

**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, 2015  
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 22042**

(Address of principal executive offices)

**(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 or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting 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 \*

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 23, 2015, 182,383,040 shares of common stock were outstanding.

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## NORTHROP GRUMMAN CORPORATION

## PART I. FINANCIAL INFORMATION

## Item 1. Financial Statements

CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS AND COMPREHENSIVE INCOME  
(Unaudited)

	Three Months Ended September		Nine Months Ended September	
	30		30	
	2015	2014	2015	2014
<i>\$ in millions, except per share amounts</i>				
<b>Sales</b>				
Product	\$ 3,615	\$ 3,494	\$ 10,553	\$ 10,466
Service	2,364	2,490	7,279	7,405
Total sales	5,979	5,984	17,832	17,871
<b>Operating costs and expenses</b>				
Product	2,633	2,614	7,743	7,815
Service	1,889	2,021	5,763	5,910
General and administrative expenses	663	580	1,939	1,712
<b>Operating income</b>	794	769	2,387	2,434
Other (expense) income				
Interest expense	(75)	(69)	(226)	(208)
Other, net	10	(6)	8	10
Earnings before income taxes	729	694	2,169	2,236
Federal and foreign income tax expense	213	221	638	673
<b>Net earnings</b>	\$ 516	\$ 473	\$ 1,531	\$ 1,563
<b>Basic earnings per share</b>	\$ 2.78	\$ 2.29	\$ 7.98	\$ 7.39
Weighted-average common shares outstanding, in millions	185.8	206.2	191.8	211.6
<b>Diluted earnings per share</b>	\$ 2.75	\$ 2.26	\$ 7.89	\$ 7.28
Weighted-average diluted shares outstanding, in millions	187.9	209.2	194.0	214.8
Net earnings (from above)	\$ 516	\$ 473	\$ 1,531	\$ 1,563
Other comprehensive income (loss)				
Change in unamortized benefit plan costs, net of tax	96	31	288	127
Change in cumulative translation adjustment	(15)	(26)	(31)	(24)
Other, net	1	3	—	3
Other comprehensive income, net of tax	82	8	257	106
<b>Comprehensive income</b>	\$ 598	\$ 481	\$ 1,788	\$ 1,669

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, 2015	December 31, 2014
<b>Assets</b>		
Cash and cash equivalents	\$ 1,292	\$ 3,863
Accounts receivable, net	3,268	2,806
Inventoried costs, net	856	742
Deferred tax assets	336	404
Prepaid expenses and other current assets	199	369
<b>Total current assets</b>	<b>5,951</b>	<b>8,184</b>
Property, plant and equipment, net of accumulated depreciation of \$4,804 in 2015 and \$4,611 in 2014	3,005	2,991
Goodwill	12,458	12,466
Non-current deferred tax assets	1,352	1,622
Other non-current assets	1,200	1,309
<b>Total assets</b>	<b>\$ 23,966</b>	<b>\$ 26,572</b>
<b>Liabilities</b>		
Trade accounts payable	\$ 1,194	\$ 1,305
Accrued employee compensation	1,208	1,441
Advance payments and amounts in excess of costs incurred	1,299	1,713
Other current liabilities	1,432	1,433
<b>Total current liabilities</b>	<b>5,133</b>	<b>5,892</b>
Long-term debt, net of current portion	6,417	5,925
Pension and other post-retirement benefit plan liabilities	5,778	6,555
Other non-current liabilities	941	965
<b>Total liabilities</b>	<b>18,269</b>	<b>19,337</b>
<b>Commitments and contingencies (Note 7)</b>		
<b>Shareholders' equity</b>		
Preferred stock, \$1 par value; 10,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, \$1 par value; 800,000,000 shares authorized; issued and outstanding: 2015—182,822,662 and 2014—198,930,240	183	199
Paid-in capital	—	—
Retained earnings	10,613	12,392
Accumulated other comprehensive loss	(5,099)	(5,356)
<b>Total shareholders' equity</b>	<b>5,697</b>	<b>7,235</b>
<b>Total liabilities and shareholders' equity</b>	<b>\$ 23,966</b>	<b>\$ 26,572</b>

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

## NORTHROP GRUMMAN CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS  
(Unaudited)

<i>\$ in millions</i>	Nine Months Ended September	
	2015	2014
<b>Operating activities</b>		
Net earnings	\$ 1,531	\$ 1,563
Adjustments to reconcile to net cash provided by operating activities:		
Depreciation and amortization	329	322
Stock-based compensation	70	93
Excess tax benefits from stock-based compensation	(111)	(75)
Deferred income taxes	165	76
Changes in assets and liabilities:		
Accounts receivable, net	(463)	(531)
Inventoried costs, net	(130)	43
Prepaid expenses and other assets	27	(30)
Accounts payable and other liabilities	(958)	(514)
Income taxes payable	403	201
Retiree benefits	(318)	5
Other, net	(16)	(50)
Net cash provided by operating activities	\$ 529	\$ 1,103
<b>Investing activities</b>		
Capital expenditures	(334)	(285)
Other investing activities, net	36	(72)
Net cash used in investing activities	(298)	(357)
<b>Financing activities</b>		
Common stock repurchases	(2,864)	(2,058)
Net proceeds from issuance of long-term debt	600	—
Cash dividends paid	(458)	(423)
Other financing activities, net	(80)	(13)
Net cash used in financing activities	(2,802)	(2,494)
Decrease in cash and cash equivalents	(2,571)	(1,748)
Cash and cash equivalents, beginning of year	3,863	5,150
Cash and cash equivalents, end of period	\$ 1,292	\$ 3,402

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	
	2015	2014
<i>\$ in millions, except per share amounts</i>		
<b>Common stock</b>		
Beginning of year	\$ 199	\$ 218
Common stock repurchased	(18)	(17)
Shares issued for employee stock awards and options	2	2
End of period	183	203
<b>Paid-in capital</b>		
Beginning of year	—	848
Common stock repurchased	—	(943)
Stock compensation	—	83
Other	—	12
End of period	—	—
<b>Retained earnings</b>		
Beginning of year	12,392	12,538
Common stock repurchased	(2,872)	(1,099)
Net earnings	1,531	1,563
Dividends declared	(447)	(434)
Stock compensation	9	—
End of period	10,613	12,568
<b>Accumulated other comprehensive loss</b>		
Beginning of year	(5,356)	(2,984)
Other comprehensive income, net of tax	257	106
End of period	(5,099)	(2,878)
Total shareholders' equity	\$ 5,697	\$ 9,893
Cash dividends declared per share	\$ 2.30	\$ 2.01

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 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.

The accompanying unaudited condensed consolidated financial statements are prepared in accordance with the rules of the Securities and Exchange Commission (SEC) for interim reporting purposes. 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, 2014 (2014 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**

The accompanying unaudited condensed consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States of America (GAAP). 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 United States (U.S.) Government for the production of goods, the provision of services, or in some cases, a combination of both. In accounting for these contracts, we utilize either the cost-to-cost 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.

We recognize changes in estimated contract sales, costs or profits using the cumulative catch-up method of accounting. This method recognizes, in the current period, the cumulative effect of the changes on current and prior periods; sales and profit 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 is charged against income in the period the loss is identified. Loss provisions are first offset against any costs that are included in unbilled accounts receivable or inventoried costs, and any remaining amount is reflected in liabilities.

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

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The effect of aggregate net changes in contract estimates recognized using the cumulative catch-up method of accounting is as follows:

<i>\$ in millions, except per share data</i>	Three Months Ended September 30		Nine Months Ended September 30	
	<b>2015</b>	2014	<b>2015</b>	2014
Operating Income	\$ 112	\$ 194	\$ 461	\$ 556
Net Earnings <sup>(1)</sup>	73	126	300	361
Diluted earnings per share <sup>(1)</sup>	0.39	0.60	1.55	1.68

(1) Based on statutory tax rates

As of September 30, 2015, the recognized amounts related to contract claims and requests for equitable adjustment are not material individually or in aggregate. In addition, as of September 30, 2015, the company does not have any contract terminations in process that we anticipate would have a material effect on our unaudited condensed consolidated financial position, or our annual results of operations and/or cash flows.

**Related Party Transactions**

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

**Accounting Standards Updates**

On May 28, 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2014-09, *Revenue from Contracts with Customers*. ASU 2014-09 supersedes existing revenue recognition guidance, including Accounting Standards Codification (ASC) No. 605-35, *Revenue Recognition - Construction-Type and Production-Type Contracts*. ASU 2014-09 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. These concepts, as well as other aspects of ASU 2014-09, may change the method and/or timing of revenue recognition for certain of our contracts. 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 are currently evaluating both methods of adoption as well as the effect ASU 2014-09 will have on the company's consolidated financial position, annual results of operations and cash flows.

Other accounting standards updates effective after September 30, 2015, 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.

**Shareholders' Equity**

The company records the difference between the cost of shares repurchased and their par value as well as tax withholding in excess of related stock compensation expense as a reduction of paid-in capital to the extent available and then as a reduction of retained earnings.

**Accumulated Other Comprehensive Loss**

The components of accumulated other comprehensive loss are as follows:

<i>\$ in millions</i>	September 30, 2015	December 31, 2014
Unamortized benefit plan costs, net of tax benefit of \$3,217 as of September 30, 2015 and \$3,395 as of December 31, 2014	\$ (5,028)	\$ (5,316)
Cumulative translation adjustment	(72)	(41)
Net unrealized gain on marketable securities and cash flow hedges, net of tax	1	1
Total accumulated other comprehensive loss	\$ (5,099)	\$ (5,356)

Unamortized benefit plan costs consist primarily of net after-tax actuarial losses totaling \$5.3 billion and \$5.6 billion as of September 30, 2015 and December 31, 2014, 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 \$96 million and \$288 million, net of taxes, for the three and nine months ended September 30, 2015,

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respectively, and were \$35 million and \$108 million, net of taxes, for the three and nine months ended September 30, 2014, respectively. The reclassifications represent the amortization of net actuarial losses and prior service credits for the company's retirement benefit plans, and are included in the computation of net periodic pension cost. See Note 8 for further information.

Reclassifications from accumulated other comprehensive loss to net earnings, relating to cumulative translation adjustments, marketable securities and effective cash flow hedges for the three and nine months ended September 30, 2015 and 2014, respectively, were not material. Reclassifications for cumulative translation adjustments and marketable securities are recorded in other income, and reclassifications for effective cash flow hedges are recorded in operating income.

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

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

**Diluted Earnings Per Share**

Diluted earnings per share includes the dilutive effect of awards granted to employees under stock-based compensation plans. The dilutive effect of these securities totaled 2.1 million shares and 2.2 million shares for the three and nine months ended September 30, 2015, respectively. The dilutive effect of these securities totaled 3.0 million and 3.2 million for the three and nine months ended September 30, 2014, respectively.

**Share Repurchases**

The table below summarizes the company's share repurchases:

Repurchase Program Authorization Date	Amount Authorized (in millions)	Total Shares Retired (in millions)	Average Price Per Share <sup>(4)</sup>	Date Completed	Shares Repurchased (in millions)	
					Nine Months Ended September 30 2015	2014
May 15, 2013 <sup>(1)</sup>	\$ 4,000	32.8	\$ 121.97	March 2015	2.7	16.9
December 4, 2014 <sup>(2)</sup>	\$ 3,000	15.0	\$ 162.89		15.0	—
September 16, 2015 <sup>(3)</sup>	\$ 4,000	—	\$ —		—	—

- (1) On May 15, 2013, the company's board of directors authorized a share repurchase program of up to \$4.0 billion of the company's common stock (2013 Repurchase Program). Repurchases under the 2013 Repurchase Program commenced in September 2013 and were completed in March 2015.
- (2) 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 (2014 Repurchase Program). Repurchases under the 2014 Repurchase Program commenced in March 2015 upon the completion of the company's 2013 Repurchase Program. As of September 30, 2015, repurchases under the 2014 Repurchase Program totaled \$2.4 billion and \$0.6 billion remained under this share repurchase authorization. By its terms, the 2014 Repurchase Program will expire when we have used all authorized funds for repurchases.
- (3) 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 (2015 Repurchase Program). By its terms, repurchases under the 2015 Repurchase Program will commence upon completion of the 2014 Repurchase Program and will expire when we have used all authorized funds for repurchases.
- (4) 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 has not made any purchases of common stock other than in connection with these publicly announced repurchase programs.

