

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

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**FORM 10-Q**

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

For the Quarterly Period Ended June 30, 2017  
or

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

Commission File Number 1-16411

**NORTHROP GRUMMAN CORPORATION**

(Exact name of registrant as specified in its charter)

**DELAWARE**

(State or other jurisdiction of  
incorporation or organization)

**80-0640649**

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

**2980 Fairview Park Drive,  
Falls Church, Virginia**

(Address of principal executive offices)

**22042**

(Zip Code)

**(703) 280-2900**

(Registrant's telephone number, including area code)

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

Yes

No

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

Yes

No

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

Large accelerated filer

Accelerated filer

Non-accelerated filer  (Do not check if a smaller reporting company)

Smaller reporting company

Emerging growth company

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

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

Yes

No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.  
As of July 21, 2017, 174,094,301 shares of common stock were outstanding.

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## NORTHROP GRUMMAN CORPORATION

## PART I. FINANCIAL INFORMATION

## Item 1. Financial Statements

CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS AND COMPREHENSIVE INCOME  
(Unaudited)

<i>\$ in millions, except per share amounts</i>	Three Months Ended June 30		Six Months Ended June 30	
	2017	2016	2017	2016
<b>Sales</b>				
Product	\$ 3,916	\$ 3,560	\$ 7,750	\$ 7,038
Service	2,459	2,440	4,892	4,918
<b>Total sales</b>	<b>6,375</b>	<b>6,000</b>	<b>12,642</b>	<b>11,956</b>
<b>Operating costs and expenses</b>				
Product	2,958	2,621	5,829	5,232
Service	1,896	1,962	3,783	3,912
General and administrative expenses	666	620	1,343	1,276
<b>Operating income</b>	<b>855</b>	<b>797</b>	<b>1,687</b>	<b>1,536</b>
Other (expense) income				
Interest expense	(76)	(74)	(151)	(150)
Other, net	28	7	44	20
Earnings before income taxes	807	730	1,580	1,406
Federal and foreign income tax expense	255	213	388	333
<b>Net earnings</b>	<b>\$ 552</b>	<b>\$ 517</b>	<b>\$ 1,192</b>	<b>\$ 1,073</b>
<b>Basic earnings per share</b>	<b>\$ 3.16</b>	<b>\$ 2.87</b>	<b>\$ 6.82</b>	<b>\$ 5.94</b>
Weighted-average common shares outstanding, in millions	174.5	180.1	174.7	180.7
<b>Diluted earnings per share</b>	<b>\$ 3.15</b>	<b>\$ 2.85</b>	<b>\$ 6.78</b>	<b>\$ 5.88</b>
Weighted-average diluted shares outstanding, in millions	175.5	181.5	175.8	182.4
Net earnings (from above)	\$ 552	\$ 517	\$ 1,192	\$ 1,073
Other comprehensive income				
Change in unamortized benefit plan costs, net of tax	102	100	201	201
Change in cumulative translation adjustment	(4)	(9)	—	(13)
Other, net	1	1	3	—
Other comprehensive income, net of tax	99	92	204	188
<b>Comprehensive income</b>	<b>\$ 651</b>	<b>\$ 609</b>	<b>\$ 1,396</b>	<b>\$ 1,261</b>

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

## NORTHROP GRUMMAN CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF FINANCIAL POSITION  
(Unaudited)

<i>\$ in millions</i>	June 30, 2017	December 31, 2016
<b>Assets</b>		
Cash and cash equivalents	\$ 1,383	\$ 2,541
Accounts receivable, net	4,280	3,299
Inventoried costs, net	1,039	816
Prepaid expenses and other current assets	162	200
Total current assets	6,864	6,856
Property, plant and equipment, net of accumulated depreciation of \$4,965 in 2017 and \$4,831 in 2016	3,802	3,588
Goodwill	12,453	12,450
Deferred tax assets	1,385	1,462
Other non-current assets	1,309	1,258
<b>Total assets</b>	<b>\$ 25,813</b>	<b>\$ 25,614</b>
<b>Liabilities</b>		
Trade accounts payable	\$ 1,385	\$ 1,554
Accrued employee compensation	1,213	1,342
Advance payments and amounts in excess of costs incurred	1,340	1,471
Other current liabilities	2,248	1,263
Total current liabilities	6,186	5,630
Long-term debt, net of current portion of \$862 in 2017 and \$12 in 2016	6,219	7,058
Pension and other post-retirement benefit plan liabilities	6,666	6,818
Other non-current liabilities	823	849
<b>Total liabilities</b>	<b>19,894</b>	<b>20,355</b>
<b>Commitments and contingencies (Note 7)</b>		
<b>Shareholders' equity</b>		
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: 2017—174,150,501 and 2016—175,068,263	174	175
Paid-in capital	—	—
Retained earnings	11,087	10,630
Accumulated other comprehensive loss	(5,342)	(5,546)
Total shareholders' equity	5,919	5,259
<b>Total liabilities and shareholders' equity</b>	<b>\$ 25,813</b>	<b>\$ 25,614</b>

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

## NORTHROP GRUMMAN CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS  
(Unaudited)

<i>\$ in millions</i>	Six Months Ended June 30	
	2017	2016
<b>Operating activities</b>		
Net earnings	\$ 1,192	\$ 1,073
Adjustments to reconcile to net cash provided by operating activities:		
Depreciation and amortization	211	209
Stock-based compensation	42	37
Deferred income taxes	(47)	(89)
Changes in assets and liabilities:		
Accounts receivable, net	(981)	(647)
Inventoried costs, net	(223)	(170)
Prepaid expenses and other assets	(25)	7
Accounts payable and other liabilities	(310)	(287)
Income taxes payable	90	225
Retiree benefits	165	209
Other, net	(46)	(23)
Net cash provided by operating activities	<b>68</b>	<b>544</b>
<b>Investing activities</b>		
Capital expenditures	(433)	(471)
Other, net	7	2
Net cash used in investing activities	<b>(426)</b>	<b>(469)</b>
<b>Financing activities</b>		
Common stock repurchases	(367)	(682)
Payments of long-term debt	—	(107)
Cash dividends paid	(341)	(322)
Payments of employee taxes withheld from share-based awards	(91)	(150)
Other, net	(1)	6
Net cash used in financing activities	<b>(800)</b>	<b>(1,255)</b>
Decrease in cash and cash equivalents	<b>(1,158)</b>	<b>(1,180)</b>
Cash and cash equivalents, beginning of year	<b>2,541</b>	<b>2,319</b>
Cash and cash equivalents, end of period	<b>\$ 1,383</b>	<b>\$ 1,139</b>

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

## NORTHROP GRUMMAN CORPORATION

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

<i>\$ in millions, except per share amounts</i>	Six Months Ended June 30	
	2017	2016
<b>Common stock</b>		
Beginning of year	\$ 175	\$ 181
Common stock repurchased	(2)	(3)
Shares issued for employee stock awards and options	1	1
End of period	174	179
<b>Paid-in capital</b>		
Beginning of year	—	—
End of period	—	—
<b>Retained earnings</b>		
Beginning of year	10,630	10,661
Common stock repurchased	(351)	(686)
Net earnings	1,192	1,073
Dividends declared	(336)	(310)
Stock compensation	(48)	(104)
End of period	11,087	10,634
<b>Accumulated other comprehensive loss</b>		
Beginning of year	(5,546)	(5,320)
Other comprehensive income, net of tax	204	188
End of period	(5,342)	(5,132)
Total shareholders' equity	\$ 5,919	\$ 5,681
Cash dividends declared per share	\$ 1.90	\$ 1.70

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

**NORTHROP GRUMMAN CORPORATION****NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)****1. BASIS OF PRESENTATION****Principles of Consolidation and Reporting**

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

These unaudited condensed consolidated financial statements are prepared in accordance with the rules of the Securities and Exchange Commission (SEC) for interim reporting. These 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 unaudited condensed consolidated financial statements are not necessarily indicative of results that may be expected for the entire year. These unaudited condensed consolidated financial statements should be read in conjunction with the information contained in the company’s Annual Report on Form 10-K for the year ended December 31, 2016 (2016 Annual Report on Form 10-K).

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**

These unaudited condensed consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP” or “FAS”). The preparation thereof requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingencies at the date of the financial statements, as well as the reported amounts of sales and expenses during the reporting period. Estimates have been prepared using the most current and best available information; however, actual results could differ materially from those estimates.

**Revenue Recognition**

The majority of our sales are derived from long-term contracts with the U.S. Government for the production of goods, the provision of services, or a combination of both. In accounting for these contracts, we utilize either the cost-to-cost method or the units-of-delivery method of percentage-of-completion accounting, with cost-to-cost being the predominant method. The company estimates profit on contracts as the difference between total estimated sales and total estimated cost at completion and recognizes that profit either as costs are incurred (cost-to-cost) or as units are delivered (units-of-delivery). The company classifies sales as product or service depending upon the predominant attributes of the contract.

Contract sales may include estimated amounts not contractually agreed to or yet funded by the customer, including cost or performance incentives (such as award and incentive fees), un-priced change orders, contract claims and requests for equitable adjustment (REAs). Further, as contracts are performed, change orders can be a regular occurrence and may be un-priced until negotiated with the customer. Un-priced change orders, contract claims (including change orders unapproved as to both scope and price) and REAs are included in estimated contract sales when management believes it is probable the un-priced change order, claim and/or REA will result in additional contract revenue and the amount can be reliably estimated based on the facts and circumstances known to us at the time. Amounts recognized related to claims and REAs as of June 30, 2017 were not material individually or in aggregate.

*Net Estimate-At-Completion (EAC) Adjustments* - We recognize changes in estimated contract sales or costs and the resulting changes in contract operating margins using the cumulative catch-up method of accounting. This method recognizes, in current period operating margin, the cumulative effect of the changes on current and prior periods as net EAC adjustments; sales and operating margins in future periods of contract performance are recognized as if the revised estimates had been used since contract inception. If it is determined that a loss will result from the performance of a contract, the entire amount of the estimable future loss, including an allocation of general and administrative costs, is charged against income in the period the loss is identified. Each loss provision is first offset

**NORTHROP GRUMMAN CORPORATION**

against costs included in unbilled accounts receivable or inventoried costs; remaining amounts are reflected in current liabilities.

