended March 31, 2022 and 2021 that was included in the contract liability balances at the beginning of each year was \$1.4 billion and \$1.1 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 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. 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. Non-cash investing activities also include capital expenditures incurred but not yet paid of \$56 million and \$58 million as of March 31, 2022 and 2021, respectively.

Accumulated Other Comprehensive Loss

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

\$ in millions	March 31, 2022	December 31, 2021
Unamortized prior service credit	\$ 1 5	5 2
Cumulative translation adjustment and other, net	(147)	(145)
Total accumulated other comprehensive loss	\$ (146)	(143)

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, 2022, are not expected to have a material effect on the company's unaudited condensed consolidated financial position, annual results of operations and/or cash flows.

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

Basic Earnings Per Share

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

Diluted Earnings Per Share

Diluted earnings per share include the dilutive effect of awards granted to employees under stock-based compensation plans. The dilutive effect of these securities totaled 0.6 million shares and 0.4 million shares for the three months ended March 31, 2022 and 2021, respectively.

Share Repurchases

On December 4, 2018, the company's board of directors authorized a share repurchase program of up to \$3.0 billion of the company's common stock (the "2018 Repurchase Program"). Repurchases under the 2018 Repurchase Program commenced in March 2020 and were completed in October 2021.

On January 25, 2021, the company's board of directors authorized a share repurchase program of up to an additional \$3.0 billion in share repurchases of the company's common stock (the "2021 Repurchase Program"). Repurchases under the 2021 Repurchase Program commenced in October 2021 upon the completion of the 2018 Repurchase Program. As of March 31, 2022, repurchases under the 2021 Repurchase Program totaled \$1.2 billion; \$1.8 billion 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, 2022, the company's total outstanding share repurchase authorization totaled \$3.8 billion.

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

During the fourth quarter of 2021, the company entered into an ASR agreement with Goldman Sachs to repurchase \$500 million of the company's common stock as part of the 2021 Repurchase Program. Under the agreement, we made a payment of \$500 million to Goldman Sachs and received an initial delivery of 1.2 million shares valued at \$425 million that were immediately canceled by the company. The remaining balance of \$75 million was settled on February 1, 2022 with a final delivery of 0.1 million shares from Goldman Sachs. The final average purchase price was \$374.79 per share.

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

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

					Shares Rep (in mill	
Repurchase Program	Amount uthorized	Total Shares Retired	Average Price		Three Months Er	ided March 31
Authorization Date	millions)	(in millions)	Per Share ⁽¹⁾	Date Completed	2022	2021
December 4, 2018	\$ 3,000	8.9	\$ 337.18	October 2021	_	5.9
January 25, 2021	\$ 3,000	3.1	379.06		0.9	_
January 24, 2022	\$ 2,000	_	_		_	_

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Dividends on Common Stock

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

3. INCOME TAXES

		Tillee Molluis	I March 21	
\$ in millions	_	2022		2021
Federal and foreign income tax expense	\$	189	\$	821
Effective income tax rate		16.5 %)	27.2 %

The first quarter 2022 effective tax rate (ETR) decreased to 16.5 percent from 27.2 percent primarily due to additional federal income taxes in the prior year resulting from the IT services divestiture. The company's first quarter 2022 ETR includes benefits of \$41 million for research credits and \$15 million for foreign derived intangible

⁽¹⁾ Includes commissions paid.

income (FDII). The company's first quarter 2021 ETR included benefits of \$52 million for research credits and \$11 million for FDII.

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, 2022, we have approximately \$1.7 billion in unrecognized tax benefits, including \$428 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.

Our current unrecognized tax benefits, which are included in Other current liabilities in the unaudited condensed consolidated statements of financial position, were \$623 million and \$590 million as of March 31, 2022 and December 31, 2021, 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 2017-2018 federal tax returns are currently under Internal Revenue Service (IRS) examination. The company's 2014-2016 federal income tax returns and refund claims related to its 2007-2016 federal tax returns are currently under review by the IRS Appeals Office. In addition, legacy Orbital ATK (OATK) federal tax returns for the years ended March 31, 2014 and 2015, the nine-month transition period ended December 31, 2015 and calendar years 2016-2017 are currently under review by the IRS Appeals Office. It is reasonably possible that within the next twelve months, unrecognized tax benefits claimed in legacy OATK's 2014 to 2017 tax years may decline by up to \$110 million through administrative resolution with IRS Appeals.

4. FAIR VALUE OF FINANCIAL INSTRUMENTS

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

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

	March 31, 2022						December 31, 2021								
\$ in millions	L	evel 1		Level 2		Level 3	Total		Level 1		Level 2	Level 3	,		Total
Financial Assets															
Marketable securities	\$	382	\$	_	\$	7	\$ 389	\$	393	\$	1	\$	7	\$	401
Marketable securities valued using NAV							15								17
Total marketable securities		382		_		7	404		393		1		7		418
Derivatives		_		(1)		_	(1)		_		(1)		_		(1)

The notional value of the company's foreign currency forward contracts at March 31, 2022 and December 31, 2021 was \$126 million, respectively. At March 31, 2022 and December 31, 2021, no portion of the notional value was designated as a cash flow hedge.

The derivative fair values and related unrealized gains/losses at March 31, 2022 and December 31, 2021 were not material.

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, 2022.

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 \$13.8 billion and \$15.1 billion as of March 31, 2022 and December 31, 2021, respectively. We calculated the fair value of long-term debt using Level 2 inputs, based on interest rates available for debt with terms and maturities similar to the company's existing debt arrangements. The current portion of long-term debt is recorded in Other current liabilities in the unaudited condensed consolidated statements of financial position.

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

Repayments of Senior Notes

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

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

5. INVESTIGATIONS, CLAIMS AND LITIGATION

On May 4, 2012, the company commenced an action, *Northrop Grumman Systems Corp. v. United States*, in the U.S. Court of Federal Claims. This lawsuit relates to an approximately \$875 million firm fixed-price contract awarded to the company in 2007 by the U.S. Postal Service (USPS) for the construction and delivery of flats sequencing systems (FSS) as part of the postal automation program. The FSS were delivered. The company's lawsuit seeks approximately \$63 million for unpaid portions of the contract price, and approximately \$115 million based on the company's assertions that, through various acts and omissions over the life of the contract, the USPS adversely affected the cost and schedule of performance and materially altered the company's obligations under the contract. The United States responded to the company's complaint with an answer, denying most of the company's claims, and counterclaims seeking approximately \$410 million, less certain amounts outstanding under the contract. In the course of the litigation, the United States subsequently amended its counterclaim, reducing it to seek approximately \$193 million. The principal counterclaim alleges that the company delayed its performance and caused damages to the USPS because USPS did not realize certain costs savings as early as it had expected. On February 3, 2020, after extensive discovery and motions practice, the parties commenced what was expected to be a seven-week trial. After COVID-19-related interruptions, trial concluded on March 5, 2021. On October 12, 2021, the parties completed post-trial briefing, and on December 8, 2021 the court held a post-trial oral argument. Although the ultimate outcome of this matter cannot be predicted or reasonably estimated at this time, the company intends to continue vigorously to pursue and defend the matter.

