

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

FORM 10-Q

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

For the Quarterly Period Ended September 30, 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 October 20, 2017, 174,078,522 shares of common stock were outstanding.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS AND COMPREHENSIVE INCOME
(Unaudited)

	Three Months Ended September		Nine Months Ended September	
	30		30	
	2017	2016	2017	2016
<i>\$ in millions, except per share amounts</i>				
Sales				
Product	\$ 4,135	\$ 3,721	\$ 11,885	\$ 10,759
Service	2,392	2,434	7,284	7,352
Total sales	6,527	6,155	19,169	18,111
Operating costs and expenses				
Product	3,153	2,760	8,982	7,992
Service	1,863	1,907	5,646	5,819
General and administrative expenses	666	662	2,009	1,938
Operating income	845	826	2,532	2,362
Other (expense) income				
Interest expense	(73)	(74)	(224)	(224)
Other, net	13	17	57	37
Earnings before income taxes	785	769	2,365	2,175
Federal and foreign income tax expense	140	167	528	500
Net earnings	\$ 645	\$ 602	\$ 1,837	\$ 1,675
Basic earnings per share	\$ 3.70	\$ 3.38	\$ 10.53	\$ 9.32
Weighted-average common shares outstanding, in millions	174.2	178.1	174.5	179.8
Diluted earnings per share	\$ 3.68	\$ 3.35	\$ 10.46	\$ 9.23
Weighted-average diluted shares outstanding, in millions	175.3	179.6	175.6	181.5
Net earnings (from above)	\$ 645	\$ 602	\$ 1,837	\$ 1,675
Other comprehensive income				
Change in unamortized benefit plan costs, net of tax	99	101	300	302
Change in cumulative translation adjustment	—	(6)	—	(19)
Other, net	—	(1)	3	(1)
Other comprehensive income, net of tax	99	94	303	282
Comprehensive income	\$ 744	\$ 696	\$ 2,140	\$ 1,957

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>	September 30, 2017	December 31, 2016
Assets		
Cash and cash equivalents	\$ 1,878	\$ 2,541
Accounts receivable, net	4,414	3,299
Inventoried costs, net	1,007	816
Prepaid expenses and other current assets	300	200
Total current assets	7,599	6,856
Property, plant and equipment, net of accumulated depreciation of \$4,994 in 2017 and \$4,831 in 2016	3,925	3,588
Goodwill	12,456	12,450
Deferred tax assets	1,200	1,462
Other non-current assets	1,333	1,258
Total assets	\$ 26,513	\$ 25,614
Liabilities		
Trade accounts payable	\$ 1,507	\$ 1,554
Accrued employee compensation	1,309	1,342
Advance payments and amounts in excess of costs incurred	1,290	1,471
Other current liabilities	2,194	1,263
Total current liabilities	6,300	5,630
Long-term debt, net of current portion of \$863 in 2017 and \$12 in 2016	6,227	7,058
Pension and other post-retirement benefit plan liabilities	6,579	6,818
Other non-current liabilities	914	849
Total liabilities	20,020	20,355
Commitments and contingencies (Note 8)		
Shareholders' equity		
Preferred stock, \$1 par value; 10,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, \$1 par value; 800,000,000 shares authorized; issued and outstanding: 2017—174,077,667 and 2016—175,068,263	174	175
Paid-in capital	16	—
Retained earnings	11,546	10,630
Accumulated other comprehensive loss	(5,243)	(5,546)
Total shareholders' equity	6,493	5,259
Total liabilities and shareholders' equity	\$ 26,513	\$ 25,614

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>	Nine Months Ended September 30	
	2017	2016
Operating activities		
Net earnings	\$ 1,837	\$ 1,675
Adjustments to reconcile to net cash provided by operating activities:		
Depreciation and amortization	322	322
Stock-based compensation	66	61
Deferred income taxes	79	(13)
Changes in assets and liabilities:		
Accounts receivable, net	(1,115)	(830)
Inventoried costs, net	(191)	14
Prepaid expenses and other assets	(86)	(144)
Accounts payable and other liabilities	(41)	(292)
Income taxes payable	(58)	218
Retiree benefits	235	318
Other, net	(42)	(47)
Net cash provided by operating activities	1,006	1,282
Investing activities		
Capital expenditures	(650)	(608)
Other, net	21	3
Net cash used in investing activities	(629)	(605)
Financing activities		
Common stock repurchases	(393)	(1,149)
Payments of long-term debt	—	(107)
Cash dividends paid	(515)	(482)
Payments of employee taxes withheld from share-based awards	(91)	(152)
Other, net	(41)	(3)
Net cash used in financing activities	(1,040)	(1,893)
Decrease in cash and cash equivalents	(663)	(1,216)
Cash and cash equivalents, beginning of year	2,541	2,319
Cash and cash equivalents, end of period	\$ 1,878	\$ 1,103

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)

	Nine Months Ended September 30	
	2017	2016
<i>\$ in millions, except per share amounts</i>		
Common stock		
Beginning of year	\$ 175	\$ 181
Common stock repurchased	(2)	(6)
Shares issued for employee stock awards and options	1	2
End of period	174	177
Paid-in capital		
Beginning of year	—	—
Stock compensation	16	—
End of period	16	—
Retained earnings		
Beginning of year	10,630	10,661
Common stock repurchased	(371)	(1,154)
Net earnings	1,837	1,675
Dividends declared	(511)	(472)
Stock compensation	(39)	(82)
End of period	11,546	10,628
Accumulated other comprehensive loss		
Beginning of year	(5,546)	(5,320)
Other comprehensive income, net of tax	303	282
End of period	(5,243)	(5,038)
Total shareholders' equity	\$ 6,493	\$ 5,767
Cash dividends declared per share	\$ 2.90	\$ 2.60

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 considering the facts and circumstances known to us at the time. Amounts recognized related to claims and REAs as of September 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

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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. During the three months ended September 30, 2017, we recorded a \$56 million favorable EAC adjustment on a restricted program at Aerospace Systems largely related to performance incentives.