Significant EAC adjustments on a single contract could have a material effect on the company's unaudited condensed consolidated financial position or results of operations. When such adjustments occur, we generally disclose the nature, underlying conditions and financial impact of the adjustments. No discrete event or adjustment to an individual contract was material to the accompanying unaudited condensed consolidated financial statements.

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

<i>\$ in millions, except per share data</i>	Three Months Ended June 30		Six Months Ended June 30	
	2017	2016	2017	2016
Operating Income	\$ 98	\$ 137	\$ 213	\$ 266
Net Earnings <sup>(1)</sup>	63	89	138	173
Diluted earnings per share <sup>(1)</sup>	0.36	0.49	0.78	0.95

<sup>(1)</sup> Based on statutory tax rates

**Accumulated Other Comprehensive Loss**

The components of accumulated other comprehensive loss are as follows:

<i>\$ in millions</i>	June 30, 2017	December 31, 2016
Unamortized benefit plan costs, net of tax benefit of \$3,317 in 2017 and \$3,439 in 2016	\$ (5,215)	\$ (5,416)
Cumulative translation adjustment	(132)	(132)
Net unrealized gain on marketable securities and cash flow hedges, net of tax	5	2
Total accumulated other comprehensive loss	\$ (5,342)	\$ (5,546)

Unamortized benefit plan costs consist primarily of net after-tax actuarial losses totaling \$5.3 billion and \$5.6 billion as of June 30, 2017 and December 31, 2016, respectively. Net actuarial gains or losses are re-determined annually or upon remeasurement events and principally arise from changes in the interest rate used to discount our benefit obligations and differences between expected and actual returns on plan assets.

Reclassifications from accumulated other comprehensive loss to net earnings related to the amortization of benefit plan costs were \$100 million and \$199 million, net of taxes, for the three and six months ended June 30, 2017, respectively, and were \$100 million and \$201 million, net of taxes, for the three and six months ended June 30, 2016, respectively. The reclassifications represent the amortization of net actuarial losses and prior service credits, and are included in the computation of net periodic pension cost. See Note 8 for further information.

Reclassifications from accumulated other comprehensive loss to net earnings, relating to cumulative translation adjustments, marketable securities and effective cash flow hedges were not material for the three and six months ended June 30, 2017 and 2016.

**Related Party Transactions**

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

**Accounting Standards Updates**

On March 10, 2017, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2017-07 *Compensation Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. ASU 2017-07 requires employers that sponsor defined benefit pension and/or other post-retirement benefit plans to report the service cost component of net benefit cost in the same line item as other compensation costs arising from services rendered by the pertinent employees during the period. Employers are required to present the other components of net benefit costs in the income statement separately from the service cost component and outside a subtotal of income from operations. Additionally, only the service cost component of net periodic pension cost will be eligible for asset capitalization.

We expect adoption of ASU 2017-07 to result in a change in our net FAS/CAS pension adjustment within operating income, which will be offset by a corresponding change in other, net to reflect the impact of presenting the interest cost, expected return on plan assets, and amortization of prior service credit and net actuarial loss components of net



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periodic benefit costs outside of operating income. We expect to adopt ASU 2017-07 on January 1, 2018 using the retrospective method and do not anticipate a material change to our 2017 net FAS/CAS pension adjustment or other, net when they are recast to reflect the standard. We also do not expect ASU 2017-07 to have a material impact on our consolidated statements of financial position and/or cash flows.

On February 25, 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. ASU 2016-02 supersedes existing lease guidance, including Accounting Standards Codification (ASC) 840 - *Leases*. Among other things, ASU 2016-02 requires recognition of a right-of-use asset and liability for future lease payments for contracts that meet the definition of a lease and requires disclosure of certain information about leasing arrangements. ASU 2016-02 will be effective January 1, 2019, although early adoption is permitted, and it is to be applied using a modified retrospective approach. We expect to adopt the standard on January 1, 2019. We are reviewing our leases to determine the effect ASU 2016-02 will have on the company's consolidated financial position, annual results of operations and/or cash flows. We currently expect the right-of-use assets and lease liabilities recognized upon adoption will each approximate our future minimum lease payments, as disclosed in our 2016 Annual Report on Form 10-K. We do not expect ASU 2016-02 to have a material impact on our annual results of operations and/or cash flows.

On May 28, 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers*. ASU 2014-09 supersedes existing revenue recognition guidance, including ASC 605-35, *Revenue Recognition - Construction-Type and Production-Type Contracts*, and outlines a single set of comprehensive principles for recognizing revenue under U.S. GAAP. Among other things, it requires companies to identify contractual performance obligations and determine whether revenue should be recognized at a point in time or over time. On July 9, 2015, the FASB approved a one year deferral of the effective date of ASU 2014-09 to annual reporting periods beginning after December 15, 2017. ASU 2014-09 may be applied either retrospectively or through the use of a modified-retrospective method. We expect to adopt the standard on January 1, 2018 and apply it retrospectively to all periods presented.

During 2016, we substantially completed our evaluation of ASU 2014-09, including the expected impact on our business processes, systems and controls, and potential differences in the timing and/or method of revenue recognition for our contracts. As a result of our evaluation, we identified changes to and are modifying certain of our accounting policies and practices. We also designed and implemented specific controls over our evaluation of the impact of ASU 2014-09, including our calculation of the cumulative effect of adopting ASU 2014-09. Although we do not expect significant changes to our accounting systems or controls upon adoption of ASU 2014-09, we have modified certain of our current controls to incorporate the revisions we have made to our accounting policies and practices.

Based on our evaluation of ASU 2014-09, we currently do not expect it to have a material impact on our results of operations or cash flows in the periods after adoption. Under ASU 2014-09, revenue is recognized as control transfers to the customer. As such, revenue for our contracts will generally be recognized over time using the cost-to-cost method, which is consistent with the revenue recognition model we currently use for the majority of our contracts. For those contracts where we currently recognize revenue as units are delivered, in most cases the accounting for those contracts will change under ASU 2014-09 such that we will recognize revenue as costs are incurred. This change will generally result in an acceleration of revenue as compared with our current revenue recognition method for those contracts. In addition, for certain of our contracts, we expect the number of performance obligations to change under ASU 2014-09, which may alter the timing of revenue and margin recognition.

ASU 2014-09 also requires expanded disclosure regarding the nature, timing, and uncertainty of revenue, cash flow and customer contract balances, including how and when we satisfy our performance obligations and the relationship between revenue recognized and changes in contract balances during a reporting period. We have evaluated these disclosure requirements and are incorporating the collection of relevant data into our quarterly processes.

During the second quarter of 2017, we completed our assessment of the cumulative effect of adopting ASU 2014-09. Under the retrospective method, we expect to recognize the cumulative effect of adoption as an increase in unbilled accounts receivable, a reduction in inventoried costs and a net increase in retained earnings as of January 1, 2016. During the second quarter of 2017, we also completed our assessment of the impact of adoption on our 2016 results. We currently expect adopting ASU 2014-09 to result in an increase in revenue of approximately \$200 million and a decrease in operating income of approximately \$70 million for the year ended December 31, 2016. These changes principally reflect the impact of converting contracts to the cost-to-cost method of accounting as well as changes in the number of performance obligations for certain of our contracts. The impact of adopting ASU 2014-09 on our

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2016 results of operations may not be indicative of the impact in future years. We will continue our evaluation of ASU 2014-09 (including how it may impact new contracts we receive as well as new or emerging interpretations of the standard) through the date of adoption.

Other accounting standards updates effective after June 30, 2017 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 1.0 million and 1.1 million shares for the three and six months ended June 30, 2017, respectively. The dilutive effect of these securities totaled 1.4 million and 1.7 million shares for the three and six months ended June 30, 2016, respectively.

**Share Repurchases**

On December 4, 2014, the company's board of directors authorized a share repurchase program of up to \$3.0 billion of the company's common stock (the "2014 Repurchase Program"). Repurchases under the 2014 Repurchase Program commenced in March 2015 and were completed in March 2016. On September 16, 2015, the company's board of directors authorized a new share repurchase program of up to \$4.0 billion of the company's common stock (the "2015 Repurchase Program"). Repurchases under the 2015 Repurchase Program commenced in March 2016 upon completion of the company's 2014 Repurchase Program. As of June 30, 2017, repurchases under the 2015 Repurchase Program totaled \$1.6 billion; \$2.4 billion remained under this share repurchase authorization. By its terms, the 2015 Repurchase Program is set to expire when we have used all authorized funds for repurchases.

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

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

Repurchase Program Authorization Date	Amount Authorized (in millions)	Total Shares Retired (in millions)	Average Price Per Share <sup>(1)</sup>	Date Completed	Shares Repurchased (in millions)	
					2017	2016
December 4, 2014	\$ 3,000	18.0	\$ 166.70	March 2016	—	1.4
September 16, 2015	\$ 4,000	7.3	\$ 222.50		1.5	2.0

<sup>(1)</sup> Includes commissions paid.

**Dividends on Common Stock**

In May 2017, the company increased the quarterly common stock dividend 11 percent to \$1.00 per share from the previous amount of \$0.90 per share.

In May 2016, the company increased the quarterly common stock dividend 13 percent to \$0.90 per share from the previous amount of \$0.80 per share.

**NORTHROP GRUMMAN CORPORATION**
**3. SEGMENT INFORMATION**

The company is aligned in three operating sectors, which also comprise our reportable segments: Aerospace Systems, Mission Systems and Technology Services.

