NORTHROP GRUMMAN CORP /DE/
Form 10-Q
April 26, 2017
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

---

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

For the Quarterly Period Ended March 31, 2017

or

o 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	80-0640649
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
2980 Fairview Park Drive, Falls Church, Virginia	22042
(Address of principal executive offices)	(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 x No o

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 x No o

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

Large accelerated filer x Accelerated filer o

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

Emerging growth company o

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

Exchange Act.o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes o No x

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

As of April 21, 2017, 174,572,774 shares of common stock were outstanding.

Table of Contents

NORTHROP GRUMMAN CORPORATION

TABLE OF CONTENTS

		Page
	PART I – FINANCIAL INFORMATION	
Item 1.	Financial Statements (Unaudited)	
	Condensed Consolidated Statements of Earnings and Comprehensive Income	1
	Condensed Consolidated Statements of Financial Position	2
	Condensed Consolidated Statements of Cash Flows	3
	Condensed Consolidated Statements of Changes in Shareholders' Equity	4
	Notes to Condensed Consolidated Financial Statements	
	1. Basis of Presentation	5
	2. Earnings Per Share, Share Repurchases and Dividends on Common Stock	8
	3. Segment Information	9
	4. Income Taxes	9
	5. Fair Value of Financial Instruments	10
	6. Investigations, Claims and Litigation	10
	7. Commitments and Contingencies	11
	8. Retirement Benefits	13
	9. Stock Compensation Plans and Other Compensation Arrangements	13
	Report of Independent Registered Public Accounting Firm	15
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	
	Overview	16
	Consolidated Operating Results	17
	Segment Operating Results	18
	Product and Service Analysis	21
	Backlog	22
	Liquidity and Capital Resources	22
	Critical Accounting Policies, Estimates and Judgments	23
	Accounting Standards Updates	23
	Forward-Looking Statements and Projections	23
	Contractual Obligations	24
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	24
Item 4.	Controls and Procedures	24
	PART II – OTHER INFORMATION	
Item 1.	Legal Proceedings	26
Item 1A.	Risk Factors	26
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	26
Item 3.	Defaults Upon Senior Securities	26
Item 4.	Mine Safety Disclosures	26
Item 5.	Other Information	26
Item 6.	Exhibits	27
	Signatures	28

Table of Contents

NORTHROP GRUMMAN CORPORATION

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

CONDENSED CONSOLIDATED STATEMENTS OF EARNINGS AND COMPREHENSIVE INCOME

(Unaudited)

	Three Months Ended March 31	
$ in millions, except per share amounts	2017	2016
Sales		
Product	$3,834	$3,478
Service	2,433	2,478
Total sales	6,267	5,956
Operating costs and expenses		
Product	2,871	2,611
Service	1,887	1,950
General and administrative expenses	677	656
Operating income	832	739
Other (expense) income		
Interest expense	(75)	(76)
Other, net	16	13
Earnings before income taxes	773	676
Federal and foreign income tax expense	133	120
Net earnings	$640	$556
Basic earnings per share	$3.66	$3.07
Weighted-average common shares outstanding, in millions	174.8	181.3
Diluted earnings per share	$3.63	$3.03
Weighted-average diluted shares outstanding, in millions	176.1	183.4
Net earnings (from above)	$640	$556
Other comprehensive income		
Change in unamortized benefit plan costs, net of tax	99	101
Change in cumulative translation adjustment	4	(4)
Other, net	2	(1)
Other comprehensive income, net of tax	105	96
Comprehensive income	$745	$652

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

Table of Contents

NORTHROP GRUMMAN CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
(Unaudited)

$ in millions	March 31, 2017	December 31, 2016
Assets		
Cash and cash equivalents	$ 1,403	$ 2,541
Accounts receivable, net	4,072	3,299
Inventoried costs, net	933	816
Prepaid expenses and other current assets	160	200
Total current assets	6,568	6,856
Property, plant and equipment, net of accumulated depreciation of $4,904 in 2017 and $4,831 in 2016	3,656	3,588
Goodwill	12,454	12,450
Deferred tax assets	1,416	1,462
Other non-current assets	1,319	1,258
Total assets	$ 25,413	$ 25,614
Liabilities		
Trade accounts payable	$ 1,374	$ 1,554
Accrued employee compensation	1,141	1,342
Advance payments and amounts in excess of costs incurred	1,286	1,471
Other current liabilities	1,367	1,263
Total current liabilities	5,168	5,630
Long-term debt, net of current portion	7,060	7,058
Pension and other post-retirement benefit plan liabilities	6,746	6,818
Other non-current liabilities	881	849
Total liabilities	19,855	20,355
Commitments and contingencies (Note 7)		
Shareholders' equity		
Preferred stock, $1 par value; 10,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, $1 par value; 800,000,000 shares authorized; issued and outstanding: 2017—174,675,878 and 2016—175,068,263	175	175
Paid-in capital	—	—
Retained earnings	10,824	10,630
Accumulated other comprehensive loss	(5,441)	(5,546)
Total shareholders' equity	5,558	5,259
Total liabilities and shareholders' equity	$ 25,413	$ 25,614

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

Table of Contents

NORTHROP GRUMMAN CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Three Months Ended March 31	
$ in millions	2017	2016
Operating activities		
Net earnings	$640	$556
Adjustments to reconcile to net cash used in operating activities:		
Depreciation and amortization	104	103
Stock-based compensation	17	14
Deferred income taxes	(16)	(35)
Changes in assets and liabilities:		
Accounts receivable, net	(773)	(514)
Inventoried costs, net	(117)	(89)
Prepaid expenses and other assets	(46)	(4)
Accounts payable and other liabilities	(466)	(364)
Income taxes payable	152	174
Retiree benefits	86	105
Other, net	(20)	(6)
Net cash used in operating activities	(439)	(60)
Investing activities		
Capital expenditures	(216)	(298)
Other, net	2	—
Net cash used in investing activities	(214)	(298)
Financing activities		
Common stock repurchases	(229)	(282)
Payments of long-term debt	—	(107)
Cash dividends paid	(166)	(159)
Payments of employee taxes withheld from share-based awards	(90)	(137)
Other, net	—	1
Net cash used in financing activities	(485)	(684)
Decrease in cash and cash equivalents	(1,138)	(1,042)
Cash and cash equivalents, beginning of year	2,541	2,319
Cash and cash equivalents, end of period	$1,403	$1,277