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

<i>\$ in millions, except per share data</i>	Three Months Ended September 30		Nine Months Ended September 30	
	2017	2016	2017	2016
Operating Income	\$ 102	\$ 121	\$ 315	\$ 387
Net Earnings ⁽¹⁾	66	79	205	252
Diluted earnings per share ⁽¹⁾	0.38	0.44	1.17	1.39

⁽¹⁾ Based on statutory tax rates

Accumulated Other Comprehensive Loss

The components of accumulated other comprehensive loss are as follows:

<i>\$ in millions</i>	September 30, 2017	December 31, 2016
Unamortized benefit plan costs, net of tax benefit of \$3,257 in 2017 and \$3,439 in 2016	\$ (5,116)	\$ (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	\$ (5,243)	\$ (5,546)

Unamortized benefit plan costs consist primarily of net after-tax actuarial losses totaling \$5.2 billion and \$5.6 billion as of September 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 \$299 million, net of taxes, for the three and nine months ended September 30, 2017, respectively, and were \$101 million and \$302 million, net of taxes, for the three and nine months ended September 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 9 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 nine months ended September 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

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cost, expected return on plan assets, and amortization of prior service credit and net actuarial loss components of net periodic benefit costs outside of operating income. In addition, interest on service cost and plan administrative expenses, which, in some cases, are currently included within service cost, will be presented in the interest cost and amortization of net actuarial loss components, respectively, in Other, net. 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 full retrospective method, we expect to recognize the cumulative effect of adoption as an increase in unbilled accounts receivable, a reduction in inventoried costs, an increase in advance payments and amounts in excess of costs incurred 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

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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 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 issued, but not effective until after September 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. PENDING ACQUISITION OF ORBITAL ATK

On September 17, 2017, the company entered into a definitive merger agreement to acquire all of the outstanding shares of Orbital ATK, Inc. (Orbital ATK) for approximately \$7.8 billion in cash, plus the assumption of approximately \$1.4 billion in net debt (the "Orbital ATK Acquisition"). Under the terms of the merger agreement, Orbital ATK shareholders are to receive all-cash consideration of \$134.50 per share. We expect to fund the Orbital ATK Acquisition with the proceeds from our recently completed debt financing and cash on hand. See Notes 8 and 11 for further information on our Orbital ATK Acquisition financing. The transaction is currently expected to close in the first half of 2018 and is subject to customary closing conditions, including regulatory and Orbital ATK shareholder approval. If the merger agreement is terminated under certain circumstances, Orbital ATK will be required to pay the company a termination fee of \$275 million. Upon completion of the Orbital ATK Acquisition, we plan to establish Orbital ATK as a new, fourth business sector.

3. 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 1.1 million and 1.1 million shares for the three and nine months ended September 30, 2017, respectively. The dilutive effect of these securities totaled 1.5 million and 1.7 million shares for the three and nine months ended September 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 September 30, 2017, repurchases under the 2015 Repurchase Program totaled \$1.7 billion; \$2.3 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.

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

Repurchase Program Authorization Date	Amount Authorized (in millions)	Total Shares Retired (in millions)	Average Price Per Share ⁽¹⁾	Date Completed	Shares Repurchased (in millions)	
					Nine Months Ended September 30	
					2017	2016
December 4, 2014	\$ 3,000	18.0	\$ 166.70	March 2016	—	1.4
September 16, 2015	\$ 4,000	7.4	\$ 222.93		1.6	4.2

⁽¹⁾ 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.

4. 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:

\$ in millions	Three Months Ended September 30		Nine Months Ended September 30	
	2017	2016	2017	2016
Sales				
Aerospace Systems	\$ 3,082	\$ 2,782	\$ 8,950	\$ 7,956
Mission Systems	2,837	2,698	8,357	8,081
Technology Services	1,183	1,190	3,552	3,617
Intersegment eliminations	(575)	(515)	(1,690)	(1,543)
Total sales	6,527	6,155	19,169	18,111
Operating income				
Aerospace Systems	334	311	961	909
Mission Systems	363	351	1,090	1,055
Technology Services	133	130	398	387
Intersegment eliminations	(71)	(61)	(211)	(188)
Total segment operating income	759	731	2,238	2,163
Net FAS/CAS pension adjustment	172	91	445	234
Unallocated corporate expenses	(85)	5	(148)	(31)
Other	(1)	(1)	(3)	(4)
Total operating income	\$ 845	\$ 826	\$ 2,532	\$ 2,362

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

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management and administration, legal, environmental, compensation, retiree benefits and corporate unallowable costs.

5. INCOME TAXES

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	2017	2016	2017	2016
Federal and foreign income tax expense	\$ 140	\$ 167	\$ 528	\$ 500
<i>Effective income tax rate</i>	17.8%	21.7%	22.3%	23.0%

Current Quarter

The company's effective tax rate of 17.8 percent for the three months ended September 30, 2017 was lower as compared with the same period in 2016 principally due to a \$45 million increase in research credits related to the current period and the filing of our 2016 tax return, and a \$35 million benefit recognized for additional manufacturing deductions related to prior years. The prior year period included a \$42 million benefit recognized in connection with the resolution of the Internal Revenue Service (IRS) examination of the company's 2007-2011 tax returns.