The following table presents sales and operating income by segment:

<i>\$ in millions</i>	Three Months Ended June 30		Six Months Ended June 30	
	2017	2016	2017	2016
<b>Sales</b>				
Aerospace Systems	\$ 2,970	\$ 2,600	\$ 5,868	\$ 5,174
Mission Systems	2,781	2,690	5,520	5,383
Technology Services	1,175	1,213	2,369	2,427
Intersegment eliminations	(551)	(503)	(1,115)	(1,028)
<b>Total sales</b>	<b>6,375</b>	<b>6,000</b>	<b>12,642</b>	<b>11,956</b>
<b>Operating income</b>				
Aerospace Systems	315	312	627	598
Mission Systems	374	351	727	704
Technology Services	134	131	265	257
Intersegment eliminations	(70)	(63)	(140)	(127)
<b>Total segment operating income</b>	<b>753</b>	<b>731</b>	<b>1,479</b>	<b>1,432</b>
Net FAS/CAS pension adjustment	137	69	273	143
Unallocated corporate expenses	(34)	(3)	(63)	(36)
Other	(1)	—	(2)	(3)
<b>Total operating income</b>	<b>\$ 855</b>	<b>\$ 797</b>	<b>\$ 1,687</b>	<b>\$ 1,536</b>

**Net FAS/CAS Pension Adjustment**

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

**Unallocated Corporate Expenses**

Unallocated corporate expenses include the portion of corporate expenses not considered allowable or allocable under applicable CAS or the FAR, and therefore not allocated to the segments. Such costs consist of a portion of management and administration, legal, environmental, compensation, retiree benefits and corporate unallowable costs.

**4. INCOME TAXES**

<i>\$ in millions</i>	Three Months Ended June 30		Six Months Ended June 30	
	2017	2016	2017	2016
Federal and foreign income tax expense	\$ 255	\$ 213	\$ 388	\$ 333
<i>Effective income tax rate</i>	<b>31.6%</b>	29.2%	<b>24.6%</b>	23.7%

*Current Quarter*

The company's effective tax rate of 31.6 percent for the three months ended June 30, 2017 was higher as compared with the same period in 2016, principally due to an increase through the second quarter of 2017 in the proportion of research and development expenditures incurred for contracts that do not qualify for purposes of the research and development tax credit and higher prior year base expenditures used to calculate the research credit.

**NORTHROP GRUMMAN CORPORATION***Year to Date*

The company's effective tax rate of 24.6 percent for the six months ended June 30, 2017 was higher as compared with the same period in 2016. The company's effective tax rate for the six months ended June 30, 2017 includes \$47 million of excess tax benefits related to employee share-based compensation, a \$42 million benefit recognized in connection with the Congressional Joint Committee on Taxation's approval of the Internal Revenue Service (IRS) examination of the company's 2012-2013 tax returns and a \$22 million benefit recognized for additional research credits claimed on our prior year tax returns. The company's effective tax rate of 23.7 percent for the six months ended June 30, 2016 included \$84 million of excess tax benefits related to employee share-based compensation.

We file income tax returns in the U.S. federal jurisdiction and in various state and foreign jurisdictions. Our 2014-2015 federal tax returns are currently under IRS examination. The company believes it is reasonably possible that within the next twelve months we may resolve certain matters related to the years under examination, which may result in reductions of our unrecognized tax benefits up to \$110 million and income tax expense up to \$30 million.

**5. FAIR VALUE OF FINANCIAL INSTRUMENTS**

The company holds a portfolio of marketable securities consisting of securities that are classified as either trading or available-for-sale to partially fund non-qualified employee benefit plans. These securities are included in other non-current assets in the unaudited condensed consolidated statements of financial position.

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

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

<i>\$ in millions</i>	June 30, 2017			December 31, 2016		
	Level 1	Level 2	Total	Level 1	Level 2	Total
<b>Financial Assets (Liabilities)</b>						
Marketable securities						
Trading	\$ 327	\$ 1	\$ 328	\$ 321	\$ 2	\$ 323
Available-for-sale	12	—	12	7	—	7
Derivatives	—	5	5	—	8	8

The notional value of the company's derivative portfolio at June 30, 2017 and December 31, 2016, was \$150 million and \$147 million, respectively. The portion of the notional value designated as cash flow hedges at June 30, 2017 was \$13 million. At December 31, 2016, no portion of the notional value was designated as a cash flow hedge. The derivative fair values and related unrealized gains/losses at June 30, 2017 and December 31, 2016, were not material.

There were no transfers of financial instruments between the three levels of the fair value hierarchy during the six months ended June 30, 2017.

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

**Long-term Debt**

The estimated fair value of long-term debt was \$7.8 billion and \$7.6 billion as of June 30, 2017 and December 31, 2016, 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 carrying value of long-term debt was \$7.1 billion as of June 30, 2017 and December 31, 2016. The current portion of long-term debt is recorded in Other current liabilities in the unaudited condensed consolidated statements of financial position.

**6. INVESTIGATIONS, CLAIMS AND LITIGATION****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

**NORTHROP GRUMMAN CORPORATION**

sequencing systems (FSS) as part of the postal automation program. The FSS have been delivered. The company's lawsuit is based on various theories of liability. The complaint 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. 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 April 2, 2013, the U.S. Department of Justice informed the company of a False Claims Act complaint relating to the FSS contract that was filed under seal by a relator in June 2011 in the U.S. District Court for the Eastern District of Virginia. On June 3, 2013, the United States filed a Notice informing the Court that the United States had decided not to intervene in this case. The relator alleged that the company violated the False Claims Act in a number of ways with respect to the FSS contract, alleged damage to the USPS in an amount of at least approximately \$179 million annually, alleged that he was improperly discharged in retaliation, and sought an unspecified partial refund of the contract purchase price, penalties, attorney's fees and other costs of suit. The relator later voluntarily dismissed his retaliation claim and reasserted it in a separate arbitration, which he also ultimately voluntarily dismissed. On September 5, 2014, the court granted the company's motion for summary judgment and ordered the relator's False Claims Act case be dismissed with prejudice. On December 19, 2014, the company filed a motion for partial summary judgment asking the court to dismiss the principal counterclaim referenced above. On June 29, 2015, the Court heard argument and denied that motion without prejudice to filing a later motion to dismiss. Although the ultimate outcome of these matters ("the FSS matters," collectively), including any possible loss, cannot be predicted or reasonably estimated at this time, the company intends vigorously to pursue and defend the FSS matters.

On August 8, 2013, the company received a court-appointed expert's report in litigation pending in the Second Federal Court of the Federal District in Brazil brought by the Brazilian Post and Telegraph Corporation (ECT), a Brazilian state-owned entity, against Solystic SAS (Solystic), a French subsidiary of the company, and two of its consortium partners. In this suit, commenced on December 17, 2004, and relatively inactive for some period of time, ECT alleges the consortium breached its contract with ECT and seeks damages of approximately R\$111 million (the equivalent of approximately \$34 million as of June 30, 2017), plus interest, inflation adjustments and attorneys' fees, as authorized by Brazilian law, which amounts could be significant over time. The original suit sought R\$89 million (the equivalent of approximately \$27 million as of June 30, 2017) in damages. In October 2013, ECT asserted an additional damage claim of R\$22 million (the equivalent of approximately \$7 million as of June 30, 2017). In its counterclaim, Solystic alleges ECT breached the contract by wrongfully refusing to accept the equipment Solystic had designed and built and seeks damages of approximately €31 million (the equivalent of approximately \$35 million as of June 30, 2017), plus interest, inflation adjustments and attorneys' fees, as authorized by Brazilian law. The Brazilian court retained an expert to consider certain issues pending before it. On August 8, 2013 and September 10, 2014, the company received reports from the expert, which contain some recommended findings relating to liability and the damages calculations put forth by ECT. Some of the expert's recommended findings were favorable to the company and others were favorable to ECT. In November 2014, the parties submitted comments on the expert's most recent report. On June 16, 2015, the court published a decision denying the parties' request to present oral testimony. At some future point, the court is expected to issue a decision on the parties' claims and counterclaims that could accept or reject, in whole or in part, the expert's recommended findings.

The company is a party to various investigations, lawsuits, claims 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, and other than with respect to the FSS matters discussed separately above, the company does not believe that the outcome of any matter pending against the company is likely to have a material adverse effect on the company's unaudited condensed consolidated financial position as of June 30, 2017, or its annual results of operations and/or cash flows.

**7. COMMITMENTS AND CONTINGENCIES****U.S. Government Cost Claims**

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 the 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

**NORTHROP GRUMMAN CORPORATION**

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 the outcome of any such matters would not have a material adverse effect on its unaudited condensed consolidated financial position as of June 30, 2017, or its annual results of operations and/or cash flows.

**Environmental Matters**

The table below summarizes management's estimate of the range of reasonably possible future costs for environmental remediation, the amount accrued within that range, and the deferred costs expected to be recoverable through overhead charges on U.S. Government contracts as of June 30, 2017 and December 31, 2016:

<i>\$ in millions</i>	Range of Reasonably Possible Future Costs <sup>(1)</sup>	Accrued Costs <sup>(2)</sup>	Deferred Costs <sup>(3)</sup>
<b>June 30, 2017</b>	<b>\$389 - \$782</b>	<b>\$ 393</b>	<b>\$ 202</b>
December 31, 2016	379 - 774	385	195

<sup>(1)</sup> Estimated remediation costs are not discounted to present value. The range of reasonably possible future costs does not take into consideration amounts expected to be recoverable through overhead charges on U.S. Government contracts.

<sup>(2)</sup> As of June 30, 2017, \$124 million is recorded in other current liabilities and \$269 million is recorded in other non-current liabilities.

<sup>(3)</sup> As of June 30, 2017, \$73 million is deferred in inventoried costs and \$129 million is deferred in other non-current assets. These amounts are evaluated for recoverability on a routine basis.

Although management cannot predict whether new information gained as our environmental remediation projects progress, or as changes in facts and circumstances occur, will materially affect the estimated liability accrued, we do not anticipate 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 June 30, 2017, or its annual results of operations and/or cash flows.