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

Table of Contents

NORTHROP GRUMMAN CORPORATION

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

	Three Months Ended March 31	
$ in millions, except per share amounts	2017	2016
Common stock		
Beginning of year	$175	$181
Common stock repurchased	(1)	(2)
Shares issued for employee stock awards and options	1	2
End of period	175	181
Paid-in capital		
Beginning of year	—	—
End of period	—	—
Retained earnings		
Beginning of year	10,630	10,661
Common stock repurchased	(215)	(284)
Net earnings	640	556
Dividends declared	(159)	(147)
Stock compensation	(72)	(122)
End of period	10,824	10,664
Accumulated other comprehensive loss		
Beginning of year	(5,546)	(5,320)
Other comprehensive income, net of tax	105	96
End of period	(5,441)	(5,224)
Total shareholders' equity	$5,558	$5,621
Cash dividends declared per share	$0.90	$0.80

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

Table of Contents

NORTHROP GRUMMAN CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

1. BASIS OF PRESENTATION

Principles of Consolidation and Reporting

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

The accompanying unaudited condensed consolidated financial statements are prepared in accordance with the rules of the Securities and Exchange Commission (SEC) for interim reporting. These financial statements include adjustments of a normal recurring nature considered necessary by management for a fair presentation of the company's unaudited condensed consolidated financial position, results of operations and cash flows.

The results reported in these unaudited condensed consolidated financial statements are not necessarily indicative of results that may be expected for the entire year. These unaudited condensed consolidated financial statements should be read in conjunction with the information contained in the company's Annual Report on Form 10-K for the year ended December 31, 2016 (2016 Annual Report on Form 10-K).

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

Accounting Estimates

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

Revenue Recognition

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

Contract sales may include estimated amounts not contractually agreed to or yet funded by the customer, including cost or performance incentives (such as award and incentive fees), un-priced change orders, contract claims and requests for equitable adjustment (REAs). Further, as contracts are performed, change orders can be a regular occurrence and may be un-priced until negotiated with the customer. Un-priced change orders, contract claims (including change orders unapproved as to both scope and price) and REAs are included in estimated contract sales when management believes it is probable the un-priced change order, claim and/or REA will result in additional contract revenue and the amount can be reliably estimated based on the facts and circumstances known to us at the time. Amounts recognized related to claims and REAs as of March 31, 2017 were not material individually or in aggregate.

Net Estimate-At-Completion (EAC) Adjustments - We recognize changes in estimated contract sales or costs and the resulting operating margins using the cumulative catch-up method of accounting. This method recognizes, in current period operating margin, the cumulative effect of the changes on current and prior periods as net EAC adjustments;

sales and operating margins in future periods of contract performance are recognized as if the revised estimates had been used since contract inception. If it is determined that a loss will result from the performance of a contract, the entire amount of the estimable future loss, including an allocation of general and administrative costs, is charged against income in the period the loss is identified. Loss provisions are first offset against costs included in unbilled accounts receivable or inventoried costs; remaining amounts are reflected in current liabilities.

Table of Contents

NORTHROP GRUMMAN CORPORATION

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 adjustments to an individual contract was material to the accompanying unaudited condensed consolidated financial statements.

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

	Three Months Ended March 31	
$ in millions, except per share data	2017	2016
Operating Income	$115	$129
Net Earnings[1]	75	84
Diluted earnings per share[1]	0.43	0.46

[1] Based on statutory tax rates

Accumulated Other Comprehensive Loss

The components of accumulated other comprehensive loss are as follows:

$ in millions	March 31, 2017	December 31, 2016
Unamortized benefit plan costs, net of tax benefit of $3,378 as of March 31, 2017 and $3,439 as of December 31, 2016	$ (5,317)	$ (5,416)
Cumulative translation adjustment	(128)	(132)
Net unrealized gain on marketable securities and cash flow hedges, net of tax	4	2
Total accumulated other comprehensive loss	$ (5,441)	$ (5,546)

Unamortized benefit plan costs consist primarily of net after-tax actuarial losses totaling $5.4 billion and $5.6 billion as of March 31, 2017 and December 31, 2016, respectively. Net actuarial gains or losses are re-determined annually or upon remeasurement events and principally arise from changes in the interest rate used to discount our benefit obligations and differences between expected and actual returns on plan assets.

Reclassifications from accumulated other comprehensive loss to net earnings related to the amortization of benefit plan costs were $99 million and $101 million, net of taxes, for the three months ended March 31, 2017 and 2016, respectively. The reclassifications represent the amortization of net actuarial losses and prior service credits, and are included in the computation of net periodic pension cost. See Note 8 for further information.

Reclassifications from accumulated other comprehensive loss to net earnings, relating to cumulative translation adjustments, marketable securities and effective cash flow hedges for the three months ended March 31, 2017 and 2016, respectively, were not material.

Related Party Transactions

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

Accounting Standards Updates

On March 10, 2017, the FASB issued ASU No. 2017-07 Compensation Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost. ASU 2017-07 requires employers that sponsor defined benefit pension and/or other post-retirement benefit plans to report the service cost component of net benefit cost in the same line item as other compensation costs arising from services rendered by the pertinent employees during the period. Employers are required to present the other components of net benefit costs in the income statement separately from the service cost component and outside a subtotal of income from operations. Additionally, only the service cost component of net periodic pension cost will be eligible for asset capitalization. We expect adoption of ASU 2017-07 to result in a change in our net FAS/CAS pension adjustment within operating income, which will be offset by a corresponding change in other, net to reflect the impact of presenting the interest cost, expected return on plan assets, and amortization of prior service credit and net actuarial loss components of net

periodic benefit costs outside of operating income. We expect to adopt ASU 2017-07 on January 1, 2018 using the retrospective method and do not anticipate a material change to our 2017 net FAS/CAS pension adjustment or other,

Table of Contents

net when they are recast to reflect the standard. We also do not expect ASU 2017-07 to have a material impact on our consolidated statements of financial position or cash flows.

