

**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 June 30, 2016  
or

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

Commission File Number 1-16411

**NORTHROP GRUMMAN CORPORATION**

(Exact name of registrant as specified in its charter)

**DELAWARE**

(State or other jurisdiction of  
incorporation or organization)

**80-0640649**

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

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

(Address of principal executive offices)

**22042**

(Zip Code)

**(703) 280-2900**

(Registrant's telephone number, including area code)

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

Yes

No

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

Yes

No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer 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 July 22, 2016, 178,574,671 shares of common stock were outstanding.

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## NORTHROP GRUMMAN CORPORATION

## PART I. FINANCIAL INFORMATION

## Item 1. Financial Statements

CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS AND COMPREHENSIVE INCOME  
(Unaudited)

<i>\$ in millions, except per share amounts</i>	Three Months Ended June 30		Six Months Ended June 30	
	2016	2015	2016	2015
<b>Sales</b>				
Product	\$ 3,560	\$ 3,509	\$ 7,038	\$ 6,938
Service	2,440	2,387	4,918	4,915
Total sales	6,000	5,896	11,956	11,853
<b>Operating costs and expenses</b>				
Product	2,621	2,568	5,232	5,110
Service	1,962	1,874	3,912	3,874
General and administrative expenses	620	641	1,276	1,276
<b>Operating income</b>	797	813	1,536	1,593
Other (expense) income				
Interest expense	(74)	(75)	(150)	(151)
Other, net	7	(2)	20	(2)
Earnings before income taxes	730	736	1,406	1,440
Federal and foreign income tax expense	213	205	333	425
<b>Net earnings</b>	\$ 517	\$ 531	\$ 1,073	\$ 1,015
<b>Basic earnings per share</b>	\$ 2.87	\$ 2.77	\$ 5.94	\$ 5.21
Weighted-average common shares outstanding, in millions	180.1	191.8	180.7	194.8
<b>Diluted earnings per share</b>	\$ 2.85	\$ 2.74	\$ 5.88	\$ 5.15
Weighted-average diluted shares outstanding, in millions	181.5	193.7	182.4	197.1
Net earnings (from above)	\$ 517	\$ 531	\$ 1,073	\$ 1,015
Other comprehensive income				
Change in unamortized benefit plan costs, net of tax	100	96	201	192
Change in cumulative translation adjustment	(9)	13	(13)	(16)
Other, net	1	—	—	(1)
Other comprehensive income, net of tax	92	109	188	175
<b>Comprehensive income</b>	\$ 609	\$ 640	\$ 1,261	\$ 1,190

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

## NORTHROP GRUMMAN CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF FINANCIAL POSITION  
(Unaudited)

<i>\$ in millions</i>	June 30, 2016	December 31, 2015
<b>Assets</b>		
Cash and cash equivalents	\$ 1,139	\$ 2,319
Accounts receivable, net	3,483	2,841
Inventoried costs, net	973	807
Prepaid expenses and other current assets	186	367
Total current assets	5,781	6,334
Property, plant and equipment, net of accumulated depreciation of \$4,927 in 2016 and \$4,849 in 2015	3,299	3,064
Goodwill	12,463	12,460
Deferred tax assets	1,375	1,409
Other non-current assets	1,163	1,157
<b>Total assets</b>	<b>\$ 24,081</b>	<b>\$ 24,424</b>
<b>Liabilities</b>		
Trade accounts payable	\$ 1,272	\$ 1,282
Accrued employee compensation	1,112	1,195
Advance payments and amounts in excess of costs incurred	1,383	1,537
Other current liabilities	1,332	1,443
Total current liabilities	5,099	5,457
Long-term debt, net of current portion	6,387	6,386
Pension and other post-retirement benefit plan liabilities	6,061	6,172
Other non-current liabilities	853	887
<b>Total liabilities</b>	<b>18,400</b>	<b>18,902</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: 2016—178,956,974 and 2015—181,303,083	179	181
Paid-in capital	—	—
Retained earnings	10,634	10,661
Accumulated other comprehensive loss	(5,132)	(5,320)
Total shareholders' equity	5,681	5,522
<b>Total liabilities and shareholders' equity</b>	<b>\$ 24,081</b>	<b>\$ 24,424</b>

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

## NORTHROP GRUMMAN CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS  
(Unaudited)

<i>\$ in millions</i>	Six Months Ended June 30	
	2016	2015
<b>Operating activities</b>		
Net earnings	\$ 1,073	\$ 1,015
Adjustments to reconcile to net cash provided by (used in) operating activities:		
Depreciation and amortization	209	216
Stock-based compensation	37	47
Excess tax benefits from stock-based compensation	—	(106)
Deferred income taxes	(89)	139
Changes in assets and liabilities:		
Accounts receivable, net	(647)	(344)
Inventoried costs, net	(170)	(117)
Prepaid expenses and other assets	7	48
Accounts payable and other liabilities	(287)	(870)
Income taxes payable	225	314
Retiree benefits	209	(378)
Other, net	(23)	8
Net cash provided by (used in) operating activities	\$ 544	\$ (28)
<b>Investing activities</b>		
Capital expenditures	(471)	(232)
Other, net	2	(2)
Net cash used in investing activities	(469)	(234)
<b>Financing activities</b>		
Common stock repurchases	(682)	(1,916)
Net proceeds from issuance of long-term debt	—	600
Payments of long-term debt	(107)	—
Cash dividends paid	(322)	(309)
Payments of employee taxes withheld from share-based awards	(150)	(172)
Other, net	6	103
Net cash used in financing activities	(1,255)	(1,694)
Decrease in cash and cash equivalents	(1,180)	(1,956)
Cash and cash equivalents, beginning of year	2,319	3,863
Cash and cash equivalents, end of period	\$ 1,139	\$ 1,907

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

## NORTHROP GRUMMAN CORPORATION

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

<i>\$ in millions, except per share amounts</i>	Six Months Ended June 30	
	2016	2015
<b>Common stock</b>		
Beginning of year	\$ 181	\$ 199
Common stock repurchased	(3)	(12)
Shares issued for employee stock awards and options	1	1
End of period	179	188
<b>Paid-in capital</b>		
Beginning of year	—	—
End of period	—	—
<b>Retained earnings</b>		
Beginning of year	10,661	12,392
Common stock repurchased	(686)	(1,933)
Net earnings	1,073	1,015
Dividends declared	(310)	(297)
Stock compensation	(104)	(13)
End of period	10,634	11,164
<b>Accumulated other comprehensive loss</b>		
Beginning of year	(5,320)	(5,356)
Other comprehensive income, net of tax	188	175
End of period	(5,132)	(5,181)
Total shareholders' equity	\$ 5,681	\$ 6,171
Cash dividends declared per share	\$ 1.70	\$ 1.50

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, 2015 (2015 Annual Report on Form 10-K) and the Form 8-K that we filed with the SEC on April 27, 2016, which recasts the disclosures in certain portions of the 2015 Annual Report on Form 10-K to reflect changes in the company’s organizational structure and reportable segments.

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 method or the units-of-delivery method of percentage-of-completion accounting, with cost-to-cost being the predominant method. The company estimates profit on contracts as the difference between total estimated sales and total estimated cost at completion and recognizes that profit either as costs are incurred (cost-to-cost) or as units are delivered (units-of-delivery). The company classifies sales as product or service depending upon the predominant attributes of the contract.

*Net Estimate-At-Completion (EAC) Adjustments* - 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 as net EAC adjustments; 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 EAC adjustments on a single contract could have a material effect on the company’s unaudited condensed consolidated financial position or results of operations. When such adjustments occur, we generally disclose the nature, underlying conditions and financial impact of the adjustments. No discrete event or adjustment to an individual contract was material to the accompanying unaudited condensed consolidated financial statements.