**Financial Arrangements**

In the ordinary course of business, the company uses standby letters of credit and guarantees issued by commercial banks and surety bonds issued principally by insurance companies to guarantee the performance on certain obligations. At June 30, 2017, there were \$202 million of stand-by letters of credit and guarantees and \$198 million of surety bonds outstanding.

**Indemnifications**

The company has provided indemnification for certain environmental, income tax and other potential liabilities in connection with certain of its divestitures. The settlement of these liabilities is not expected to have a material adverse effect on the company's unaudited condensed consolidated financial position as of June 30, 2017, or its annual results of operations and/or cash flows.

**Operating Leases**

Rental expense for operating leases for the three and six months ended June 30, 2017 was \$65 million and \$154 million, respectively, and was \$68 million and \$159 million for the three and six months ended June 30, 2016, respectively. These amounts are net of immaterial amounts of sublease rental income.

**Credit Facilities**

In December 2016, a subsidiary of the company entered into a two-year credit facility, with two additional one-year option periods, in an aggregate principal amount of £120 million (the equivalent of approximately \$152 million as of June 30, 2017) (the "2016 Credit Agreement"). The 2016 Credit Agreement is guaranteed by the company. At June 30, 2017, there was £110 million (the equivalent of approximately \$139 million as of June 30, 2017) outstanding under this facility, which bears interest at a rate of LIBOR plus 1.10 percent. All of the borrowings outstanding under this facility mature less than one year from the date of issuance, but may be renewed under the terms of the facility. Based on our intent and ability to refinance the obligations on a long-term basis, substantially all of the borrowings are classified as non-current.

The company also maintains a five-year unsecured credit facility in an aggregate principal amount of \$1.6 billion that matures in July 2020. At June 30, 2017, there was no balance outstanding under this facility.

At June 30, 2017, the company was in compliance with all covenants under its credit agreements.

**NORTHROP GRUMMAN CORPORATION**
**8. RETIREMENT BENEFITS**

The cost to the company of its retirement plans is shown in the following table:

<i>\$ in millions</i>	Three Months Ended June 30				Six Months Ended June 30			
	Pension Benefits		Medical and Life Benefits		Pension Benefits		Medical and Life Benefits	
	2017	2016	2017	2016	2017	2016	2017	2016
<b>Components of net periodic benefit cost</b>								
Service cost	\$ 114	\$ 111	\$ 7	\$ 7	\$ 228	\$ 223	\$ 13	\$ 15
Interest cost	308	321	21	23	617	642	42	47
Expected return on plan assets	(472)	(463)	(23)	(22)	(943)	(926)	(45)	(43)
Amortization of:								
Prior service credit	(14)	(15)	(6)	(5)	(29)	(30)	(11)	(11)
Net loss from previous years	178	179	3	5	356	357	5	8
<b>Net periodic benefit cost</b>	<b>\$ 114</b>	<b>\$ 133</b>	<b>\$ 2</b>	<b>\$ 8</b>	<b>\$ 229</b>	<b>\$ 266</b>	<b>\$ 4</b>	<b>\$ 16</b>

**Employer Contributions**

The company sponsors defined benefit pension and post-retirement 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, including making voluntary contributions from time to time.

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

<i>\$ in millions</i>	Three Months Ended June 30		Six Months Ended June 30	
	2017	2016	2017	2016
Defined benefit pension plans	\$ 28	\$ 20	\$ 51	\$ 47
Medical and life benefit plans	13	18	24	29
Defined contribution plans	77	71	176	158

**9. STOCK COMPENSATION PLANS AND OTHER COMPENSATION ARRANGEMENTS**
**Stock Awards**

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

<i>in millions</i>	Six Months Ended June 30	
	2017	2016
RSRs granted	0.1	0.2
RPSRs granted	0.3	0.3
Grant date aggregate fair value	\$ 91	\$ 88

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

**NORTHROP GRUMMAN CORPORATION****Cash Awards**

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

<i>\$ in millions</i>	Six Months Ended June 30	
	2017	2016
Minimum aggregate payout amount	\$ 35	\$ 34
Maximum aggregate payout amount	198	193

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 financial metrics over a three-year period.



## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

We have reviewed the accompanying condensed consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries (the “Company”) as of June 30, 2017, and the related condensed consolidated statements of earnings and comprehensive income for the three-month and six-month periods ended June 30, 2017 and 2016, and of cash flows and changes in shareholders’ equity for the six-month periods ended June 30, 2017 and 2016. These interim financial statements are the responsibility of the Company’s management.

We conducted our reviews in accordance with the standards of the Public Company Accounting Oversight Board (United States). 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 Public Company Accounting Oversight Board (United States), 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.

Based on our reviews, we are not aware of any material modifications that should be made to such condensed consolidated interim financial statements for them 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), the consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries as of December 31, 2016, and the related consolidated statements of earnings and comprehensive income, cash flows, and changes in shareholders’ equity for the year then ended (not presented herein); and in our report dated January 30, 2017, 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, 2016, is fairly stated, in all material respects, in relation to the consolidated statement of financial position from which it has been derived.

/s/ Deloitte & Touche LLP  
McLean, Virginia  
July 25, 2017

**NORTHROP GRUMMAN CORPORATION****Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations****OVERVIEW**

Northrop Grumman Corporation (herein referred to as "Northrop Grumman," the "company," "we," "us," or "our") is a leading global security company. We offer a broad portfolio of capabilities and technologies that enable us to deliver innovative products, systems and solutions for applications that range from undersea to outer space and into cyberspace. We provide products, systems and solutions in autonomous systems; cyber; command, control, communications and computers, intelligence, surveillance and reconnaissance (C4ISR); strike; and logistics and modernization. We participate in many high-priority defense and government programs in the United States (U.S.) and abroad. We conduct most of our business with the U.S. Government, principally the Department of Defense (DoD) and intelligence community. We also conduct business with foreign, state and local governments, as well as commercial customers.

The following discussion should be read along with the unaudited condensed consolidated financial statements included in this Form 10-Q, as well as our 2016 Annual Report on Form 10-K, which provides additional information on our systems, products and solutions; operating results; and liquidity.

**Global Security and Economic Environment**

The following is an update of events relating to the global security and economic environment since the filing of our 2016 Annual Report on Form 10-K and our Quarterly Report on Form 10-Q for the quarter ended March 31, 2017 (2017 Quarterly Report on Form 10-Q).

The global security and economic environment continues to be impacted by uncertainty surrounding geopolitical tensions and financial instability. During the second quarter, we continued to see global and regional security threats from state and non-state actors as well as terrorist organizations and increasingly diverse regional security concerns. Any or all of these types of events could impact the global market for defense products, services and solutions.

**U.S. Political and Economic Environment**

The following is an update of events relating to the U.S. political and economic environment since the filing of our 2016 Annual Report on Form 10-K and our 2017 Quarterly Report on Form 10-Q.

In March 2017, the debt ceiling was reached and the Treasury Department began taking "extraordinary measures" to finance the government. If the debt ceiling is breached, we may be required to continue to perform for some period of time on certain of our U.S. Government contracts even if the U.S. Government is not making timely payments.

In May 2017, the President signed into law the FY 2017 Consolidated Appropriations Act. In total for FY 2017, Congress appropriated \$524 billion in base discretionary funding for the DoD, consistent with the 2015 Bipartisan Budget Act. Congress also appropriated approximately \$68 billion in Overseas Contingency Operation (OCO) funding and approximately \$15 billion in additional DoD appropriations.

In May 2017, the President released his FY 2018 budget request, which seeks \$575 billion for the DoD's base budget, approximately \$52 billion above the statutory caps provided for in the 2011 Budget Control Act (BCA). The President's budget request also seeks another \$65 billion in OCO funding for expeditionary needs, not capped by the BCA. It is unclear when or if an annual appropriations bill will be enacted for FY 2018 or at what levels. Failure to enact appropriations or a continuing resolution by September 30, 2017 could result in a government shutdown of unknown duration. If a prolonged government shutdown were to occur, it could result in program cancellations and/or stop work orders and could limit our ability to perform on our U.S. Government contracts and the U.S. Government's ability to make timely payments.

**Operating Performance Assessment and Reporting**

We manage and assess our business based on our performance on contracts and programs (typically larger contracts or two or more closely-related contracts). We recognize sales from our portfolio of long-term contracts primarily using the cost-to-cost method of percentage of completion accounting, but in some cases we utilize the units-of-delivery method of percentage of completion accounting. As a result, sales tend to fluctuate in concert with costs incurred and units delivered across our large portfolio of contracts. Due to Federal Acquisition Regulation (FAR) rules that govern our U.S. Government business and related Cost Accounting Standards (CAS), most types of costs are allocable to U.S. Government contracts. As such, we do not focus on individual cost groupings (such as manufacturing, engineering and design labor, subcontractor, material, overhead and general and administrative (G&A) costs), as much as we do on total contract cost, which is the key driver of our sales and operating income.

In evaluating our 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

**NORTHROP GRUMMAN CORPORATION**

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 three segments before distinguishing between products and services. Changes in sales are generally described in terms of volume, deliveries or other indicators of sales activity. Changes in margin rates are generally described in terms of performance and contract mix. For purposes of this discussion, volume generally refers to increases or decreases in sales or cost from production/service activity levels or delivery rates. 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., development, production, sustainment, etc).