Year to Date

The company's effective tax rate of 22.3 percent for the nine months ended September 30, 2017 was lower as compared with the same period in 2016 primarily due to a \$55 million increase in research credits largely related to our prior year tax returns and a \$32 million benefit recognized for additional manufacturing deductions related to prior years. The effective tax rate for the nine months ended September 30, 2017 and 2016 each include separate \$42 million benefits recognized in connection with the resolution of IRS examinations of the company's prior year tax returns.

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 and our 2007-2011 federal tax returns are subject to examination due to the filing of refund claims for these years. 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.

6. 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>	September 30, 2017			December 31, 2016		
	Level 1	Level 2	Total	Level 1	Level 2	Total
Financial Assets (Liabilities)						
Marketable securities						
Trading	\$ 333	\$ 1	\$ 334	\$ 321	\$ 2	\$ 323
Available-for-sale	11	—	11	7	—	7
Derivatives	—	4	4	—	8	8

The notional value of the company's derivative portfolio at September 30, 2017 and December 31, 2016, was \$148 million and \$147 million, respectively. The portion of the notional value designated as cash flow hedges at September 30, 2017 was \$10 million. At December 31, 2016, no portion of the notional value was designated as a

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cash flow hedge. The derivative fair values and related unrealized gains/losses at September 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 nine months ended September 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 September 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 September 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.

7. 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 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 \$35 million as of September 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 \$28 million as of September 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 September 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 \$37 million as of September 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

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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 September 30, 2017, or its annual results of operations and/or cash flows.

8. 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 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 September 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 September 30, 2017 and December 31, 2016:

<i>\$ in millions</i>	Range of Reasonably Possible Future Costs ⁽¹⁾	Accrued Costs ⁽²⁾	Deferred Costs ⁽³⁾
September 30, 2017	\$409 - \$796	\$ 416	\$ 210
December 31, 2016	379 - 774	385	195

⁽¹⁾ 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.

⁽²⁾ As of September 30, 2017, \$144 million is recorded in other current liabilities and \$272 million is recorded in other non-current liabilities.

⁽³⁾ As of September 30, 2017, \$75 million is deferred in inventoried costs and \$135 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 September 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 September 30, 2017, there were \$210 million of stand-by letters of credit and guarantees and \$208 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

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adverse effect on the company's unaudited condensed consolidated financial position as of September 30, 2017, or its annual results of operations and/or cash flows.

Operating Leases

Rental expense for operating leases for the three and nine months ended September 30, 2017 was \$73 million and \$227 million, respectively, and was \$69 million and \$228 million for the three and nine months ended September 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 \$162 million as of September 30, 2017) (the "2016 Credit Agreement"). The 2016 Credit Agreement is guaranteed by the company. At September 30, 2017, there was £110 million (the equivalent of approximately \$149 million as of September 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 September 30, 2017, there was no balance outstanding under this facility.

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

Financing Commitment

On September 17, 2017, we entered into a commitment letter (the "Commitment Letter") with JPMorgan Chase Bank, N.A. (JPMorgan), pursuant to which, subject to the terms and conditions set forth therein, JPMorgan committed to provide a 364-day senior unsecured bridge loan facility in an aggregate principal amount of up to \$8.5 billion (the "Bridge Facility"), to finance the Orbital ATK Acquisition and to pay related fees and expenses. Under the terms of the Commitment Letter, the Bridge Facility availability is subject to reduction in equivalent amounts upon an incurrence by the company of term loans and/or the issuance of notes prior to the consummation of the Orbital ATK Acquisition and certain other specified events. In consideration for JPMorgan's commitment to provide the Bridge Facility, we paid to JPMorgan a non-refundable commitment fee of \$29.8 million, which has been amortized from inception to the date permanent financing was established as described below.

Subsequent Event

In October 2017, the company issued \$8.25 billion of unsecured senior notes. The company intends to use the net proceeds to finance the Orbital ATK Acquisition and to pay related fees and expenses. See Note 11 for further information. As a result of the issuance of the unsecured senior notes, the company terminated the Commitment Letter.

9. RETIREMENT BENEFITS

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

<i>\$ in millions</i>	Three Months Ended September 30				Nine Months Ended September 30			
	Pension Benefits		Medical and Life Benefits		Pension Benefits		Medical and Life Benefits	
	2017	2016	2017	2016	2017	2016	2017	2016
Components of net periodic benefit cost								
Service cost	\$ 94	\$ 112	\$ 6	\$ 8	\$ 322	\$ 335	\$ 19	\$ 23
Interest cost	308	321	21	24	925	963	63	71
Expected return on plan assets	(471)	(464)	(22)	(21)	(1,414)	(1,390)	(67)	(64)
Amortization of:								
Prior service credit	(14)	(15)	(4)	(6)	(43)	(45)	(15)	(17)
Net loss from previous years	178	179	1	3	534	536	6	11
Net periodic benefit cost	\$ 95	\$ 133	\$ 2	\$ 8	\$ 324	\$ 399	\$ 6	\$ 24

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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 September 30		Nine Months Ended September 30	
	2017	2016	2017	2016
Defined benefit pension plans	\$ 20	\$ 14	\$ 71	\$ 61
Medical and life benefit plans	11	17	35	46
Defined contribution plans	91	83	267	241

10. 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>	Nine Months Ended September 30	
	2017	2016
RSRs granted	0.1	0.2
RPSRs granted	0.3	0.3
Grant date aggregate fair value	\$ 92	\$ 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.

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>	Nine Months Ended September 30	
	2017	2016
Minimum aggregate payout amount	\$ 36	\$ 35
Maximum aggregate payout amount	199	194

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.