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; the State also communicated that it was assessing potential natural resource damages. In December 2020, the parties reached a tentative agreement regarding the steps the company will take to implement the State's Amended Record of Decision and to resolve certain potential other claims, including for natural resource damages. On September 22, 2021, the State of New York issued for public comment a new consent decree reflecting the agreement. On December 7, 2021, the public comment period closed. We understand that the State will soon seek court approval of the consent decree. Subject to court approval, we have also reached agreements with the Department of Defense and the Bethpage Water District to resolve claims involving these parties. We are in discussions with the South Farmingdale Water District to explore whether we can also resolve their claims at this stage.

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, allocation and allowability

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NORTHROP GRUMMAN CORPORATION

standards and other requirements to which we are subject may continue to change, and our costs may increase materially. In addition to disputes and legal proceedings related to environmental conditions at the site (including remediation, allocation and allowability), we are a party to various, and may become a party to additional disputes and legal proceedings with individual and class action plaintiffs alleging personal injury and property damage, with insurance carriers and with other parties. We cannot at this time predict or reasonably estimate the potential cumulative outcomes or ranges of possible liability of these aggregate Bethpage matters.

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 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. The company has resumed discussions with staff at the FTC regarding our response and their views on compliance issues. 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, 2022, 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 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, 2022, 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, 2022, or its annual results of operations and/or cash flows.

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

Environmental Matters

The table below summarizes the amount accrued for environmental remediation costs, management's estimate of the amount of reasonably possible future costs in excess of accrued costs and the deferred costs expected to be recoverable through overhead charges on U.S. government contracts as of March 31, 2022 and December 31, 2021:

\$ in millions	Accrued	Costs ⁽¹⁾⁽²⁾	in Excess of A		De	ferred Costs ⁽³⁾
March 31, 2022	\$	582	\$	361	\$	494
December 31, 2021		572		363		486

⁽¹⁾ As of March 31, 2022, \$181 million is recorded in Other current liabilities and \$401 million is recorded in Other non-current liabilities.

Although management cannot predict whether new information gained as our environmental remediation projects progress, or as changes in facts and circumstances occur, will materially affect the estimated liability accrued, except with respect to Bethpage, we do not anticipate that future remediation expenditures associated with our currently identified projects will have a material adverse effect on the company's unaudited condensed consolidated financial position as of March 31, 2022, or its annual results of operations and/or cash flows.

With respect to Bethpage, as discussed in Note 5, in December 2019, the State of New York issued an Amended Record of Decision, seeking to impose additional remedial requirements beyond those the company previously had been taking; the State also communicated that it was assessing potential natural resource damages. In December 2020, the parties reached a tentative agreement regarding the steps the company will take to implement the State's Amended Record of Decision and to resolve certain potential other claims, including for natural resource damages. On September 22, 2021, the State of New York issued for public comment a new consent decree reflecting the agreement. On December 7, 2021, the public comment period closed. We understand that the State will soon seek court approval of the consent decree. As discussed in Note 5, the applicable remediation standards and other requirements to which we are subject may continue to change, our costs may increase materially, and those costs may not be fully recoverable.

Financial Arrangements

In the ordinary course of business, the company uses standby letters of credit and guarantees issued by commercial banks and surety bonds issued principally by insurance companies to guarantee the performance on certain obligations. At March 31, 2022, there were \$382 million of stand-by letters of credit and guarantees and \$71 million of surety bonds outstanding.

Commercial Paper

The company maintains a commercial paper program that serves as a source of short-term financing with capacity to issue unsecured commercial paper notes up to \$2.0 billion. At March 31, 2022, there were no commercial paper borrowings outstanding.

Credit Facilities

The company maintains a five-year senior unsecured credit facility in an aggregate principal amount of \$2.0 billion (the "2018 Credit Agreement") that matures in August 2024 and is intended to support the company's commercial paper program and other general corporate purposes. Commercial paper borrowings reduce the amount available for borrowing under the 2018 Credit Agreement. At March 31, 2022, there was no balance outstanding under this facility.

At March 31, 2022, the company was in compliance with all covenants under its credit agreements.

⁽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, 2022, \$156 million is deferred in Prepaid expenses and other current assets and \$338 million is deferred in Other non-current assets. These amounts are evaluated for recoverability on a routine basis.

7. RETIREMENT BENEFITS

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

	Three Months Ended March 31							
	Pension Benefits					0	PB	
\$ in millions		2022	2021			2022		2021
Components of net periodic benefit cost (benefit)								
Service cost	\$	92	\$	104	\$	2	\$	4
Interest cost		284		263		12		13
Expected return on plan assets		(660)		(628)		(28)		(26)
Amortization of prior service (credit) cost		_		(2)		_		_
Net periodic benefit cost (benefit)	\$	(284)	\$	(263)	\$	(14)	\$	(9)

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:

	Tl	led March		
\$ in millions		2022		2021
Defined benefit pension plans	\$	26	\$	27
OPB plans		10		11
Defined contribution plans		199		266

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:

	Three Months	Ended March 31
in millions	2022	2021
RSRs granted	0.1	0.1
RPSRs granted	0.2	0.2
Grant date aggregate fair value	\$ 88	\$ 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:

	Thre	Three Months Ended March					
\$ in millions		2022	2021				
Minimum aggregate payout amount	\$	32	\$	31			
Maximum aggregate payout amount		182		177			

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

9. SEGMENT INFORMATION

The following table presents sales and operating income by segment:

	Three	Three Months Ended Marc			
\$ in millions	20	022	2021		
Sales					
Aeronautics Systems	\$	2,703 \$	2,990		
Defense Systems		1,283	1,562		
Mission Systems		2,497	2,589		
Space Systems		2,855	2,521		
Intersegment eliminations		(541)	(505)		
Total sales		8,797	9,157		
Operating income					
Aeronautics Systems		307	308		
Defense Systems		155	177		
Mission Systems		385	397		
Space Systems		261	276		
Intersegment eliminations		(71)	(63)		
Total segment operating income		1,037	1,095		
FAS/CAS operating adjustment		(46)	19		
Unallocated corporate (expense) income		(94)	1,708		
Total operating income	\$	897 \$	2,822		

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) Income

Unallocated corporate (expense) income 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) income also includes costs not considered part of management's evaluation of segment operating performance, such as amortization of purchased intangible assets and the additional depreciation expense related to the step-up in fair value of property, plant and equipment acquired through business combinations, as well as certain compensation and other costs.