**Dividends on Common Stock**

In May 2015, the company increased the quarterly common stock dividend 14 percent to \$0.80 per share from the previous amount of \$0.70 per share.

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In May 2014, the company increased the quarterly common stock dividend 15 percent to \$0.70 per share from the previous amount of \$0.61 per share.

**3. SEGMENT INFORMATION**

At September 30, 2015, the company was aligned into four segments: Aerospace Systems, Electronic Systems, Information Systems and Technical Services. The following table presents sales and operating income by segment:

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2015	2014	2015	2014
<b>Sales</b>				
Aerospace Systems	\$ 2,563	\$ 2,543	\$ 7,573	\$ 7,465
Electronic Systems	1,767	1,733	5,131	5,121
Information Systems	1,472	1,511	4,531	4,650
Technical Services	695	691	2,185	2,120
Intersegment eliminations	(518)	(494)	(1,588)	(1,485)
<b>Total sales</b>	<b>5,979</b>	<b>5,984</b>	<b>17,832</b>	<b>17,871</b>
<b>Operating income</b>				
Aerospace Systems	303	402	940	1,016
Electronic Systems	275	274	787	833
Information Systems	146	150	462	465
Technical Services	64	66	199	202
Intersegment eliminations	(62)	(52)	(185)	(177)
<b>Total segment operating income</b>	<b>726</b>	<b>840</b>	<b>2,203</b>	<b>2,339</b>
Reconciliation to total operating income:				
Net FAS/CAS pension adjustment	97	(20)	261	200
Unallocated corporate expenses	(29)	(50)	(76)	(103)
Other	—	(1)	(1)	(2)
<b>Total operating income</b>	<b>\$ 794</b>	<b>\$ 769</b>	<b>\$ 2,387</b>	<b>\$ 2,434</b>

**Net FAS/CAS Pension Adjustment**

The net FAS (GAAP Financial Accounting Standards)/CAS (U.S. Government Cost Accounting Standards) pension adjustment reflects the difference between pension expense included as cost in segment operating income and pension expense determined in accordance with GAAP. In the third quarter of 2014, Congress passed the Highway and Transportation Funding Act of 2014 (HATFA), which includes provisions that reduce the amount of CAS pension expense charged to our contracts. The legislation was retroactive to January 1, 2014. In the third quarter of 2014, we recognized a \$132 million cumulative reduction in 2014 CAS pension expense principally reflecting the year-to-date HATFA impact.

*Current Quarter*

The increase in net FAS/CAS pension adjustment for the three months ended September 30, 2015, as compared to the same period in 2014, is principally due to the absence in 2015 of the \$132 million reduction in CAS pension expense related to HATFA described above, partially offset by higher FAS expense in 2015, as a result of changes in our FAS discount rate and mortality assumptions as of December 31, 2014.

*Year to Date*

The increase in net FAS/CAS pension adjustment for the nine months ended September 30, 2015, as compared to the same period in 2014, is principally due to higher 2015 CAS expense resulting from changes in mortality assumptions and demographic experience, partially offset by an increase in 2015 FAS expense as a result of changes in our FAS discount rate and mortality assumptions as of December 31, 2014.

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**Unallocated Corporate Expenses**

Unallocated corporate expenses include the portion of corporate expenses not considered allowable or allocable under applicable CAS or the Federal Acquisition Regulation, and are therefore not allocated to the segments. Such costs consist of a portion of management and administration, legal, environmental, compensation costs, retiree benefits and certain unallowable costs such as lobbying activities. The decrease in unallocated corporate expenses for the three and nine months ended September 30, 2015, as compared to the same periods in 2014, is principally due to reductions in environmental and other corporate provisions.

**4. INCOME TAXES**

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September 30	
	2015	2014	2015	2014
Federal and foreign income tax expense	\$ 213	\$ 221	\$ 638	\$ 673
Effective income tax rate	29.2%	31.8%	29.4%	30.1%

*Current Quarter*

The company's effective tax rate for the three months ended September 30, 2015 was lower than the comparable 2014 period primarily due to a \$21 million benefit recognized in 2015 for additional research credits claimed on our prior year tax return.

*Year to Date*

The company's effective tax rate for the nine months ended September 30, 2015 was comparable with the same period in 2014 and reflects a \$59 million benefit recognized in 2015 for additional research credits and a \$51 million benefit recorded in 2014 for the partial resolution of the Internal Revenue Service (IRS) examination of our 2007-2009 tax returns.

The company files income tax returns in the U.S. federal jurisdiction, and in various state and foreign jurisdictions. Certain matters related to our 2007-2011 tax returns are currently before the IRS Office of Appeals. The company believes it is reasonably possible that within the next twelve months we may settle certain matters on these open tax years. The combined resolution of these items, excluding interest, could result in a reduction of our unrecognized tax benefits up to \$75 million and a reduction of our income tax expense up to \$40 million.

Open tax years related to state and foreign jurisdictions remain subject to examination, but are not considered material.

**5. FAIR VALUE OF FINANCIAL INSTRUMENTS**

The following table presents comparative carrying value and fair value information for our financial assets and liabilities:

<i>\$ in millions</i>	September 30, 2015		December 31, 2014	
	Carrying Value	Fair Value	Carrying Value	Fair Value
<b>Financial Assets (Liabilities)</b>				
Marketable securities				
Trading	\$ 295	\$ 295	\$ 331	\$ 331
Available-for-sale	5	5	5	5
Derivatives	4	4	1	1
Long-term debt, including current portion	\$ (6,527)	\$ (7,041)	\$ (5,928)	\$ (6,726)

There were no transfers of financial instruments between the three levels of the fair value hierarchy during the nine months ended September 30, 2015.

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

**Investments in Marketable Securities**

The company holds a portfolio of marketable securities to partially fund non-qualified employee benefit plans consisting of securities that are classified as either trading or available-for-sale. These assets are recorded at fair

## NORTHROP GRUMMAN CORPORATION

value on a recurring basis and substantially all of these instruments are valued using Level 1 inputs, with an immaterial amount valued using Level 2 inputs. As of September 30, 2015 and December 31, 2014, marketable securities of \$300 million and \$336 million, respectively, were included in other non-current assets in the unaudited condensed consolidated statements of financial position.

### **Derivative Financial Instruments and Hedging Activities**

The company's derivative portfolio consists primarily of foreign currency forward contracts. The notional value of the company's derivative portfolio at September 30, 2015 and December 31, 2014, was \$120 million and \$146 million, respectively. The portion of notional value designated as cash flow hedges at September 30, 2015 and December 31, 2014, was \$12 million and \$34 million, respectively.

Derivative financial instruments are recognized as assets or liabilities in the unaudited condensed consolidated financial statements and measured at fair value on a recurring basis. Substantially all of these instruments are valued using Level 2 inputs. 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.

Unrealized gains or losses on the effective portion of cash flow hedges are reclassified from other comprehensive income to operating income upon the recognition of the underlying hedged transaction. Hedge contracts not designated for hedge accounting and the ineffective portion of cash flow hedges are recorded in other income. The derivative fair values and related unrealized gains/losses at September 30, 2015 and December 31, 2014, were not material.

### **Long-term Debt**

The fair value of long-term debt is calculated using Level 2 inputs based on interest rates available for debt with terms and maturities similar to the company's existing debt arrangements.

#### *Debt Issuance*

In February 2015, the company issued \$600 million of unsecured senior notes due April 15, 2045 with a fixed interest rate of 3.85 percent (the Notes). Interest on the Notes is payable semi-annually in arrears. The Notes are subject to redemption at the company's discretion at any time, or from time to time, prior to maturity in whole or in part at the greater of the principal amount of the Notes or an applicable "make-whole" amount, plus accrued and unpaid interest. We are using the net proceeds from this offering for general corporate purposes, including the funding of a \$500 million voluntary contribution to our pension plans in the first quarter of 2015 and debt repayment.

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

### **Litigation**

On May 4, 2012, the company commenced an action, *Northrop Grumman Systems Corp. v. United States*, in the U.S. Court of Federal Claims. This lawsuit relates to an approximately \$875 million firm fixed price contract awarded to the company in 2007 by the U.S. Postal Service (USPS) for the construction and delivery of flats 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

## **NORTHROP GRUMMAN CORPORATION**

dismiss. Although the ultimate outcome of these matters (“the FSS matters,” collectively), including any possible loss, cannot be predicted or 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 \$27 million as of September 30, 2015), 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 \$22 million as of September 30, 2015) in damages. In October 2013, ECT asserted an additional damage claim of R\$22 million (the equivalent of approximately \$5 million as of September 30, 2015). In its counterclaim, Solystic alleges ECT breached the contract by wrongfully refusing to accept the equipment Solystic had designed and built and seeks damages of approximately €31 million (the equivalent of approximately \$35 million as of September 30, 2015), plus interest, inflation adjustments and attorneys' fees, as authorized by Brazilian law. The Brazilian court retained an expert to consider certain issues pending before it. On August 8, 2013 and September 10, 2014, the company received reports from the expert, which contain some recommended findings relating to liability and the damages calculations put forth by ECT. Some of the expert's recommended findings were favorable to the company and others were favorable to ECT. In November 2014, the parties submitted comments on the expert's most recent report. On June 16, 2015, the court published a decision denying the parties' request to present oral testimony. At some future point, the court is expected to issue a decision on the parties' claims and counterclaims that could accept or reject, in whole or in part, the expert's recommended findings.

The company is one of several defendants in litigation brought by the Orange County Water District in Orange County Superior Court in California on December 17, 2004, for alleged contribution to volatile organic chemical contamination of the County's shallow groundwater. The lawsuit includes counts against the defendants for violation of the Orange County Water District Act, the California Super Fund Act, negligence, nuisance, trespass and declaratory relief. Among other things, the lawsuit seeks unspecified damages for the cost of remediation, payment of attorney fees and costs, and punitive damages. Trial on the statutory claims (those based on the Orange County Water District Act, the California Super Fund Act and declaratory relief) concluded on September 25, 2012. On October 29, 2013, the court issued its decision in favor of the defendants on the statutory claims. On May 9, 2014, the court granted defendants' dispositive motions on the remaining tort causes of action. Notice of entry of judgment was filed on July 1, 2014. The Orange County Water District filed a notice of appeal on August 28, 2014. The Orange County Water District filed its opening brief on October 14, 2015. The company's response is due on December 14, 2015.

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, 2015, or its annual results of operations or cash flows.

## **7. COMMITMENTS AND CONTINGENCIES**

### **Guarantees of Subsidiary Performance Obligations**

From time to time in the ordinary course of business, the company guarantees obligations of its subsidiaries under certain contracts. Generally, the company is liable under such an arrangement only if its subsidiary is unable to perform under its contract. Historically, the company has not incurred any substantial liabilities resulting from these guarantees.

In addition, the company's subsidiaries may enter into joint ventures, teaming and other business arrangements (collectively, Business Arrangements) to support our products and services in domestic and international markets. The company generally strives to limit its exposure under these arrangements to its subsidiary's investment in the Business Arrangements or to the extent of such subsidiary's obligations under the applicable contract. In some cases, however, we may be required to guarantee performance by the Business Arrangements and, in such cases, the company generally strives to obtain cross-indemnification from the other members of the Business Arrangements.

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At September 30, 2015, the company is not aware of any existing event of default that would require it to satisfy any of these guarantees.

### **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 matters raised by the U.S. Government. 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 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, 2015, or its annual results of operations and/or cash flows.