**CONSOLIDATED OPERATING RESULTS**

Selected financial highlights are presented in the table below:

<i>\$ in millions, except per share amounts</i>	Three Months Ended June 30		%	Six Months Ended June 30		%
	2017	2016	Change	2017	2016	Change
Sales	\$ 6,375	\$ 6,000	6%	\$ 12,642	\$ 11,956	6%
Operating costs and expenses	5,520	5,203	6%	10,955	10,420	5%
<i>Operating costs and expenses as a % of sales</i>	<b>86.6%</b>	86.7%		<b>86.7%</b>	87.2%	
Operating income	855	797	7%	1,687	1,536	10%
<i>Operating margin rate</i>	<b>13.4%</b>	13.3%		<b>13.3%</b>	12.8%	
Federal and foreign income tax expense	255	213	20%	388	333	17%
<i>Effective income tax rate</i>	<b>31.6%</b>	29.2%		<b>24.6%</b>	23.7%	
Net earnings	552	517	7%	1,192	1,073	11%
Diluted earnings per share	\$ 3.15	\$ 2.85	11%	\$ 6.78	\$ 5.88	15%

**Sales**
*Current Quarter*

Sales for the three months ended June 30, 2017 increased \$375 million, or 6 percent, as compared with the same period in 2016, primarily due to higher sales at Aerospace Systems.

*Year to Date*

Sales for the six months ended June 30, 2017 increased \$686 million, or 6 percent, as compared with the same period in 2016, primarily due to higher sales at Aerospace Systems.

See “Segment Operating Results” below for further information by segment and “Product and Service Analysis” for product and service detail.

**Operating Income**
*Current Quarter*

Operating income for the three months ended June 30, 2017 increased \$58 million, or 7 percent, as compared with the same period in 2016, primarily due to a \$68 million increase in our net FAS/CAS pension adjustment and a \$22 million increase in segment operating income, partially offset by a \$31 million increase in unallocated corporate expenses. A slight decline in operating costs and expenses as a percentage of sales increased our operating margin rate to 13.4 percent from 13.3 percent in the prior year period. The higher operating margin rate was principally driven by the increase in our net FAS/CAS pension adjustment described above, partially offset by higher unallocated corporate expenses and a lower segment operating margin rate, as described in “Segment Operating Results.”

G&A as a percentage of sales for the three months ended June 30, 2017 was 10.4%, comparable with the prior year period.

*Year to Date*

Operating income for the six months ended June 30, 2017 increased \$151 million, or 10 percent, as compared with the same period in 2016, primarily due to a \$130 million increase in our net FAS/CAS pension adjustment and a \$47 million increase in segment operating income, partially offset by a \$27 million increase in unallocated corporate expenses. Lower operating costs and expenses as a percentage of sales increased our operating margin rate to 13.3 percent from 12.8 percent in the prior year period and was principally driven by the increase in our net FAS/CAS

**NORTHROP GRUMMAN CORPORATION**

pension adjustment described above, partially offset by higher unallocated corporate expenses and a lower segment operating margin rate, as described in “Segment Operating Results.”

G&A as a percentage of sales for the six months ended June 30, 2017 was 10.6%, comparable with the prior year period.

For further information regarding product and service operating costs and expenses, see “Product and Service Analysis” below.

**Federal and Foreign Income Taxes***Current Quarter*

Our effective tax rate for the three months ended June 30, 2017 was higher as compared with the same period in 2016, as discussed in Note 4 to the unaudited condensed consolidated financial statements.

*Year to Date*

Our effective tax rate for the six months ended June 30, 2017 was higher as compared with the same period in 2016, as discussed in Note 4 to the unaudited condensed consolidated financial statements.

While certain periods include discrete tax items that impact our effective tax rate, on an ongoing basis (absent the impact of discrete items and/or changes in federal tax legislation), we expect an annual effective tax rate of approximately 30 percent due principally to tax benefits associated with the manufacturing deduction and research credits.

**Net Earnings***Current Quarter*

Net earnings for the three months ended June 30, 2017 increased \$35 million, or 7 percent, as compared with the same period in 2016, primarily due to the higher operating income described above and an increase in Other, net as a result of the gain on sale of an investment, partially offset by the higher effective tax rate described above.

*Year to Date*

Net earnings for the six months ended June 30, 2017 increased \$119 million, or 11 percent, as compared with the same period in 2016, primarily due to the higher operating income described above and an increase in Other, net as a result of the gain on sale of an investment, partially offset by the higher effective tax rate described above.

**Diluted Earnings Per Share***Current Quarter*

Diluted earnings per share for the three months ended June 30, 2017 increased \$0.30, or 11 percent, as compared with the same period in 2016. The increase is primarily due to the 7 percent increase in net earnings described above and a 3 percent reduction in weighted-average shares outstanding resulting from shares repurchased during 2016 and 2017.

*Year to Date*

Diluted earnings per share for the six months ended June 30, 2017 increased \$0.90, or 15 percent, as compared with the same period in 2016. The increase is primarily due to the 11 percent increase in net earnings described above and a 4 percent reduction in weighted-average shares outstanding resulting from shares repurchased during 2016 and 2017.

**SEGMENT OPERATING RESULTS****Basis of Presentation**

At June 30, 2017, the company was aligned in three operating sectors, which also comprise our reportable segments: Aerospace Systems, Mission Systems, and Technology Services.

We present our sectors in the following business areas, which are reported in a manner reflecting core capabilities:

<b>Aerospace Systems</b>	<b>Mission Systems</b>	<b>Technology Services</b>
Autonomous Systems	Sensors and Processing	Global Logistics and Modernization
Manned Aircraft	Cyber and ISR	Advanced Defense Services
Space	Advanced Capabilities	System Modernization and Services

This section discusses segment sales, operating income and operating margin rates. A reconciliation of segment operating income to total operating income is provided below.

**NORTHROP GRUMMAN CORPORATION**
**Segment Operating Income and Margin Rate**

Segment operating income, as reconciled in the Reconciliation of Segment Operating Income to Total Operating Income section below, is a non-GAAP measure that reflects total earnings from our three segments, including allocated pension expense recognized under CAS, and excluding unallocated corporate items and FAS pension expense. This measure may be useful to investors and other users of our financial statements as a supplemental measure in evaluating the financial performance and operational trends of our sectors. This measure 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 U.S. GAAP.

\$ in millions	Three Months Ended June 30		% Change	Six Months Ended June 30		% Change
	2017	2016		2017	2016	
Segment operating income	\$ 753	\$ 731	3%	\$ 1,479	\$ 1,432	3%
Segment operating margin rate	11.8%	12.2%		11.7%	12.0%	

**Current Quarter**

Segment operating income for the three months ended June 30, 2017 increased \$22 million, or 3 percent, as compared with the same period in 2016. Second quarter 2017 segment operating income includes \$54 million recognized to date in connection with a claim related to certain costs incurred in prior years (the "Cost Claim"). Higher sales volume was partially offset by a lower segment operating margin rate. Segment operating margin rate decreased due to a lower segment margin rate at Aerospace Systems, partially offset by higher segment margin rates at Mission Systems and Technology Services.

**Year to Date**

Segment operating income for the six months ended June 30, 2017 increased \$47 million, or 3 percent, as compared with the same period in 2016, and includes higher operating income at all three sectors principally due to the Cost Claim. Higher sales volume was partially offset by a lower segment operating margin rate. Segment operating margin rate decreased principally due to a lower segment margin rate at Aerospace Systems, partially offset by a higher segment margin rate at Technology Services.

*Reconciliation of Segment Operating Income to Total Operating Income* - The table below reconciles segment operating income to total operating income by including the impact of net FAS/CAS pension adjustments, as well as unallocated corporate expenses (certain corporate-level expenses, which are not considered allowable or allocable under applicable CAS or the FAR). See Note 3 to the unaudited condensed consolidated financial statements for further information on the net FAS/CAS pension adjustment and unallocated corporate expenses.

\$ in millions	Three Months Ended June 30		Six Months Ended June 30	
	2017	2016	2017	2016
Segment operating income	\$ 753	\$ 731	\$ 1,479	\$ 1,432
CAS pension expense	251	202	502	409
Less: FAS pension expense	(114)	(133)	(229)	(266)
Net FAS/CAS pension adjustment	137	69	273	143
Unallocated corporate expenses	(34)	(3)	(63)	(36)
Other	(1)	—	(2)	(3)
Total operating income	\$ 855	\$ 797	\$ 1,687	\$ 1,536

The increase in net FAS/CAS pension adjustment for the three and six months ended June 30, 2017, as compared with the same periods in 2016, is due to higher CAS expense and lower FAS expense than in the prior year period. The increase in CAS expense relates to the continued phase-in of CAS harmonization, partially offset by a change in our mortality assumption as of December 31, 2016. The reduction in FAS expense was driven by our year-end 2016 FAS pension assumptions, including the noted change in our mortality assumption offset by a lower discount rate.

Unallocated corporate expenses increased for the three and six months ended June 30, 2017, as compared with the same periods in 2016, primarily due to the completion of our 2016 overhead cost submission. In addition, the prior year period benefited from a reduction in provisions for overhead costs.

**NORTHROP GRUMMAN CORPORATION**

*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:

<i>\$ in millions</i>	Three Months Ended June 30		Six Months Ended June 30	
	2017	2016	2017	2016
Favorable EAC adjustments	\$ 153	\$ 199	\$ 313	\$ 399
Unfavorable EAC adjustments	(55)	(62)	(100)	(133)
Net EAC adjustments	\$ 98	\$ 137	\$ 213	\$ 266

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

<i>\$ in millions</i>	Three Months Ended June 30		Six Months Ended June 30	
	2017	2016	2017	2016
Aerospace Systems	\$ 61	\$ 83	\$ 115	\$ 142
Mission Systems	24	45	72	100
Technology Services	15	16	33	37
Eliminations	(2)	(7)	(7)	(13)
Net EAC adjustments	\$ 98	\$ 137	\$ 213	\$ 266

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.

**AEROSPACE SYSTEMS**

<i>\$ in millions</i>	Three Months Ended June 30		%	Six Months Ended June 30		%
	2017	2016		2017	2016	
Sales	\$ 2,970	\$ 2,600	14%	\$ 5,868	\$ 5,174	13%
Operating income	315	312	1%	627	598	5%
Operating margin rate	10.6%	12.0%		10.7%	11.6%	

*Current Quarter*

Aerospace Systems sales for the three months ended June 30, 2017 increased \$370 million, or 14 percent, as compared with the same period in 2016, primarily due to higher volume on Manned Aircraft programs. Higher Manned Aircraft sales were driven by higher restricted and E-2D Advanced Hawkeye volume. Autonomous Systems sales increased and reflect higher volume for several programs, including Triton, partially offset by lower NATO Alliance Ground Surveillance (AGS) volume. Space sales increased and include higher restricted sales and lower volume on the Advanced Extremely High Frequency (AEHF) program.