**NORTHROP GRUMMAN CORPORATION**

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

<i>\$ in millions, except per share data</i>	Three Months Ended June 30		Six Months Ended June 30	
	<b>2016</b>	2015	<b>2016</b>	2015
Operating Income	\$ 137	\$ 162	\$ 266	\$ 349
Net Earnings <sup>(1)</sup>	<b>89</b>	105	<b>173</b>	227
Diluted earnings per share <sup>(1)</sup>	<b>0.49</b>	0.54	<b>0.95</b>	1.15

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

Contract sales may include estimated amounts not contractually agreed to by the customer, including cost or performance incentives (such as award and incentive fees), un-priced change orders, contract claims and requests for equitable adjustment (REAs). Further, as contracts are performed, change orders can be a regular occurrence and may be un-priced until negotiated with the customer. Un-priced change orders, contract claims (including change orders unapproved as to both scope and price) and REAs are included in estimated contract sales when management believes it is probable the un-priced change order, claim and/or REA will result in additional contract revenue and the amount can be reliably estimated based on the facts and circumstances known to us at the time. During July 2016, the company entered into a contract modification with the U.S. government on an Aerospace Systems program, which resolved most of the REAs disclosed in our 2015 Annual Report on Form 10-K. Amounts recognized related to claims and REAs as of June 30, 2016 were not material individually or in aggregate.

As of June 30, 2016, the company does not have any contract terminations in process that we anticipate will 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 March 30, 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. The company adopted ASU 2016-09 during the first quarter of 2016. Among other things, the ASU requires that entities recognize excess tax benefits and deficiencies related to employee share-based payment transactions as income tax expense or benefit. The ASU also eliminates the requirement to reclassify excess tax benefits and deficiencies from operating activities to financing activities in the statement of cash flows. As a result of adoption, the company recognized a \$4 million and \$84 million tax benefit during the three and six months ended June 30, 2016, respectively. Adoption also resulted in an \$84 million increase in operating cash flows and a corresponding \$84 million reduction in financing cash flows for the six months ended June 30, 2016.

On February 25, 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. ASU 2016-02 supersedes existing lease guidance, including Accounting Standards Codification (ASC) 840 - *Leases*. Among other things, the new standard requires recognition of a right-of-use asset and liability for future lease payments for contracts that meet the definition of a lease. ASU 2016-02 will be effective January 1, 2019, although early adoption is permitted. The standard must be applied using a modified retrospective approach. We are currently evaluating the timing of adoption as well as the effect ASU 2016-02 will have on the company's consolidated financial position, annual results of operations and cash flows.

On May 28, 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers*. ASU 2014-09 supersedes existing revenue recognition guidance, including ASC 605-35, *Revenue Recognition - Construction-Type and Production-Type Contracts*. 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 expect to complete our evaluation of 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 by the end of 2016.



**NORTHROP GRUMMAN CORPORATION**

Other accounting standards updates effective after June 30, 2016 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.

**Reclassifications**

The company adopted ASU 2015-03, *Interest - Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs*, during the first quarter of 2016. As a result, we now present capitalized debt issuance costs as a reduction in the carrying amount of long-term debt. This change resulted in a reclassification of \$30 million of other non-current assets reported in our 2015 consolidated statement of financial position to long-term debt, which reduced our previously reported total assets and total liabilities as of December 31, 2015.

**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>	<b>June 30, 2016</b>	December 31, 2015
Unamortized benefit plan costs, net of tax benefit of \$3,227 as of June 30, 2016 and \$3,350 as of December 31, 2015	\$ (5,040)	\$ (5,241)
Cumulative translation adjustment	(95)	(82)
Net unrealized gain on marketable securities and cash flow hedges, net of tax	3	3
Total accumulated other comprehensive loss	\$ (5,132)	\$ (5,320)

Unamortized benefit plan costs consist primarily of net after-tax actuarial losses totaling \$5.2 billion and \$5.5 billion as of June 30, 2016 and December 31, 2015, respectively. Net actuarial gains or losses are re-determined annually or upon remeasurement events and principally arise from changes in the interest rate used to discount our benefit obligations and differences between expected and actual returns on plan assets.

Reclassifications from accumulated other comprehensive loss to net earnings related to the amortization of benefit plan costs were \$100 million and \$201 million, net of taxes, for the three and six months ended June 30, 2016, respectively, and were \$96 million and \$192 million, net of taxes, for the three and six months ended June 30, 2015, 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 six months ended June 30, 2016 and 2015, respectively, were not material.

**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 1.4 million shares and 1.7 million shares for the three and six months ended June 30, 2016, respectively. The dilutive effect of these securities totaled 1.9 million shares and 2.3 million shares for the three and six months ended June 30, 2015, respectively.

**Share Repurchases**

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. On December 4, 2014, the company's board of directors authorized a new 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 and were completed in March 2016.

**NORTHROP GRUMMAN CORPORATION**

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). Repurchases under the 2015 Repurchase Program commenced in March 2016 upon completion of the company's 2014 Repurchase Program. As of June 30, 2016, repurchases under the 2015 Repurchase Program totaled \$0.4 billion; \$3.6 billion remained under this share repurchase authorization. By its terms, the 2015 Repurchase Program is set to expire when we have used all authorized funds for repurchases.

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

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

Repurchase Program Authorization Date	Amount Authorized (in millions)	Total Shares Retired (in millions)	Average Price Per Share <sup>(1)</sup>	Date Completed	Shares Repurchased (in millions)	
					Six Months Ended June 30	
					2016	2015
May 15, 2013	\$ 4,000	32.8	\$ 121.97	March 2015	—	2.7
December 4, 2014	\$ 3,000	18.0	\$ 166.70	March 2016	1.4	9.4
September 16, 2015	\$ 4,000	2.0	\$ 210.87		2.0	—

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

**Dividends on Common Stock**

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

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.

**3. SEGMENT INFORMATION**

The company is aligned in three operating sectors, which also comprise our reportable segments: Aerospace Systems, Mission Systems and Technology Services. Effective January 1, 2016, the company streamlined our sectors from four to three to better align our business with the evolving needs of our customers and enhance innovation across the company. Mission Systems and Technology Services were created by merging elements of our former Electronic Systems, Information Systems and Technical Services sectors. The new Mission Systems sector is composed of the majority of our former Electronic Systems sector and the businesses from our former Information Systems sector focused on the development of new capabilities for our military and intelligence customers. The new Technology Services sector was formed by combining the services portfolio in the former Information Systems sector with the former Technical Services sector. Among other operations that were realigned, the military and civil space hardware business in Azusa, California, previously reporting to the Electronic Systems sector, moved to the Aerospace Systems sector, and the electronic attack business, previously in the Aerospace Systems sector, moved to the Mission Systems sector.

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**NORTHROP GRUMMAN CORPORATION**

The following table presents sales and operating income by segment:

<i>\$ in millions</i>	Three Months Ended June 30		Six Months Ended June 30	
	2016	2015	2016	2015
<b>Sales</b>				
Aerospace Systems	\$ 2,600	\$ 2,498	\$ 5,174	\$ 4,996
Mission Systems	2,690	2,628	5,383	5,339
Technology Services	1,213	1,238	2,427	2,505
Intersegment eliminations	(503)	(468)	(1,028)	(987)
Total sales	6,000	5,896	11,956	11,853
<b>Operating income</b>				
Aerospace Systems	312	319	598	631
Mission Systems	351	348	704	692
Technology Services	131	128	257	261
Intersegment eliminations	(63)	(53)	(127)	(107)
<b>Total segment operating income</b>	<b>731</b>	<b>742</b>	<b>1,432</b>	<b>1,477</b>
Reconciliation to total operating income:				
Net FAS/CAS pension adjustment	69	81	143	164
Unallocated corporate expenses	(3)	(9)	(36)	(47)
Other	—	(1)	(3)	(1)
Total operating income	\$ 797	\$ 813	\$ 1,536	\$ 1,593

**Net FAS/CAS Pension Adjustment**

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

The decrease in net FAS/CAS pension adjustment for the three and six months ended June 30, 2016, as compared to the same periods in 2015, is primarily due to lower than expected asset returns during 2015, partially offset by the increase in our FAS discount rate assumption as of December 31, 2015 and the continued phase-in of the effects of CAS harmonization.