### **Environmental Matters**

The estimated cost to complete remediation at certain current or formerly owned or leased sites has been accrued where the company believes, based on the facts and circumstances known to the company, it is probable we will incur costs to address environmental impacts and the costs are reasonably estimable. As of September 30, 2015, management estimates the range of reasonably possible future costs for environmental remediation is between \$351 million and \$794 million, before considering the amount recoverable through overhead charges on U.S. Government contracts. At September 30, 2015, the amount within that range accrued for probable environmental remediation costs was \$368 million, of which \$111 million is recorded in other current liabilities and \$257 million is recorded in other non-current liabilities. A portion of the environmental remediation costs is expected to be recoverable through overhead charges on U.S. Government contracts and, accordingly, such amounts are deferred in inventoried costs and other non-current assets. As of September 30, 2015, \$58 million is deferred in inventoried costs and \$129 million is deferred in other non-current assets. These amounts are evaluated for recoverability on a routine basis. Although management cannot predict whether new information gained as our environmental remediation projects progress, or as changes in facts and circumstances occur, will materially affect the estimated liability accrued, we do not anticipate future remediation expenditures associated with our currently identified projects will have a material adverse effect on the company's unaudited condensed consolidated financial position as of September 30, 2015, 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, 2015, there were \$236 million of stand-by letters of credit and guarantees and \$152 million of surety bonds outstanding.

### **Indemnifications**

The company has retained certain environmental, income tax and other potential liabilities in connection with certain of its divestitures. The settlement of these liabilities is not expected to have a material adverse effect on the company's unaudited condensed consolidated financial position as of September 30, 2015, 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, 2015, was \$75 million and \$232 million, respectively, and was \$84 million and \$229 million for the three and nine months ended September 30, 2014, respectively. These amounts are net of immaterial amounts of sublease rental income.

### **Credit Facility**

In July 2015, the company amended its \$1.8 billion five-year credit facility dated August 29, 2013 by reducing the aggregate principal amount available under the facility to \$1.6 billion and extending the maturity to July 2020 (2015 Credit Agreement).

The 2015 Credit Agreement contains generally customary terms and conditions, including covenants restricting the company's ability to sell all or substantially all of its assets, merge or consolidate with another entity or undertake other fundamental changes and incur liens. The company also generally cannot permit the ratio of its debt to capitalization (as set forth in the 2015 Credit Agreement) to exceed 65 percent.

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**8. RETIREMENT BENEFITS**

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

<i>\$ in millions</i>	Three Months Ended September 30				Nine Months Ended September 30			
	Pension Benefits		Medical and Life Benefits		Pension Benefits		Medical and Life Benefits	
	2015	2014	2015	2014	2015	2014	2015	2014
<b>Components of net periodic benefit cost</b>								
Service cost	\$ 121	\$ 114	\$ 8	\$ 8	\$ 363	\$ 343	\$ 26	\$ 25
Interest cost	306	314	24	25	918	944	71	75
Expected return on plan assets	(494)	(467)	(22)	(21)	(1,481)	(1,402)	(67)	(63)
Amortization of:								
Prior service credit	(15)	(14)	(7)	(12)	(45)	(44)	(21)	(32)
Net loss from previous years	170	81	6	3	511	245	20	9
Other	—	1	—	—	—	1	—	—
<b>Net periodic benefit cost</b>	<b>\$ 88</b>	<b>\$ 29</b>	<b>\$ 9</b>	<b>\$ 3</b>	<b>\$ 266</b>	<b>\$ 87</b>	<b>\$ 29</b>	<b>\$ 14</b>

**Employer Contributions**

The company sponsors defined benefit pension and post-retirement plans, as well as defined contribution plans. We fund our defined benefit pension plans annually in a manner consistent with the Employee Retirement Income Security Act of 1974, as amended by the Pension Protection Act of 2006. Additionally, in the first quarter of 2015, we made a voluntary pension contribution of \$500 million.

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	
	2015	2014	2015	2014
	Defined benefit pension plans	\$ 20	\$ 20	\$ 564
Post-retirement benefit plans	19	17	44	43
Defined contribution plans	77	63	227	210

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

**Stock Awards**

In February 2015, the company granted certain employees 0.2 million restricted stock rights (RSRs) and 0.4 million restricted performance stock rights (RPSRs) under the company's long-term incentive stock plan, with a grant date aggregate fair value of \$87 million. The RSRs will typically vest on the third anniversary of the grant date, while the RPSRs will vest and pay out based on the achievement of financial metrics for the three-year period ending December 31, 2017.

**Cash Awards**

In February 2015, the company granted certain employees cash units (CUs) and cash performance units (CPUs) with a minimum aggregate payout amount of \$34 million and a maximum aggregate payout amount of \$190 million. The CUs will vest and settle in cash on the third anniversary of the grant date, while the CPUs will vest and settle in cash based on the achievement of financial metrics for the three-year period ending December 31, 2017.

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**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 (the "Corporation") and subsidiaries as of September 30, 2015, and the related condensed consolidated statements of earnings and comprehensive income for the three-month and nine-month periods ended September 30, 2015 and 2014, and of cash flows and changes in shareholders' equity for the nine-month periods ended September 30, 2015 and 2014. These interim financial statements are the responsibility of the Corporation'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, 2014, and the related consolidated statements of earnings and comprehensive (loss) income, cash flows, and changes in shareholders' equity for the year then ended (not presented herein); and in our report dated February 2, 2015, 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, 2014, 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 27, 2015

**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 unmanned systems; cyber; command, control, communications and computers (C4), intelligence, surveillance and reconnaissance (C4ISR); strike aircraft; and logistics and modernization to government and commercial customers worldwide. 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 and commercial customers.

At September 30, 2015, the company was aligned into four sectors: Aerospace Systems, Electronic Systems, Information Systems and Technical Services. In October 2015, the company announced changes effective January 1, 2016, which are intended to better align our business with the evolving needs of our customers and enhance innovation across the company. The changes include the streamlining of our business sectors from four to three. Two new sectors will be created by merging elements of our current Electronic Systems, Information Systems and Technical Services sectors. A new Mission Systems sector will be composed of our existing Electronic Systems sector and the businesses from our current Information Systems sector focused on the development of new capabilities for our military and intelligence customers. The services portfolio in the Information Systems sector will combine with the Technical Services sector to form the new Technology Services sector. Among other operations being realigned, the military and civil space hardware business in Azusa, California, currently reporting to Electronic Systems, will move to the Aerospace Systems sector and the electronic attack business currently in Aerospace Systems will move to the Mission Systems sector. This realignment is not reflected in any of the accompanying financial information.

The following discussion should be read along with the unaudited condensed consolidated financial statements included in this Form 10-Q, as well as our 2014 Annual Report on Form 10-K, which provides a more thorough discussion of our systems, products and solutions; political and economic environment; industry outlook; and business trends. See further discussions in the Consolidated Operating Results and Segment Operating Results sections that follow.

**Political and Economic Environment**

The following is an update of events relating to the company's political and economic environment since the filing of our 2014 Annual Report on Form 10-K.

On February 2, 2015, the President delivered his FY 2016 budget to Congress. The FY 2016 budget seeks an increase in defense and non-defense spending, including \$534 billion for the DoD's annual budget and an additional \$51 billion for Overseas Contingency Operations. While the President's FY 2016 defense budget is in line with projections included in his FY 2015 budget, it is approximately \$34 billion more than the spending caps provided for in the Budget Control Act (BCA). The Administration and Congress continue to debate the defense budget and strategies to address the BCA's spending caps.

The Temporary Debt Limit Extension Act suspended the statutory limit on the amount of permissible federal debt (the debt ceiling) until March 15, 2015. On March 16, 2015, the Treasury Department began taking "extraordinary measures" to finance the government. If the debt ceiling is not raised, it is anticipated that the debt ceiling will be reached later this year with potentially significant consequences for the U.S. Government's ability to pay amounts owed.

On September 30, 2015 the President signed a continuing resolution which funds the government at FY 2015 levels until December 11, 2015. It is unclear when or if annual appropriations bills will be enacted for FY 2016. The U.S. Government may operate under a continuing resolution for all of FY 2016, restricting new contract or program starts for that year, and we may face a government shutdown of unknown duration.

**Operating Performance Assessment and Reporting**

We manage and assess our business based on our performance on contracts and programs (typically two or more closely-related contracts). Sales from our portfolio of long-term contracts are primarily recognized 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 across our large portfolio of contracts. Due to Federal Acquisition Regulation (FAR) rules that govern our U.S. Government

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business and related Cost Accounting Standards (CAS), most types of costs are allocable to U.S. Government contracts, and we do not focus on individual cost groupings (such as manufacturing, engineering and design labor costs, subcontractor costs, material costs, overhead costs and general and administrative 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, including the effects of meaningful changes in operating income as a result of changes in contract estimates. 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 below of results of operations first focuses on our four segments before distinguishing between products and services. Changes in sales are generally described in terms of volume, deliveries or other indicators of sales activity, 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 changes in contract operating margin rates for the period, as well as the continuing effect of prior cumulative catch-up adjustments.

**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	
	2015	2014	2015	2014
Sales	\$ 5,979	\$ 5,984	\$ 17,832	\$ 17,871
Operating costs and expenses	5,185	5,215	15,445	15,437
Operating income	794	769	2,387	2,434
Operating margin rate	13.3%	12.9%	13.4%	13.6%
Federal and foreign income tax expense	213	221	638	673
Effective income tax rate	29.2%	31.8%	29.4%	30.1%
Net earnings	516	473	1,531	1,563
Diluted earnings per share	2.75	2.26	7.89	7.28
Net cash provided by operating activities	\$ 557	\$ 933	\$ 529	\$ 1,103

**Sales**

Sales for the three and nine months ended September 30, 2015, decreased \$5 million and \$39 million, respectively, as compared with the same periods in 2014.

Sales for the three and nine months ended September 30, 2014 include the benefit of \$75 million realized in connection with agreements reached with the U.S. Government to settle certain claims relating to use of the company's intellectual property and a terminated program, which is reflected in product sales at the Aerospace Systems segment.

The table below shows the variances in segment sales from the prior year period:

<i>\$ in millions</i>	Three Month Variance		Nine Month Variance	
Aerospace Systems	\$ 20	1%	\$ 108	1%
Electronic Systems	34	2%	10	—
Information Systems	(39)	(3%)	(119)	(3%)
Technical Services	4	1%	65	3%
Intersegment sales elimination	(24)	5%	(103)	7%
Total sales variance	\$ (5)	—	\$ (39)	—

For further information by segment refer to Segment Operating Results below, and for product and service detail, refer to the Product and Service Analysis section that follows Segment Operating Results.

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**Operating Costs and Expenses**

Operating costs and expenses primarily comprise labor, material, subcontractor and overhead costs, and are generally allocated to contracts as incurred. In accordance with industry practice and the regulations that govern cost accounting requirements for government contracts, most general management and corporate expenses incurred at the segment and corporate locations are considered allowable and allocable costs. Allowable and allocable general and administrative costs are allocated on a systematic basis to contracts in progress.

Operating costs and expenses comprise the following:

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	2015	2014	2015	2014
Product costs	\$ 2,633	\$ 2,614	\$ 7,743	\$ 7,815
Service costs	1,889	2,021	5,763	5,910
General and administrative expenses	663	580	1,939	1,712
Operating costs and expenses	\$ 5,185	\$ 5,215	\$ 15,445	\$ 15,437

*Current Quarter*

Operating costs and expenses as a percentage of sales declined for the three months ended September 30, 2015 as compared with the same period in 2014, which increased our operating margin rate to 13.3 percent from 12.9 percent in the prior year period. The reduction in operating costs and expenses as a percentage of sales was driven by a \$117 million increase in our net FAS/CAS pension adjustment and a \$21 million decrease in unallocated corporate expenses, which more than offset \$114 million of lower segment operating income, as described in the Segment Operating Results section below.

*Year to Date*

Operating costs and expenses as a percentage of sales increased for the nine months ended September 30, 2015 as compared with the same period in 2014, which reduced our operating margin rate to 13.4 percent from 13.6 percent in the prior year period. The increase in operating costs and expenses as a percentage of sales was driven by \$136 million of lower segment operating income, which more than offset a \$61 million increase in our net FAS/CAS pension adjustment and a \$27 million reduction in unallocated corporate expenses, as described in the Segment Operating Results section below.

**General and Administrative Expenses**

General and administrative expenses as a percentage of sales for the three and nine months ended September 30, 2015 were 11.1 percent and 10.9 percent, respectively, and were 9.7 percent and 9.6 percent for the three and nine months ended September 30, 2014, respectively. The increases in both periods principally reflect higher independent research and development (IR&D) as we continue to invest in future business opportunities.