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

Disaggregation of Revenue

Sales by Customer Type	Thre	Three Months Ended March 3				
	2022	2	2021	-		
\$ in millions	\$	% ⁽³⁾	\$	% ⁽³⁾		
Aeronautics Systems						
U.S. government ⁽¹⁾	2,292	8% \$	2,541	8%		
International ⁽²⁾	343	1%	399	1%/		
Other customers	3	-%	6	- %		
Intersegment sales	65	2 ⁄o	44	%		
Aeronautics Systems sales	2,703	10%	2,990	10%		
Defense Systems						
U.S. government ⁽¹⁾	775	6%	993	6%		
International ⁽²⁾	293	2%	351	2 %		
Other customers	16	%	33	2⁄0		
Intersegment sales	199	1%	185	12%		
Defense Systems sales	1,283	10%	1,562	10%		
Mission Systems						
U.S. government ⁽¹⁾	1,794	72 ⁄ ₀	1,834	7%		
International ⁽²⁾	433	1%	502	1 %		
Other customers	24	%	16	%		
Intersegment sales	246	1%	237	%		
Mission Systems sales	2,497	10%	2,589	10%		
Space Systems						
U.S. government ⁽¹⁾	2,708	9%	2,326	92%		
International ⁽²⁾	72	%	105	%%		
Other customers	44	2⁄0	51	2⁄0		
Intersegment sales	31	%	39	2⁄0		
Space Systems sales	2,855	10%	2,521	10%		
<u>Fotal</u>						
U.S. government ⁽¹⁾	7,569	8%	7,694	8%		
International ⁽²⁾	1,141	1%	1,357	1 %		
Other customers	87	%	106	%		
Total Sales \$	8,797	10%\$	9,157	10%		

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

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

⁽³⁾ Percentages calculated based on total segment sales.

Sales by Contract Type	Three Months Ended March 31					
	 202	2	20	21		
\$ in millions	 \$	% ⁽¹⁾	\$	% ⁽¹⁾		
Aeronautics Systems						
Cost-type	\$ 1,276	48 %	\$ 1,411	48 %		
Fixed-price	1,362	52 %	1,535	52 %		
Intersegment sales	65		44			
Aeronautics Systems sales	2,703		2,990			
Defense Systems						
Cost-type	336	31 %	509	37 %		
Fixed-price	748	69 %	868	63 %		
Intersegment sales	199		185			
Defense Systems sales	1,283		1,562			
Mission Systems						
Cost-type	835	37 %	865	37 %		
Fixed-price	1,416	63 %	1,487	63 %		
Intersegment sales	246		237			
Mission Systems sales	2,497		2,589			
Space Systems						
Cost-type	1,983	70 %	1,844	74 %		
Fixed-price	841	30 %	638	26 %		
Intersegment sales	31		39			
Space Systems sales	2,855		2,521			
Total						
Cost-type	4,430	50 %	4,629	51 %		
Fixed-price	4,367	50 %	4,528	49 %		
Total Sales	\$ 8,797		\$ 9,157			

 $^{^{\}left(1\right)}$ Percentages calculated based on external customer sales.

Sales by Geographic Region	 Three Months Ended March 31								
	202	.2	202	21					
\$ in millions	\$	% ⁽²⁾	\$	% ⁽²⁾					
Aeronautics Systems									
United States	\$ 2,295	87 %	\$ 2,547	87 %					
Asia/Pacific	190	7 %	279	9 %					
Europe	137	5 %	100	3 %					
All other ⁽¹⁾	16	1 %	20	1 %					
Intersegment sales	65		44						
Aeronautics Systems sales	2,703		2,990						
Defense Systems									
United States	791	73 %	1,026	75 %					
Asia/Pacific	105	10 %	103	7 %					
Europe	101	9 %	76	6 %					
All other ⁽¹⁾	87	8 %	172	12 %					
Intersegment sales	199		185						
Defense Systems sales	1,283		1,562						
Mission Systems									
United States	1,818	81 %	1,850	79 %					
Asia/Pacific	139	6 %	160	7 %					
Europe	225	10 %	269	11 %					
All other ⁽¹⁾	69	3 %	73	3 %					
Intersegment sales	246		237						
Mission Systems sales	2,497		2,589						
Space Systems									
United States	2,752	98 %	2,376	95 %					
Asia/Pacific	29	1 %	16	1 %					
Europe	40	1 %	88	4 %					
All other ⁽¹⁾	3	— %	2	— %					
Intersegment sales	31		39						
Space Systems sales	2,855		2,521						
Total									
United States	7,656	87 %	7,799	85 %					
Asia/Pacific	463	5 %	558	6 %					
Europe	503	6 %	533	6 %					
All other ⁽¹⁾	175	2 %	267	3 %					
Total Sales	\$ 8,797	- 	\$ 9,157						

 $^{^{\}left(1\right)}$ All other is principally comprised of the Middle East.

 $^{^{(2)}\,\}mathrm{Percentages}$ calculated based on external customer sales.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Results of Review of Interim Financial Information

We have reviewed the accompanying condensed consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries (the "Company") as of March 31, 2022, 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, 2022 and 2021, 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, 2021, 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 26, 2022, 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, 2021, 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 27, 2022

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

OVERVIEW

Northrop Grumman Corporation (herein referred to as "Northrop Grumman," the "company," "we," "us," or "our") is a leading global aerospace and defense company. We 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 our 2021 Annual Report on Form 10-K, which provides additional information on our business and the environment in which we operate and our operating results.