**Unallocated Corporate Expenses**

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

*Current Quarter*

Unallocated corporate expenses for the three months ended June 30, 2016 were comparable with the same period in 2015 and both periods reflect a reduction in reserves for overhead costs related to the finalization of certain prior year incurred cost claims.

*Year to Date*

Unallocated corporate expenses decreased for the six months ended June 30, 2016, as compared with the same period in 2015, principally due to higher deferred state taxes in 2015 resulting from a \$500 million discretionary pension contribution made in the first quarter of 2015.

**NORTHROP GRUMMAN CORPORATION**

**4. INCOME TAXES**

<i>\$ in millions</i>	Three Months Ended June 30		Six Months Ended June 30	
	2016	2015	2016	2015
Federal and foreign income tax expense	\$ 213	\$ 205	\$ 333	\$ 425
Effective income tax rate	29.2%	27.9%	23.7%	29.5%

*Current Quarter*

The company's effective tax rate for the three months ended June 30, 2016 was higher than the comparable 2015 period primarily due to the absence of \$38 million of refund claims filed in 2015, partially offset by extension of the research tax credit.

*Year to Date*

The company's effective tax rate for the six months ended June 30, 2016 was lower than the comparable 2015 period principally due to \$84 million of excess tax benefits related to employee share-based payment transactions recognized in 2016 resulting from the adoption of ASU No. 2016-09 described in Note 1 and extension of the research tax credit, partially offset by the absence of \$38 million of refund claims filed in 2015.

We file income tax returns in the U.S. federal jurisdiction and in various state and foreign jurisdictions. As of June 30, 2016, our 2007-2013 federal tax returns were either under Internal Revenue Service (IRS) examination or on appeal. During July 2016, the U.S. Congressional Joint Committee on Taxation approved a resolution of the IRS examination of the company's 2007-2011 tax returns. As a result, in the third quarter of 2016, the company will record a reduction of our unrecognized tax benefits of approximately \$115 million and a reduction of our income tax expense of approximately \$40 million. The company believes it is reasonably possible that within the next twelve months we may resolve additional tax matters, which may result in further reductions of our unrecognized tax benefits up to \$70 million and income tax expense up to \$45 million.

**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>	June 30, 2016		December 31, 2015	
	Carrying Value	Fair Value	Carrying Value	Fair Value
<b>Financial Assets (Liabilities)</b>				
Marketable securities				
Trading	\$ 305	\$ 305	\$ 303	\$ 303
Available-for-sale	8	8	7	7
Derivatives	5	5	5	5
Long-term debt, including current portion	\$ (6,390)	\$ (7,352)	\$ (6,496)	\$ (6,907)

There were no transfers of financial instruments between the three levels of the fair value hierarchy during the six months ended June 30, 2016.

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

**Investments in Marketable Securities**

The company holds a portfolio of marketable securities consisting of securities to partially fund non-qualified employee benefit plans. These assets are recorded at fair value on a recurring basis and substantially all of these instruments are valued using Level 1 inputs. As of June 30, 2016 and December 31, 2015, marketable securities of \$313 million and \$310 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 June 30, 2016 and December 31, 2015, was \$127 million and \$141 million, respectively. The portion of the notional value designated as cash flow hedges at June 30, 2016 and December 31,

## NORTHROP GRUMMAN CORPORATION

2015, was \$4 million and \$10 million, respectively. 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. The derivative fair values and related unrealized gains/losses at June 30, 2016 and December 31, 2015, 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.

#### *Unsecured Senior Notes*

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. We used 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 most of a debt repayment of \$107 million in the first quarter of 2016.

## 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 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 \$34 million as of June 30, 2016), plus interest, inflation adjustments and attorneys' fees, as authorized by Brazilian law, which amounts could be significant over time. The original suit sought R\$89 million (the equivalent of approximately \$27 million as of June 30, 2016) in damages. In October 2013, ECT asserted an additional damage claim of R\$22 million (the equivalent of approximately \$7 million as of June 30, 2016). 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 \$34 million as of June 30, 2016), 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

## **NORTHROP GRUMMAN CORPORATION**

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 parties have submitted their briefs to the court.

The company is a party to various investigations, lawsuits, claims and other legal proceedings, including government investigations and claims, that arise in the ordinary course of our business. The nature of legal proceedings is such that we cannot assure the outcome of any particular matter. However, based on information available to the company to date, and other than with respect to the FSS matters discussed separately above, the company does not believe that the outcome of any matter pending against the company is likely to have a material adverse effect on the company's unaudited condensed consolidated financial position as of June 30, 2016, or its annual results of operations or cash flows.

## **7. COMMITMENTS AND CONTINGENCIES**

### **Guarantees of Certain Performance Obligations**

The company's subsidiaries enter into joint ventures, teaming and other business arrangements (collectively, Business Arrangements) to support our products and services in U.S. 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, the company 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.

At June 30, 2016, 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 June 30, 2016, or its annual results of operations and/or cash flows.

**NORTHROP GRUMMAN CORPORATION****Environmental Matters**

The table below summarizes management's estimate of the range of reasonably possible future costs for environmental remediation, the amount accrued within that range, and the deferred costs expected to be recoverable through overhead charges on U.S. Government contracts as of June 30, 2016 and December 31, 2015:

<i>\$ in millions</i>	Range of Reasonably Possible Future Costs <sup>(1)</sup>	Accrued Costs <sup>(2)</sup>	Deferred Costs <sup>(3)</sup>
<b>June 30, 2016</b>	<b>\$361 - \$771</b>	<b>\$ 371</b>	<b>\$ 189</b>
December 31, 2015	353 - 812	370	186

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

<sup>(2)</sup> As of June 30, 2016, \$101 million is recorded in other current liabilities and \$270 million is recorded in other non-current liabilities.

<sup>(3)</sup> As of June 30, 2016, \$56 million is deferred in inventoried costs and \$133 million is deferred in other non-current assets. These amounts are evaluated for recoverability on a routine basis.

Although management cannot predict whether new information gained as our environmental remediation projects progress, or as changes in facts and circumstances occur, will materially affect the estimated liability accrued, we do not anticipate future remediation expenditures associated with our currently identified projects will have a material adverse effect on the company's unaudited condensed consolidated financial position as of June 30, 2016, or its annual results of operations and/or cash flows.

**Financial Arrangements**

In the ordinary course of business, the company uses standby letters of credit and guarantees issued by commercial banks and surety bonds issued principally by insurance companies to guarantee the performance on certain obligations. At June 30, 2016, there were \$280 million of stand-by letters of credit and guarantees and \$151 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 June 30, 2016, or its annual results of operations and/or cash flows.

**Operating Leases**

Rental expense for operating leases for the three and six months ended June 30, 2016 was \$68 million and \$159 million, respectively, and was \$76 million and \$157 million for the three and six months ended June 30, 2015, respectively. These amounts are net of immaterial amounts of sublease rental income.

**Credit Facility**

The company maintains an unsecured credit facility in an aggregate principal amount of \$1.6 billion (the "Credit Agreement") that matures in July 2020. At June 30, 2016, the company was in compliance with the covenants under the Credit Agreement and there was no balance outstanding.