For product and service detail, refer to the Product and Service Analysis section that follows Segment Operating Results.

**Operating Income**

We define operating income as sales less operating costs and expenses, which includes general and administrative expenses. Changes in estimated contract operating margin at completion, resulting from changes in estimated sales, operating costs and expenses, are recorded using the cumulative catch-up method of accounting, which in aggregate can have a significant effect on our reported sales and operating income in each of our reporting periods. Cumulative catch-up adjustments are presented in the table below:

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	2015	2014	2015	2014
Favorable adjustments	\$ 189	\$ 254	\$ 707	\$ 736
Unfavorable adjustments	(77)	(60)	(246)	(180)
Net favorable adjustments	\$ 112	\$ 194	\$ 461	\$ 556

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Net cumulative catch-up adjustments by segment are presented in the table below:

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	2015	2014	2015	2014
Aerospace Systems	\$ 66	\$ 114	\$ 288	\$ 309
Electronic Systems	27	54	106	188
Information Systems	12	20	50	54
Technical Services	10	12	33	33
Eliminations	(3)	(6)	(16)	(28)
Net favorable adjustments	\$ 112	\$ 194	\$ 461	\$ 556

**Federal and Foreign Income Tax Expense**

The effective tax rates for the three and nine months ended September 30, 2015, were 29.2 percent and 29.4 percent, respectively, compared with 31.8 percent and 30.1 percent, respectively, for the three and nine months ended September 30, 2014.

*Current Quarter*

The company's effective tax rate for the three months ended September 30, 2015 was lower than the comparable 2014 period primarily due to a \$21 million benefit recognized in 2015 for additional research credits claimed on our prior year tax return.

*Year to Date*

The company's effective tax rate for the nine months ended September 30, 2015 was comparable with the same period in 2014 and reflects a \$59 million benefit recognized in 2015 for additional research credits and a \$51 million benefit recorded in 2014 for the partial resolution of the Internal Revenue Service (IRS) examination of our 2007-2009 tax returns.

*Subsequent Event*

On October 27, 2015, the IRS approved a change in accounting method requested by the company. This change is expected to increase our fourth quarter 2015 federal income tax expense by approximately \$25 million due to lower deductions for domestic production activities. It is also expected to increase our fourth quarter 2015 unallocated corporate expense for state income taxes by approximately \$45 million.

**Net Earnings***Current Quarter*

Net earnings for the three months ended September 30, 2015 increased \$43 million, or 9 percent, principally due to the absence in 2015 of a \$62 million cumulative reduction in net earnings recognized in the third quarter of 2014 as a result of the Highway and Transportation Funding Act of 2014 (HATFA) legislation described below.

*Year to Date*

Net earnings for the nine months ended September 30, 2015 decreased \$32 million, or 2 percent, principally due to lower segment operating income, partially offset by an increase in net FAS/CAS pension adjustment and a reduction in income tax expense.

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

Diluted earnings per share for the three months ended September 30, 2015, increased \$0.49, or 22 percent, as compared with the same period in 2014, reflecting higher net earnings and lower weighted-average shares outstanding resulting from shares repurchased during 2014 and 2015.

*Year to Date*

Diluted earnings per share for the nine months ended September 30, 2015, increased \$0.61, or 8 percent, as compared with the same period in 2014, reflecting lower weighted-average shares outstanding resulting from shares repurchased during 2014 and 2015, partially offset by lower net earnings.

**Net Cash from Operating Activities***Current Quarter*

For the three months ended September 30, 2015, net cash provided by operating activities decreased \$376 million, as compared with the same period in 2014, principally due to changes in trade working capital.

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

For the nine months ended September 30, 2015, net cash provided by operating activities decreased \$574 million, as compared with the same period in 2014, principally driven by a \$500 million voluntary pre-tax pension contribution and changes in trade working capital.

**SEGMENT OPERATING RESULTS**

At September 30, 2015, the company was aligned into four segments: Aerospace Systems, Electronic Systems, Information Systems and Technical Services. This section discusses segment sales, operating income and operating margin rates. A reconciliation of segment sales to total sales is provided in Note 3 to the unaudited condensed consolidated financial statements in Part I, Item 1. A reconciliation of segment operating income to total operating income, as well as a discussion of the reconciling items, is provided in Note 3 to the unaudited condensed consolidated financial statements in Part I, Item 1. For purposes of the discussion in this Segment Operating Results section, references to operating income and operating margin rate reflect segment operating income and segment operating margin rate.

**Segment Operating Income**

Segment operating income, as reconciled below, is a non-GAAP measure and is used by management as an internal measure for financial performance of our operating segments. Segment operating income reflects total earnings from our four segments including allocated pension expense recognized under CAS and excludes unallocated corporate items, including FAS pension expense.

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	2015	2014	2015	2014
Segment operating income	\$ 726	\$ 840	\$ 2,203	\$ 2,339
Segment operating margin rate	12.1%	14.0%	12.4%	13.1%

*Current Quarter*

Segment operating income for the three months ended September 30, 2015 decreased \$114 million, or 14 percent, and segment operating margin rate decreased to 12.1 percent from 14.0 percent. Segment operating margin and segment operating margin rate declined in the third quarter of 2015 when compared to the third quarter of 2014 principally due to the \$75 million benefit recognized in the third quarter of 2014 in connection with the settlements described in the Consolidated Operating Results section above and the \$37 million benefit recognized in the third quarter of 2014 resulting from lower CAS pension costs due to the HATFA legislation described below.

*Year to Date*

Segment operating income for the nine months ended September 30, 2015 decreased \$136 million, or 6 percent, and segment operating margin rate decreased to 12.4 percent from 13.1 percent. Segment operating margin and segment operating margin rate declined in 2015 when compared to 2014 principally due to the \$75 million benefit recognized in the third quarter of 2014 in connection with the settlements described in the Consolidated Operating Results section above and the \$37 million benefit recognized in the third quarter of 2014 resulting from lower CAS pension costs due to the HATFA legislation described below.

The table below reconciles segment operating income to total operating income by including the impact of net FAS/CAS pension adjustments, as well as certain corporate-level expenses, which are not considered allowable or allocable under applicable CAS or the FAR.

**NORTHROP GRUMMAN CORPORATION**

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	<b>2015</b>	2014	<b>2015</b>	2014
Segment operating income	\$ 726	\$ 840	\$ 2,203	\$ 2,339
CAS pension expense	185	9	527	287
Less: FAS pension expense	(88)	(29)	(266)	(87)
Net FAS/CAS pension adjustment	97	(20)	261	200
Unallocated corporate expenses	(29)	(50)	(76)	(103)
Other	—	(1)	(1)	(2)
Total operating income	\$ 794	\$ 769	\$ 2,387	\$ 2,434

**Net FAS/CAS Pension Adjustment**

For financial statement purposes, we account for our employee pension plans in accordance with GAAP under FAS. However, the cost of these plans is charged to our contracts in accordance with the FAR and the related CAS that govern such plans. The net FAS/CAS pension adjustment reflects the difference between pension expense included as cost in segment operating income and pension expense determined in accordance with GAAP. In the third quarter of 2014, Congress passed HATFA, which includes provisions that reduce the amount of CAS pension expense charged to our contracts. The legislation was retroactive to January 1, 2014. In the third quarter of 2014, we recognized a \$132 million cumulative reduction in 2014 CAS pension expense principally reflecting the year-to-date HATFA impact.

*Current Quarter*

The increase in net FAS/CAS pension adjustment for the three months ended September 30, 2015, as compared to the same period in 2014, is principally due to the absence in 2015 of the \$132 million reduction in CAS pension expense related to HATFA described above, partially offset by higher FAS expense in 2015, as a result of changes in our FAS discount rate and mortality assumptions as of December 31, 2014.

*Year to Date*

The increase in net FAS/CAS pension adjustment for the nine months ended September 30, 2015, as compared to the same period in 2014, is principally due to higher 2015 CAS expense resulting from changes in mortality assumptions and demographic experience, partially offset by an increase in 2015 FAS expense as a result of changes in our FAS discount rate and mortality assumptions as of December 31, 2014.

**Unallocated Corporate Expenses**

Unallocated corporate expenses include the portion of corporate expenses not considered allowable or allocable under applicable CAS or the FAR, and are therefore not allocated to the segments. Such costs consist of a portion of management and administration, legal, environmental, compensation costs, retiree benefits and certain unallowable costs such as lobbying activities. The decrease in unallocated corporate expenses for the three and nine months ended September 30, 2015, as compared to the same periods in 2014, is principally due to reductions in environmental and other corporate provisions.

**AEROSPACE SYSTEMS**

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	<b>2015</b>	2014	<b>2015</b>	2014
Sales	\$ 2,563	\$ 2,543	\$ 7,573	\$ 7,465
Operating income	303	402	940	1,016
Operating margin rate	11.8%	15.8%	12.4%	13.6%

*Current Quarter*

Aerospace Systems sales for the three months ended September 30, 2015 increased \$20 million, or 1 percent, as compared with the same period in 2014 due to higher volume on manned military aircraft and unmanned programs, partially offset by lower volume on other programs. The increase in manned military aircraft programs is mainly due to higher production volume on the F-35 and E-2D Advanced Hawkeye programs, partially offset by fewer F/A-18 deliveries. Higher unmanned sales reflect increased volume for a number of programs, including Triton and Global

**NORTHROP GRUMMAN CORPORATION**

Hawk. The increase in sales between periods was partially offset by the benefit of \$75 million in settlements recognized in the third quarter of 2014 as described in the Consolidated Operating Results section above.

Operating income for the three months ended September 30, 2015 decreased \$99 million, or 25 percent, and operating margin rate decreased to 11.8 percent from 15.8 percent. Operating income and margin rate decreased in the third quarter of 2015 when compared to the third quarter of 2014 principally due to the benefits recognized in 2014 associated with the settlements and HATFA legislation described above.

*Year to Date*

Aerospace Systems sales for the nine months ended September 30, 2015 increased \$108 million, or 1 percent, as compared with the same period in 2014 due to higher volume on unmanned systems, manned military aircraft and space programs, partially offset by lower volume on other programs. Higher unmanned sales reflect increased volume on a number of programs, including Global Hawk. The increase in manned military aircraft programs is mainly due to higher production volume on the E-2D Advanced Hawkeye and F-35 programs, partially offset by fewer F/A-18 deliveries. The increase in space programs was mainly due to higher volume for restricted work, partially offset by lower volume on the Advanced Extremely High Frequency program. The increase in sales between periods was partially offset by the benefit of \$75 million in settlements recognized in the third quarter of 2014 as described in the Consolidated Operating Results section above.

Operating income for the nine months ended September 30, 2015 decreased \$76 million, or 7 percent, and operating margin rate decreased to 12.4 percent from 13.6 percent. Operating income and margin rate decreased in 2015 when compared to 2014 principally due to the benefits recognized in 2014 associated with the settlements and HATFA legislation described above.

**ELECTRONIC SYSTEMS**

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	2015	2014	2015	2014
Sales	\$ 1,767	\$ 1,733	\$ 5,131	\$ 5,121
Operating income	275	274	787	833
Operating margin rate	15.6%	15.8%	15.3%	16.3%

*Current Quarter*

Electronic Systems sales for the three months ended September 30, 2015 increased \$34 million, or 2 percent, as compared with the same period in 2014. The increase was primarily driven by higher volume on navigation and maritime systems and space programs, partially offset by lower volume on land and self protection systems and airborne tactical sensor programs.

Operating income for the three months ended September 30, 2015 was comparable with the same period in 2014. Operating margin rate decreased slightly to 15.6 percent from 15.8 percent primarily due to lower CAS costs recognized in 2014 resulting from the HATFA legislation described above, partially offset by improved performance in 2015.

*Year to Date*

Electronic Systems sales for the nine months ended September 30, 2015 was consistent with the same period in 2014. Sales include higher volume on navigation and maritime systems and space programs, partially offset by lower volume on land and self protection systems, airborne tactical sensor programs and intercompany activities.