11. SUBSEQUENT EVENT
Unsecured Senior Notes

In October 2017, the company issued \$8.25 billion of unsecured senior notes to finance the Orbital ATK Acquisition and to pay related fees and expenses as follows:

- \$1.0 billion of 2.08 percent Senior Notes due 2020 (the "2020 Notes"),
- \$1.5 billion of 2.55 percent Senior Notes due 2022 (the "2022 Notes"),
- \$1.5 billion of 2.93 percent Senior Notes due 2025 (the "2025 Notes"),
- \$2.0 billion of 3.25 percent Senior Notes due 2028 (the "2028 Notes") and
- \$2.25 billion of 4.03 percent Senior Notes due 2047 (the "2047 Notes").

We refer to the 2020 Notes, the 2022 Notes, the 2025 Notes, the 2028 Notes and the 2047 Notes, together, as the "notes." Interest on the notes is payable semi-annually in arrears. The notes are generally subject to redemption, in

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whole or in part, at the company's discretion at any time, or from time to time, prior to maturity at a redemption price equal to the greater of 100% of the principal amount of the notes to be redeemed or an applicable "make-whole" amount, plus accrued and unpaid interest.

If the Orbital ATK Acquisition is not consummated on or prior to December 17, 2018, or if the merger agreement relating to the Orbital ATK Acquisition is terminated prior to such date, then, in either case, the company will be required to redeem all of the outstanding 2020 Notes, 2022 Notes, 2025 Notes and 2047 Notes in a special mandatory redemption at a redemption price equal to 101% of the aggregate principal amount of such notes, plus accrued and unpaid interest. The proceeds of the offering of such notes will not be deposited into an escrow account pending any special mandatory redemption of such notes.

The 2028 Notes are not subject to a special mandatory redemption. If the Orbital ATK Acquisition is not consummated, the company expects to use the net proceeds from the offering of the 2028 Notes for general corporate purposes, including debt repayment, share repurchases, pension plan funding, acquisitions and working capital.

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 September 30, 2017, and the related condensed consolidated statements of earnings and comprehensive income for the three-month and nine-month periods ended September 30, 2017 and 2016, and of cash flows and changes in shareholders’ equity for the nine-month periods ended September 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
October 24, 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.

Pending Acquisition of Orbital ATK

On September 17, 2017, the company entered into a definitive merger agreement to acquire all of the outstanding shares of Orbital ATK, Inc. (Orbital ATK) for approximately \$7.8 billion in cash, plus the assumption of approximately \$1.4 billion in net debt (the “Orbital ATK Acquisition”). See Item 1.01 in our Current Report on Form 8-K filed with the SEC on September 18, 2017 for a summary and copy of the merger agreement. We believe this acquisition will enable us to broaden our capabilities and offerings, create value for shareholders, provide expanded opportunities for our combined employees and enhance our ability to provide innovative solutions to meet our customers’ emerging requirements. Under the terms of the merger agreement, Orbital ATK shareholders are to receive all-cash consideration of \$134.50 per share. We expect to fund the Orbital ATK Acquisition with the proceeds from our recently completed debt financing and cash on hand. See Notes 8 and 11 to the unaudited condensed consolidated financial statements for further information on our Orbital ATK Acquisition financing. The transaction is currently expected to close in the first half of 2018 and is subject to customary closing conditions, including regulatory and Orbital ATK shareholder approval. If the merger agreement is terminated under certain circumstances, Orbital ATK will be required to pay the company a termination fee of \$275 million. Upon completion of the Orbital ATK Acquisition, we plan to establish Orbital ATK as a new, fourth business sector.

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 periods ended March 31, 2017 and June 30, 2017 (2017 Quarterly Reports on Form 10-Q).

The global security and economic environment continues to be impacted by uncertainty surrounding geopolitical tensions. During the third 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 Reports on Form 10-Q.

In March 2017, the debt ceiling was reached and the Treasury Department began taking “extraordinary measures” to finance the government. On September 8, 2017, the President signed legislation suspending the debt ceiling through December 8, 2017, with the debt ceiling to be reset on December 9, 2017. 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. On September 8, 2017, the President signed a continuing resolution (CR) which generally funds the

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government at FY 2017 levels through December 8, 2017. It is unclear when or if an annual appropriations bill will be enacted for FY 2018 or at what levels. The U.S. Government may continue to operate under a continuing resolution for some or all of FY 2018, restricting new contract or program starts for that year and placing limitations on some planned program budgets, and we may have 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 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 September 30		%	Nine Months Ended September 30		%
	2017	2016		2017	2016	
Sales	\$ 6,527	\$ 6,155	6 %	\$ 19,169	\$ 18,111	6 %
Operating costs and expenses	5,682	5,329	7 %	16,637	15,749	6 %
<i>Operating costs and expenses as a % of sales</i>	<i>87.1%</i>	<i>86.6%</i>		<i>86.8%</i>	<i>87.0%</i>	
Operating income	845	826	2 %	2,532	2,362	7 %
<i>Operating margin rate</i>	<i>12.9%</i>	<i>13.4%</i>		<i>13.2%</i>	<i>13.0%</i>	
Federal and foreign income tax expense	140	167	(16)%	528	500	6 %
<i>Effective income tax rate</i>	<i>17.8%</i>	<i>21.7%</i>		<i>22.3%</i>	<i>23.0%</i>	
Net earnings	645	602	7 %	1,837	1,675	10 %
Diluted earnings per share	\$ 3.68	\$ 3.35	10 %	\$ 10.46	\$ 9.23	13 %

Sales
Current Quarter

Sales for the three months ended September 30, 2017 increased \$372 million, or 6 percent, as compared with the same period in 2016, primarily due to higher sales at Aerospace Systems and Mission Systems.

Year to Date

Sales for the nine months ended September 30, 2017 increased \$1.1 billion, 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.