**NORTHROP GRUMMAN CORPORATION**

**8. RETIREMENT BENEFITS**

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

<i>\$ in millions</i>	Three Months Ended June 30				Six Months Ended June 30			
	Pension Benefits		Medical and Life Benefits		Pension Benefits		Medical and Life Benefits	
	2016	2015	2016	2015	2016	2015	2016	2015
<b>Components of net periodic benefit cost</b>								
Service cost	\$ 111	\$ 121	\$ 7	\$ 9	\$ 223	\$ 242	\$ 15	\$ 18
Interest cost	321	306	23	23	642	612	47	47
Expected return on plan assets	(463)	(493)	(22)	(23)	(926)	(987)	(43)	(45)
Amortization of:								
Prior service credit	(15)	(15)	(5)	(7)	(30)	(30)	(11)	(14)
Net loss from previous years	179	170	5	8	357	341	8	14
<b>Net periodic benefit cost</b>	<b>\$ 133</b>	<b>\$ 89</b>	<b>\$ 8</b>	<b>\$ 10</b>	<b>\$ 266</b>	<b>\$ 178</b>	<b>\$ 16</b>	<b>\$ 20</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 June 30		Six Months Ended June 30	
	2016	2015	2016	2015
Defined benefit pension plans	\$ 20	\$ 19	\$ 47	\$ 544
Medical and life benefit plans	18	19	29	25
Defined contribution plans	71	65	158	150

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

**Stock Awards**

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

<i>in millions</i>	Six Months Ended June 30	
	2016	2015
RSRs granted	0.2	0.2
RPSRs granted	0.3	0.4
Grant date aggregate fair value	\$ 88	\$ 88

RSRs typically vest on the third anniversary of the grant date, while RPSRs generally vest and pay out based on the achievement of financial metrics for the three-year period beginning January 1 of the year of grant.



**NORTHROP GRUMMAN CORPORATION**

**Cash Awards**

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

<i>\$ in millions</i>	Six Months Ended June 30	
	2016	2015
Minimum aggregate payout amount	\$ 34	\$ 36
Maximum aggregate payout amount	193	192

CUs typically vest and settle in cash on the third anniversary of the grant date, while CPUs generally vest and pay out in cash based on the achievement of financial metrics for a three-year period beginning January 1 of the year of grant.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

We have reviewed the accompanying condensed consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries (the "Company") as of June 30, 2016, and the related condensed consolidated statements of earnings and comprehensive income for the three-month and six-month periods ended June 30, 2016 and 2015, and of cash flows and changes in shareholders' equity for the six-month periods ended June 30, 2016 and 2015. These interim financial statements are the responsibility of the Company's management.

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

Based on our reviews, we are not aware of any material modifications that should be made to such condensed consolidated interim financial statements for them to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries as of December 31, 2015, and the related consolidated statements of earnings and comprehensive income (loss), cash flows, and changes in shareholders' equity for the year then ended (not presented herein); and in our report dated February 1, 2016 (April 26, 2016 as to the reclassification of segment information), 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, 2015, is fairly stated, in all material respects, in relation to the consolidated statement of financial position from which it has been derived.

/s/ Deloitte & Touche LLP  
McLean, Virginia  
July 26, 2016

**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 cyberspace. We provide products, systems and solutions in autonomous systems; cyber; command, control, communications and computers, intelligence, surveillance and reconnaissance (C4ISR); strike; and logistics and modernization. We participate in many high-priority defense and government programs in the United States (U.S.) and abroad. We conduct most of our business with the U.S. Government, principally the Department of Defense (DoD) and intelligence community. We also conduct business with foreign, state and local governments and commercial customers.

The following discussion should be read along with the unaudited condensed consolidated financial statements included in this Form 10-Q, as well as our 2015 Annual Report on Form 10-K and the Form 8-K that we filed with the SEC on April 27, 2016, which recasts the disclosures in certain portions of the 2015 Annual Report on Form 10-K to reflect changes in the company’s organizational structure and reportable segments. 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 2015 Annual Report on Form 10-K.

On February 9, 2016, the President delivered his FY 2017 budget to Congress. The FY 2017 budget reflects the FY 2017 spending caps established in the Bipartisan Budget Act of 2015 and requests \$524 billion for the DoD’s annual budget and an additional \$59 billion for Overseas Contingency Operations. Congress is continuing to consider appropriations bills for FY 2017. It is unclear when or if annual appropriations bills will be enacted for FY 2017. The U.S. Government may operate under a continuing resolution for some or all of FY 2017, restricting new contract or program starts for that year and placing limitations on some planned program budgets, 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). We recognize sales from our portfolio of long-term contracts primarily using the cost-to-cost method of percentage of completion accounting, but in some cases we utilize the units-of-delivery method of percentage of completion accounting. As a result, sales tend to fluctuate in concert with costs incurred across our large portfolio of contracts. Due to Federal Acquisition Regulation (FAR) rules that govern our U.S. Government business and related Cost Accounting Standards (CAS), most types of costs are allocable to U.S. Government contracts. As such, we do not focus on individual cost groupings (such as manufacturing, engineering and design labor costs, subcontractor costs, material costs, overhead costs and general and administrative (G&A) costs), as much as we do on total contract cost, which is the key driver of our sales and operating income.

In evaluating our operating performance, we look primarily at changes in sales and operating income, 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 three segments before distinguishing between products and services. Changes in sales are generally described in terms of volume, deliveries or other indicators of sales activity, and contract mix. For purposes of this discussion, volume generally refers to increases or decreases in sales or cost from production/service activity levels or delivery rates. Performance generally refers to non-volume related changes in profitability.

**NORTHROP GRUMMAN CORPORATION**
**CONSOLIDATED OPERATING RESULTS**

Selected financial highlights are presented in the table below:

<i>\$ in millions, except per share amounts</i>	Three Months Ended June 30		%	Six Months Ended June 30		%
	2016	2015	Change	2016	2015	Change
Sales	\$ 6,000	\$ 5,896	2 %	\$ 11,956	\$ 11,853	1 %
Operating costs and expenses	5,203	5,083	2 %	10,420	10,260	2 %
Operating income	797	813	(2)%	1,536	1,593	(4)%
<i>Operating margin rate</i>	13.3%	13.8%		12.8%	13.4%	
Federal and foreign income tax expense	213	205	4 %	333	425	(22)%
<i>Effective income tax rate</i>	29.2%	27.9%		23.7%	29.5%	
Net earnings	517	531	(3)%	1,073	1,015	6 %
Diluted earnings per share	2.85	2.74	4 %	5.88	5.15	14 %
Net cash provided by (used in) operating activities	\$ 604	\$ 626	(4)%	\$ 544	\$ (28)	NM

**Sales**
*Current Quarter*

The increase in sales was due to higher sales at Aerospace Systems and Mission Systems, partially offset by lower sales at Technology Services.

*Year to Date*

The increase in sales was due to higher sales at Aerospace Systems and Mission Systems, partially offset by lower sales at Technology Services.

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

**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 G&A costs, including independent research and development (IR&D) and bid and proposal 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 June 30		%	Six Months Ended June 30		%
	2016	2015	Change	2016	2015	Change
Product costs	\$ 2,621	\$ 2,568	2 %	\$ 5,232	\$ 5,110	2%
Service costs	1,962	1,874	5 %	3,912	3,874	1%
G&A expenses	620	641	(3)%	1,276	1,276	—
Operating costs and expenses	\$ 5,203	\$ 5,083	2 %	\$ 10,420	\$ 10,260	2%
Operating costs and expenses as a % of sales	86.7%	86.2%		87.2%	86.6%	

*Current Quarter*

Operating costs and expenses as a percentage of sales increased for the three months ended June 30, 2016 as compared with the same period in 2015, which decreased our operating margin rate to 13.3 percent from 13.8 percent in the prior year period. The increase in operating costs and expenses as a percentage of sales was principally driven by lower segment margin rates, as described in the Segment Operating Results section below, and a \$12 million decrease in our net FAS (GAAP Financial Accounting Standards)/CAS pension adjustment, as described in Note 3 to the unaudited condensed consolidated financial statements in Part I, Item 1.