Operating income for the three months ended June 30, 2017 increased \$3 million, or 1 percent, primarily due to higher sales, partially offset by a lower operating margin rate. Operating margin rate decreased to 10.6 percent from 12.0 percent principally due to changes in contract mix on Manned Aircraft programs and the timing of risk reductions on Space programs.

*Year to Date*

Aerospace Systems sales for the six months ended June 30, 2017 increased \$694 million, or 13 percent, as compared with the same period in 2016, primarily due to higher volume on Manned Aircraft programs. Higher Manned Aircraft sales were driven by higher restricted sales, increased F-35 deliveries and higher E-2D Advanced Hawkeye volume. Autonomous Systems sales increased and reflect higher volume for several programs, including Triton, partially offset by lower NATO AGS volume. Space sales increased and include higher restricted sales and lower volume on the AEHF program.

**NORTHROP GRUMMAN CORPORATION**

Operating income for the six months ended June 30, 2017 increased \$29 million, or 5 percent, primarily due to higher sales, partially offset by a lower operating margin rate. Operating margin rate decreased to 10.7 percent from 11.6 percent principally due to changes in contract mix on Manned Aircraft programs and the timing of risk reductions on Space programs, partially offset by improved performance on Autonomous Systems programs.

**MISSION SYSTEMS**

<i>\$ in millions</i>	Three Months Ended June 30		<b>% Change</b>	Six Months Ended June 30		<b>% Change</b>
	<b>2017</b>	2016		<b>2017</b>	2016	
Sales	\$ <b>2,781</b>	\$ 2,690	<b>3%</b>	\$ <b>5,520</b>	\$ 5,383	<b>3%</b>
Operating income	<b>374</b>	351	<b>7%</b>	<b>727</b>	704	<b>3%</b>
<i>Operating margin rate</i>	<b>13.4%</b>	13.0%		<b>13.2%</b>	13.1%	

*Current Quarter*

Mission Systems sales for the three months ended June 30, 2017 increased \$91 million, or 3 percent, as compared with the same period in 2016, due to higher Sensors and Processing volume, partially offset by lower Cyber and ISR and Advanced Capabilities volume. Sensors and Processing sales increased primarily due to higher volume on combat avionics programs, including increased F-35 volume, and on communications programs, partially offset by lower volume on international radar programs. Cyber and ISR sales decreased principally due to lower restricted volume. Advanced Capabilities sales decreased primarily due to lower volume on navigation and maritime systems programs.

Operating income for the three months ended June 30, 2017 increased \$23 million, or 7 percent, and operating margin rate increased to 13.4 percent from 13.0 percent primarily due to \$32 million recognized in connection with the Cost Claim, partially offset by lower performance in Advanced Capabilities due to a provision for cost reduction initiatives.

*Year to Date*

Mission Systems sales for the six months ended June 30, 2017 increased \$137 million, or 3 percent, as compared with the same period in 2016, primarily due to higher Sensors and Processing volume, partially offset by lower Advanced Capabilities volume. Sensors and Processing sales increased primarily due to higher volume on combat avionics programs, including increased F-35 volume, and on communications programs, partially offset by lower volume on international radar programs. Advanced Capabilities sales decreased primarily due to lower volume on navigation and maritime systems programs. Cyber and ISR sales were comparable to the prior year.

Operating income for the six months ended June 30, 2017 increased \$23 million, or 3 percent, primarily due to the Cost Claim. Operating margin rate was comparable with the prior year period and reflects the cost claim described above and improved performance on Cyber and ISR programs, partially offset by lower performance on Advanced Capabilities programs.

**TECHNOLOGY SERVICES**

<i>\$ in millions</i>	Three Months Ended June 30		<b>% Change</b>	Six Months Ended June 30		<b>% Change</b>
	<b>2017</b>	2016		<b>2017</b>	2016	
Sales	\$ <b>1,175</b>	\$ 1,213	<b>(3)%</b>	\$ <b>2,369</b>	\$ 2,427	<b>(2)%</b>
Operating income	<b>134</b>	131	<b>2%</b>	<b>265</b>	257	<b>3%</b>
<i>Operating margin rate</i>	<b>11.4%</b>	10.8%		<b>11.2%</b>	10.6%	

*Current Quarter*

Technology Services sales for the three months ended June 30, 2017 decreased \$38 million, or 3 percent, as compared with the same period in 2016, due to lower volume across the sector. System Modernization and Services and Advanced Defense Services sales decreased principally due to the completion of several programs in 2016. Global Logistics and Modernization sales declined primarily due to lower volume on the KC-10 program as our contract nears completion.

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Operating income for the three months ended June 30, 2017 increased \$3 million, or 2 percent, and operating margin rate increased to 11.4 percent from 10.8 percent primarily due to the Cost Claim and improved performance on Advanced Defense Services and System Modernization and Services programs.

*Year to Date*

Technology Services sales for the six months ended June 30, 2017 decreased \$58 million, or 2 percent, as compared with the same period in 2016, primarily due to lower volume across the sector. System Modernization and Services and Advanced Defense Services sales decreased principally due to the completion of several programs in 2016. Global Logistics and Modernization sales declined primarily due to lower volume on the KC-10 program as our contract nears completion, partially offset by higher international volume.

Operating income for the six months ended June 30, 2017 increased \$8 million, or 3 percent, and operating margin rate increased to 11.2 percent from 10.6 percent primarily due to improved performance across the sector.

**PRODUCT AND SERVICE ANALYSIS**

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

\$ in millions	Three Months Ended June 30				Six Months Ended June 30			
	2017		2016		2017		2016	
Segment Information:	Sales	Operating Costs and Expenses	Sales	Operating Costs and Expenses	Sales	Operating Costs and Expenses	Sales	Operating Costs and Expenses
<b>Aerospace Systems</b>								
Product	\$ 2,429	\$ 2,173	\$ 2,123	\$ 1,855	\$ 4,811	\$ 4,289	\$ 4,214	\$ 3,706
Service	541	482	477	433	1,057	952	960	870
<b>Mission Systems</b>								
Product	1,677	1,440	1,575	1,343	3,328	2,863	3,113	2,687
Service	1,104	967	1,115	996	2,192	1,930	2,270	1,992
<b>Technology Services</b>								
Product	92	85	83	77	173	159	163	148
Service	1,083	956	1,130	1,005	2,196	1,945	2,264	2,022
<b>Segment Totals</b>								
Total Product	\$ 4,198	\$ 3,698	\$ 3,781	\$ 3,275	\$ 8,312	\$ 7,311	\$ 7,490	\$ 6,541
Total Service	2,728	2,405	2,722	2,434	5,445	4,827	5,494	4,884
Intersegment eliminations	(551)	(481)	(503)	(440)	(1,115)	(975)	(1,028)	(901)
<b>Total segment<sup>(1)</sup></b>	<b>\$ 6,375</b>	<b>\$ 5,622</b>	<b>\$ 6,000</b>	<b>\$ 5,269</b>	<b>\$ 12,642</b>	<b>\$ 11,163</b>	<b>\$ 11,956</b>	<b>\$ 10,524</b>

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

**Product Sales and Costs**
*Current Quarter*

Product sales for the three months ended June 30, 2017 increased \$417 million, or 11 percent, as compared with the same period in 2016, primarily due to higher product sales at Aerospace Systems and Mission Systems. Higher Aerospace Systems product sales were primarily driven by higher restricted and Triton volume, partially offset by lower NATO AGS volume. The increase at Mission Systems was principally due to higher product volume on combat avionics programs, including increased F-35 volume, and on communications programs, partially offset by lower volume on international radar programs.

Product costs for the three months ended June 30, 2017 increased \$423 million, or 13 percent, as compared with the same period in 2016. The increase was consistent with the higher product sales described above and reflects a lower product margin rate at Aerospace Systems due to changes in contract mix.

*Year to Date*

Product sales for the six months ended June 30, 2017 increased \$822 million, or 11 percent, as compared with the same period in 2016, primarily due to higher product sales at Aerospace Systems and Mission Systems. Higher Aerospace Systems product sales were primarily driven by higher restricted and Triton volume and increased F-35



## **NORTHROP GRUMMAN CORPORATION**

deliveries, partially offset by lower NATO AGS volume. The increase at Mission Systems was principally due to higher product volume on combat avionics programs, including increased F-35 volume, and on communications programs, partially offset by lower volume on international radar programs.

Product costs for the six months ended June 30, 2017 increased \$770 million, or 12 percent, as compared with the same period in 2016. The increase was consistent with the higher product sales described above and reflects a lower product margin rate at Aerospace Systems due to changes in contract mix.

### **Service Sales and Costs**

#### *Current Quarter*

Service sales for the three months ended June 30, 2017 were comparable with the same period in 2016, and reflect higher service sales on Autonomous Systems programs at Aerospace Systems, partially offset by lower service volume on the KC-10 program at Technology Services.

Service costs for the three months ended June 30, 2017 decreased \$29 million, or 1 percent, as compared with the same period in 2016. The decrease was consistent with the lower service sales at Technology Services described above and a higher service margin rate at Mission Systems.

#### *Year to Date*

Service sales for the six months ended June 30, 2017 decreased \$49 million, or 1 percent as compared with the same period in 2016. The decrease was primarily driven by lower volume on several Cyber and ISR service programs at Mission Systems and lower service volume on the KC-10 program at Technology Services, partially offset by an increase in service sales on several Autonomous Systems and Manned Aircraft programs at Aerospace Systems.

Service costs for the six months ended June 30, 2017 decreased \$57 million, or 1 percent, as compared with the same period in 2016, consistent with the change in service sales above.