NORTHROP GRUMMAN CORPORATION**Operating Income***Current Quarter*

Operating income for the three months ended September 30, 2017 increased \$19 million, or 2 percent, as compared with the same period in 2016, primarily due to a \$81 million increase in our net FAS/CAS pension adjustment and a \$28 million increase in segment operating income, partially offset by a \$90 million increase in unallocated corporate expenses. Higher operating costs and expenses as a percentage of sales reduced our operating margin rate to 12.9 percent from 13.4 percent in the prior year period and was principally driven by higher unallocated corporate expenses and a lower segment operating margin rate, as described in “Segment Operating Results,” partially offset by the increase in our net FAS/CAS pension adjustment described above.

G&A as a percentage of sales for the three months ended September 30, 2017 decreased to 10.2 percent from 10.8 percent in the prior year period principally due to higher sales.

Year to Date

Operating income for the nine months ended September 30, 2017 increased \$170 million, or 7 percent, as compared with the same period in 2016, primarily due to a \$211 million increase in our net FAS/CAS pension adjustment and a \$75 million increase in segment operating income, partially offset by a \$117 million increase in unallocated corporate expenses. Lower operating costs and expenses as a percentage of sales increased our operating margin rate to 13.2 percent from 13.0 percent in the prior year period and 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 nine months ended September 30, 2017 decreased to 10.5 percent from 10.7 percent in the prior year period primarily due to higher sales.

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

Federal and Foreign Income Taxes*Current Quarter and Year to Date*

Our effective tax rate for the three and nine months ended September 30, 2017 was lower as compared with the same periods in 2016, as discussed in Note 5 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 September 30, 2017 increased \$43 million, or 7 percent, as compared with the same period in 2016, primarily due to the lower effective tax rate and higher operating income described above.

Year to Date

Net earnings for the nine months ended September 30, 2017 increased \$162 million, or 10 percent, as compared with the same period in 2016, primarily due to the higher operating income described above.

Diluted Earnings Per Share*Current Quarter*

Diluted earnings per share for the three months ended September 30, 2017 increased \$0.33, or 10 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 2 percent reduction in weighted-average shares outstanding resulting from shares repurchased during 2016 and 2017.

Year to Date

Diluted earnings per share for the nine months ended September 30, 2017 increased \$1.23, or 13 percent, as compared with the same period in 2016. The increase is primarily due to the 10 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.

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SEGMENT OPERATING RESULTS
Basis of Presentation

The company is 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:

Aerospace Systems	Mission Systems	Technology Services
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.

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 (accounting principles generally accepted in the United States of America) 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 GAAP.

<i>\$ in millions</i>	Three Months Ended September 30			%	Nine Months Ended September 30			%
	2017	2016	Change		2017	2016	Change	
Segment operating income	\$ 759	\$ 731	4%	\$ 2,238	\$ 2,163	3%		
Segment operating margin rate	11.6%	11.9%		11.7%	11.9%			

Current Quarter

Segment operating income for the three months ended September 30, 2017 increased \$28 million, or 4 percent, as compared with the same period in 2016, and includes higher operating income at all three sectors. The higher operating income at Aerospace Systems includes a \$56 million favorable EAC adjustment on a restricted program largely related to performance incentives. Segment operating margin rate decreased principally due to lower segment margin rates at Aerospace Systems and Mission Systems, partially offset by a higher segment margin rate at Technology Services.

Year to Date

Segment operating income for the nine months ended September 30, 2017 increased \$75 million, or 3 percent, as compared with the same period in 2016, and includes higher operating income at all three sectors including the \$56 million favorable EAC adjustment described above and \$54 million recognized to date in connection with a claim related to certain costs incurred in prior years (the "Cost Claim"). 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.

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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 the net FAS/CAS pension adjustment, 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 4 to the unaudited condensed consolidated financial statements for further information on the net FAS/CAS pension adjustment and unallocated corporate expenses.

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	2017	2016	2017	2016
Segment operating income	\$ 759	\$ 731	\$ 2,238	\$ 2,163
CAS pension expense	267	224	769	633
Less: FAS pension expense	(95)	(133)	(324)	(399)
Net FAS/CAS pension adjustment	172	91	445	234
Unallocated corporate expenses	(85)	5	(148)	(31)
Other	(1)	(1)	(3)	(4)
Total operating income	\$ 845	\$ 826	\$ 2,532	\$ 2,362

Net FAS/CAS Pension Adjustment
Current Quarter and Year to Date

The increase in net FAS/CAS pension adjustment for the three and nine months ended September 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 periods. The increase in CAS expense relates to the continued phase-in of CAS harmonization and the impact of actual demographic experience, partially offset by a change in our mortality assumption as of December 31, 2016. The reduction in FAS expense was principally 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
Current Quarter

Unallocated corporate expenses increased for the three months ended September 30, 2017, as compared with the same period in 2016, primarily due to \$27 million of costs associated with the Orbital ATK Acquisition. In addition, the prior year period included a \$30 million benefit recognized for state tax refunds claimed on our prior year tax returns and a \$25 million benefit recognized for estimated prior year overhead claim recoveries.

Year to Date

Unallocated corporate expenses increased for the nine months ended September 30, 2017, as compared with the same period in 2016, principally due to the current quarter items discussed above and the completion of our 2016 overhead cost submission. In addition, the prior year period benefited from a reduction in provisions for overhead costs.