## NORTHROP GRUMMAN CORPORATION

G&A as a percentage of sales for the three months ended June 30, 2016 decreased to 10.3 percent from 10.9 percent in the prior year period, principally due to the timing of indirect costs at Mission Systems.

### *Year to Date*

Operating costs and expenses as a percentage of sales increased for the six months ended June 30, 2016 as compared with the same period in 2015, which decreased our operating margin rate to 12.8 percent from 13.4 percent in the prior year period. The increase in operating costs and expenses as a percentage of sales was principally driven by lower segment margin rates, as described in the Segment Operating Results section below, and a \$21 million decrease in our net FAS/CAS pension adjustment, as described in Note 3 to the unaudited condensed consolidated financial statements in Part I, Item 1.

G&A as a percentage of sales for the six months ended June 30, 2016 was comparable with the same period in 2015.

For further information regarding product and service sales and costs, see the Product and Service Analysis section that follows Segment Operating Results.

### **Operating Income and Margin Rate**

We define operating income as sales less operating costs and expenses, which includes G&A. Operating margin rate is defined as operating income as a percentage of sales.

### *Current Quarter*

Operating income for the three months ended June 30, 2016 decreased \$16 million, or 2 percent, as compared with the same period in 2015, and operating margin rate decreased to 13.3 percent from 13.8 percent in the prior year period primarily due to the higher operating costs and expenses described above.

### *Year to Date*

Operating income for the six months ended June 30, 2016 decreased \$57 million, or 4 percent, as compared with the same period in 2015, and operating margin rate decreased to 12.8 percent from 13.4 percent in the prior year period primarily due to the higher operating costs and expenses described above.

### **Federal and Foreign Income Taxes**

#### *Current Quarter*

The company's effective tax rate for the three months ended June 30, 2016 was 29.2 percent as compared with 27.9 percent in the comparable 2015 period. The higher rate is primarily due to the absence of \$38 million of refund claims filed in 2015, partially offset by extension of the research tax credit.

#### *Year to Date*

The company's effective tax rate for the six months ended June 30, 2016 was 23.7 percent as compared with 29.5 percent in the comparable 2015 period. The lower rate is principally due to \$84 million of excess tax benefits related to employee share-based payment transactions recognized in 2016 due to the adoption of Accounting Standards Update (ASU) No. 2016-09, as described in Note 1 to the unaudited condensed consolidated financial statements in Part I, Item 1, and extension of the research tax credit, partially offset by the absence of \$38 million of refund claims filed in 2015.

### **Net Earnings**

#### *Current Quarter*

Net earnings for the three months ended June 30, 2016 decreased \$14 million, or 3 percent, as compared with the same period in 2015, principally due to lower operating income, as described above, partially offset by an increase in Other, net as a result of higher returns on marketable securities.

#### *Year to Date*

Net earnings for the six months ended June 30, 2016 increased \$58 million, or 6 percent, as compared with the same period in 2015, principally due to the lower effective tax rate discussed above and an increase in Other, net as a result of higher returns on marketable securities, partially offset by the lower operating income discussed above.

### **Diluted Earnings Per Share**

#### *Current Quarter*

Diluted earnings per share for the three months ended June 30, 2016 increased \$0.11, or 4 percent, as compared with the same period in 2015, reflecting lower weighted-average shares outstanding resulting from shares repurchased during 2015 and 2016, partially offset by lower net earnings.

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

Diluted earnings per share for the six months ended June 30, 2016 increased \$0.73, or 14 percent, as compared with the same period in 2015, reflecting higher net earnings and lower weighted-average shares outstanding resulting from shares repurchased during 2015 and 2016.

**Net Cash from Operating Activities**

See “Operating Cash Flow” in the Liquidity and Capital Resources section below for further information on net cash provided by (used in) operating activities.

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

At June 30, 2016, the company was aligned in three operating sectors, which also comprise our reportable segments: Aerospace Systems, Mission Systems, and Technology Services. Effective January 1, 2016, the company streamlined our sectors from four to three as described in Note 3 to the unaudited condensed consolidated financial statements in Part I, Item 1.

Our sectors provide products and services in the following business areas, which are presented in a manner reflecting core capabilities:

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

This section discusses segment sales, operating income and operating margin rates. Reconciliations of segment sales to total sales and of segment operating income to total operating income, as well as a discussion of the reconciling items, are provided in Note 3 to the unaudited condensed consolidated financial statements in Part I, Item 1.

**Segment Operating Income and Margin Rate**

Segment operating income, as reconciled in the Reconciliation of Segment Operating Income to Total Operating Income table 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 three segments including allocated pension expense recognized under CAS, and excludes unallocated corporate items, including FAS pension expense.

<i>\$ in millions</i>	Three Months Ended June 30		%	Six Months Ended June 30		%
	2016	2015		2016	2015	
Segment operating income	\$ 731	\$ 742	(1)%	\$ 1,432	\$ 1,477	(3)%
Segment operating margin rate	12.2%	12.6%		12.0%	12.5%	

*Current Quarter*

Segment operating income for the three months ended June 30, 2016 decreased \$11 million, or 1 percent, as compared with the same period in 2015. Segment operating margin rate decreased to 12.2 percent from 12.6 percent in the prior year period due to lower margin rates at Aerospace Systems and Mission Systems, partially offset by a higher margin rate at Technology Services.

*Year to Date*

Segment operating income for the six months ended June 30, 2016 decreased \$45 million, or 3 percent, as compared with the same period in 2015. Segment operating margin rate decreased to 12.0 percent from 12.5 percent in the prior year period principally due to a lower operating margin rate at Aerospace Systems.

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

<i>\$ in millions</i>	Three Months Ended June 30		Six Months Ended June 30	
	2016	2015	2016	2015
Favorable EAC adjustments	\$ 199	\$ 228	\$ 399	\$ 518
Unfavorable EAC adjustments	(62)	(66)	(133)	(169)
Net EAC adjustments	\$ 137	\$ 162	\$ 266	\$ 349

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

<i>\$ in millions</i>	Three Months Ended June 30		Six Months Ended June 30	
	2016	2015	2016	2015
Aerospace Systems	\$ 83	\$ 109	\$ 142	\$ 220
Mission Systems	\$ 45	\$ 43	100	99
Technology Services	16	16	37	39
Eliminations	(7)	(6)	(13)	(9)
Net EAC adjustments	\$ 137	\$ 162	\$ 266	\$ 349

*Reconciliation of Segment Operating Income to Total Operating Income* - The table below reconciles segment operating income to total operating income by including the impact of net FAS/CAS pension adjustments, as well as unallocated corporate expenses (certain corporate-level expenses, which are not considered allowable or allocable under applicable CAS or the FAR). See Note 3 to the unaudited condensed consolidated financial statements in Part I, Item 1 for further information on the net FAS/CAS pension adjustment and unallocated corporate expenses.