### **BACKLOG**

Total backlog includes 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 the option or IDIQ task order is exercised or awarded. For multi-year service contracts with non-U.S. Government customers having no stated contract values, backlog includes only the amounts committed by the customer. Backlog is converted into sales as costs are incurred or deliveries are made.

During the six months ended June 30, 2017, the company's total backlog declined modestly.

### **OTHER**

On July 18, 2017, the Armed Services Board of Contract Appeals made public its decision that the government improperly required Northrop Grumman to treat \$253 million of its post-retirement benefit costs as unallowable for government contract cost accounting purposes. The decision, if upheld on any potential appeal, would only apply to certain contracts spanning a 20-year period.

### **LIQUIDITY AND CAPITAL RESOURCES**

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

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

**NORTHROP GRUMMAN CORPORATION****Operating Cash Flow**

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

<i>\$ in millions</i>	Six Months Ended June 30	
	2017	2016
Net earnings	\$ 1,192	\$ 1,073
Non-cash items <sup>(1)</sup>	206	157
Changes in assets and liabilities:		
Trade working capital	(1,449)	(872)
Retiree benefits	165	209
Other, net	(46)	(23)
Net cash provided by operating activities	\$ 68	\$ 544

<sup>(1)</sup> Includes depreciation and amortization, stock based compensation expense and deferred income taxes.

Net cash provided by operating activities for the six months ended June 30, 2017 decreased \$476 million, as compared with the same period in 2016. Higher earnings were more than offset by an increase in trade working capital principally due to an increase in accounts receivable and a decrease in accounts payable and other liabilities.

**Free Cash Flow**

Free cash flow, as reconciled in the table below, is a non-GAAP measure defined as net cash provided by operating activities less capital expenditures, and may not be defined and calculated by other companies in the same manner. We use free cash flow as a key factor in our planning for, and consideration of, acquisitions, stock repurchases, and the payment of dividends. This 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 U.S. GAAP.

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

<i>\$ in millions</i>	Six Months Ended June 30	
	2017	2016
Net cash provided by operating activities	\$ 68	\$ 544
Less: capital expenditures	(433)	(471)
Free cash flow	\$ (365)	\$ 73

Free cash flow for the six months ended June 30, 2017 decreased \$438 million, as compared with the same period in 2016, principally due to the decrease in net cash provided by operating activities described above.

**Investing Cash Flow**

Net cash used in investing activities for the six months ended June 30, 2017 decreased to \$426 million from \$469 million in the prior year period principally due to lower capital expenditures.

**Financing Cash Flow**

Net cash used in financing activities for the six months ended June 30, 2017 decreased to \$800 million from \$1.3 billion in the prior year period primarily due to lower share repurchases during 2017 and a debt repayment of \$107 million in the first quarter of 2016.

*Credit Facilities and Financial Arrangements* - See Note 7 to the unaudited condensed consolidated financial statements for further information on our credit facilities and our use of standby letters of credit and guarantees.

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

## **NORTHROP GRUMMAN CORPORATION**

### **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 2016 Annual Report on Form 10-K.

### **ACCOUNTING STANDARDS UPDATES**

See Note 1 to our unaudited condensed consolidated 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, other than statements of historical fact, that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “expect,” “intend,” “may,” “could,” “plan,” “project,” “forecast,” “believe,” “estimate,” “outlook,” “anticipate,” “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 2016 Annual Report on Form 10-K and other filings with the Securities and Exchange Commission (SEC). They include:

- 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 more broadly
- investigations, claims, disputes and/or litigation
- our exposure to additional risks as a result of our international business
- the improper conduct of employees, agents, subcontractors, suppliers, business partners or joint ventures in which we participate and the impact on our reputation, our ability to do business, and our financial position, results of operations and/or cash flows
- 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
- the performance and financial viability of our subcontractors and suppliers and the availability and pricing of raw materials and components
- cyber and other security threats or disruptions faced by us, our customers or our partners
- changes in procurement and other laws, regulations and practices applicable to our industry, findings by the U.S. Government, and changes in our customers’ business practices globally
- increased competition within our markets and bid protests
- the ability to maintain a qualified workforce
- inability to meet performance obligations under our contracts
- environmental matters, including unforeseen environmental costs and government and third party claims
- natural and/or environmental disasters
- the adequacy and availability of our insurance coverage, customer indemnifications or other liability protections
- products and services we provide related to hazardous and high risk operations, which subject us to various environmental, regulatory, financial, reputational and other risks
- the future investment performance of plan assets, changes in actuarial assumptions associated with our pension and other post-retirement benefit plans and legislative or other regulatory actions impacting our pension, post-retirement and health and welfare plans

## **NORTHROP GRUMMAN CORPORATION**

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

Additional information regarding these risks and other important factors can be found in the section entitled “Risk Factors” in our 2016 Annual Report on Form 10-K and as disclosed in this report and from time to time in our other filings with the SEC.

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

### **CONTRACTUAL OBLIGATIONS**

There have been no material changes to our contractual obligations from those discussed in our 2016 Annual Report on Form 10-K.

#### **Item 3. Quantitative and Qualitative Disclosures About Market Risk**

There have been no material changes to our market risks from those discussed in our 2016 Annual Report on Form 10-K.

#### **Item 4. Controls and Procedures**

##### **DISCLOSURE CONTROLS AND PROCEDURES**

Our principal executive officer (Chairman, Chief Executive Officer and President) and principal financial officer (Corporate Vice President and Chief Financial Officer) have evaluated the company’s disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) of the Securities Exchange Act of 1934 (the Exchange Act)) as of June 30, 2017, 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 June 30, 2017, no change occurred in our internal controls over financial reporting that materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

## NORTHROP GRUMMAN CORPORATION

## PART II. OTHER INFORMATION

**Item 1. Legal Proceedings**

We have provided information about certain legal proceedings in which we are involved in our 2016 Annual Report on Form 10-K, and updated that information in Note 6 to the unaudited condensed consolidated financial statements.

We are a party to various investigations, lawsuits, claims 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 fines; penalties; compensatory, treble or other damages; or non-monetary relief. Government regulations also 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. Suspension or debarment could have a material adverse effect on the company because of our reliance on government contracts and authorizations. The nature of legal proceedings is such that we cannot assure the outcome of any particular matter. However, based on information available to us to date and other than as noted in our 2016 Annual Report on Form 10-K, as updated by Note 6 to the unaudited condensed consolidated financial statements in this report, we do not believe that the outcome of any matter currently pending against the company is likely to have a material adverse effect on the company's unaudited condensed consolidated financial position as of June 30, 2017, its annual results of operations and/or cash flows. For further information on the risks we face from existing and future investigations, lawsuits, claims and other legal proceedings, please see "Risk Factors" in our 2016 Annual Report on Form 10-K.

**Item 1A. Risk Factors**

For a discussion of our risk factors please see the section entitled "Risk Factors" in our 2016 Annual Report on Form 10-K.

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

*Purchases of Equity Securities* – The table below summarizes our repurchases of common stock during the three months ended June 30, 2017:

Period	Total Number of Shares Purchased	Average Price Paid per Share <sup>(1)</sup>	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased under the Plans or Programs (\$ in millions)
April 1, 2017 - April 28, 2017	127,005	\$ 241.13	127,005	\$ 2,473
April 29, 2017 - May 26, 2017	274,569	248.08	274,569	2,404
May 27, 2017 - June 30, 2017	148,121	256.87	148,121	2,366
Total	549,695	\$ 248.84	549,695	\$ 2,366

<sup>(1)</sup> 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 unaudited condensed consolidated financial statements for further information on our share repurchase programs.

**Item 3. Defaults Upon Senior Securities**

No information is required in response to this item.

**Item 4. Mine Safety Disclosures**

No information is required in response to this item.

**Item 5. Other Information**

No information is required in response to this item.

**NORTHROP GRUMMAN CORPORATION**

**Item 6. Exhibits**

2.1 Agreement and Plan of Merger among Titan II, Inc. (formerly Northrop Grumman Corporation), Northrop Grumman Corporation (formerly New P, Inc.) and Titan Merger Sub Inc., dated March 29, 2011 (incorporated by reference to Exhibit 10.1 to Form 8-K filed April 4, 2011, File No. 001-16411)

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

\*+10.1 Non-Employee Director Compensation Term Sheet, effective May 17, 2017

\*+10.2 Grant Certificate Specifying the Terms and Conditions Applicable to 2017 Restricted Stock Rights Granted Under the 2011 Long-Term Incentive Stock Plan

\*12(a) Computation of Ratio of Earnings to Fixed Charges

\*15 Letter from Independent Registered Public Accounting Firm

\*31.1 Certification of Wesley G. Bush pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

\*31.2 Certification of Kenneth L. Bedingfield pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

\*\*32.1 Certification of Wesley G. Bush pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

\*\*32.2 Certification of Kenneth L. Bedingfield 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 June 30, 2017, formatted in XBRL (Extensible Business Reporting Language): (i) the Condensed Consolidated Statements of Earnings and Comprehensive Income, (ii) Condensed Consolidated Statements of Financial Position, (iii) Condensed Consolidated Statements of Cash Flows, (iv) Condensed Consolidated Statements of Changes in Shareholders' Equity, and (v) Notes to Condensed Consolidated Financial Statements

+ Management contract or compensatory plan or arrangement

\* Filed with this report

\*\* Furnished with this report

**NORTHROP GRUMMAN CORPORATION**

**SIGNATURES**

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

NORTHROP GRUMMAN CORPORATION  
(Registrant)

By:

**/s/ Michael A. Hardesty**

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

Date: July 25, 2017

**Board of Director Compensation**  
(effective as of May 17, 2017)

Retainer: Retainer fees are paid quarterly, at the end of each quarter. Fees are as follows:

Annual cash retainer:	\$122,500
Additional retainer for Lead Independent Director:	\$35,000
Additional retainer for Audit Committee:	\$10,000
Additional retainer for Audit Committee chair:	\$20,000
Additional retainer for Comp Committee chair:	\$20,000
Additional retainer for Gov Committee chair:	\$15,000
Additional retainer for Policy Committee chair:	\$7,500

Equity Grant: Directors are awarded an annual equity grant of \$150,000 in deferred stock units (“Automatic Stock Units”), awarded annually on the day of the Company’s Annual Meeting of Shareholders. The Automatic Stock Units will vest on the one year anniversary of the grant date. Directors may elect to have all or any portion of their Automatic Stock Units paid on (A) the earlier of (i) the beginning of a specified calendar year after the vesting date or (ii) their separation from service as a member of the Board or (B) the vesting date.