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

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	2017	2016	2017	2016
Favorable EAC adjustments	\$ 188	\$ 196	\$ 501	\$ 595
Unfavorable EAC adjustments	(86)	(75)	(186)	(208)
Net EAC adjustments	\$ 102	\$ 121	\$ 315	\$ 387

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

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	2017	2016	2017	2016
Aerospace Systems	\$ 90	\$ 76	\$ 205	\$ 218
Mission Systems	8	36	80	136
Technology Services	8	16	41	53
Eliminations	(4)	(7)	(11)	(20)
Net EAC adjustments	\$ 102	\$ 121	\$ 315	\$ 387

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 September 30		%	Nine Months Ended September 30		%
	2017	2016		2017	2016	
Sales	\$ 3,082	\$ 2,782	11%	\$ 8,950	\$ 7,956	12%
Operating income	334	311	7%	961	909	6%
Operating margin rate	10.8%	11.2%		10.7%	11.4%	

Current Quarter

Aerospace Systems sales for the three months ended September 30, 2017 increased \$300 million, or 11 percent, as compared with the same period in 2016, primarily due to higher volume on Manned Aircraft and Space programs. Higher Manned Aircraft sales were driven by higher restricted sales and higher F/A-18 volume. Space sales increased primarily due to higher restricted sales, partially offset by lower volume on the James Webb Space Telescope (JWST) program. Autonomous Systems sales also increased principally due to higher volume for several programs, partially offset by lower volume on the Global Hawk and NATO Alliance Ground Surveillance (AGS) programs.

Operating income for the three months ended September 30, 2017 increased \$23 million, or 7 percent, primarily due to higher sales, partially offset by a lower operating margin rate. Operating margin rate decreased to 10.8 percent from 11.2 percent principally due to changes in contract mix on Manned Aircraft programs, partially offset by the previously discussed \$56 million favorable EAC adjustment largely related to performance incentives.

Year to Date

Aerospace Systems sales for the nine months ended September 30, 2017 increased \$994 million, or 12 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 F/A-18 volume. Space sales increased primarily due to higher restricted sales, partially offset by lower volume on the Advanced Extremely High Frequency program and JWST. Autonomous Systems sales increased principally due to higher volume for several programs, including Triton, partially offset by lower NATO AGS volume.

Operating income for the nine months ended September 30, 2017 increased \$52 million, or 6 percent, primarily due to higher sales, partially offset by a lower operating margin rate. Operating margin rate decreased to 10.7 percent from 11.4 percent principally due to changes in contract mix on Manned Aircraft programs.

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MISSION SYSTEMS

\$ in millions	Three Months Ended September 30			%	Nine Months Ended September 30			%
	2017	2016	Change		2017	2016	Change	
Sales	\$ 2,837	\$ 2,698	5%	\$ 8,357	\$ 8,081	3%		
Operating income	363	351	3%	1,090	1,055	3%		
Operating margin rate	12.8%	13.0%		13.0%	13.1%			

Current Quarter

Mission Systems sales for the three months ended September 30, 2017 increased \$139 million, or 5 percent, as compared with the same period in 2016, due to higher Sensors and Processing and Advanced Capabilities volume, partially offset by lower Cyber and ISR volume. Sensors and Processing sales increased principally due to higher volume on electro-optical/infrared (EO/IR) self-protection and targeting programs, F-35 sensors and the Scalable Agile Beam Radar (SABR) program. Advanced Capabilities sales increased primarily due to higher volume on air and missile defense programs. Cyber and ISR sales decreased primarily due to lower volume on ISR programs.

Operating income for the three months ended September 30, 2017 increased \$12 million, or 3 percent, primarily due to higher sales, partially offset by a lower operating margin rate. Operating margin rate decreased to 12.8 percent from 13.0 percent primarily due to lower margin rates on Cyber and ISR and Sensors and Processing programs, partially offset by improved margin rates on Advanced Capabilities programs.

Year to Date

Mission Systems sales for the nine months ended September 30, 2017 increased \$276 million, or 3 percent, as compared with the same period in 2016, primarily due to higher Sensors and Processing volume, partially offset by lower Cyber and ISR volume. Sensors and Processing sales increased principally due to higher volume on F-35 sensors, EO/IR self-protection and targeting programs and the SABR program. These increases were partially offset by lower volume on international ground-based radar programs. Cyber and ISR sales decreased primarily due to lower volume on ISR programs. Advanced Capabilities sales were comparable to the prior year.

Operating income for the nine months ended September 30, 2017 increased \$35 million, or 3 percent, primarily due to \$32 million recognized in connection with the Cost Claim described above. Operating margin rate was comparable with the prior year period.

TECHNOLOGY SERVICES

\$ in millions	Three Months Ended September 30			%	Nine Months Ended September 30			%
	2017	2016	Change		2017	2016	Change	
Sales	\$ 1,183	\$ 1,190	(1)%	\$ 3,552	\$ 3,617	(2)%		
Operating income	133	130	2%	398	387	3%		
Operating margin rate	11.2%	10.9%		11.2%	10.7%			

Current Quarter

Technology Services sales for the three months ended September 30, 2017 decreased \$7 million, or 1 percent, as compared with the same period in 2016, primarily due to lower volume on System Modernization and Services programs, partially offset by higher volume on Global Logistics and Modernization programs. System Modernization and Services sales decreased principally due to the completion of several programs in 2016 and 2017. Global Logistics and Modernization sales increased primarily due to higher intercompany restricted sales and increased volume on the Hunter and UKAWACS programs, partially offset by lower volume on the KC-10 program as our contract nears completion.

Operating income for the three months ended September 30, 2017 increased \$3 million, or 2 percent, and operating margin rate increased to 11.2 percent from 10.9 percent primarily due to improved performance on Advanced Defense Services and System Modernization and Services programs.

Year to Date

Technology Services sales for the nine months ended September 30, 2017 decreased \$65 million, or 2 percent, as compared with the same period in 2016, primarily due to lower volume on System Modernization and Services

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programs. System Modernization and Services sales decreased principally due to the completion of several programs in 2016 and 2017.