<i>\$ in millions</i>	Three Months Ended June 30		Six Months Ended June 30	
	2016	2015	2016	2015
Segment operating income	\$ 731	\$ 742	\$ 1,432	\$ 1,477
CAS pension expense	202	170	409	342
Less: FAS pension expense	(133)	(89)	(266)	(178)
Net FAS/CAS pension adjustment	69	81	143	164
Unallocated corporate expenses	(3)	(9)	(36)	(47)
Other	—	(1)	(3)	(1)
Total operating income	\$ 797	\$ 813	\$ 1,536	\$ 1,593

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

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## AEROSPACE SYSTEMS

<i>\$ in millions</i>	Three Months Ended June 30		%	Six Months Ended June 30		%
	2016	2015		2016	2015	
Sales	\$ 2,600	\$ 2,498	4 %	\$ 5,174	\$ 4,996	4 %
Operating income	312	319	(2)%	598	631	(5)%
Operating margin rate	12.0%	12.8%		11.6%	12.6%	

*Current Quarter*

Aerospace Systems sales for the three months ended June 30, 2016 increased \$102 million, or 4 percent, as compared with the same period in 2015. The increase was due to higher volume on Manned Aircraft and Autonomous Systems programs, partially offset by lower volume on Space programs. Manned Aircraft sales increased primarily due to higher restricted volume and increased F-35 deliveries, partially offset by fewer F/A-18 deliveries and lower B-2 volume. Autonomous Systems sales increased primarily due to higher volume on the Global Hawk and Triton programs, partially offset by the ramp-down of the NATO Alliance Ground Surveillance (AGS) program. Space sales declined due to lower volume on the Advanced Extremely High Frequency (AEHF) and James Webb Space Telescope (JWST) programs, partially offset by higher restricted volume.

Operating income for the three months ended June 30, 2016 decreased \$7 million, or 2 percent, and operating margin rate decreased to 12.0 percent from 12.8 percent. Operating income and margin rate decreased due to lower margins on Manned Aircraft programs, principally due to changes in contract mix and the timing of risk reductions, which more than offset the higher sales volume described above and improved performance on Space programs.

*Year to Date*

Aerospace Systems sales for the six months ended June 30, 2016 increased \$178 million, or 4 percent, as compared with the same period in 2015. The increase was due to higher volume on Manned Aircraft and Autonomous Systems programs, partially offset by lower volume on Space programs. Manned Aircraft sales increased primarily due to higher restricted volume, increased F-35 deliveries and the transition to full rate production on the E-2D Advanced Hawkeye program. These increases were partially offset by fewer F/A-18 deliveries and lower B-2 volume. Autonomous Systems sales increased primarily due to higher volume on the Global Hawk and Triton programs, partially offset by the ramp-down of the NATO AGS program. Space sales declined due to lower volume on the AEHF and JWST programs, partially offset by higher restricted volume.

Operating income for the six months ended June 30, 2016 decreased \$33 million, or 5 percent, and operating margin rate decreased to 11.6 percent from 12.6 percent. Operating income and margin rate decreased due to lower margins on Manned Aircraft programs, principally due to changes in contract mix and the timing of risk reductions, which more than offset the higher sales volume described above and improved performance on Space programs.

## MISSION SYSTEMS

<i>\$ in millions</i>	Three Months Ended June 30		%	Six Months Ended June 30		%
	2016	2015		2016	2015	
Sales	\$ 2,690	\$ 2,628	2%	\$ 5,383	\$ 5,339	1%
Operating income	351	348	1%	704	692	2%
Operating margin rate	13.0%	13.2%		13.1%	13.0%	

*Current Quarter*

Mission Systems sales for the three months ended June 30, 2016 increased \$62 million, or 2 percent, as compared with the same period in 2015. The increase was primarily due to higher volume on Advanced Capabilities programs, as well as Sensors and Processing programs. Advanced Capabilities sales increased primarily due to higher restricted volume and ramp-up on a number of navigation and maritime programs, including Surface Electronic Warfare Improvement Program (SEWIP) Block III. Sensors and Processing sales increased primarily due to ramp-up on the G/ATOR and Joint Counter Radio-Controlled Improvised Explosive Device Electronic Warfare (JCREW) programs, partially offset by lower volume on international and combat avionics programs.

Operating income for the three months ended June 30, 2016 increased \$3 million, or 1 percent, and operating margin rate decreased to 13.0 percent from 13.2 percent. Operating income increased primarily due to the higher sales



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volume described above. Operating margin rate declined principally due to lower margins on Sensors and Processing programs due to changes in contract mix.

*Year to Date*

Mission Systems sales for the six months ended June 30, 2016 increased \$44 million, or 1 percent, as compared with the same period in 2015. The increase was due to higher volume on Advanced Capabilities and Sensors and Processing programs, partially offset by lower volume on Cyber and ISR programs. Advanced Capabilities sales increased primarily due to ramp-up on a number of navigation and maritime programs, including SEWIP Block III, and higher restricted volume. Sensors and Processing sales increased primarily due to production ramp-up on the G/ATOR program and higher volume on fixed wing avionics and C4ISR programs. These increases were partially offset by lower volume on international and combat avionics programs. Cyber and ISR sales reflect lower volume on restricted programs and the Counter Narcoterrorism Technology program.

Operating income for the six months ended June 30, 2016 increased \$12 million, or 2 percent, and operating margin rate increased to 13.1 percent from 13.0 percent. Operating income and margin rate increased primarily due to the higher sales volume described above and higher margins on Advanced Capabilities programs due to improved performance, partially offset by lower margins on Sensors and Processing programs due to the timing of risk reductions and changes in contract mix.

**TECHNOLOGY SERVICES**

<i>\$ in millions</i>	Three Months Ended June 30		%	Six Months Ended June 30		%
	2016	2015		2016	2015	
Sales	\$ 1,213	\$ 1,238	(2)%	\$ 2,427	\$ 2,505	(3)%
Operating income	131	128	2%	257	261	(2)%
<i>Operating margin rate</i>	<b>10.8%</b>	10.3%		<b>10.6%</b>	10.4%	

*Current Quarter*

Technology Services sales for the three months ended June 30, 2016 decreased \$25 million, or 2 percent, as compared with the same period in 2015. The decrease was principally due to lower volume on Advanced Defense Services programs, partially offset by higher volume on Global Logistics and Modernization programs. Advanced Defense Services sales declined primarily due to the completion of several programs in 2015, partially offset by higher volume on the Saudi Arabian Ministry of National Guard Training Support (MNG TSC) program (through our interest in a joint venture for which we consolidate the financial results). Global Logistics and Modernization sales increased mainly due to higher KC-10 volume, partially offset by lower volume on the Intercontinental Ballistic Missile (ICBM) program.

Operating income for the three months ended June 30, 2016 increased \$3 million, or 2 percent, and operating margin rate increased to 10.8 percent from 10.3 percent. Operating income and margin rate increased primarily due to improved performance on System Modernization and Services and Global Logistics and Modernization programs, partially offset by lower margins on Advanced Defense Services programs due to the positive impact of EAC adjustments related to the completion of several programs in 2015.

*Year to Date*

Technology Services sales for the six months ended June 30, 2016 decreased \$78 million, or 3 percent, as compared with the same period in 2015. The decrease was principally due to lower volume on Global Logistics and Modernization and Advanced Defense Services programs. Global Logistics and Modernization sales decreased mainly due to lower volume on the ICBM program and restricted programs, partially offset by higher KC-10 volume. Advanced Defense Services sales declined primarily due to the completion of several programs in 2015, partially offset by higher volume on the MNG TSC and Passenger Systems Program Directorate programs.

Operating income for the six months ended June 30, 2016 decreased \$4 million, or 2 percent, and operating margin rate increased to 10.6 percent from 10.4 percent. Operating income declined primarily due to the lower sales volume described above. Operating margin rate increased principally due to improved performance on System Modernization and Services and Global Logistics and Modernization programs, partially offset by lower margins on Advanced Defense Services programs due to the positive impact of EAC adjustments related to the completion of several programs in 2015.