Operating income for the nine months ended September 30, 2015 decreased \$46 million, or 6 percent, and operating margin rate decreased to 15.3 percent from 16.3 percent. Operating income and margin rate for 2015 decreased primarily due to business mix changes, which resulted in lower volume for mature fixed price production programs and higher volume for cost-type development programs, less favorable performance in land and self protection systems and lower CAS costs recognized in 2014 resulting from the HATFA legislation described above.

## NORTHROP GRUMMAN CORPORATION

## INFORMATION SYSTEMS

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	2015	2014	2015	2014
Sales	\$ 1,472	\$ 1,511	\$ 4,531	\$ 4,650
Operating income	146	150	462	465
Operating margin rate	9.9%	9.9%	10.2%	10.0%

*Current Quarter*

Information Systems sales for the three months ended September 30, 2015 decreased \$39 million, or 3 percent, as compared with the same period in 2014. The decrease was driven by lower volume on command and control (C2) programs, including the Consolidated Afloat Network and Enterprise Services (CANES) program, and the impact of in-theater force reductions.

Operating income for the three months ended September 30, 2015 decreased \$4 million, or 3 percent, and operating margin rate was consistent with the prior period. The decrease in operating income was primarily driven by the lower sales volume described above.

*Year to Date*

Information Systems sales for the nine months ended September 30, 2015 decreased \$119 million, or 3 percent, as compared with the same period in 2014. The decrease was driven by lower volume on C2 and civil programs, partially offset by higher volume on the F-35 program and on intelligence, surveillance and reconnaissance (ISR) and integrated air and missile defense (IAMD) programs. The decrease in C2 was principally due to lower volume on CANES and the impact of in-theater force reductions. The decline in civil programs was mainly due to lower volume on the Emergency Communications Transformation Program. The increase in ISR programs is primarily due to expanded scope on the Solutions for the Information Technology Enterprise - Enterprise Application Development and Integration Services program. The increase in IAMD programs is principally due to higher volume on the Ground-Based Midcourse Defense Development and Sustainment and Joint National Integration Center Research and Development programs.

Operating income for the nine months ended September 30, 2015 decreased \$3 million, or 1 percent, as compared with the same period in 2014, primarily due to the lower sales volume described above. Operating margin rate increased to 10.2 percent from 10.0 percent due to program completions and improved performance across the portfolio, partially offset by lower CAS costs recognized in 2014 resulting from the HATFA legislation described above.

## TECHNICAL SERVICES

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	2015	2014	2015	2014
Sales	\$ 695	\$ 691	\$ 2,185	\$ 2,120
Operating income	64	66	199	202
Operating margin rate	9.2%	9.6%	9.1%	9.5%

*Current Quarter*

Technical Services sales for the three months ended September 30, 2015 increased \$4 million, or 1 percent, as compared with the same period in 2014. The increase was principally due to higher volume on mission solutions & readiness (MS&R) programs, partially offset by lower volume on integrated logistics and modernization (IL&M) programs, including the InterContinental Ballistic Missile (ICBM) program.

Operating income for the three months ended September 30, 2015 decreased \$2 million, or 3 percent, and operating margin rate decreased to 9.2 percent from 9.6 percent. The declines in both operating income and operating margin rate were due in part to lower income from an unconsolidated joint venture than in the prior year period.

*Year to Date*

Technical Services sales for the nine months ended September 30, 2015 increased \$65 million, or 3 percent, as compared with the same period in 2014. The increase was principally due to higher volume on MS&R programs,

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partially offset by lower volume on IL&M programs. The increase in MS&R was primarily due to higher volume on the Saudi Arabian Ministry of National Guard Training Support program (through our interest in a joint venture for which we consolidate the financial results). The decrease in IL&M includes ramp-down activities on the ICBM program.

Operating income for the nine months ended September 30, 2015 decreased \$3 million, or 1 percent, and operating margin rate decreased to 9.1 percent from 9.5 percent. The declines in both operating income and operating margin rate were due in part to lower income from an unconsolidated joint venture than in the prior year period.

**PRODUCT AND SERVICE ANALYSIS**

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

<i>\$ in millions</i>	Three Months Ended September 30				Nine Months Ended September 30			
	2015		2014		2015		2014	
<b>Segment Information:</b>	<b>Sales</b>	<b>Operating Costs and Expenses</b>	<b>Sales</b>	<b>Operating Costs and Expenses</b>	<b>Sales</b>	<b>Operating Costs and Expenses</b>	<b>Sales</b>	<b>Operating Costs and Expenses</b>
<b>Aerospace Systems</b>								
Product	\$ 2,067	\$ 1,824	\$ 2,014	\$ 1,671	\$ 6,046	\$ 5,301	\$ 5,995	\$ 5,147
Service	496	436	529	470	1,527	1,332	1,470	1,302
<b>Electronic Systems</b>								
Product	1,441	1,227	1,338	1,118	4,170	3,567	4,088	3,415
Service	326	265	395	341	961	777	1,033	873
<b>Information Systems</b>								
Product	327	280	346	332	989	869	1,006	953
Service	1,145	1,046	1,165	1,029	3,542	3,200	3,644	3,232
<b>Technical Services</b>								
Product	56	52	46	39	176	169	144	130
Service	639	579	645	586	2,009	1,817	1,976	1,788
<b>Segment Totals</b>								
Total Product	\$ 3,891	\$ 3,383	\$ 3,744	\$ 3,160	\$ 11,381	\$ 9,906	\$ 11,233	\$ 9,645
Total Service	2,606	2,326	2,734	2,426	8,039	7,126	8,123	7,195
Intersegment eliminations	(518)	(456)	(494)	(442)	(1,588)	(1,403)	(1,485)	(1,308)
<b>Total segment<sup>(1)</sup></b>	<b>\$ 5,979</b>	<b>\$ 5,253</b>	<b>\$ 5,984</b>	<b>\$ 5,144</b>	<b>\$ 17,832</b>	<b>\$ 15,629</b>	<b>\$ 17,871</b>	<b>\$ 15,532</b>

(1) The reconciliation of segment operating income to total operating income, as well as a discussion of the reconciling items, is included in Note 3 to the unaudited condensed consolidated financial statements in Part I, Item 1.

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

Product sales for the three months ended September 30, 2015, increased \$147 million, or 4 percent, as compared with the same period in 2014. The increase was driven primarily by higher volume on combat avionics and tactical sensor programs at Electronic Systems and higher volume on manned military aircraft programs at Aerospace Systems. These increases were partially offset by the benefit of \$75 million in settlements recorded in the third quarter of 2014 as described in the Consolidated Operating Results section above.

Product costs for the three months ended September 30, 2015, increased \$223 million, or 7 percent, as compared with the same period in 2014. The increase was primarily driven by the higher product sales described above.

*Year to Date*

Product sales for the nine months ended September 30, 2015 increased \$148 million, or 1 percent, as compared with the same period in 2014. The increase was driven primarily by higher product sales at Electronic Systems and Aerospace Systems. The increase at Electronic Systems was driven by higher volume on space and combat avionics programs, partially offset by international programs. The increase at Aerospace Systems was driven by higher

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volume on unmanned and space programs, partially offset by lower volume on manned military aircraft and other programs, including the benefit of \$75 million in settlements recognized in the third quarter of 2014 as described in the Consolidated Operating Results section above.

Product costs for the nine months ended September 30, 2015, increased \$261 million, or 3 percent, as compared with the same period in 2014. The increase was primarily driven by the higher product sales described above and lower product operating margin rates at Electronic Systems, which were principally due to business mix changes as described in the Segment Operating Results section above.

**Service Sales and Costs***Current Quarter*

Service sales for the three months ended September 30, 2015, decreased \$128 million, or 5 percent, as compared with the same period in 2014. The decrease was primarily driven by lower service sales at Electronic Systems and Aerospace Systems. The decrease at Electronic Systems was primarily driven by lower volume on land and self protection systems programs. The decrease at Aerospace Systems was primarily driven by lower volume on unmanned and other programs, partially offset by increased volume on manned military aircraft programs.

Service costs for the three months ended September 30, 2015, decreased \$100 million, or 4 percent, as compared with the same period in 2014. The decrease was primarily driven by the lower service sales described above.

*Year to Date*

Service sales for the nine months ended September 30, 2015, decreased \$84 million, or 1 percent, as compared with the same period in 2014. The decrease was primarily due to lower service sales at Information Systems and Electronic Systems, partially offset by higher service sales at Aerospace Systems. The decrease at Information Systems was primarily due to lower volume on C2 programs and the impact of in-theater force reductions. The decrease at Electronic Systems was primarily due to lower services sales on tactical sensor and other programs. The increase at Aerospace Systems was primarily driven by higher service sales on manned military aircraft programs, partially offset by lower service sales on other programs.

Service costs for the nine months ended September 30, 2015, decreased \$69 million, or 1 percent, as compared with the same period in 2014. The decrease was consistent with the change in 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.

Backlog consisted of the following as of September 30, 2015, and December 31, 2014:

<i>\$ in millions</i>	September 30, 2015			December 31, 2014
	Funded	Unfunded	Total Backlog	Total Backlog
Aerospace Systems	\$ 8,742	\$ 8,999	\$ 17,741	\$ 20,063
Electronic Systems	7,471	2,101	9,572	9,715
Information Systems	3,185	2,794	5,979	6,115
Technical Services	2,393	205	2,598	2,306
<b>Total backlog</b>	<b>\$ 21,791</b>	<b>\$ 14,099</b>	<b>\$ 35,890</b>	<b>\$ 38,199</b>

**New Awards**

The estimated value of contract awards recorded during the nine months ended September 30, 2015 was \$15.5 billion. New awards during this period include \$1.1 billion for the F-35 program, \$791 million for the Saudi Arabian Ministry of National Guard Training Support program (through our interest in a joint venture for which we consolidate the financial results), \$589 million for the E-2D Advanced Hawkeye program, \$389 million for the Global Hawk program and \$341 million for the F/A-18 program.

**NORTHROP GRUMMAN CORPORATION***Subsequent Event*

On October 27, 2015, the U.S. Air Force announced it was awarding us a contract for Engineering and Manufacturing Development and early production for the Long Range Strike Bomber (LRS-B). The time period within which the unsuccessful offeror could file a protest and trigger an automatic stay of contract performance has not yet expired. The LRS-B award is not included in third quarter 2015 new awards or backlog.

**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. In addition to our cash position, we use various financial measures to assist in capital deployment decision-making, including cash provided by operating activities, free cash flow, net debt-to-equity and net debt-to-capital. We believe these measures are useful to investors in assessing our financial performance and condition.

In February 2015, the company issued \$600 million of unsecured senior notes due April 15, 2045 with a fixed interest rate of 3.85 percent (the Notes). Interest on the Notes is payable semi-annually in arrears. The Notes are subject to redemption at the company's discretion at any time, or from time to time, prior to maturity in whole or in part at the greater of the principal amount of the Notes or an applicable "make-whole" amount, plus accrued and unpaid interest. We are using the net proceeds from this offering for general corporate purposes, including the funding of a \$500 million voluntary contribution to our pension plans in the first quarter of 2015 and debt repayment.

In July 2015, the company amended its \$1.8 billion five-year credit facility dated August 29, 2013 by reducing the aggregate principal amount available under the facility to \$1.6 billion and extending the maturity to July 2020 (2015 Credit Agreement). The 2015 Credit Agreement contains generally customary terms and conditions. At September 30, 2015, the company was in compliance with all covenants under the 2015 Credit Agreement and there was no balance outstanding.

In October 2015, the company completed its previously announced goal of repurchasing 60 million shares of common stock by the end of 2015.

Cash balances 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.