Disposition of IT and Mission Support Services Business

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

COVID-19

In March 2020, the World Health Organization characterized COVID-19 as a global pandemic, and the President declared a national emergency concerning the COVID-19 outbreak. In the more than two years since then, the pandemic (including the first and subsequent variants of COVID-19) has dramatically impacted the global health and economic environment, including millions of confirmed cases and deaths, business slowdowns or shutdowns, labor shortfalls, supply chain challenges, regulatory challenges, and market volatility. We discussed in some detail in our Annual Report on Form 10-K for the fiscal years ended December 31, 2020 and 2021, as well as interim Form 10-Qs, 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.

At a macro level, the number of hospitalizations and deaths, in the U.S. in particular, have eased recently, as more people are fully vaccinated, and communities have continued to open up. It, of course, remains unclear whether that trajectory will continue, but there is some reason for optimism. The company continues to work to monitor and address the pandemic and related developments, including the impact on our company, our employees, our customers, our suppliers and our communities. Our goals have been, and continue to be, 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 applicable government requirements, and the needs of our stakeholders.

During the first quarter of 2022, COVID-19 case rates and the health and economic impacts of the pandemic fluctuated in different communities in the U.S. and globally, particularly with the spread of new variants. We continued to see a prolonged impact on the economy, our industry, and our company, with ongoing labor shortages, supply chain challenges, and inflation, among other impacts.

The company's first quarter 2022 revenue and operating income were modestly reduced by the impact of the COVID-19 pandemic on the company earlier in the quarter, including through elevated levels of employee leave and supply chain challenges. While we cannot predict the future course of the pandemic, or its impact on us, we are not currently assuming significant additional impacts to our 2022 financial results. For further information on the pandemic and the potential impact to the company of COVID-19, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Liquidity and Capital Resources" below and "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our 2021 Annual Report on Form 10-K.

Global Security and Economic 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 major global powers, as well as terrorist organizations, emerging nuclear tensions, diverse regional security concerns and political instability. The conflict in Ukraine has increased those tensions and instability, and highlighted threats. 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. We have begun to experience an increased demand for certain of our goods and services related to the conflict in the Ukraine, in particular, but we have not seen a significant increase to date. Although we are not currently experiencing significant disruption to our operations or our supply chain, or unanticipated costs as a result of the conflict, any or all of these may occur in the future. While we do not have sizeable business dealings in Russia or Ukraine, we do sell and procure some products and services in the region, including procuring engines and cores for the Antares rocket used in our Commercial Resupply Services contract. We are actively monitoring the situation and are exploring potential measures to mitigate the risk of future disruption and costs to our programs.

The global geopolitical and economic environments also continue to be impacted by uncertainty and stress. Geopolitical relationships have changed and are continuing to change. Global economic growth is expected to remain in the low single digits in 2022, reflecting, among other things, the continued impact of and uncertainty surrounding geopolitical tensions globally, financial market volatility, inflation and the COVID-19 pandemic. We expect still further impacts related to the conflict in Ukraine and economic sanctions imposed on Russia. The global economy may also be affected by the residual legal, regulatory and economic impacts of Britain's exit from the European Union, the full impacts of which are complex and gradually becoming evident. Rising inflation has led to higher costs of various commodities and supplier products. It has also increased interest rates, raising the cost of borrowing for the federal government, which could impact other spending priorities. Additionally, and more broadly, economic tensions and changes in international trade policies, including higher tariffs on imported goods and materials and renegotiation of free trade agreements, could impact the global market for defense products, services and solutions.

U.S. Political and Economic Environment

On May 28, 2021, the Administration released its budget request for fiscal year (FY) 2022. The budget proposed \$753 billion for national defense programs and \$770 billion in non-defense discretionary funding. The Administration's budget request included funding for an infrastructure and economic recovery plan as well as an education and economic support plan. On November 15, 2021, the President signed into law the \$1.2 trillion Infrastructure and Investment and Jobs Act. Enactment of the infrastructure plan and any future spending plans, as well as the costs of the pandemic may have broader implications for the defense industry, our customers' budgets and priorities, and the overall economic environment, including the national debt. It is difficult to predict the specific course of future defense budgets. However, we believe the ongoing conflict in Ukraine has highlighted some of the national security threats to our nation and our allies, and the need for strong deterrence and a robust defense capability, as well as impacting our political and economic environment. More generally, the threat to U.S. national security remains very substantial and we believe that our capabilities, particularly in space, missiles, missile defense, hypersonics, counter-hypersonics, survivable aircraft and mission systems should help our customers defend against current and future threats and, as a result, continue to allow for long-term profitable business growth.

On March 15, 2022, the President signed into law the consolidated appropriations act for FY 2022, which provides full-year funding through September 30, including \$782 billion for national defense. This represents nearly \$30 billion more than the Administration initially requested for FY 2022, and approximately 6%, or \$42 billion higher than it was in FY 2021. The Pentagon's portion of the overall national defense budget is \$743 billion. Congress also approved \$14 billion in emergency aid to support security, economic, and humanitarian assistance for Ukraine and Central European partners.

The Bipartisan Budget Act of 2019 suspended the debt ceiling through July 31, 2021. In October 2021, the statutory debt limit was increased by \$480 billion and, in December 2021, was further increased by \$2.5 trillion, which is currently expected to allow the Treasury Department to finance the government into 2023.

The political environment, federal budget and debt ceiling are expected to continue to be the subject of considerable debate, especially in light of the ongoing conflict in Ukraine and its potential long-term impacts, which could have material impacts on defense spending broadly and the company's programs in particular.

For further information on the risks we face from the current political and economic environment, see "Risk Factors" in our 2021 Annual Report on Form 10-K.

CONSOLIDATED OPERATING RESULTS

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

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

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

Selected financial highlights are presented in the table below:

	Tl	%			
\$ in millions, except per share amounts		2022		2021	Change
Sales	\$	8,797	\$	9,157	(4)%
Operating costs and expenses		7,900		8,315	(5)%
Operating costs and expenses as a % of sales		89.8 %		90.8 %	
Gain on sale of business		_		1,980	NM
Operating income		897		2,822	NM
Operating margin rate		10.2 %		30.8 %	
Federal and foreign income tax expense		189		821	(77)%
Effective income tax rate		16.5 %		27.2 %	
Net earnings		955	·	2,195	(56)%
Diluted earnings per share	\$	6.10	\$	13.43	(55)%

Sales

The table below reconciles sales to organic sales:

Three Months Ended March 31

	I nree Wonths Ended Warch 31									
	·		2022		2021					
\$ in millions		Sales	IT services sales	Organic sales		Sales	IT services sales	Organic sales	Organic sales % change	
Aeronautics Systems	\$	2,703 \$	- \$	2,703	\$	2,990 \$	— \$	2,990	(10)%	
Defense Systems		1,283	_	1,283		1,562	(106)	1,456	(12)%	
Mission Systems		2,497	_	2,497		2,589	(42)	2,547	(2)%	
Space Systems		2,855	_	2,855		2,521	(16)	2,505	14 %	
Intersegment eliminations		(541)	_	(541)		(505)	2	(503)		
Total	\$	8,797 \$	- \$	8,797	\$	9,157 \$	(162) \$	8,995	(2)%	

First quarter 2022 sales decreased \$360 million due, in part, to a \$162 million reduction in sales related to the IT services divestiture. First quarter 2022 organic sales decreased \$198 million, or 2 percent, primarily due to lower sales at Aeronautics Systems and Defense Systems, partially offset by higher sales at Space Systems. First quarter 2022 organic sales reflect the continuation from 2021 of a tightened labor market as well as some temporal COVID-19-related headwinds early in the quarter related to supply chain and labor disruption.

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 2022 operating income decreased \$1.9 billion, or 68 percent, primarily due to a \$2.0 billion pre-tax gain on sale and \$192 million of unallocated corporate expenses recognized in the prior year associated with the IT services divestiture. Operating income also decreased due to a \$65 million reduction in the FAS/CAS operating adjustment and \$58 million of lower segment operating income. First quarter 2022 operating margin rate declined to 10.2 percent reflecting the items above.

First quarter 2022 general and administrative (G&A) costs as a percentage of sales increased to 11.1 percent from 9.8 percent in the prior year period primarily due to an increase in investments for future business opportunities as well as the timing of indirect cost recognition during the year.

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

Federal and Foreign Income Taxes

The first quarter 2022 effective tax rate (ETR) decreased to 16.5 percent from 27.2 percent primarily due to additional federal income taxes in the prior year resulting from the IT services divestiture. See Note 3 to the financial statements for additional information.

Net Earnings

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

	Th	ree Months	%	
\$ in millions		2022	2021	Change
Net earnings	\$	955	\$ 2,195	(56)%
Gain on sale of business		_	(1,980)	NM
State tax impact ¹		_	160	NM
Transaction costs		_	32	NM
Make-whole premium		_	54	NM
Federal tax impact of items above ²		_	614	NM
Transaction adjustment, net of tax	\$	_	\$ (1,120)	NM
Transaction-adjusted net earnings	\$	955	\$ 1,075	(11)%

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

First quarter 2022 net earnings decreased \$1.2 billion, or 56 percent, primarily due to a \$1.1 billion after-tax decline associated with the IT services divestiture. Transaction-adjusted net earnings decreased \$120 million, or 11 percent, primarily due to the lower operating income described above.

Diluted Earnings Per Share

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

	Th	ree Months	%	
		2022	2021	Change
Diluted EPS	\$	6.10	\$ 13.43	(55)%
Gain on sale of business per share		_	(12.11)	NM
State tax impact per share ¹		_	0.98	NM
Transaction costs per share		_	0.19	NM
Make-whole premium per share		_	0.33	NM
Federal tax impact of line items above per share ²		_	3.75	NM
Transaction adjustment per share, net of tax	\$		\$ (6.86)	NM
Transaction-adjusted EPS	\$	6.10	\$ 6.57	(7)%

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

First quarter 2022 diluted earnings per share decreased 55 percent, principally due to a \$6.86 after-tax decline associated with the IT services divestiture. Transaction-adjusted earnings per share decreased \$0.47, or 7 percent, reflecting an 11 percent decrease in transaction-adjusted net earnings and a 4 percent reduction in weighted-average diluted shares outstanding.

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

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

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:

Aeronaut	tics Systems	Defense Systems	Mission Systems	Space Systems
Autonom	ous Systems	Battle Management & Missile Systems	Airborne Multifunction Sensors	Launch & Strategic Missiles
Manne	d 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).

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.

	Th	ree Months	%		
\$ in millions		2022		2021	Change
Operating income	\$	897	\$	2,822	NM
Reconciliation to segment operating income:					
CAS pension expense	\$	(46)	\$	(123)	(63)%
FAS pension service expense		92		104	(12)%
FAS/CAS operating adjustment		46		(19)	(342)%
Gain on sale of business		_		(1,980)	NM
IT services divestiture – unallowable state taxes and transaction costs		_		192	NM
Intangible asset amortization and PP&E step-up depreciation		60		65	(8)%
Other unallocated corporate expense		34		15	127 %
Unallocated corporate expense (income)		94		(1,708)	NM
Segment operating income	\$	1,037	\$	1,095	(5)%
Segment operating margin rate		11.8 %	,	12.0 %	

First quarter 2022 segment operating income decreased \$58 million, or 5 percent. First quarter 2021 segment operating income included \$20 million from the IT services business, as well as a benefit of approximately \$100 million due to the impact of lower overhead rates on the company's fixed price contracts. Segment operating margin rate decreased to 11.8 percent from 12.0 percent and reflects a lower operating margin rate at Space Systems, partially offset by higher operating margin rates at Aeronautics Systems and Defense Systems.

FAS/CAS Operating Adjustment

First quarter 2022 FAS/CAS operating adjustment decreased primarily due to lower CAS pension expense resulting from favorable plan asset returns in 2021 and changes in certain CAS actuarial assumptions as of December 31, 2021.

<u>Unallocated Corporate Expense (Income)</u>

The change in unallocated corporate expense (income) is primarily due to the \$2.0 billion pre-tax gain on sale and \$192 million of unallowable state taxes and transaction costs recognized in the prior year associated with the IT services divestiture.

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

	Three M	Ionths	s En 31	ded March
\$ in millions	2022			2021
Favorable EAC adjustments	\$	357	\$	348
Unfavorable EAC adjustments	((184)		(158)
Net EAC adjustments	\$	173	\$	190

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

	Т		s End 31	Ended March 1	
\$ in millions		2022		2021	
Aeronautics Systems	\$	103	\$	37	
Defense Systems		25		30	
Mission Systems		57		88	
Space Systems		(8)		37	
Eliminations		(4)		(2)	
Net EAC adjustments	\$	173	\$	190	

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

AERONAUTICS SYSTEMS	Th	ree Months	%		
\$ in millions	<u> </u>	2022		2021	Change
Sales	\$	2,703	\$	2,990	(10)%
Operating income		307		308	— %
Operating margin rate		11.4 %	ó	10.3 %	

Sales

First quarter 2022 sales decreased \$287 million, or 10 percent, due to lower volume in both Manned Aircraft and Autonomous Systems, including restricted programs and the E-2, Triton and F/A-18 production programs.