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**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 June 30				Six Months Ended June 30			
	2016		2015		2016		2015	
<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	\$ 2,123	\$ 1,855	\$ 2,029	\$ 1,764	\$ 4,214	\$ 3,706	\$ 3,987	\$ 3,490
Service	477	433	469	415	960	870	1,009	875
<b>Mission Systems</b>								
Product	1,575	1,343	1,579	1,363	3,113	2,687	3,190	2,751
Service	1,115	996	1,049	917	2,270	1,992	2,149	1,896
<b>Technology Services</b>								
Product	83	77	93	96	163	148	187	177
Service	1,130	1,005	1,145	1,014	2,264	2,022	2,318	2,067
<b>Segment Totals</b>								
Total Product	\$ 3,781	\$ 3,275	\$ 3,701	\$ 3,223	\$ 7,490	\$ 6,541	\$ 7,364	\$ 6,418
Total Service	2,722	2,434	2,663	2,346	5,494	4,884	5,476	4,838
Intersegment eliminations	(503)	(440)	(468)	(415)	(1,028)	(901)	(987)	(880)
<b>Total segment<sup>(1)</sup></b>	<b>\$ 6,000</b>	<b>\$ 5,269</b>	<b>\$ 5,896</b>	<b>\$ 5,154</b>	<b>\$ 11,956</b>	<b>\$ 10,524</b>	<b>\$ 11,853</b>	<b>\$ 10,376</b>

<sup>(1)</sup> 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 June 30, 2016 increased \$80 million, or 2 percent, as compared with the same period in 2015. The increase was primarily driven by higher product sales on Manned Aircraft programs at Aerospace Systems due to higher restricted volume and increased F-35 deliveries, partially offset by fewer F/A-18 deliveries.

Product costs for the three months ended June 30, 2016 increased \$52 million, or 2 percent, consistent with the change in product sales described above. Higher product margins at Mission Systems and Technology Services were partially offset by lower product margins at Aerospace Systems due to changes in contract mix.

*Year to Date*

Product sales for the six months ended June 30, 2016 increased \$126 million, or 2 percent, as compared with the same period in 2015. The increase was driven primarily by higher product sales at Aerospace Systems, partially offset by lower product sales at Mission Systems. The increase at Aerospace Systems was primarily due to higher volume on Manned Aircraft programs. The decrease at Mission Systems was primarily due to lower volume on international, restricted and combat avionics production programs, partially offset by ramp-up on the G/ATOR program.

Product costs for the six months ended June 30, 2016 increased \$123 million, or 2 percent, consistent with the change in product sales described above.

**Service Sales and Costs**

*Current Quarter*

Service sales for the three months ended June 30, 2016 increased \$59 million, or 2 percent, as compared with the same period in 2015. The increase was primarily due to higher service sales at Mission Systems due to higher volume and ramp-up on several Sensors and Processing service programs.

Service costs for the three months ended June 30, 2016 increased \$88 million, or 4 percent, as compared with the same period in 2015. The increase was primarily driven by the increase in service sales described above as well as lower service margins at Mission Systems due to ramp-up on several Sensors and Processing service programs.

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

Service sales for the six months ended June 30, 2016 increased slightly as compared with the same period in 2015. The increase was primarily due to higher service sales at Mission Systems due to ramp-up on several Sensors and Processing service programs, partially offset by lower service volume on restricted service programs at Aerospace Systems and on the ICBM program at Technology Services.

Service costs for the six months ended June 30, 2016 increased \$46 million, or 1 percent, as compared with the same period in 2015. The increase was primarily driven by the increase in service sales described above as well as lower service margins at Aerospace Systems due to the timing of risk reductions.

**BACKLOG**

Total backlog includes both funded backlog (firm orders for which funding is authorized and appropriated) and unfunded backlog. Unexercised contract options and indefinite delivery indefinite quantity (IDIQ) contracts are not included in backlog until the time the option or IDIQ task order is exercised or awarded. For multi-year service contracts with non-U.S. Government customers having no stated contract values, backlog includes only the amounts committed by the customer. Backlog is converted into sales as costs are incurred or deliveries are made.

During the six months ended June 30, 2016, the company's total backlog increased and reflects higher backlog at Aerospace Systems, a high single-digit percent decline in backlog at Technology Services and a modest decline in backlog at Mission Systems. The company recorded various awards during the six months ended June 30, 2016, including a portion of the B-21 Long-Range Strike Bomber program.

**LIQUIDITY AND CAPITAL RESOURCES**

We endeavor to achieve the most efficient conversion of operating income into cash for deployment in our business and to maximize shareholder value through other cash deployment activities. In addition to our cash position, we use various financial measures to assist in capital deployment decision-making, including cash provided by (used in) operating activities and free cash flow. We believe these measures are useful to investors in assessing our financial performance and condition.

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

**Operating Cash Flow**

The table below summarizes key components of cash flow provided by (used in) operating activities:

<i>\$ in millions</i>	Six Months Ended June 30	
	2016	2015
Net earnings	\$ 1,073	\$ 1,015
Non-cash items <sup>(1)</sup>	157	296
Changes in assets and liabilities:		
Trade working capital	(872)	(969)
Retiree benefits	209	(378)
Other, net	(23)	8
Net cash provided by (used in) operating activities	\$ 544	\$ (28)

<sup>(1)</sup> Includes depreciation and amortization, stock based compensation expense (including related excess tax benefits in 2015) and deferred income taxes.

Net cash provided by operating activities for the six months ended June 30, 2016 increased \$572 million, as compared with the same period in 2015, principally due to a \$500 million voluntary pre-tax pension contribution (\$325 million after-tax) made in the first quarter of 2015, changes in trade working capital and the impact of the adoption of ASU No. 2016-09 described in Note 1 to the unaudited condensed consolidated financial statements in Part I, Item 1.

**Free Cash Flow**

We define free cash flow as cash provided by (used in) operating activities less capital expenditures. We believe free cash flow is a useful measure for investors as it represents cash flow available after capital spending and is a key factor in our planning for, and consideration of, acquisitions, payment of dividends and stock repurchases.

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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 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 provided by (used in) operating activities to free cash flow:

<i>\$ in millions</i>	Six Months Ended June 30	
	2016	2015
Net cash provided by (used in) operating activities	\$ 544	\$ (28)
Less: capital expenditures	(471)	(232)
Free cash flow	\$ 73	\$ (260)

Free cash flow for the six months ended June 30, 2016 increased \$333 million, as compared with the same period in 2015, principally due to the increase in net cash provided by operating activities described above, partially offset by higher capital expenditures in 2016, including \$239 million for the purchase of facilities previously leased by Mission Systems.

**Investing Cash Flow**

Net cash used in investing activities for the six months ended June 30, 2016 increased to \$469 million from \$234 million in the prior year period principally due to higher capital expenditures, including the \$239 million purchase of facilities described above.

**Financing Cash Flow**

Net cash used in financing activities for the six months ended June 30, 2016 decreased to \$1.3 billion from \$1.7 billion in the prior year period primarily due to lower share repurchases in 2016, partially offset by \$600 million of net proceeds from our issuance of unsecured senior notes in 2015, a debt repayment of \$107 million in 2016, and the impact of the adoption of ASU No. 2016-09 described in Note 1 to the unaudited condensed consolidated financial statements in Part I, Item 1.

*Unsecured Senior Notes* - See Note 5 to the unaudited condensed consolidated financial statements in Part I, Item 1 for further information on our unsecured senior notes.

*Credit Facility and Financial Arrangements* - See Note 7 to the unaudited condensed consolidated financial statements in Part I, Item 1 for further information on our credit facility and our use of standby letters of credit and guarantees.

*Share Repurchases* - See Note 2 to the unaudited condensed consolidated financial statements in Part I, Item 1 for further information on our share repurchase programs.