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

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

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

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

Upon adoption of the standard, we also expect a reduction in inventoried costs, an increase in unbilled accounts receivable and a net increase in retained earnings primarily to reflect the impact of converting units-of-delivery contracts to the cost-to-cost method of accounting. ASU 2014-09 also requires expanded disclosure regarding the nature, timing, and uncertainty of revenue, cash flow and customer contract balances, including how and when we satisfy our performance obligations and the relationship between revenue recognized and changes in contract balances during a reporting period. We have evaluated these disclosure requirements and are incorporating the collection of relevant data into our quarterly processes.

We expect to complete our assessment of the cumulative effect of adopting ASU 2014-09 as well as the expected impact of adoption on our 2016 results during the first half of 2017. We will continue our evaluation of ASU 2014-09 (including how it may impact new contracts we receive as well as new or emerging interpretations of the standard) through the date of adoption.

Other accounting standards updates effective after March 31, 2017 are not expected to have a material effect on the company's unaudited condensed consolidated financial position, annual results of operations and/or cash flows.

Table of Contents

NORTHROP GRUMMAN CORPORATION

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

Basic Earnings Per Share

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

Diluted Earnings Per Share

Diluted earnings per share include the dilutive effect of awards granted to employees under stock-based compensation plans. The dilutive effect of these securities totaled 1.3 million shares and 2.1 million shares for the three months ended March 31, 2017 and 2016, respectively.

Share Repurchases

On December 4, 2014, the company's board of directors authorized a share repurchase program of up to $3.0 billion of the company's common stock (the "2014 Repurchase Program"). Repurchases under the 2014 Repurchase Program commenced in March 2015 and were completed in March 2016. On September 16, 2015, the company's board of directors authorized a new share repurchase program of up to $4.0 billion of the company's common stock (the "2015 Repurchase Program"). Repurchases under the 2015 Repurchase Program commenced in March 2016 upon completion of the company's 2014 Repurchase Program. As of March 31, 2017, repurchases under the 2015 Repurchase Program totaled $1.5 billion; $2.5 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[1]	Date Completed	Shares Repurchased (in millions) Three Months Ended March 31	
					2017	2016
December 4, 2014	$ 3,000	18.0	$ 166.70	March 2016	—	1.4
September 16, 2015	$ 4,000	6.8	$ 220.37		0.9	0.1

[1] 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.

Table of Contents

NORTHROP GRUMMAN CORPORATION

3. SEGMENT INFORMATION

At March 31, 2017, the company was aligned in three operating sectors, which also comprise our reportable segments: Aerospace Systems, Mission Systems and Technology Services.

The following table presents sales and operating income by segment:

	Three Months Ended March 31	
$ in millions	2017	2016
Sales		
Aerospace Systems	$2,898	$2,574
Mission Systems	2,739	2,693
Technology Services	1,194	1,214
Intersegment eliminations	(564)	(525)
Total sales	6,267	5,956
Operating income		
Aerospace Systems	312	286
Mission Systems	353	353
Technology Services	131	126
Intersegment eliminations	(70)	(64)
Total segment operating income	726	701
Net FAS/CAS pension adjustment	136	74
Unallocated corporate expenses	(29)	(33)
Other	(1)	(3)
Total operating income	$832	$739

Net FAS/CAS Pension Adjustment

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

Unallocated Corporate Expenses

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

4. INCOME TAXES

	Three Months Ended March 31	
$ in millions	2017	2016
Federal and foreign income tax expense	$133	$120
Effective income tax rate	17.2 %	17.8 %

The company’s effective tax rate of 17.2 percent for the three months ended March 31, 2017 was comparable with the same period in 2016. Both periods reflect comparable tax benefits associated with the manufacturing deduction and research credits. In addition, the company’s effective tax rate for the three months ended March 31, 2017 includes $47 million of excess tax benefits related to employee share-based compensation, a $42 million benefit recognized in connection with the Congressional Joint Committee on Taxation’s approval of the Internal Revenue Service (IRS) examination of the company’s 2012-2013 tax returns and a $22 million benefit recognized for additional research credits claimed on our prior year tax returns. The company’s effective tax rate of 17.8 percent for

Table of Contents

NORTHROP GRUMMAN CORPORATION

the three months ended March 31, 2016 included $80 million of excess tax benefits related to employee share-based compensation.

We file income tax returns in the U.S. federal jurisdiction and in various state and foreign jurisdictions. Our 2014-2015 federal tax returns are currently under IRS examination.

In the first quarter of 2017, the company recorded a net increase in unrecognized tax benefits of approximately $55 million. This increase included $65 million related to tax benefits from temporary items claimed on a prior year tax return and $40 million related to positions taken on amended federal and state tax returns filed during the quarter. These increases were partially offset by a $60 million reduction in connection with the resolution of the IRS examination of the company's 2012-2013 tax returns described above.

5. FAIR VALUE OF FINANCIAL INSTRUMENTS

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

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

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

	March 31, 2017			December 31, 2016		
$ in millions	Level 1	Level 2	Total	Level 1	Level 2	Total
Financial Assets (Liabilities)						
Marketable securities						
Trading	$333	$ 1	$334	$321	$ 2	$323
Available-for-sale	11	—	11	7	—	7
Derivatives	—	6	6	—	8	8

The notional value of the company's derivative portfolio at March 31, 2017 and December 31, 2016, was $159 million and $147 million, respectively. At March 31, 2017 and December 31, 2016, no portion of the notional value was designated as a cash flow hedge. The derivative fair values and related unrealized gains/losses at March 31, 2017 and December 31, 2016, were not material.

There were no transfers of financial instruments between the three levels of the fair value hierarchy during the three months ended March 31, 2017.