Operating Income

First quarter 2022 operating income was comparable to the prior year period. Operating margin rate increased to 11.4 percent from 10.3 percent primarily due to a \$67 million favorable EAC adjustment on the engineering, manufacturing and development phase of the B-21 program largely related to performance incentives, partially offset by the previously described overhead rate benefit to fixed price contracts in the prior year.

DEFENSE SYSTEMS	Th	ree Months	%		
\$ in millions		2022		2021	Change
Sales	\$	1,283	\$	1,562	(18)%
Operating income		155		177	(12)%
Operating margin rate		12.1 %	ó	11.3 %	

Sales

First quarter 2022 sales decreased \$279 million due, in part, to a \$106 million reduction in sales related to the IT services divestiture. First quarter 2022 organic sales decreased \$173 million, or 12 percent, principally due to lower scope on an international training program as well as lower volume on the Advanced Anti-Radiation Guided Missile (AARGM) and Precision Guided Kit (PGK) programs due to timing of ramp-up on follow-on production lots. These reductions were partially offset by higher volume on an international weapons program.

Operating Income

First quarter 2022 operating income decreased \$22 million, or 12 percent, due, in part, to a \$14 million reduction in operating income related to the IT services divestiture. Lower organic sales volume was partially offset by a higher operating margin rate, which increased to 12.1 percent from 11.3 percent primarily due to improved performance at Battle Management and Missile Systems.

MISSION SYSTEMS	Three Months Ended March 31				
\$ in millions	<u> </u>	2022		2021	Change
Sales	\$	2,497	\$	2,589	(4)%
Operating income		385		397	(3)%
Operating margin rate		15.4 %	ó	15.3 %	

Sales

First quarter 2022 sales decreased \$92 million due, in part, to a \$42 million reduction in sales related to the IT services divestiture. First quarter 2022 organic sales decreased \$50 million, or 2 percent, primarily due to lower volume on Navigation, Targeting and Survivability programs, as well as lower volume on airborne radar and electronic warfare programs. These decreases were partially offset by an increase in restricted sales, higher volume on the Ground/Air Task-Oriented Radar program, as well as higher intercompany volume largely related to ramp-up on the Ground Based Strategic Deterrent (GBSD) program.

Operating Income

First quarter 2022 operating income decreased \$12 million, or 3 percent, principally due to lower sales. Operating margin rate was comparable to the prior year period and reflects improved performance on Maritime/Land Systems and Sensors and Navigation, Targeting and Survivability programs, partially offset by the previously described overhead rate benefit to fixed price contracts in the prior year.

SPACE SYSTEMS	Tl	Three Months Ended March 31						
\$ in millions		2022		2021	Change			
Sales	\$	2,855	\$	2,521	13 %			
Operating income		261		276	(5)%			
Operating margin rate		9.1 %	ó	10.9 %				

Sales

First quarter 2022 sales increased \$334 million, or 13 percent, and includes a \$16 million reduction in sales related to the IT services divestiture. First quarter 2022 organic sales increased \$350 million, or 14 percent, due to higher sales in both the Launch & Strategic Missiles and Space business areas. Launch & Strategic Missiles sales increased primarily due to ramp-up on development programs, including a \$130 million increase on the Next Generation Interceptor program and a \$117 million increase on GBSD. Space sales were driven by higher volume on CRS and restricted programs, partially offset by lower volume on the James Webb Space Telescope after its successful launch in December 2021.

Operating Income

First quarter 2022 operating income decreased \$15 million, or 5 percent, due to a lower operating margin rate, partially offset by higher sales volume. Operating margin rate decreased to 9.1 percent from 10.9 percent primarily due to lower net EAC adjustments on commercial space programs as well as the previously described overhead rate benefit to fixed price contracts in the prior year.

PRODUCT AND SERVICE ANALYSIS

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

	Three Months Ended March 31								
\$ in millions	2022								
Segment Information:	Sales	Operating Costs and Expenses	Sales	Operating Costs and Expenses					
Aeronautics Systems				_					
Product	\$ 2,045 \$	1,804 \$	2,524 \$	2,274					
Service	593	533	422	369					
Intersegment eliminations	65	59	44	39					
Total Aeronautics Systems	2,703	2,396	2,990	2,682					
Defense Systems									
Product	610	527	680	595					
Service	474	425	697	624					
Intersegment eliminations	199	176	185	166					
Total Defense Systems	1,283	1,128	1,562	1,385					
Mission Systems									
Product	1,762	1,509	1,760	1,493					
Service	489	396	592	497					
Intersegment eliminations	246	207	237	202					
Total Mission Systems	2,497	2,112	2,589	2,192					
Space Systems									
Product	2,424	2,195	2,058	1,829					
Service	400	371	424	381					
Intersegment eliminations	31	28	39	35					
Total Space Systems	2,855	2,594	2,521	2,245					
Segment Totals									
Total Product	\$ 6,841 \$	6,035 \$	7,022 \$	6,191					
Total Service	1,956	1,725	2,135	1,871					
Total Segment ⁽¹⁾	\$ 8,797 \$	7,760 \$	9,157 \$	8,062					

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

Product Sales and Costs

First quarter 2022 product sales decreased \$181 million, or 3 percent, primarily due to decreases in product sales at Aeronautics Systems and Defense Systems, partially offset by increases in product sales at Space Systems. The decrease at Aeronautics Systems was principally due to lower volume on restricted programs, as well as the E-2 and F/A-18 production programs. The decrease at Defense Systems was driven by lower volume on the AARGM and PGK programs. The increase at Space Systems is principally related to ramp-up on development programs including NGI and GBSD.

First quarter 2022 product costs decreased \$156 million, or 3 percent, consistent with the lower product sales.

Service Sales and Costs

First quarter 2022 service sales decreased \$179 million, or 8 percent, primarily due to the IT services divestiture and lower volume on an international training program at Defense Systems. Sales from the divested IT services business, which were largely included in service sales, were \$162 million in the prior year period. The decreases were partially offset by higher service volume on restricted programs at Aeronautics Systems.

First quarter 2022 service costs decreased \$146 million, or 8 percent, consistent with the lower service sales.