**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 2015 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

## **NORTHROP GRUMMAN CORPORATION**

forward-looking statements include, but are not limited to, those identified and discussed more fully in the section entitled “Risk Factors” in our 2015 Annual Report on Form 10-K. They include:

- our dependence on the U.S. Government for a substantial portion of our business
- significant delays or reductions in appropriations for our programs and U.S. Government funding more broadly
- investigations, claims and/or litigation
- our exposure to additional risks as a result of our international business
- the improper conduct of employees, agents, business partners or joint ventures in which we participate and the impact on our reputation and our ability to do business
- the use of estimates when accounting for our contracts and the effect of contract cost growth and/or changes in estimated contract revenues and costs
- cyber and other security threats or disruptions faced by us, our customers or our partners
- the future investment performance of plan assets, changes in actuarial assumptions associated with our pension and other post-retirement benefit plans and related legislative or other regulatory actions
- the performance and financial viability of our subcontractors and suppliers and the availability and pricing of materials and components
- increased competition within our markets and bid protests
- changes in procurement and other laws, regulations and practices applicable to our industry, findings by the U.S. Government, and changes in our customers’ business practices
- natural and/or environmental disasters
- the adequacy and availability of our insurance coverage, customer indemnifications or other liability protections
- products and services we provide related to nuclear and other hazardous and high risk operations, which subject us to various environmental, regulatory, financial, reputational and other risks
- changes in business conditions that could impact business investments and/or recorded goodwill or the value of other long-lived assets
- inability to develop new products and technologies and maintain technologies, facilities, equipment and a qualified workforce to win new competitions and meet the needs of our customers
- inability to meet performance obligations under our contracts
- unforeseen environmental costs
- our ability to protect our intellectual property rights
- unanticipated changes in our tax provisions or exposure to additional tax liabilities
- our potential exposure to claims, liabilities and reputational harm relating to our former Shipbuilding business

Additional information regarding these risks and other important factors can be found in the section entitled “Risk Factors” in our 2015 Annual Report on Form 10-K and as disclosed in this report and from time to time in our other filings with the SEC.

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

## **CONTRACTUAL OBLIGATIONS**

There have been no material changes to our contractual obligations from those discussed in our 2015 Annual Report on Form 10-K.

**NORTHROP GRUMMAN CORPORATION**

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

There have been no material changes to our market risks from those discussed in our 2015 Annual Report on Form 10-K.

**Item 4. Controls and Procedures**

**DISCLOSURE CONTROLS AND PROCEDURES**

Our principal executive officer (Chairman, Chief Executive Officer and President) and principal financial officer (Corporate Vice President and Chief Financial Officer) have evaluated the company's disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) of the Securities Exchange Act of 1934 (the Exchange Act)) as of June 30, 2016, 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 June 30, 2016, no change occurred in our internal controls over financial reporting that materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

## NORTHROP GRUMMAN CORPORATION

## PART II. OTHER INFORMATION

**Item 1. Legal Proceedings**

We have provided information about certain legal proceedings in which we are involved in our 2015 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.

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 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 2015 Annual Report on Form 10-K, as updated by Note 6 to the unaudited condensed consolidated financial statements in this report, we do not believe that the outcome of any matter currently pending against the company is likely to have a material adverse effect on the company's unaudited condensed consolidated financial position as of June 30, 2016, 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 2015 Annual Report on Form 10-K.

**Item 1A. Risk Factors**

For a discussion of our risk factors please see the section entitled "Risk Factors" in our 2015 Annual Report on Form 10-K.

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

*Purchases of Equity Securities* – The table below summarizes our repurchases of common stock during the three months ended June 30, 2016:

Period	Total Number of Shares Purchased	Average Price Paid per Share <sup>(1)</sup>	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased under the Plans or Programs (\$ in millions)
April 2, 2016 - April 29, 2016	500,908	\$ 201.91	500,908	\$ 3,888
April 30, 2016 - May 27, 2016	663,503	213.21	663,503	3,747
May 28, 2016 - July 1, 2016	747,228	215.70	747,228	3,585
Total	1,911,639	\$ 211.22	1,911,639	\$ 3,585

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

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

See Note 2 to the unaudited condensed consolidated financial statements in Part I, Item 1 for further information on our share repurchase programs.

**Item 3. Defaults Upon Senior Securities**

No information is required in response to this item.

**Item 4. Mine Safety Disclosures**

No information is required in response to this item.

**Item 5. Other Information**

No information is required in response to this item.

**NORTHROP GRUMMAN CORPORATION**

**Item 6. Exhibits**

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

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

\*+10.1 Non-Employee Director Compensation Term Sheet, effective May 18, 2016

\*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 June 30, 2016, formatted in XBRL (Extensible Business Reporting Language): (i) the Condensed Consolidated Statements of Earnings and Comprehensive Income, (ii) Condensed Consolidated Statements of Financial Position, (iii) Condensed Consolidated Statements of Cash Flows, (iv) Condensed Consolidated Statements of Changes in Shareholders' Equity, and (v) Notes to Condensed Consolidated Financial Statements

+ Management contract or compensatory plan or arrangement

\* Filed with this report

\*\* Furnished with this report



**NORTHROP GRUMMAN CORPORATION**

**SIGNATURES**

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

NORTHROP GRUMMAN CORPORATION  
(Registrant)

By:

*/s/ Michael A. Hardesty*

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

Date: July 26, 2016

**Board of Director Compensation**

(effective as of May 18, 2016)

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

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

*Equity Grant:* Directors are awarded an annual equity grant of \$145,000 in deferred stock units (“Automatic Stock Units”), awarded annually on the day of the Company’s Annual Meeting of Shareholders. The Automatic Stock Units will vest on the one year anniversary of the grant date.

Directors may elect to have all or any portion of their Automatic Stock Units paid on (A) the earlier of (i) the beginning of a specified calendar year after the vesting date or (ii) their separation from service as a member of the Board or (B) the vesting date.

*Deferral of Cash Retainer:* Directors may elect to defer payment of all or a portion of their cash retainer fees and any other committee retainer fees into a deferred stock unit account (“Elective Stock Units”). Elective Stock Units are awarded on a calendar quarterly basis.

Directors may elect to have all or a portion of their Elective Stock Units paid on the earlier of (i) the beginning of a specified calendar year or (ii) their separation from service as a member of the Board.

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

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

<i>\$ in millions</i>	Six Months Ended June 30		Year Ended December 31				
<b>Earnings:</b>	<b>2016</b>	2015	2015	2014	2013	2012	2011
Earnings from continuing operations before income taxes	\$ 1,406	\$ 1,440	\$ 2,790	\$ 2,937	\$ 2,863	\$ 2,965	\$ 3,083
<b>Fixed Charges:</b>							
Interest expense, including amortization of debt premium	150	151	301	282	257	212	221
Portion of rental expenses on operating leases deemed to be representative of the interest factor	53	52	101	101	99	116	140
Earnings from continuing operations before income taxes and fixed charges	\$ 1,609	\$ 1,643	\$ 3,192	\$ 3,320	\$ 3,219	\$ 3,293	\$ 3,444
<b>Fixed Charges:</b>	\$ 203	\$ 203	\$ 402	\$ 383	\$ 356	\$ 328	\$ 361
Ratio of earnings to fixed charges	7.9	8.1	7.9	8.7	9.0	10.0	9.5

**LETTER FROM INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

July 26, 2016

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

We have reviewed, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the unaudited interim financial information of Northrop Grumman Corporation and subsidiaries for the periods ended June 30, 2016, and 2015, as indicated in our report dated July 26, 2016; because we did not perform an audit, we expressed no opinion on that information.

We are aware that our report referred to above, which is included in your Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, 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: July 26, 2016

**/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: July 26, 2016

**/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 June 30, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Wesley G. Bush, Chairman, Chief Executive Officer and President of the company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: July 26, 2016

**/s/ Wesley G. Bush**

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Wesley G. Bush  
Chairman, Chief Executive Officer and President

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

In connection with the Quarterly Report of Northrop Grumman Corporation (the "company") on Form 10-Q for the period ended June 30, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Kenneth L. Bedingfield, Corporate Vice President and Chief Financial Officer of the company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: July 26, 2016

**/s/ Kenneth L. Bedingfield**

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Kenneth L. Bedingfield  
Corporate Vice President and Chief Financial Officer