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

Long-term Debt

The estimated fair value of long-term debt was $7.6 billion as of March 31, 2017 and December 31, 2016. We calculated the fair value of long-term debt using Level 2 inputs, based on interest rates available for debt with terms and maturities similar to the company's existing debt arrangements. The carrying value of long-term debt was $7.1 billion as of March 31, 2017 and December 31, 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

Table of Contents

million, less certain amounts outstanding under the contract. The principal counterclaim alleges that the company delayed its performance and caused damages to the USPS because USPS did not realize certain costs savings as early as it had expected. On April 2, 2013, the U.S. Department of Justice informed the company of a False Claims Act complaint relating to the FSS contract that was filed under seal by a relator in June 2011 in the U.S. District Court for the Eastern District of Virginia. On June 3, 2013, the United States filed a Notice informing the Court that the United States had decided not to intervene in this case. The relator alleged that the company violated the False Claims Act in a number of ways with respect to the FSS contract, alleged damage to the USPS in an amount of at least approximately $179 million annually, alleged that he was improperly discharged in retaliation, and sought an unspecified partial refund of the contract purchase price, penalties, attorney's fees and other costs of suit. The relator later voluntarily dismissed his retaliation claim and reasserted it in a separate arbitration, which he also ultimately voluntarily dismissed. On September 5, 2014, the court granted the company's motion for summary judgment and ordered the relator's False Claims Act case be dismissed with prejudice. On December 19, 2014, the company filed a motion for partial summary judgment asking the court to dismiss the principal counterclaim referenced above. On June 29, 2015, the Court heard argument and denied that motion without prejudice to filing a later motion to dismiss. Although the ultimate outcome of these matters ("the FSS matters," collectively), including any possible loss, cannot be predicted or reasonably estimated at this time, the company intends vigorously to pursue and defend the FSS matters.
On August 8, 2013, the company received a court-appointed expert's report in litigation pending in the Second Federal Court of the Federal District in Brazil brought by the Brazilian Post and Telegraph Corporation (ECT), a Brazilian state-owned entity, against Solystic SAS (Solystic), a French subsidiary of the company, and two of its consortium partners. In this suit, commenced on December 17, 2004, and relatively inactive for some period of time, ECT alleges the consortium breached its contract with ECT and seeks damages of approximately R$111 million (the equivalent of approximately $35 million as of March 31, 2017), plus interest, inflation adjustments and attorneys' fees, as authorized by Brazilian law, which amounts could be significant over time. The original suit sought R$89 million (the equivalent of approximately $28 million as of March 31, 2017) in damages. In October 2013, ECT asserted an additional damage claim of R$22 million (the equivalent of approximately $7 million as of March 31, 2017). In its counterclaim, Solystic alleges ECT breached the contract by wrongfully refusing to accept the equipment Solystic had designed and built and seeks damages of approximately €31 million (the equivalent of approximately $33 million as of March 31, 2017), plus interest, inflation adjustments and attorneys' fees, as authorized by Brazilian law. The Brazilian court retained an expert to consider certain issues pending before it. On August 8, 2013 and September 10, 2014, the company received reports from the expert, which contain some recommended findings relating to liability and the damages calculations put forth by ECT. Some of the expert's recommended findings were favorable to the company and others were favorable to ECT. In November 2014, the parties submitted comments on the expert's most recent report. On June 16, 2015, the court published a decision denying the parties' request to present oral testimony. At some future point, the court is expected to issue a decision on the parties' claims and counterclaims that could accept or reject, in whole or in part, the expert's recommended findings.
The company is a party to various investigations, lawsuits, claims and other legal proceedings, including government investigations and claims, that arise in the ordinary course of our business. The nature of legal proceedings is such that we cannot assure the outcome of any particular matter. However, based on information available to the company to date, and other than with respect to the FSS matters discussed separately above, the company does not believe that the outcome of any matter pending against the company is likely to have a material adverse effect on the company's unaudited condensed consolidated financial position as of March 31, 2017, or its annual results of operations and/or cash flows.

7. COMMITMENTS AND CONTINGENCIES

U.S. Government Cost Claims

From time to time, the company is advised of claims by the U.S. Government concerning certain potential disallowed costs, plus, at times, penalties and interest. When such findings are presented, the company and the U.S. Government representatives engage in discussions to enable the company to evaluate the merits of these claims, as well as to assess

the amounts being claimed. Where appropriate, provisions are made to reflect the company's estimated exposure for such potential disallowed costs. Such provisions are reviewed periodically using the most recent information available. The company believes it has adequately reserved for disputed amounts that are probable and reasonably estimable, and the outcome of any such matters would not have a material adverse effect on its unaudited condensed consolidated financial position as of March 31, 2017, or its annual results of operations and/or cash flows.

Table of Contents

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 March 31, 2017 and December 31, 2016:

$ in millions	Range of Reasonably Possible Future Costs[1]	Accrued Costs[2]	Deferred Costs[3]
March 31, 2017	$399 - $790	$ 402	$ 207
December 31, 2016	379 - 774	385	195

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

(2) As of March 31, 2017, $127 million is recorded in other current liabilities and $275 million is recorded in other non-current liabilities.

(3) As of March 31, 2017, $71 million is deferred in inventoried costs and $136 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 March 31, 2017, or its annual results of operations and/or cash flows.

Financial Arrangements

In the ordinary course of business, the company uses standby letters of credit and guarantees issued by commercial banks and surety bonds issued principally by insurance companies to guarantee the performance on certain obligations. At March 31, 2017, there were $205 million of stand-by letters of credit and guarantees and $202 million of surety bonds outstanding.

Indemnifications

The company has provided indemnification for certain environmental, income tax and other potential liabilities in connection with certain of its divestitures. The settlement of these liabilities is not expected to have a material adverse effect on the company's unaudited condensed consolidated financial position as of March 31, 2017, or its annual results of operations and/or cash flows.

Operating Leases

Rental expense for operating leases was $89 million and $91 million for the three months ended March 31, 2017 and 2016, respectively. These amounts are net of immaterial amounts of sublease rental income.

Credit Facilities

In December 2016, a subsidiary of the company entered into a two-year credit facility, with two additional one-year option periods, in an aggregate principal amount of £120 million (the equivalent of approximately $150 million as of March 31, 2017) (the "2016 Credit Agreement"). The 2016 Credit Agreement is guaranteed by the company. At March 31, 2017, there was £110 million (the equivalent of approximately $137 million as of March 31, 2017) outstanding under this facility, which bears interest at a rate of LIBOR plus 1.10 percent. All of the borrowings outstanding under this facility mature less than one year from the date of issuance, but may be renewed under the terms of the facility. Based on our intent and ability to refinance the obligations on a long-term basis, substantially all of the borrowings are classified as non-current.