The table below summarizes key components of cash from operating activities:

<i>\$ in millions</i>	Three Months Ended September		Nine Months Ended September	
	2015	2014	2015	2014
Net earnings	\$ 516	\$ 473	\$ 1,531	\$ 1,563
Non-cash items <sup>(1)</sup>	157	201	453	416
Changes in assets and liabilities:				
Trade working capital	(152)	287	(1,121)	(831)
Retiree benefits	60	(3)	(318)	5
Other, net	(24)	(25)	(16)	(50)
Net cash provided by operating activities	\$ 557	\$ 933	\$ 529	\$ 1,103

(1) Includes depreciation and amortization, stock-based compensation (including related excess tax benefits) and deferred income taxes

**Free Cash Flow**

Free cash flow is defined as cash from operating activities less capital expenditures. We believe free cash flow is a useful measure for investors to consider as it represents the cash flow the company has available after capital spending to invest for future growth, strengthen the balance sheet and/or return to shareholders through dividends and share repurchases. Free cash flow is a key factor in our planning for and consideration of strategic acquisitions, the payment of dividends and stock repurchases.

Free cash flow is not a measure of financial performance under GAAP, and may not be defined and calculated by other companies in the same manner. This measure should not be considered in isolation, as a measure of residual

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cash flow available for discretionary purposes, or as an alternative to operating results presented in accordance with GAAP as indicators of performance.

The table below reconciles cash from operating activities to free cash flow from operations:

<i>\$ in millions</i>	Three Months Ended September 30		Nine Months Ended September 30	
	<b>2015</b>	2014	<b>2015</b>	2014
Net cash provided by operating activities	<b>\$ 557</b>	\$ 933	<b>\$ 529</b>	\$ 1,103
Less: capital expenditures	<b>(102)</b>	(109)	<b>(334)</b>	(285)
Free cash flow	<b>\$ 455</b>	\$ 824	<b>\$ 195</b>	\$ 818

*Current Quarter*

Free cash flow for the three months ended September 30, 2015, decreased \$369 million, as compared to the same period in 2014, principally due to changes in trade working capital.

*Year to Date*

Free cash flow for the nine months ended September 30, 2015, decreased \$623 million, as compared to the same period in 2014, principally driven by a \$500 million voluntary pre-tax pension contribution, changes in trade working capital and higher capital expenditures.

**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 2014 Annual Report on Form 10-K.

**ACCOUNTING STANDARDS UPDATES**

See Note 1 to our unaudited condensed consolidated financial statements in Part I, Item 1.

**FORWARD-LOOKING STATEMENTS AND PROJECTIONS**

This Form 10-Q and the information we are incorporating by reference contains 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 cash flows. Forward-looking statements are based upon assumptions, expectations, plans and projections that we believe to be reasonable when made, but which may change over time. These statements are not guarantees of future performance and inherently involve a wide range of risks and uncertainties that are difficult to predict. Specific risks that could cause actual results to differ materially from those expressed or implied in these forward-looking statements include, but are not limited to, those identified and discussed more fully in the section entitled “Risk Factors” in our 2014 Annual Report on Form 10-K. They include:

- our dependence on a single customer, the U.S. Government
- delays or reductions in appropriations for our programs and U.S. Government funding
- investigations, claims and/or litigation
- our international business
- the improper conduct of employees, agents, business partners or joint ventures in which we participate
- the use of accounting estimates for our contracts
- cyber and other security threats or disruptions
- changes in actuarial assumptions associated with our pension and other post-retirement benefit plans
- the performance and financial viability of our suppliers and the availability and pricing of raw materials and components
- competition within our markets

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- changes in procurement and other laws and regulations applicable to our industry
- natural and/or environmental disasters
- the adequacy of our insurance coverage, customer indemnifications or other liability protections
- the products and services we provide related to nuclear operations
- changes in business conditions that could impact recorded goodwill or the value of other long-lived assets
- our ability to develop new products and technologies and maintain technologies, facilities, equipment and a qualified workforce
- our ability to meet performance obligations under our contracts
- unforeseen environmental costs
- our ability to protect our intellectual property rights
- changes in our tax provisions or exposure to additional tax liabilities
- the spin-off of our former Shipbuilding business

Additional information regarding these risks and other important factors can be found in the section entitled “Risk Factors” in our 2014 Annual Report on Form 10-K and as disclosed in this report and from time to time in our other filings with the SEC.

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

### **CONTRACTUAL OBLIGATIONS**

Other than the debt issuance, including associated interest, described in Note 5 of Part I, Item 1, and the credit facility amendment described in Note 7 of Part I, Item 1, there have been no material changes to our contractual obligations from those discussed in our 2014 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 2014 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, 2015, 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 Securities and Exchange Commission’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, 2015, 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 2014 Annual Report on Form 10-K, and updated that information in Note 6 to the unaudited condensed consolidated financial statements in Part I, Item 1 of this report.

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. U.S. Government regulations also provide that certain allegations against a contractor may lead to suspension or debarment from future U.S. 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 2014 Annual Report on Form 10-K, as updated by Note 6 to the unaudited condensed consolidated financial statements in this report, we do not believe that the outcome of any matter currently pending against the company is likely to have a material adverse effect on the company's unaudited condensed consolidated financial position as of September 30, 2015, 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 Part I, Item 1A of our 2014 Annual Report on Form 10-K.

**Item 1A. Risk Factors**

The following is an update to one of our risk factors described in our 2014 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 2014 Annual Report on Form 10-K.

***Significant delays or reductions in appropriations for our programs and U.S. Government funding more broadly may negatively impact our business and programs and could have a material adverse effect on our financial position, results of operations or cash flows.***

U.S. Government programs are subject to annual congressional budget authorization and appropriation processes. For many programs, Congress appropriates funds on a fiscal year basis even though the program performance period may extend over several years. Consequently, programs are often partially funded initially and additional funds are committed only as Congress makes further appropriations. If we incur costs in excess of funds obligated on a contract, we may be at risk for reimbursement of those costs unless and until additional funds are obligated to the contract. We cannot predict the extent to which total funding and/or funding for individual programs will be included, increased or reduced as part of the annual budget process ultimately approved by Congress or in separate supplemental appropriations or continuing resolutions, as applicable. Plans adopted by the U.S. Government, along with pressures on, and uncertainty surrounding, the federal budget, sequestration, the appropriations process, use of continuing resolutions (with restrictions, e.g., on new starts) and the permissible federal debt limit, could adversely affect the funding for individual programs and delay purchasing or payment decisions by our customers. In the event government funding for our significant programs becomes unavailable, or is reduced or delayed, our contract or subcontract under such programs may be terminated or adjusted by the U.S. Government or the prime contractor.

The Temporary Debt Limit Extension Act suspended the statutory limit on the amount of permissible federal debt (the debt ceiling) until March 15, 2015. On March 16, 2015, the Treasury Department began taking "extraordinary measures" to finance the government. If the existing debt ceiling is not raised, we may be required to continue to perform for some period of time on certain of our U.S. Government contracts even if the U.S. Government is unable to make timely payments. An extended debt ceiling breach could negatively affect the U.S. Government's timely payment of our billings, resulting in delayed cash collection, and have significant consequences for our company, our employees, our suppliers and the defense industry.

On September 30, 2015 the President signed a continuing resolution which funds the government at FY 2015 levels until December 11, 2015. It is unclear when or if annual appropriations bills will be enacted for FY 2016. The U.S. Government may operate under a continuing resolution for all of FY 2016, restricting new contract or program starts for that year and we may face a government shutdown of unknown duration.

The budget environment, including sequestration as currently mandated, and uncertainty surrounding the appropriations processes, remain significant long-term risks. Considerable uncertainty exists regarding how future budget and program decisions will unfold and what challenges budget reductions will present for the defense

**NORTHROP GRUMMAN CORPORATION**

industry. We believe continued budget pressures will have serious negative consequences for the security of our country, the defense industrial base, including Northrop Grumman, and the customers, employees, suppliers, investors, and communities that rely on companies in the defense industrial base. Members of Congress continue to discuss various options to address sequestration in future budget planning, but we cannot predict the outcome of these efforts. It is likely budget and program decisions made in this environment will have long-term implications for our company and the entire defense industry.

Long term funding for certain programs in which we participate may be reduced, delayed or cancelled. In addition, budget cuts could adversely affect the viability of our subcontractors and suppliers, and our employee base. While we believe that our business is well-positioned in areas that the Department of Defense (DoD) has indicated are areas of focus for future defense spending, the long-term impact of the Budget Control Act, other defense spending cuts, and the ongoing fiscal debates remain uncertain.

Significant delays or reductions in appropriations, long term funding under a continuing resolution, an extended debt ceiling breach or government shutdown, and/or future budget and program decisions may negatively impact our business and programs and could have a material adverse effect on our 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, 2015:

<b>Period</b>	<b>Total Number of Shares Purchased<sup>(1)</sup></b>	<b>Average Price Paid per Share<sup>(2)</sup></b>	<b>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs</b>	<b>Approximate Dollar Value of Shares that May Yet Be Purchased under the Plans or Programs (\$ in millions)</b>
July	1,781,400	\$ 166.35	1,781,400	\$ 1,206
August	1,622,650	169.57	1,622,650	930
September	2,245,529	165.97	2,245,529	4,558
<b>Total</b>	<b>5,649,579</b>	<b>\$ 167.12</b>	<b>5,649,579</b>	<b>\$ 4,558</b>

(1) 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 (2014 Repurchase Program). Repurchases under the 2014 Repurchase Program commenced in March 2015. As of September 30, 2015, repurchases under the 2014 Repurchase Program totaled \$2.4 billion and \$0.6 billion remained under this share repurchase authorization. By its terms, the 2014 Repurchase Program will expire when we have used all authorized funds for repurchases.

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 (2015 Repurchase Program). By its terms, repurchases under the 2015 Repurchase Program will commence upon completion of the 2014 Repurchase Program and will expire when we have used all authorized funds for repurchases.

(2) 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 has not made any purchases of common stock other than in connection with these publicly announced 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.

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**Item 5. Other Information**

No information is required in response to this item.

**NORTHROP GRUMMAN CORPORATION**

**Item 6. Exhibits**

- 2.1 Agreement and Plan of Merger among Titan II, Inc. (formerly Northrop Grumman Corporation), Northrop Grumman Corporation (formerly New P, Inc.) and Titan Merger Sub Inc., dated March 29, 2011 (incorporated by reference to Exhibit 10.1 to Form 8-K filed April 4, 2011, File No. 001-16411)
  - 2.2 Separation and Distribution Agreement dated as of March 29, 2011, among Titan II, Inc. (formerly Northrop Grumman Corporation), Northrop Grumman Corporation (formerly New P, Inc.), Huntington Ingalls Industries, Inc., Northrop Grumman Shipbuilding, Inc. and Northrop Grumman Systems Corporation (incorporated by reference to Exhibit 10.2 to Form 8-K filed April 4, 2011, File No. 001-16411)
  - \*+10.1 Northrop Grumman Corporation Equity Grant Program for Non-Employee Directors under the Northrop Grumman 2011 Long-Term Incentive Stock Plan, Amended and Restated Effective January 1, 2016
  - 10.2 Amended and Restated Credit Agreement, dated as of July 8, 2015, among Northrop Grumman Corporation, as borrower, Northrop Grumman Systems Corporation, as guarantor, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent (incorporated by reference to exhibit 10.1 to Form 8-K filed July 9, 2015, File No. 001-16411)
  - \*12(a) Computation of Ratio of Earnings to Fixed Charges
    - \* 15 Letter from Independent Registered Public Accounting Firm
  - \*31.1 Rule 13a-14(a)/15d-14(a) Certification of Wesley G. Bush (Section 302 of the Sarbanes-Oxley Act of 2002)
  - \*31.2 Rule 13a-14(a)/15d-14(a) Certification of Kenneth L. Bedingfield (Section 302 of the Sarbanes-Oxley Act of 2002)
  - \*\*32.1 Certification of Wesley G. Bush pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
  - \*\*32.2 Certification of Kenneth L. Bedingfield pursuant to 18 U.S.C. Section 1350, as adopted 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, 2015, 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**  
**EQUITY GRANT PROGRAM FOR NON-EMPLOYEE DIRECTORS**  
**UNDER THE**  
**NORTHROP GRUMMAN 2011 LONG-TERM INCENTIVE STOCK PLAN**  
**Amended and Restated Effective as of January 1, 2016**

**1. Purpose**

(a) The purpose of the Northrop Grumman Corporation Equity Grant Program for Non-Employee Directors (the “Program”) is to promote the long-term growth and financial success of Northrop Grumman Corporation (the “Company”) by attracting and retaining non-employee directors of outstanding ability and assisting the Company in promoting a greater identity of interest between the Company’s non-employee directors and its stockholders.