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, 2022 and December 31, 2021:

	March 31, 2022					De	cember 31, 2021		
\$ in millions		Funded		Unfunded		Total Backlog		Total Backlog	% Change in 2022
Aeronautics Systems	\$	8,906	\$	8,735	\$	17,641	\$	18,277	(3)%
Defense Systems		5,404		737		6,141		6,349	(3)%
Mission Systems		9,960		4,055		14,015		14,306	(2)%
Space Systems		6,828		31,168		37,996		37,114	2 %
Total backlog	\$	31,098	\$	44,695	\$	75,793	\$	76,046	— %

New Awards

First quarter 2022 net awards totaled \$8.5 billion and backlog totaled \$75.8 billion. Significant first quarter new awards include \$2.5 billion for restricted programs (primarily at Aeronautics Systems and Mission Systems), \$1.3 billion for Commercial Resupply Service Missions, \$0.7 billion for the Space Development Agency Tranche 1 Transport Layer and \$0.6 billion for F-35 at Aeronautics Systems.

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, 2022, we had \$2.2 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 \$2.0 billion, and in April 2022, we renewed our one-year \$500 million uncommitted credit facility. At March 31, 2022, there was no balance outstanding under these credit facilities.

Effective January 30, 2021, we completed the IT services divestiture for \$3.4 billion cash. Proceeds were primarily used in the first quarter of 2021 for a \$2.0 billion accelerated share repurchase and to fund redemption of \$1.5 billion of the company's 2.55 percent unsecured notes due October 2022.

COVID-19 and the CARES Act

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

Internal Revenue Code (IRC) Section 174

Beginning in 2022, the Tax Cuts and Jobs Act of 2017 ("TCJA") eliminates the option to deduct research and development expenditures currently and requires taxpayers to amortize them over five years pursuant to IRC Section 174. Congress is considering, but has not passed, legislation that would defer the amortization requirement to later years. Although first quarter 2022 cash from operations was not impacted, if legislation is not passed and made effective retroactively to January 1, 2022, we estimate the provisions currently in effect will reduce cash from operations for the year ended December 31, 2022 by approximately \$1 billion. The actual impact on 2022 cash from operations will depend on if and when Congress passes additional legislation, whether such legislation is made effective retroactively, the amount of research and development expenditures incurred and paid by the company during 2022, and whether the IRS issues guidance on the provision which differs from our current interpretation.

Cash Flow Measure

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 flow used in operating activities:

	Tl	hree Month :	s Ene 31	ded March	%
\$ in millions		2022		2021	Change
Net earnings	\$	955	\$	2,195	(56)%
Gain on sale of business		_		(1,980)	NM
Non-cash items ⁽¹⁾		(178)		41	(534)%
Pension and OPB contributions		(36)		(38)	(5)%
Changes in trade working capital		(1,254)		(310)	305 %
Other, net		25		26	(4)%
Net cash used in operating activities	\$	(488)	\$	(66)	639 %

⁽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 2022 cash used in operating activities increased \$422 million, as compared with the same period in 2021, principally due to increases in trade working capital. 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 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:

	Th	nree Months	Enc 81	ded March	%
\$ in millions		2022		2021	Change
Net cash used in operating activities	\$	(488)	\$	(66)	639 %
Capital expenditures		(244)		(205)	19 %
Adjusted free cash flow	\$	(732)	\$	(271)	170 %

First quarter 2022 adjusted free cash flow decreased \$461 million, as compared with the same period in 2021, due to higher net cash used in operating activities and an increase in capital expenditures.

Investing Cash Flow

First quarter 2022 net cash used in investing activities was \$249 million compared to net cash provided by investing activities of \$3.2 billion in the prior year period, principally due to \$3.4 billion in cash received from the sale of our IT services business during the first quarter of 2021.

Financing Cash Flow

First quarter 2022 net cash used in financing activities decreased \$3.9 billion, as compared with the same period in 2021, principally due to a \$2.2 billion decrease in debt repayments and a \$1.7 billion reduction 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 2021 Annual Report on Form 10-K.

ACCOUNTING STANDARDS UPDATES

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

FORWARD-LOOKING STATEMENTS AND PROJECTIONS

This Form 10-Q and the information we are incorporating by reference contain statements that constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "will," "expect," "anticipate," "intend," "may," "could," "should," "plan," "project," "forecast," "believe," "estimate," "outlook," "trends," "goals" and similar expressions generally identify these forward-looking statements. Forward-looking statements include, among other things, statements relating to our future financial condition, results of operations and/or cash flows. Forward-looking statements are based upon assumptions, expectations, plans and projections that we believe to be reasonable when made, but which may change over time. These statements are not guarantees of future performance and inherently involve a wide range of risks and uncertainties that are difficult to predict. Specific risks that could cause actual results to differ materially from those expressed or implied in these forward-looking statements include, but are not limited to, those identified and discussed more fully in the section entitled "Risk Factors" in our 2021 Annual Report on Form 10-K and from time to time in our other filings with the Securities and Exchange Commission (SEC). These risks and uncertainties are amplified by the global COVID-19 pandemic and the related effects on the broader economic environment, which have caused and will continue to cause significant challenges, instability and uncertainty. They include:

Industry and Economic Risks

- our dependence on the U.S. government for a substantial portion of our business
- significant delays or reductions in appropriations for our programs, and U.S. government funding and program support more broadly, including related to hostilities and other global events
- the use of estimates when accounting for our contracts and the effect of contract cost growth and/or changes in estimated contract revenues and costs

increased competition within our markets and bid protests

Legal and Regulatory Risks

- · investigations, claims, disputes, enforcement actions, litigation and/or other legal proceedings
- the improper conduct of employees, agents, subcontractors, suppliers, business partners or joint ventures in which we participate and the impact on our reputation and our ability to do business
- changes in procurement and other laws, SEC and other regulations, contract terms and practices applicable to our industry, findings by the U.S. government as to our compliance with such requirements, and changes in our customers' business practices globally
- · 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 of the COVID-19 pandemic (or future health epidemics, pandemics or similar outbreaks), including potential new variants, case surges or prolonged recovery periods, their effects on the broader environment, and varying related government requirements, on: our business, our ability to maintain a qualified and productive workforce, work slowdowns or stoppages, labor shortages, supply chain and logistics challenges, costs we cannot recover and liabilities for which we are not compensated, performance challenges (including cost and schedule), government funding, changes in government acquisition priorities and processes, government payment rules and practices, insurance challenges, and potential impacts on access to capital, the markets and the fair value of our assets
- · cyber and other security threats or disruptions faced by us, our customers or our suppliers and other partners, and changes in related regulations
- the ability to maintain a qualified workforce with the required security clearances and requisite skills
- the performance and viability of our subcontractors and suppliers and the availability and pricing of raw materials and components
- climate change, its impacts on our company, our operations and our stakeholders (employees, suppliers, customers, shareholders and regulators), and
 changes in laws, regulations and priorities related to greenhouse gas emissions and other climate change related concerns
- our exposure to additional risks as a result of our international business, including risks related to geopolitical and economic factors, 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
- our ability to develop new products and technologies and maintain technologies, facilities, and equipment to win new competitions and meet the needs
 of our customers