Deferral of Cash Retainer: Directors may elect to defer payment of all or a portion of their cash retainer fees and any other committee retainer fees into a deferred stock unit account (“Elective Stock Units”). Elective Stock Units are awarded on a calendar quarterly basis. Directors may elect to have all or a portion of their Elective Stock Units paid on the earlier of (i) the beginning of a specified calendar year or (ii) their separation from service as a member of the Board.

Elective Deferral Program: Directors may elect to defer to a later year all or a portion of their annual cash retainer and any other fees payable for their Board service into alternative investment options similar to the options available under Northrop Grumman’s Savings Excess Plan.



**NORTHROP GRUMMAN CORPORATION**  
**TERMS AND CONDITIONS APPLICABLE TO**  
**2017 RESTRICTED STOCK RIGHTS**  
**GRANTED UNDER THE 2011 LONG-TERM INCENTIVE STOCK PLAN**

These Terms and Conditions (“Terms”) apply to certain “Restricted Stock Rights” (“RSRs”) granted by Northrop Grumman Corporation (the “Company”) in 2017 under its 2011 Long-Term Incentive Stock Plan. The date of grant of the 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. These Terms apply only with respect to this special 2017 RSR award identified in your Grant Letter. 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 these Terms, 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, including these Terms, 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 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 first anniversary of the Grant Date, provided that if the first 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 first 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 these Terms, “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 Section 2.6 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.

**2.5 Continuance of Employment Required.** Except as expressly provided in Section 2.6 and in Section 6, the vesting of the RSRs (and related Dividend Equivalents) subject to the award requires continued employment through the first 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 these Terms, 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, but in no event later than March 15 of the year following the date of the death or 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 these Terms with respect to such vested and unpaid RSRs (and related Dividend Equivalents).

### **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 Recoupment of Awards.** 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. Further, 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 Corporate Policy Council Contribution.** You acknowledge and agree that as a member of the Corporate Policy Council (“CPC”), 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 manned and unmanned aircraft, space, C4ISR, cyber, sensors, electronics, through-life support and technical services. 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 CPC 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 these Terms 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 manned and unmanned aircraft, space, C4ISR, cyber, sensors, electronics, through-life support and technical services.

**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.

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

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

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

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

The Company's obligation to make any payments or issue any shares with respect to the award is subject to full compliance with all then applicable requirements of law, the Securities and Exchange Commission, or other regulatory agencies having jurisdiction over the Company and its shares, and of any exchange upon which stock of the Company may be listed. The Grantee shall not have the rights and privileges of a stockholder, including without limitation the right to vote or receive dividends (except as expressly provided in these Terms 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 within 60 days of the Grantee's termination of employment, but in no event later than March 15 of the year following the Grantee's date of 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 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 Change of Control, but in no event later than March 15 of the year following the Change in Control.

## **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.** These Terms are designed to be exempt from Code Section 409A, and the Committee shall administer and construe the award, and may amend the Terms of the award, in such a way as to be exempt from and to avoid adverse tax consequences under Code Section 409A.

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

**7.5. Code Section 280G.** Notwithstanding any other provision of this Agreement to the contrary, in the event that any amounts payable to you as a result of Section 6.2 or 6.3 hereof, either alone or together with amounts payable pursuant to any other plan, program or arrangement (a) constitute “parachute payments” within the meaning of Section 280G of the Code, and (b) but for this Section 7.5 would be subject to the excise tax imposed by Section 4999 of the Code or any comparable successor provisions (the “Excise Tax”), then the vesting acceleration provided in Section 6.2 or 6.3, as applicable, shall be either (a) provided to you in full, or (b) provided to you to such lesser extent that would result in no portion of the payments so accelerated being subject to the Excise Tax, whichever of the foregoing amounts, when taking into account applicable federal, state, local and foreign income and employment taxes, the Excise Tax, and any other applicable taxes, results in the receipt by you, on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such benefits may be subject to the Excise Tax. All determinations required to be made under this Section 7.5 shall be made by a registered public accounting firm selected by the Company, which shall provide supporting calculations both to the Company and you no later than the date of the applicable Change in Control. In the event that the Payments are to be reduced pursuant to this Section 7.5, such Payments shall be reduced such that the reduction of compensation to be provided to the Executive as a result of this Section 7.5 is minimized. In applying this principle, the reduction shall be made in a manner consistent with the requirements of Section 409A and where two economically equivalent amounts are subject to reduction but payable at different times,

such amounts shall be reduced on a pro rata basis but not below zero.

## **8. Choice of Law; Venue; Arbitration**

This agreement shall be governed by the laws of the State of Delaware. Any cause of action or claim arising out of or related to the terms and conditions applicable to this grant will be determined through final and binding arbitration, in accordance with Northrop Grumman CTM H200 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 these terms, 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 these terms 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 these Terms, 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 these Terms, 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 these Terms 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 these Terms and/or the Plan, the provisions of these Terms 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 50% of the total number (if any) of shares of Common Stock the Grantee receives as payment for Vested RSRs until the earlier of (A) the third anniversary of the date such shares of Common Stock are paid to the Grantee, (B) the date the Grantee's employment by the Company and its subsidiaries terminates due to the Grantee's death or Disability, (C) the occurrence of a Change in Control that results in termination and payment under Section 6.2 or 6.3 above, or (D) with respect to Grantee's entering a U.S. federal government position only, the latest of (i) the date the Grantee's employment with the Company terminates, or (ii) the date the Grantee formally accepts the government position in writing, or (iii) the date the government confirms the Grantee (for positions requiring nomination and confirmation). For purposes of this Section 11, the total number of shares of Common Stock the Grantee receives as payment for 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. 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 these Terms, 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) The willful engaging by the Grantee in misconduct that is significantly injurious 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.

“**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.

The Grantee's right to terminate employment for Good Reason is conditioned upon (a) the Grantee providing the Company with written notice of the Good Reason condition within 90 days of its first occurrence; (b) Grantee's notice including a period of no less than 30 days from the Company's receipt of the notice for the Company to cure the Good Reason condition; and (c) Grantee implementing a Good Reason termination only if the condition continues to go uncured and such termination is initiated and executed no later than six (6) months from the date of its first occurrence.

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.

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

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

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

- (i) If the Change in Control is triggered by a tender offer for shares of the Company's stock or by the offeror's acquisition of shares pursuant to such a tender offer, the Protected Period shall commence on the date of the initial tender offer and shall continue through and including the date of the Change in Control; provided that in no case will the Protected Period commence earlier than the date that is six (6) months prior to the Change in Control.
- (ii) If the Change in Control is triggered by a merger, consolidation, or reorganization of the Company with or involving any other corporation, the Protected Period shall commence on the date that serious and substantial discussions first take

place to effect the merger, consolidation, or reorganization and shall continue through and including the date of the Change in Control; provided that in no case will the Protected Period commence earlier than the date that is six (6) months prior to the Change in Control.

- (iii) In the case of any Change in Control not described in clause (i) or (ii) above, the Protected Period shall commence on the date that is six (6) months prior to the Change in Control and shall continue through and including the date of the Change in Control.

“**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**  
**COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES**

<i>\$ in millions</i>	Six Months Ended June 30		Year Ended December 31				
<b>Earnings:</b>	<b>2017</b>	2016	2016	2015	2014	2013	2012
Earnings before income taxes	\$ 1,580	\$ 1,406	\$ 2,923	\$ 2,790	\$ 2,937	\$ 2,863	\$ 2,965
<b>Fixed Charges:</b>							
Interest expense, including amortization of debt premium	151	150	301	301	282	257	212
Portion of rental expenses on operating leases deemed to be representative of the interest factor	51	53	99	101	101	99	116
Earnings before income taxes and fixed charges	\$ 1,782	\$ 1,609	\$ 3,323	\$ 3,192	\$ 3,320	\$ 3,219	\$ 3,293
<b>Fixed Charges:</b>	\$ 202	\$ 203	\$ 400	\$ 402	\$ 383	\$ 356	\$ 328
Ratio of earnings to fixed charges	8.8	7.9	8.3	7.9	8.7	9.0	10.0

**LETTER FROM INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

July 25, 2017

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

We have reviewed, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the unaudited interim financial information of Northrop Grumman Corporation and subsidiaries for the periods ended June 30, 2017, and 2016, as indicated in our report dated July 25, 2017; because we did not perform an audit, we expressed no opinion on that information.

We are aware that our report referred to above, which is included in your Quarterly Report on Form 10-Q for the quarter ended June 30, 2017, 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. 333-217087 on Form S-3.

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

/s/ Deloitte & Touche LLP  
McLean, Virginia

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

I, Wesley G. Bush, 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: July 25, 2017

/s/ **Wesley G. Bush**

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Wesley G. Bush  
Chairman, Chief Executive Officer and President

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

I, Kenneth L. Bedingfield, 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: July 25, 2017

/s/ **Kenneth L. Bedingfield**

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Kenneth L. Bedingfield  
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 June 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Wesley G. Bush, Chairman, Chief Executive Officer and President of the company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: July 25, 2017

**/s/ Wesley G. Bush**

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Wesley G. Bush  
Chairman, 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 June 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Kenneth L. Bedingfield, 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: July 25, 2017

**/s/ Kenneth L. Bedingfield**

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Kenneth L. Bedingfield  
Corporate Vice President and Chief Financial Officer