(b) The Program is adopted and maintained under the Company’s 2011 Long-Term Incentive Stock Plan and any successor equity compensation plan of the Company (as each such plan may be amended from time to time, the “Equity Plan”). The Program sets forth terms and conditions previously approved by the Company’s Board of Directors (the “Board”) with respect to the compensation of Eligible Directors (as defined below) for 2012 and will continue in effect for 2012 and, as amended from time to time, in subsequent years unless and until otherwise provided by the Company’s Board of Directors (the “Board”). The term “Stock Units” as used in the Program and any provision of the Program applicable to such Stock Units refers only to Stock Units that are credited under the Program on or after January 1, 2012 (the “Effective Date”). The Program as in effect at the time that Stock Units are awarded hereunder constitutes the award agreement evidencing the terms and conditions of the awards applicable to such Stock Units. This Program does not affect any stock units or other awards granted prior to the Effective Date. Unless otherwise provided by the Board, no awards will be granted to Eligible Directors under the Equity Plan on or after the Effective Date other than as provided under this Program.

(c) Effective January 1, 2015 the Program provides for alternative investment options pursuant to Section 10 for certain compensation earned on or after January 1, 2015.

**2. Term**

The Program shall operate and shall remain in effect until terminated by action of the Board.

**3. Program Operation**

The Program and transactions hereunder in respect of Company equity securities are intended to be exempt from Section 16(b) of the Securities Exchange Act of 1934 (the “1934 Act”) to the maximum extent possible under Rule 16b-3 promulgated thereunder. Except as specifically provided for herein, the Program requires no discretionary action by any administrative body with regard to any transaction under the Program. To the extent, if any, that any administrative or interpretive actions are required under the Program, such actions shall be undertaken by the Board or by the Compensation Committee of the Board (the “Compensation Committee”).

**4. Eligibility**

Only directors of the Company who are not employees of the Company or any subsidiary of the Company (“Eligible Directors”) shall participate in the Program.

**5. Shares of Common Stock Subject to the Program**

Shares of common stock of the Company (“Common Stock”) that are paid in settlement of Stock Units awarded under the Program shall be applied to reduce the maximum number of shares of Common Stock remaining available for issuance under the Equity Plan then in effect and giving effect to any applicable fungible or premium share-counting rules of such plan.

**6. Adjustments and Reorganizations**

(a) Upon (or, as may be necessary to effect the adjustment, immediately prior to): any reclassification, recapitalization, stock split (including a stock split in the form of a stock dividend) or reverse stock split; any merger, combination, consolidation, or other reorganization; any spin-off, split-up, or similar extraordinary dividend distribution in respect of the Common Stock; or any exchange of shares of Common Stock or other securities of the Company, or any similar, unusual or extraordinary corporate transaction in

respect of the Common Stock; then the Board or Compensation Committee shall equitably and proportionately adjust (1) the number and type of shares of Common Stock (or other securities) that thereafter may be made the subject of Stock Units, (2) the number, amount and type of shares of Common Stock (or other securities or property) subject to any outstanding Stock Units, and/or (3) the securities, cash or other property deliverable upon payment of any outstanding Stock Units, in each case to the extent necessary to preserve (but not increase) the level of incentives intended by this Program and the then-outstanding Stock Units. The Board or Compensation Committee may also prospectively make such similar appropriate adjustment in the calculation of Fair Market Value (as defined in Section 7) as it deems necessary to preserve (but not increase) Eligible Directors' rights under the Program.

(b) It is intended that, if possible, any adjustments contemplated by the preceding Section 6(a) be made in a manner that satisfies applicable legal, tax (including, without limitation and as applicable in the circumstances, Section 409A of the Internal Revenue Code of 1986, as amended ("Section 409A")) and accounting (so as to not trigger any charge to earnings with respect to such adjustment) requirements. Any good faith determination by the Board or Compensation Committee as to whether an adjustment is required in the circumstances pursuant to Section 6(a), and the extent and nature of any such adjustment, shall be conclusive and binding on all persons.

## **7. Fair Market Value**

Fair Market Value for all purposes under the Program shall mean the NYSE closing price of a share of Common Stock on the relevant date and if no shares of Common Stock are traded on the NYSE on such date then the NYSE closing price on the immediately preceding trading day.

## **8. Annual Retainer; Grants of Stock Units**

(a) The Board (or applicable committee thereof) shall establish what portion or amount, if any, of the annual retainer payable to each Eligible Director for services as a director (the "Annual Retainer") will be paid in the form of shares of Common Stock (the "Stock Component") and what portion or amount of the Annual Retainer will be paid in cash (the "Cash Component"). The Stock Component shall be compensation for services rendered for one year commencing with the Company's Annual Meeting of Shareholders (the "Service Year"). The Cash Component shall be compensation for services rendered during the calendar year, paid on a quarterly basis.

(b) As of the close of business on the day of the Company's Annual Meeting of Shareholders, each Eligible Director's account under the Program automatically will be credited with a number of Stock Units equal to the Stock Component for that Service Year divided by the Fair Market Value of a share of Common Stock on that date (the "Automatic Stock Units"). As used herein, a "Stock Unit" is a non-voting unit of measurement which is credited to a bookkeeping account and deemed for purposes of the Program to be equivalent in value to one outstanding share of Common Stock. The Stock Units shall be used solely as a device for the determination of any payment to eventually be made to the Eligible Director pursuant to Section 9. Automatic Stock Units will vest on the first anniversary of the date of the Company's Annual Meeting of Shareholders held for the year for which such Stock Component was granted, and, absent a valid election in accordance with Section 9(a), be payable on or within 30 days after the Eligible Director's Separation from Service. Should any individual cease to serve as a director prior to the vesting date of his or her Automatic Stock Units on the first anniversary date, such individual shall be entitled to a pro rata portion of such Automatic Stock Units based on the number of calendar days that such individual served as a director during the Service Year for which such Automatic Stock Units were granted, which pro rata portion shall vest and become payable on the same date(s) as otherwise would have applied with respect to such Automatic Stock Units (including after giving effect to any election pursuant to Section 9(a) hereof).

(c) Absent a valid election in accordance with this Section 8(c), the Cash Component of the Annual Retainer earned for each calendar quarter, as well as any fees payable for service on Board committees, for service as lead independent director or for extraordinary services (the "Other Annual Retainers") for such calendar quarter shall be payable to each Eligible Director as of the last day of each calendar quarter during the relevant year. For any Eligible Director who validly elects pursuant to this Section 8(c), all or any portion of the Cash Component and the Other Annual Retainers shall be payable in the form of a credit of Stock Units under the Program (collectively, the "Elective Stock Units"), which shall be credited as of the date that such amounts otherwise would have been payable in cash under the Program (each, a "Crediting Date"). The number of Elective Stock Units to be credited pursuant to such election on a Crediting Date shall be determined by dividing the portion of the Annual Retainer and Other Annual Retainer that would have otherwise been paid in cash to the Eligible Director for the corresponding calendar quarter but for such an election by the Eligible Director, divided by the Fair Market Value of a share of Common Stock on that Crediting Date. Any such election to receive Elective Stock Units in lieu of a cash payment under the foregoing proviso must be made on a form and in a manner prescribed by Company management prior to the beginning of the calendar year to which such Cash Component or Other Annual Retainers relate.

(d) Should any individual become an Eligible Director after the beginning of the Service Year or after the beginning of the calendar year, such Eligible Director shall be entitled to a pro rata Annual Retainer, with the amount of the Stock Component and the Cash Component proportionately reduced to reflect the number of calendar days that have elapsed between the beginning of the

Service Year (with respect to the Stock Component) or the calendar year (with respect to the Cash Component), respectively, and the effective date of the individual's election as an Eligible Director. Such pro-rated Stock Component shall be credited as Automatic Stock Units as of the effective date of the individual's election as an Eligible Director and shall vest on the first anniversary of the date of the Company's most recent Annual Meeting of Shareholders. The number of Automatic Stock Units so credited to the Eligible Director's account shall be equal to the pro-rated Stock Component divided by the Fair Market Value of a share of Common Stock on the effective date of the Eligible Director's election to the Board. Such pro-rated Cash Component shall be paid on the date that the relevant Cash Component would otherwise have been paid had the individual served as an Eligible Director during the entire calendar year.

(e) As a transition, each individual serving as an Eligible Director as of January 1, 2016 shall be credited with a number of Automatic Stock Units as of that date determined by dividing 138/363 of the Stock Component of the Annual Retainer by the Fair Market Value of a share of Common Stock on January 1, 2016, which Automatic Stock Units shall vest as of May 18, 2016 and shall be payable as provided in Section 9(a), subject to any valid election made by an Eligible Director pursuant to Section 9(a) no later than December 31, 2015.

## **9. Payment of Stock Units**

(a) All Stock Units shall be paid in an equivalent number of shares of Common Stock. All Stock Units shall be paid on or within 30 days after the Eligible Director's Separation from Service; provided, however, that an Eligible Director may make an irrevocable election in advance to have all or any portion of any Stock Units paid (A) upon the earlier of (i) the Eligible Director's Separation from Service or (ii) a calendar year specified by the Eligible Director in his or her election (which year may be no earlier than the year after the relevant year to which the deferred Annual Retainer or Other Annual Retainers, as the case may be, relate), or (B) in the case of Automatic Stock Units, upon the Automatic Stock Units' vesting date. Notwithstanding the foregoing, no Automatic Stock Units shall be paid before the date they otherwise vest pursuant to Section 8. Any election to receive payment of Stock Units upon an event other than Separation from Service must be made on a form and in a manner prescribed by Company management by no later than December 31<sup>st</sup> of the calendar year before the start of the relevant Service Year (that is, before the calendar year in which the Eligible Director performs the services giving rise to Stock Units). Notwithstanding the foregoing, an individual who first becomes an Eligible Director on or after January 1 of a calendar year shall be permitted to make an irrevocable election to receive payment of Automatic Stock Units upon an event other than Separation from Service provided that such election is made within 30 days after the date the individual becomes an Eligible Director and such election relates only to Automatic Stock Units attributable to services performed after the election. If the Eligible Director makes such an election to receive payment upon an event that is earlier than Separation from Service and payment is triggered (1) by the occurrence of the specified calendar year, the applicable Stock Units will generally be paid in January of such calendar year, and shall in all cases be paid prior to the end of such calendar year, or (2) upon vesting or Separation from Service, the applicable Stock Units shall be paid on or within 30 days of such event.

(b) Notwithstanding the foregoing Section 9(a), if an Eligible Director is a Key Employee as of his Separation from Service, any payment triggered by the Eligible Director's Separation from Service shall be made on the first day of the seventh month following the date of his or her Separation from Service (or, if earlier, the date of his or her death). Such payment shall be subject to adjustment as provided in Section 6 and shall be in complete satisfaction of such Stock Units. For the avoidance of doubt, an Eligible Director shall continue to be eligible to receive additional credits of Stock Units as dividend equivalents pursuant to Section 12 during any period of time payment of the Eligible Director's Stock Units is delayed pursuant to this Section 9(b).

(c) For purposes of this Program, the following terms shall have the meanings indicated below:

Affiliated Company. The Company and any other entity related to the Company under the rules of section 414 of the Code. The Affiliated Companies include Northrop Grumman Corporation and its 80%-owned subsidiaries and may include other entities as well.

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

Separation from Service. A "separation from service" within the meaning of Section 409A.

(d) Section 6 of the 2011 Long-Term Incentive Stock Plan (addressing certain change in control events) shall apply to the Stock Units; provided that no modification to the timing of payment of the Stock Units shall be made unless the requirements of Treas. Reg. Section 1.409A-3(j)(4)(ix) ("plan terminations and liquidations"), or any successor provision thereto, are satisfied and such

modification would not result in any tax, penalty or interest under Section 409A.