The company also maintains an unsecured credit facility in an aggregate principal amount of $1.6 billion (the "2015 Credit Agreement") that matures in July 2020. At March 31, 2017, there was no balance outstanding under this facility. At March 31, 2017, the company was in compliance with all covenants under the Credit Agreements.

Table of Contents

NORTHROP GRUMMAN CORPORATION

8. RETIREMENT BENEFITS

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

	Three Months Ended March 31			
	Pension Benefits		Medical and Life Benefits	
$ in millions	2017	2016	2017	2016
Components of net periodic benefit cost				
Service cost	$114	$112	$6	$ 8
Interest cost	309	321	21	24
Expected return on plan assets	(471)	(463)	(22)	(21)
Amortization of:				
Prior service credit	(15)	(15)	(5)	(6)
Net loss from previous years	178	178	2	3
Net periodic benefit cost	$115	$133	$2	$ 8

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.

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

	Three Months Ended March 31	
$ in millions	2017	2016
Defined benefit pension plans	$23	$ 27
Medical and life benefit plans	11	11
Defined contribution plans	99	87

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:

	Three Months Ended March 31	
in millions	2017	2016
RSRs granted	0.1	0.2
RPSRs granted	0.3	0.3
Grant date aggregate fair value	$86	$ 87

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

Table of Contents

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:

	Three Months Ended March 31	
$ in millions	2017	2016
Minimum aggregate payout amount	$ 35	$ 34
Maximum aggregate payout amount	198	193

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

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

We have reviewed the accompanying condensed consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries (the "Company") as of March 31, 2017, and the related condensed consolidated statements of earnings and comprehensive income, cash flows, and changes in shareholders' equity for the three-month periods ended March 31, 2017 and 2016. These interim financial statements are the responsibility of the Company's management.

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

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

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated statement of financial position of Northrop Grumman Corporation and subsidiaries as of December 31, 2016, and the related consolidated statements of earnings and comprehensive income, cash flows, and changes in shareholders' equity for the year then ended (not presented herein); and in our report dated January 30, 2017, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying condensed consolidated statement of financial position as of December 31, 2016, is fairly stated, in all material respects, in relation to the consolidated statement of financial position from which it has been derived.

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

Table of Contents

NORTHROP GRUMMAN CORPORATION

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

OVERVIEW

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

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

Global Security and Economic Environment

The following is an update of events relating to the global security and economic environment since the filing of our 2016 Annual Report on Form 10-K.

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

U.S. Political and Economic Environment

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

The federal government has been operating under a continuing resolution since October 1, 2016 that provides funding at FY 2016 levels through April 28, 2017. On March 16, 2017, the President submitted a $30 billion supplemental request to the FY 2017 budget to Congress, proposing to increase the total DoD base budget request to $550 billion and the Overseas Contingency Operations (OCO) request to $70 billion. The proposed base budget exceeds the FY 2017 spending caps established in the Bipartisan Budget Act of 2015 (BBA). 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 the remainder of FY 2017, restricting new contract or program starts and placing potentially significant limitations on some planned program budgets.

Failure to enact appropriations or to extend a continuing resolution would result in a government shutdown of unknown duration. If a prolonged government shutdown were to occur, it could result in program cancellations and stop work orders and could limit our ability to perform on our U.S. Government contracts and the U.S. Government's ability to make timely payments.

In March 2017, the debt ceiling was reached and the Treasury Department began taking "extraordinary measures" to finance the government. If the debt ceiling is breached, we may be required to continue to perform for some period of time on certain of our U.S. Government contracts even if the U.S. Government is unable to make timely payments.

In March 2017, the President released a blueprint of his FY 2018 budget request, which seeks $574 billion for the DoD's base budget and $65 billion for OCO. The requested budget exceeds the caps established under the Budget Control Act of 2011 (BCA). It is unclear whether an annual appropriations bill will be enacted for FY 2018 at the levels proposed by the President and the government may once again at least begin its fiscal year operating under a continuing resolution.

Operating Performance Assessment and Reporting

We manage and assess our business based on our performance on contracts and programs (typically larger contracts or two or more closely-related contracts). We recognize sales from our portfolio of long-term contracts primarily using

the cost-to-cost method of percentage of completion accounting, but in some cases we utilize the units-of-delivery method of percentage of completion accounting. As a result, sales tend to fluctuate in concert with costs incurred and units delivered across our large portfolio of contracts. Due to Federal Acquisition Regulation (FAR) rules that govern our U.S. Government business and related Cost Accounting Standards (CAS), most types of costs

Table of Contents

NORTHROP GRUMMAN CORPORATION

are allocable to U.S. Government contracts. As such, we do not focus on individual cost groupings (such as manufacturing, engineering and design labor, subcontractor, material, overhead and general and administrative (G&A) costs), as much as we do on total contract cost, which is the key driver of our sales and operating income.

In evaluating our operating performance, we look primarily at changes in sales and operating income. Where applicable, significant fluctuations in operating performance attributable to individual contracts or programs, or changes in a specific cost element across multiple contracts, are described in our analysis. Based on this approach and the nature of our operations, the discussion of results of operations below first focuses on our three segments before distinguishing between products and services. Changes in sales are generally described in terms of volume, deliveries or other indicators of sales activity. Changes in margin rates are generally described in terms of performance and contract mix. For purposes of this discussion, volume generally refers to increases or decreases in sales or cost from production/service activity levels or delivery rates. Performance generally refers to non-volume related changes in profitability. Contract mix generally refers to changes in the ratio of contract type and/or lifecycle (e.g., development, production, sustainment, etc).

CONSOLIDATED OPERATING RESULTS

Selected financial highlights are presented in the table below:

	Three Months Ended March 31		%
$ in millions, except per share amounts	2017	2016	Change
Sales	$6,267	$5,956	5 %
Operating costs and expenses	5,435	5,217	4 %
Operating costs and expenses as a % of sales	86.7 %	87.6 %	
Operating income	832	739	13 %
Operating margin rate	13.3 %	12.4 %	
Federal and foreign income tax expense	133	120	11 %
Effective income tax rate	17.2 %	17.8 %	
Net earnings	640	556	15 %
Diluted earnings per share	$3.63	$3.03	20 %

Sales

Sales for the three months ended March 31, 2017 increased $311 million, or 5 percent, as compared with the same period in 2016, primarily due to higher sales at Aerospace Systems.