Operating income for the nine months ended September 30, 2017 increased \$11 million, or 3 percent, and operating margin rate increased to 11.2 percent from 10.7 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 September 30				Nine Months Ended September 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
Aerospace Systems								
Product	\$ 2,558	\$ 2,274	\$ 2,266	\$ 2,005	\$ 7,369	\$ 6,563	\$ 6,480	\$ 5,711
Service	524	474	516	466	1,581	1,426	1,476	1,336
Mission Systems								
Product	1,731	1,501	1,604	1,395	5,059	4,364	4,717	4,082
Service	1,106	973	1,094	952	3,298	2,903	3,364	2,944
Technology Services								
Product	109	100	76	72	282	259	239	220
Service	1,074	950	1,114	988	3,270	2,895	3,378	3,010
Segment Totals								
Total Product	\$ 4,398	\$ 3,875	\$ 3,946	\$ 3,472	\$ 12,710	\$ 11,186	\$ 11,436	\$ 10,013
Total Service	2,704	2,397	2,724	2,406	8,149	7,224	8,218	7,290
Intersegment eliminations	(575)	(504)	(515)	(454)	(1,690)	(1,479)	(1,543)	(1,355)
Total segment⁽¹⁾	\$ 6,527	\$ 5,768	\$ 6,155	\$ 5,424	\$ 19,169	\$ 16,931	\$ 18,111	\$ 15,948

⁽¹⁾ 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 September 30, 2017 increased \$452 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 increased restricted volume. The increase at Mission Systems was principally due to higher product volume on EO/IR self-protection and targeting programs, F-35 sensors and the SABR program.

Product costs for the three months ended September 30, 2017 increased \$403 million, or 12 percent, as compared with the same period in 2016, consistent with the higher product sales described above.

Year to Date

Product sales for the nine months ended September 30, 2017 increased \$1.3 billion, 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 increased restricted volume, partially offset by lower NATO AGS volume. The increase at Mission Systems was principally due to higher product volume on F-35 sensors, EO/IR self-protection and targeting programs and the SABR program.

Product costs for the nine months ended September 30, 2017 increased \$1.2 billion, 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 September 30, 2017 decreased \$20 million, or 1 percent, as compared with the same period in 2016. The decrease was primarily driven by lower service volume on the KC-10 program at

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Technology Services, partially offset by an increase in service sales on several Sensors and Processing programs at Mission Systems.

Service costs for the three months ended September 30, 2017 were comparable with the same period in 2016, and reflects lower service margin rates at Mission Systems.

Year to Date

Service sales for the nine months ended September 30, 2017 decreased \$69 million, or 1 percent, as compared with the same period in 2016. The decrease was primarily due to lower service volume on the KC-10 program at Technology Services and on several Cyber and ISR programs at Mission Systems, partially offset by an increase in service sales on several Autonomous Systems and Manned Aircraft programs at Aerospace Systems.

Service costs for the nine months ended September 30, 2017 decreased \$66 million, or 1 percent, as compared with the same period in 2016. The decrease was consistent with the lower service sales described 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 nine months ended September 30, 2017, the company's total backlog declined modestly.

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.

On September 17, 2017, we entered into a definitive merger agreement to acquire Orbital ATK for approximately \$7.8 billion in cash, plus the assumption of approximately \$1.4 billion in net debt. In October 2017, the company issued \$8.25 billion of unsecured senior notes and intends to use the net proceeds to finance the Orbital ATK Acquisition and to pay related fees and expenses. See Notes 2, 8 and 11 to the unaudited condensed consolidated financial statements for further information.

Operating Cash Flow

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

<i>\$ in millions</i>	Nine Months Ended September 30	
	2017	2016
Net earnings	\$ 1,837	\$ 1,675
Non-cash items ⁽¹⁾	467	370
Changes in assets and liabilities:		
Trade working capital	(1,491)	(1,034)
Retiree benefits	235	318
Other, net	(42)	(47)
Net cash provided by operating activities	\$ 1,006	\$ 1,282

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

Net cash provided by operating activities for the nine months ended September 30, 2017 decreased \$276 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 inventoried costs.

NORTHROP GRUMMAN CORPORATION**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 GAAP.

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

<i>\$ in millions</i>	Nine Months Ended September 30	
	2017	2016
Net cash provided by operating activities	\$ 1,006	\$ 1,282
Less: capital expenditures	(650)	(608)
Free cash flow	\$ 356	\$ 674

Free cash flow for the nine months ended September 30, 2017 decreased \$318 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 nine months ended September 30, 2017 increased to \$629 million from \$605 million in the prior year period principally due to higher capital expenditures.

Financing Cash Flow

Net cash used in financing activities for the nine months ended September 30, 2017 decreased to \$1 billion from \$1.9 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 8 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 3 to the unaudited condensed consolidated financial statements for further information on our share repurchase programs.

Unsecured Senior Notes - See Note 11 to the unaudited condensed consolidated financial statements for further information.

CRITICAL ACCOUNTING POLICIES, ESTIMATES AND JUDGMENTS

There have been no material changes to our critical accounting policies, estimates or judgments from those discussed in our 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, expected benefits and implications of the proposed Orbital ATK Acquisition and the timing and circumstances of the proposed acquisition. 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

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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 suppliers and other 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
- changes in business conditions that could impact business investments and/or recorded goodwill or the value of other long-lived assets
- the satisfaction of conditions to (including regulatory approvals and Orbital ATK shareholder approval) and successful consummation of the Orbital ATK Acquisition; our ability successfully to integrate the Orbital ATK business and realize fully the anticipated benefits of the acquisition, without adverse consequences
- 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

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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 September 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 September 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.

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PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We have provided information about certain legal proceedings in which we are involved in our 2016 Annual Report on Form 10-K, and updated that information in Note 7 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 7 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 September 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

The following risk factor is in addition to the risk factors described in our 2016 Annual Report on Form 10-K and should be read in conjunction with the risk factors therein. For a discussion of our risk factors please see the section entitled "Risk Factors" in our 2016 Annual Report on Form 10-K.