## 10. Elective Deferrals

(a) Eligible Directors shall be provided with the opportunity to elect to defer all or a portion of their Eligible Compensation, at the time and in the form and manner set forth below. To be effective, any deferral election must be filed by the deadline established by Company management, which shall be no later than December 31st of the calendar year before the calendar year in which the services giving rise to the Eligible Compensation to be deferred will be performed. An individual who becomes an Eligible Director on or after January 1 of a calendar year shall not be eligible to defer any portion of Eligible Compensation during that calendar year. Deferral election forms shall be in such form, and shall be filed and revoked in such manner as Company management shall from time to time determine. In addition, the Board may establish such minimum deferral amounts, specified percentages of Eligible Compensation that may be deferred, and similar requirements and limitations, as it may determine to be appropriate for convenience of administration of the Program.

(b) The Board shall cause Company management to establish and maintain an Elective Deferral Account for each Eligible Director who elects to defer Eligible Compensation earned on or after January 1, 2015, pursuant to Section 10(a) above. On the last day of each calendar quarter, the Elective Deferral Account of each person who is an Eligible Director as of such date shall be credited with his or her Elective Deferral Amount (if any) for such calendar quarter.

(c) Company management shall from time to time establish one or more bookkeeping investment funds (each, an "Investment Fund") based upon such criteria as it may from time to time determine. Company management shall establish procedures to permit Eligible Directors to make Investment Elections from time to time indicating in which of the available Investment Funds their Elective Deferral Accounts shall be deemed invested. Company management shall cause Eligible Director's Elective Deferral Account to be adjusted upwards or downwards, at such intervals as it may from time to time determine, to reflect the net investment return (whether positive or negative) of the particular Investment Fund(s) elected; *provided*, that no Elective Deferral Account may at any time have a balance less than zero.

(d) For purposes of this Program, the following terms shall have the meanings indicated below:

Elective Deferral Account. A bookkeeping account for an Eligible Director representing the Eligible Compensation that the Eligible Director has elected to defer under Section 10(a) of the Program, as adjusted to reflect earnings, losses, contributions and distributions in accordance with Section 10(c) and Section 11 of the Program.

Elective Deferral Amount. An amount of Eligible Compensation that an Eligible Director elects to defer under and in accordance with Section 10(a) of the Program.

Eligible Compensation. With respect to any calendar quarter, the portion of an Eligible Director's Cash Component and Other Annual Retainers payable for such quarter, less any portion of such amount for such quarter which the Eligible Director elects to receive in the form of Elective Stock Units in accordance with Section 8(c).

Investment Election. An election by an Eligible Director to have Elective Deferral Amounts invested in an Investment Fund. Investment Elections shall be made on a form and in the manner prescribed by Company management.

## 11. Payment of Elective Deferrals

(a) The balance of an Eligible Director's Elective Deferral Account shall be paid in a single distribution within 30 days following such Eligible Director's Separation from Service, unless: (i) the Eligible Director has elected an alternative time of payment under Section 11(b) or (ii) a later date is required by Section 11(e).

(b) In lieu of the default time of payment set forth in Section 11(a), an Eligible Director may elect to receive a distribution of all or a portion of his Elective Deferral Account at the earlier of Separation from Service or a calendar year specified by the Eligible Director. Any such election must be made in accordance with the procedures set forth in Section 11(d). A distribution scheduled to be made due to the Eligible Director's Separation from Service shall be made within 30 days of such Separation from Service. A distribution scheduled to be made in a specified calendar year shall be made no later than December 31st of such calendar year.

(c) All distributions from an Eligible Director's Elective Deferral Account shall be made in cash.

(d) Company management shall establish rules and procedures for an Eligible Director to file a distribution election form on which such Eligible Director may make a distribution election, subject to the following requirements and restrictions:

(1) A distribution election form must be filed by the deadline established by Company management, which shall be no

later than December 31st of the calendar year before the calendar year in which the Eligible Director will perform the services giving rise to the Annual Retainer (or Other Annual Retainer, if applicable) to be deferred;

(2) A distribution election applies only with respect to deferrals for the calendar year for which the distribution election form is filed. If an Eligible Director wishes to make a distribution election for amounts deferred in subsequent calendar years, a new distribution election form must be filed for each calendar year by the deadline described in Section 11(d)(1), above; and

(3) A distribution election is irrevocable once the distribution election form is filed.

In addition, Company management may establish rules for designating a beneficiary, and such other rules, limitations and conditions as Company management determines to be appropriate, subject to the requirements and restrictions set forth above.

(e) If an Eligible Director is a "specified employee" (as determined by the Company in accordance with Section 409A(a)(2)(B) of the Code and Treas. Reg. § 1.409A-1(i)), any amount that becomes payable under this Section 11 as a result of the Eligible Director's Separation from Service shall be paid on the later of (a) the payment date prescribed by this Section 11, and (b) the first day of the seventh month that begins after the Eligible Director's Separation from Service.

(f) If an Eligible Director dies before the balance of his Elective Deferral Account is fully distributed, the remaining balance of the Eligible Director's Elective Deferral Account shall be distributed (in the form such balance would have been paid to such Eligible Director) to his beneficiary within 90 days after the Eligible Director's death.

(g) Section 6 of the Equity Plan (addressing certain change in control events) shall apply to Elective Deferral Accounts; provided that no modification to the timing of payment shall be made unless the requirements of Treas. Reg. Section 1.409A-3(j)(4)(ix) ("plan terminations and liquidations"), or any successor provision thereto, are satisfied and such modification would not result in any tax, penalty or interest under Section 409A.

## **12. Dividend Equivalents**

No later than sixty (60) days following each date that the Company pays an ordinary cash dividend on its outstanding Common Stock (if any ordinary cash dividends are paid), for which the related record date occurs on or after the Effective Date and prior to all of the Eligible Director's Stock Units being paid pursuant to Section 9, the Eligible Director's Stock Unit account shall be credited with additional Stock Units equal to (i) the number of outstanding and unpaid Stock Units credited to such account as of such record date, multiplied by (ii) the amount of the ordinary cash dividend paid by the Company on a share of Common Stock, divided by (iii) the Fair Market Value of a share of the Common Stock as of such record date. Any Stock Units credited pursuant to the foregoing provisions of this Section 12 shall be subject to the same payment and other terms and conditions as the original Stock Units to which they relate.

## **13. Restrictions on Transfer**

Stock Units shall be nontransferable and shall not be assignable, alienable, saleable or otherwise transferable by an Eligible Director other than by will or the laws of descent and distribution or pursuant to a qualified domestic relations order. An Eligible Director may designate a beneficiary or beneficiaries to receive any distributions under the Program, including distributions of Elective Deferral Accounts, upon the death of the Eligible Director.

## **14. Issuance of Certificates**

(a) On each payment date described in Section 9, the Company shall deliver to the Eligible Director a number of shares of Common Stock (either by delivering one or more certificates for such shares or by entering such shares in book entry form, as determined by the Company in its discretion) equivalent to the number of Stock Units which are payable under the Program with respect to such payment date.

(b) Whenever under the terms of the Program a fractional share would be required to be issued, the fractional share shall be rounded up to the next full share.

(c) All shares of Common Stock delivered under the Program shall be subject to such stop-transfer orders and other restrictions as the Company may deem advisable or legally necessary under any laws, statutes, rules, regulations and other legal requirements, including those of any stock exchange upon which the Common Stock is then listed and any applicable Federal, state or foreign securities law.

(d) Anything to the contrary herein notwithstanding, the Company shall not be required to issue any shares of Common Stock under the Program if, in the opinion of legal counsel, the issuance and delivery of such shares would constitute a violation by the

Eligible Director or the Company of any applicable law or regulation of any governmental authority, including, without limitation, Federal and state securities laws, or the regulations of any stock exchange on which the Company's securities may then be listed.

**15. Program Amendment**

The Board may suspend or terminate the Program or any portion of the Program. The Board may also amend the Program if deemed to be in the best interests of the Company and its stockholders; provided, however, that (a) no such amendment may impair any Eligible Director's right regarding any outstanding grants or Stock Units, Elective Deferral Accounts, or other right to receive shares or cash payments under the Program without his or her consent, and (b) no such amendment may cause the Program not to comply with Rule 16b-3, or any successor rule, under the 1934 Act.

**16. Unfunded Program**

The Program shall be unfunded and shall not create (or be construed to create) a trust or a separate fund or funds. The Program shall not establish any fiduciary relationship between the Company and any Eligible Director or other person. To the extent any person holds any rights by virtue of an award granted under the Program, such rights (unless otherwise determined by the Board) shall be no greater than the rights of an unsecured general creditor of the Company.

**17. Future Rights**

Neither the Program, nor the granting of Common Stock nor any other action taken pursuant to the Program, shall constitute or be evidence of any agreement or understanding, express or implied, that the Company will retain an Eligible Director for any period of time, or at any particular rate of compensation. Nothing in this Program shall in any way limit or affect the right of the Board or the stockholders of the Company to remove any Eligible Director or otherwise terminate his or her service as a director of the Company.

**18. Governing Law**

The Program and all rights and obligations under the Program shall be governed by, and construed in accordance with, the laws of the State of Delaware and applicable Federal law.

**19. Successors and Assigns**

The Program shall be binding on all successors and assigns of an Eligible Director, including, without limitation, the estate of such Eligible Director and the executor, administrator or trustee of such estate, or any receiver or trustee in bankruptcy or representative of the Eligible Director's creditors.

**20. Rights as a Stockholder**

The Eligible Director in whose name any shares of Common Stock have been issued pursuant to this Program shall have all of the rights of a stockholder with respect to such shares, including the right to vote the Common Stock and receive dividends and other distributions made on the Common Stock. Shares of Common Stock issued in respect of Stock Units credited under the Program shall be fully paid and non-assessable.

**21. Construction**

The Program shall be construed and interpreted to comply with, and avoid any tax or penalty or interest under, Section 409A. Notwithstanding Section 15 above, the Company reserves the right to amend the Program and any outstanding grants or deferrals under the Program to the extent it reasonably determines is consistent with and necessary in order to preserve the intended tax consequences of the Stock Units and amounts deferred in Elective Deferral Accounts, in light of Section 409A and any regulations or other guidance promulgated thereunder.

**NORTHROP GRUMMAN CORPORATION**  
**COMPUTATION OF RATIOS OF EARNINGS TO FIXED CHARGES**

<i>\$ in millions</i>	Nine Months Ended September 30		Year Ended December 31				
<b>Earnings:</b>	<b>2015</b>	2014	2014	2013	2012	2011	2010
Earnings from continuing operations before income taxes	\$ 2,169	\$ 2,236	\$ 2,937	\$ 2,863	\$ 2,965	\$ 3,083	\$ 2,366
<b>Fixed Charges:</b>							
Interest expense, including amortization of debt premium	226	208	282	257	212	221	269
Portion of rental expenses on operating leases deemed to be representative of the interest factor	77	76	101	99	116	140	149
Earnings from continuing operations before income taxes and fixed charges	\$ 2,472	\$ 2,520	\$ 3,320	\$ 3,219	\$ 3,293	\$ 3,444	\$ 2,784
<b>Fixed Charges:</b>	\$ 303	\$ 284	\$ 383	\$ 356	\$ 328	\$ 361	\$ 418
Ratio of earnings to fixed charges	8.2	8.9	8.7	9.0	10.0	9.5	6.7

**LETTER FROM INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

October 27, 2015

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, 2015, and 2014, as indicated in our report dated October 27, 2015; 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, 2015, 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 333-196238 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  
RULE 13a-14(a)/15d-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934,  
AS ADOPTED 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 27, 2015

**/s/ Wesley G. Bush**

Wesley G. Bush

Chairman, Chief Executive Officer and President

**CERTIFICATION PURSUANT TO  
RULE 13a-14(a)/15d-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934,  
AS ADOPTED 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 27, 2015

**/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, 2015, 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 27, 2015

**/s/ Wesley G. Bush**

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Wesley G. Bush  
Chairman, Chief Executive Officer and President

**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Northrop Grumman Corporation (the "company") on Form 10-Q for the period ended September 30, 2015, 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 27, 2015

**/s/ Kenneth L. Bedingfield**

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Kenneth L. Bedingfield  
Corporate Vice President and Chief Financial Officer