General and Other Risk Factors

- the adequacy and availability of our insurance coverage, customer indemnifications or other liability protections
- the future investment performance of plan assets, changes in actuarial assumptions associated with our pension and other postretirement benefit plans and legislative or other regulatory actions impacting our pension and postretirement benefit obligations
- · changes in business conditions that could impact business investments and/or recorded goodwill or the value of other long-lived assets

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NORTHROP GRUMMAN CORPORATION

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 2021 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, 2022, 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, 2022, no changes occurred in our internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

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

We are a party to various investigations, lawsuits, arbitration, claims, enforcement actions and other legal proceedings, including government investigations and claims, that arise in the ordinary course of our business. These types of matters could result in administrative, civil or criminal fines, penalties or other sanctions (which terms include judgments or convictions and consent or other voluntary decrees or agreements); compensatory, treble or other damages; non-monetary relief or actions; or other liabilities. Government regulations provide that certain allegations against a contractor may lead to suspension or debarment from future government contracts or suspension of export privileges for the company or one or more of its components. The nature of legal proceedings is such that we cannot assure the outcome of any particular matter. For additional information on pending matters, please see Notes 5 and 6 to the financial statements, and for further information on the risks we face from existing and future investigations, lawsuits, arbitration, claims, enforcement actions and other legal proceedings, please see "Risk Factors" in our 2021 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 2021 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, 2022.

Period	Total Number of Shares Purchased	Average Price Paid per Share ⁽¹⁾⁽³⁾	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approxi Dollar Va Shares tha Yet Be Pun under Plans or Pr (\$ in milli	due of at May chased the cograms
January 1, 2022 - January 28, 2022	255,824	\$ 396.46	255,824	\$	4,107
January 29, 2022 - February 25, 2022	404,647	$NM^{(3)}$	404,647		3,930
February 26, 2022 - April 1, 2022	251,153	447.04	251,153		3,818
Total	911,624	NM ⁽³⁾	911,624	\$	3,818

⁽¹⁾ Includes commissions paid.

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

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

⁽²⁾ The value remaining includes an additional \$2.0 billion share repurchase authorization approved by the company's board of directors on January 24, 2022.

⁽³⁾ During the fourth quarter of 2021, the company entered into an accelerated share repurchase (ASR) agreement with Goldman Sachs & Co. LLC, which was completed on February 1, 2022. Pursuant to the terms of the ASR, a total of approximately 0.1 million shares of our common stock were repurchased with an average final purchase price of \$374.79

NORTHROP GRUMMAN CORPORATION

Item 6. Exhibits

- *+10.1 Group Personal Excess Liability Policy effective January 1, 2022
- *+10.2 2022 Restricted Stock Rights Grant Agreement Specifying Terms and Conditions Applicable to 2022 Restricted Stock Rights Granted under the 2011 Long-Term Incentive Stock Plan
- *+10.3 2022 Restricted Performance Stock Rights Grant Agreement Specifying Terms and Conditions Applicable to 2022 Restricted Performance Stock Rights Granted under the 2011 Long-Term Incentive Stock Plan
 - *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, 2022, 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

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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 27, 2022

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 desc ribed 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.

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/underinsure d motorists protection available for any one occurrence is the excess uninsured motorists/underinsure d 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:

- vou:
- · 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 descendents of theirs;
- · parents, grandparents or other ancestors of theirs; or
- siblings, their children or other descendents 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 inrur 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 sailboatracing even if the sailboat is equippw 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 residen tial 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 activ ities other than selling, repairing, 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.

IDness. 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.

NORTHROP GRUMMAN CORPORATION 2022 RESTRICTED STOCK RIGHTS GRANT AGREEMENT

This 2022 Restricted Stock Rights Grant Agreement ("Agreement") applies to certain "Restricted Stock Rights" ("RSRs") granted by Northrop Grumman Corporation (the "Company") in 2022 under its 2011 Long-Term Incentive Stock Plan. If you were granted an RSR award by the Company in 2022, 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 2022 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 Continuance 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

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.

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. <u>Compliance with Laws; No Stockholder Rights Prior to</u> 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. <u>Choice of Law; Venue; Arbitration.</u>

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 (Å) 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 respected 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. <u>Definitions</u>.

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 form 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

2022 RESTRICTED PERFORMANCE STOCK RIGHTS GRANT AGREEMENT

This 2022 Restricted Performance Stock Rights Grant Agreement ("Agreement") applies to certain "Restricted Performance Stock Rights" ("RPSRs") granted by Northrop Grumman Corporation (the "Company") in 2022 under its 2011 Long-Term Incentive Stock Plan. If you were granted an RPSR award by the Company in 2022, 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 2022 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, 2022 to December 31, 2024 (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.

Vesting; Payment of RPSRs. 1.

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.

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 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.

2.4Leave 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).

2.7Continuance 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. <u>Non-Transferability and Other Restrictions</u>.

3.1Non-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. <u>Post-Employment Conduct.</u>

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.

4.4Non-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.

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.

6.1Adjustments. 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.

7.4Unfunded 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 respected 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:

- 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);
- (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.
- ${\bf ``Code"}$ 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:

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 form 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.

LETTER FROM INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

April 27, 2022

The Board of Directors and Stockholders of Northrop Grumman Corporation

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

We are aware that our report dated April 27, 2022, 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, 2022, is incorporated by reference in Registration Statement Nos. 033-59815, 033-59853, 333-67266, 333-100179, 333-107734, 333-121104, 333-125120, 333-127317, and 333-175798 on Form S-8; and Registration Statement No. 333-237504 on Form S-3.

/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 27, 2022

/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 27, 2022

/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, 2022, 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 27, 2022

/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, 2022, 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 27, 2022

/s/ David F. Keffer

David F. Keffer Corporate Vice President and Chief Financial Officer