Anticipated benefits of the Orbital ATK Acquisition may not be realized.

On September 17, 2017, the company entered into a definitive merger agreement to acquire Orbital ATK. We believe this acquisition will enable us to broaden our capabilities and offerings, create value for shareholders, provide expanded opportunities for our combined employees and enhance our ability to provide innovative solutions to meet our customers' emerging requirements. However, in the course of integrating our business with Orbital ATK's business, we may discover additional information about Orbital ATK's business (including its financial controls and potential risks, opportunities and liabilities) that alters our assessment of the anticipated benefits and risks of the Orbital ATK Acquisition. Additionally, our customers may not value our combined businesses and capabilities as much as we anticipate, in which case we may not realize the benefits of our combined business to the extent we currently anticipate or at all.

The Orbital ATK Acquisition is subject to the satisfaction of certain customary conditions, some of which are beyond our control and may prevent or otherwise negatively affect the consummation of the Orbital ATK Acquisition or the anticipated benefits therefrom. These conditions include receiving the approval of Orbital ATK's stockholders, the expiration or termination of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 and satisfaction of the requirements of the European Commission. We cannot predict when these conditions will be satisfied, if at all, or what requirements will be imposed in order to satisfy these conditions. In addition, the merger agreement may be terminated if the Orbital ATK Acquisition is not completed by September 17, 2018 (subject to extension to December 17, 2018 in certain circumstances) and in certain other specified circumstances described in the merger agreement. If the Orbital ATK Acquisition is not consummated, we will have incurred significant transaction-related costs, expenses and risks without realizing the anticipated benefits of the acquisition.

Our ability to realize the anticipated benefits of the Orbital ATK Acquisition will depend, to a large extent, on our ability to integrate the Orbital ATK business into ours. The integration of an independent business into our business is a complex, costly and time-consuming process. Costs may include, among other things, those associated with facilities and systems consolidation, operational impacts, severance and other potential employment-related costs, as well as fees paid to financial, legal and other advisors. We will be required to devote significant management attention and resources prior to the consummation of the Orbital ATK Acquisition to prepare for integration. We also will be required to devote significant management attention and resources following the consummation of the Orbital ATK Acquisition to integrate Orbital ATK's business and operations into our business and to realize the anticipated benefits. One area of integration will be internal controls processes and procedures. In the past, Orbital ATK restated its financial statements and identified material weaknesses in internal control over financial reporting, which we may need to address in the integration process. The integration process may disrupt our business and, if

NORTHROP GRUMMAN CORPORATION

implemented ineffectively, may not result in the realization of the expected benefits of the Orbital ATK Acquisition. The consummation of the Orbital ATK Acquisition may trigger change in control and other similar provisions in certain agreements to which Orbital ATK is a party, or otherwise affect contractual relationships, which could have an adverse impact on the combined business if we are unable to address such issues. The failure to meet the challenges involved in integrating Orbital ATK's business and to realize the anticipated benefits of the Orbital ATK Acquisition could cause an interruption of, or a loss of momentum in, our activities.

Assuming the Orbital ATK Acquisition closes, the above risks could have a material adverse effect on our future financial position, results of operations and/or cash flows.

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 September 30, 2017:

Period	Total Number of Shares Purchased	Average Price Paid per Share⁽¹⁾	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased under the Plans or Programs (\$ in millions)
July 1, 2017 - July 28, 2017	77,200	\$ 263.15	77,200	\$ 2,346
July 29, 2017 - August 25, 2017	—	—	—	2,346
August 26, 2017 - September 29, 2017	—	—	—	2,346
Total	77,200	\$ 263.15	77,200	\$ 2,346

⁽¹⁾ Includes commissions paid.

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

See Note 3 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 \(incorporated by reference to Exhibit 10.2 to Form 8-K filed April 4, 2011, File No. 001-16411\)](#)
- 2.3 [Agreement and Plan of Merger, dated as of September 17, 2017, among Northrop Grumman Corporation, Neptune Merger, Inc. and Orbital ATK, Inc. \(incorporated by reference to Exhibit 2.1 to Form 8-K filed September 18, 2017\)](#)

*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 September 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

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

Date: October 24, 2017

NORTHROP GRUMMAN CORPORATION
COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES

<i>\$ in millions</i>	Nine Months Ended September 30		Year Ended December 31				
Earnings:	2017	2016	2016	2015	2014	2013	2012
Earnings before income taxes	\$ 2,365	\$ 2,175	\$ 2,923	\$ 2,790	\$ 2,937	\$ 2,863	\$ 2,965
Fixed Charges:							
Interest expense, including amortization of debt premium	224	224	301	301	282	257	212
Portion of rental expenses on operating leases deemed to be representative of the interest factor	76	76	99	101	101	99	116
Earnings before income taxes and fixed charges	\$ 2,665	\$ 2,475	\$ 3,323	\$ 3,192	\$ 3,320	\$ 3,219	\$ 3,293
Fixed Charges:	\$ 300	\$ 300	\$ 400	\$ 402	\$ 383	\$ 356	\$ 328
Ratio of earnings to fixed charges	8.9	8.3	8.3	7.9	8.7	9.0	10.0

LETTER FROM INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

October 24, 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 September 30, 2017, and 2016, as indicated in our report dated October 24, 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 September 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: October 24, 2017

/s/ Wesley G. Bush

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: October 24, 2017

/s/ **Kenneth L. Bedingfield**

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 September 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: October 24, 2017

/s/ Wesley G. Bush

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 September 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: October 24, 2017

/s/ Kenneth L. Bedingfield

Kenneth L. Bedingfield

Corporate Vice President and Chief Financial Officer