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

Operating Income

Operating income for the three months ended March 31, 2017 increased $93 million, or 13 percent, as compared with the same period in 2016. Operating income increased due to lower operating costs and expenses as a percentage of sales and the higher sales volume described above. The lower operating costs and expenses as a percentage of sales increased our operating margin rate to 13.3 percent from 12.4 percent in the prior year period and was principally driven by a $62 million increase in our net FAS/CAS pension adjustment, as described in “Segment Operating Results.” G&A as a percentage of sales for the three months ended March 31, 2017 decreased to 10.8 percent from 11.0 percent in the prior year reflecting higher sales and increased investment for future business.

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

Federal and Foreign Income Taxes

Our effective tax rate of 17.2 percent for the three months ended March 31, 2017 was comparable with the same period in 2016, as discussed in Note 4 to the unaudited condensed consolidated financial statements. While discrete tax benefits in each period reduced our effective tax rate well below the statutory rate, these items are not indicative of a longer-term trend or reflective of our expectation for the company’s ongoing annual effective tax rate. On an ongoing

basis (absent the impact of discrete items, such as those we recorded during the first quarter of 2017, and/or

Table of Contents

NORTHROP GRUMMAN CORPORATION

changes in federal tax legislation), we expect an annual effective tax rate of approximately 30 percent due principally to tax benefits associated with the manufacturing deduction and research credits.

Net Earnings

Net earnings for the three months ended March 31, 2017 increased $84 million, or 15 percent, as compared with the same period in 2016, consistent with the increase in operating income described above.

Diluted Earnings Per Share

Diluted earnings per share for the three months ended March 31, 2017 increased $0.60, or 20 percent, as compared with the same period in 2016. The increase is primarily due to the 15 percent increase in net earnings described above and a 4 percent reduction in weighted-average shares outstanding resulting from shares repurchased during 2016 and 2017.

SEGMENT OPERATING RESULTS

Basis of Presentation

At March 31, 2017, the company was aligned in three operating sectors, which also comprise our reportable segments: Aerospace Systems, Mission Systems, and Technology Services.

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

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

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

Segment Operating Income and Margin Rate

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

	Three Months Ended March 31		%
$ in millions	2017	2016	Change
Segment operating income	$726	$701	4 %
Segment operating margin rate	11.6 %	11.8 %	

Segment operating income for the three months ended March 31, 2017 increased $25 million, or 4 percent, as compared with the same period in 2016 as a result of higher sales volume, which more than offset a lower segment operating margin rate. Segment operating margin rate decreased due to lower segment margin rates at Aerospace Systems and Mission Systems, partially offset by a higher segment margin rate at Technology Services.

Table of Contents

NORTHROP GRUMMAN CORPORATION

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

	Three Months Ended March 31	
$ in millions	2017	2016
Segment operating income	$726	$701
CAS pension expense	251	207
Less: FAS pension expense	(115)	(133)
Net FAS/CAS pension adjustment	136	74
Unallocated corporate expenses	(29)	(33)
Other	(1)	(3)
Total operating income	$832	$739

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

Unallocated corporate expenses for the three months ended March 31, 2017 were comparable with the same period in 2016.

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

	Three Months Ended March 31	
$ in millions	2017	2016
Favorable EAC adjustments	$160	$200
Unfavorable EAC adjustments	(45)	(71)
Net EAC adjustments	$115	$129

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

	Three Months Ended March 31	
$ in millions	2017	2016
Aerospace Systems	$54	$59
Mission Systems	48	55
Technology Services	18	21
Eliminations	(5)	(6)
Net EAC adjustments	$115	$129

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

Table of Contents

NORTHROP GRUMMAN CORPORATION

AEROSPACE SYSTEMS

$ in millions	Three Months Ended March 31 2017	2016	% Change
Sales	$2,898	$2,574	13 %
Operating income	312	286	9 %
Operating margin rate	10.8 %	11.1 %	

Aerospace Systems sales for the three months ended March 31, 2017 increased $324 million, or 13 percent, as compared with the same period in 2016, primarily due to higher volume on Manned Aircraft programs. Higher Manned Aircraft sales were driven by higher restricted volume and increased F-35 deliveries. Autonomous Systems sales increased slightly and reflect higher Triton volume and lower NATO Alliance Ground Surveillance (AGS) volume. Space sales were comparable to the prior year and include higher restricted sales, offset by lower volume on the Advanced Extremely High Frequency program.

Operating income for the three months ended March 31, 2017 increased $26 million, or 9 percent, due to the higher sales volume described above, partially offset by a lower operating margin rate. Operating margin rate decreased to 10.8 percent from 11.1 percent principally due to changes in contract mix on Manned Aircraft programs and the timing of risk reductions on Space programs, partially offset by improved performance on Autonomous Systems programs.

MISSION SYSTEMS

$ in millions	Three Months Ended March 31 2017	2016	% Change
Sales	$2,739	$2,693	2 %
Operating income	353	353	— %
Operating margin rate	12.9 %	13.1 %	

Mission Systems sales for the three months ended March 31, 2017 increased $46 million, or 2 percent, as compared with the same period in 2016. The increase was primarily due to higher Sensors and Processing volume, partially offset by lower Advanced Capabilities volume. Sensors and Processing sales increased primarily due to higher volume on communications programs, including the Joint Counter Radio-Controlled Improvised Explosive Device Electronic Warfare (JCREW) program, and combat avionics programs, including increased F-35 volume. Advanced Capabilities sales decreased primarily due to lower volume on navigation and maritime systems programs. Cyber and ISR sales were comparable to the prior year.

Operating income for the three months ended March 31, 2017 was unchanged from the same period in 2016. Operating margin rate decreased to 12.9 percent from 13.1 percent primarily due to the timing of risk reductions on Advanced Capabilities programs, partially offset by improved performance on Cyber and ISR programs.

TECHNOLOGY SERVICES

$ in millions	Three Months Ended March 31 2017	2016	% Change
Sales	$1,194	$1,214	(2)%
Operating income	131	126	4 %
Operating margin rate	11.0 %	10.4 %	

Technology Services sales for the three months ended March 31, 2017 decreased $20 million, or 2 percent, as compared with the same period in 2016, primarily due to lower volume on System Modernization and Services and Advanced Defense Services programs. System Modernization and Services and Advanced Defense Services sales decreased principally due to the completion of several programs in 2016. Global Logistics and Modernization sales

Table of Contents

NORTHROP GRUMMAN CORPORATION

were comparable to the prior year and include higher international volume, partially offset by lower volume on the KC-10 program as our contract nears completion.

Operating income for the three months ended March 31, 2017 increased $5 million, or 4 percent, due to a higher operating margin rate, which more than offset the lower sales volume described above. Operating margin rate increased to 11.0 percent from 10.4 percent principally due to improved performance on System Modernization and Services and Global Logistics and Modernization programs.

PRODUCT AND SERVICE ANALYSIS

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

	Three Months Ended March 31			
$ in millions	2017		2016	
Segment Information:	Sales	Operating Costs and Expenses	Sales	Operating Costs and Expenses
Aerospace Systems				
Product	$2,382	$ 2,116	$2,091	$ 1,851
Service	516	470	483	437
Mission Systems				
Product	1,651	1,423	1,538	1,344
Service	1,088	963	1,155	996
Technology Services				
Product	81	74	80	71
Service	1,113	989	1,134	1,017
Segment Totals				
Total Product	$4,114	$ 3,613	$3,709	$ 3,266
Total Service	2,717	2,422	2,772	2,450
Intersegment eliminations	(564)	(494)	(525)	(461)
Total segment[1]	$6,267	$ 5,541	$5,956	$ 5,255

[1] A reconciliation of segment operating income to total operating income is included in “Segment Operating Results.”

Product Sales and Costs

Product sales for the three months ended March 31, 2017 increased $405 million, or 11 percent, as compared with the same period in 2016. The increase was primarily driven by higher product sales at Aerospace Systems and Mission Systems. Higher Aerospace Systems product sales were primarily driven by increased restricted volume and F-35 deliveries, partially offset by lower NATO AGS volume. The increase at Mission Systems was principally due to higher F-35, JCREW and restricted product volume.

Product costs for the three months ended March 31, 2017 increased $347 million, or 11 percent, as compared with the same period in 2016, consistent with the change in product sales above and reflects a higher product margin rate at Mission Systems, partially offset by a lower product margin rate at Aerospace Systems due to changes in contract mix.

Service Sales and Costs

Service sales for the three months ended March 31, 2017 decreased $55 million, or 2 percent as compared with the same period in 2016. The decrease was primarily driven by lower volume on several Cyber and ISR and Advanced Capabilities service programs at Mission Systems.

Service costs for the three months ended March 31, 2017 decreased $28 million, or 1 percent, as compared with the same period in 2016. The decrease was primarily driven by lower service sales described above and reflects a lower service margin rate at Mission Systems, partially offset by improved performance at Technology Services.

Table of Contents

NORTHROP GRUMMAN CORPORATION

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 three months ended March 31, 2017, the company's total backlog declined modestly.

LIQUIDITY AND CAPITAL RESOURCES

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

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

Operating Cash Flow

The table below summarizes key components of cash flow used in operating activities:

	Three Months Ended March 31	
$ in millions	2017	2016
Net earnings	$640	$556
Non-cash items[(1)]	105	82
Changes in assets and liabilities:		
Trade working capital	(1,250)	(797)
Retiree benefits	86	105
Other, net	(20)	(6)
Net cash used in operating activities	$(439)	$(60)

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

Net cash used in operating activities for the three months ended March 31, 2017 increased $379 million, as compared with the same period in 2016, principally due to increases in trade working capital. The net use of cash during the first quarter is consistent with the company's historical timing of operating cash flows, which are generally more heavily weighted toward the second half of the year.

Free Cash Flow

Free cash flow, as reconciled in the table below, is a non-GAAP measure defined as net cash used in operating activities less capital expenditures, and may not be defined and calculated by other companies in the same manner. We use free cash flow as a key factor in our planning for, and consideration of, acquisitions, stock repurchases, and the payment of dividends. This measure may be useful to investors and other users of our financial statements as a supplemental measure of our cash performance, but should not be considered in isolation, as a measure of residual cash flow available for discretionary purposes, or as an alternative to operating cash flows presented in accordance with U.S. GAAP.

The table below reconciles cash used in operating activities to free cash flow:

	Three Months Ended March 31	
$ in millions	2017	2016
Net cash used in operating activities	$(439)	$(60)

Less: capital expenditures	(216)	(298)
Free cash flow	$(655)	$(358)

Table of Contents

NORTHROP GRUMMAN CORPORATION

Free cash flow for the three months ended March 31, 2017 decreased $297 million, as compared with the same period in 2016, principally due to the increase in net cash used in operating activities described above, partially offset by lower capital expenditures. Lower capital expenditures were primarily due to the purchase of a facility by Mission Systems in the first quarter of 2016, partially offset by higher capital expenditures at Aerospace Systems in the first quarter of 2017.

Investing Cash Flow

Net cash used in investing activities for the three months ended March 31, 2017 decreased to $214 million from $298 million in the prior year period principally due to the lower capital expenditures described above.

Financing Cash Flow

Net cash used in financing activities for the three months ended March 31, 2017 decreased to $485 million from $684 million in the prior year period primarily due to a debt repayment of $107 million in the first quarter of 2016 and lower share repurchases.

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

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

CRITICAL ACCOUNTING POLICIES, ESTIMATES AND JUDGMENTS

There have been no material changes to our critical accounting policies, estimates or judgments from those discussed in our 2016 Annual Report on Form 10-K.

ACCOUNTING STANDARDS UPDATES

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

FORWARD-LOOKING STATEMENTS AND PROJECTIONS

This Form 10-Q and the information we are incorporating by reference contain statements, other than statements of historical fact, that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “expect,” “intend,” “may,” “could,” “plan,” “project,” “forecast,” “believe,” “estimate,” “c “anticipate,” “trends,” “goals” and similar expressions generally identify these forward-looking statements. Forward-looking statements include, among other things, statements relating to our future financial condition, results of operations and/or cash flows. Forward-looking statements are based upon assumptions, expectations, plans and projections that we believe to be reasonable when made, but which may change over time. These statements are not guarantees of future performance and inherently involve a wide range of risks and uncertainties that are difficult to predict. Specific risks that could cause actual results to differ materially from those expressed or implied in these forward-looking statements include, but are not limited to, those identified and discussed more fully in the section entitled “Risk Factors” in our 2016 Annual Report on Form 10-K and other filings with the SEC. They include:

- our dependence on the U.S. Government for a substantial portion of our business
- significant delays or reductions in appropriations for our programs and U.S. Government funding more broadly
- investigations, claims, disputes and/or litigation
- our exposure to additional risks as a result of our international business
- the improper conduct of employees, agents, subcontractors, suppliers, business partners or joint ventures in which we participate and the impact on our reputation, our ability to do business, and our financial position, results of operations and/or cash flows
- the use of estimates when accounting for our contracts and the effect of contract cost growth and/or changes in estimated contract revenues and costs
- the performance and financial viability of our subcontractors and suppliers and the availability and pricing of raw materials and components
- cyber and other security threats or disruptions faced by us, our customers or our partners

Table of Contents

- changes in procurement and other laws, regulations and practices applicable to our industry, findings by the U.S. Government, and changes in our customers' business practices globally
- increased competition within our markets and bid protests
- the ability to maintain a qualified workforce
- inability to meet performance obligations under our contracts
- environmental matters, including unforeseen environmental costs and government and third party claims
- natural and/or environmental disasters
- the adequacy and availability of our insurance coverage, customer indemnifications or other liability protections
- products and services we provide related to hazardous and high risk operations, which subject us to various environmental, regulatory, financial, reputational and other risks
- the future investment performance of plan assets, changes in actuarial assumptions associated with our pension and other post-retirement benefit plans and legislative or other regulatory actions impacting our pension, post-retirement and health and welfare plans
- changes in business conditions that could impact business investments and/or recorded goodwill or the value of other long-lived assets
- our ability to exploit or protect intellectual property rights
- inability to develop new products and technologies and maintain technologies, facilities, and equipment to win new competitions and meet the needs of our customers
- unanticipated changes in our tax provisions or exposure to additional tax liabilities

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

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

CONTRACTUAL OBLIGATIONS

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

Item 3. Quantitative and Qualitative Disclosures About Market Risk

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

Item 4. Controls and Procedures

DISCLOSURE CONTROLS AND PROCEDURES

Our principal executive officer (Chairman, Chief Executive Officer and President) and principal financial officer (Corporate Vice President and Chief Financial Officer) have evaluated the company's disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) of the Securities Exchange Act of 1934 (the Exchange Act)) as of March 31, 2017, and have concluded that these controls and procedures are effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the 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.

Table of Contents

NORTHROP GRUMMAN CORPORATION

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

During the three months ended March 31, 2017, no change occurred in our internal controls over financial reporting that materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

Table of Contents

NORTHROP GRUMMAN CORPORATION

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We have provided information about certain legal proceedings in which we are involved in our 2016 Annual Report on Form 10-K, and updated that information in Note 6 to the unaudited condensed consolidated financial statements. We are a party to various investigations, lawsuits, claims and other legal proceedings, including government investigations and claims, that arise in the ordinary course of our business. These types of matters could result in fines; penalties; compensatory, treble or other damages; or non-monetary relief. Government regulations also provide that certain allegations against a contractor may lead to suspension or debarment from future government contracts or suspension of export privileges for the company or one or more of its components. Suspension or debarment could have a material adverse effect on the company because of our reliance on government contracts and authorizations. The nature of legal proceedings is such that we cannot assure the outcome of any particular matter. However, based on information available to us to date and other than as noted in our 2016 Annual Report on Form 10-K, as updated by Note 6 to the unaudited condensed consolidated financial statements in this report, we do not believe that the outcome of any matter currently pending against the company is likely to have a material adverse effect on the company's unaudited condensed consolidated financial position as of March 31, 2017, its annual results of operations and/or cash flows. For further information on the risks we face from existing and future investigations, lawsuits, claims and other legal proceedings, please see "Risk Factors" in our 2016 Annual Report on Form 10-K.

Item 1A. Risk Factors

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

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

Purchases of Equity Securities – The table below summarizes our repurchases of common stock during the three months ended March 31, 2017:

Period	Total Number of Shares Purchased	Average Price Paid per Share[1]	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased under the Plans or Programs ($ in millions)
January 1, 2017 - January 27, 2017	502,278	$ 231.96	502,278	$ 2,603
January 28, 2017 - February 24, 2017	263,934	232.59	263,934	2,541
February 25, 2017 - March 31, 2017	158,392	240.76	158,392	2,503
Total	924,604	$ 233.65	924,604	$ 2,503

[1] Includes commissions paid.

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

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

Item 3. Defaults Upon Senior Securities

No information is required in response to this item.

Item 4. Mine Safety Disclosures

No information is required in response to this item.

Item 5. Other Information
No information is required in response to this item.

Table of Contents

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	Grant Certificate Specifying the Terms and Conditions Applicable to 2017 Restricted Stock Rights Granted Under the 2011 Long-Term Incentive Stock Plan
*+10.2	Grant Certificate Specifying the Terms and Conditions Applicable to 2017 Restricted Performance Stock Rights Granted Under the 2011 Long-Term Incentive Stock Plan
*+10.3	Severance Plan for Elected and Appointed Officers of Northrop Grumman Corporation as amended and restated effective February 16, 2017
+10.4	Transition and Retirement Agreement between Northrop Grumman Systems Corporation and Thomas E. Vice, dated February 27, 2017 (incorporated by reference to Exhibit 10.1 to Form 8-K filed February 28, 2017, File No. 001-16411)
*12(a)	Computation of Ratio of Earnings to Fixed Charges
*15	Letter from Independent Registered Public Accounting Firm
*31.1	Certification of Wesley G. Bush pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
*31.2	Certification of Kenneth L. Bedingfield pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
**32.1	Certification of Wesley G. Bush pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
**32.2	Certification of Kenneth L. Bedingfield pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
*101	Northrop Grumman Corporation Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, formatted in XBRL (Extensible Business Reporting Language): (i) the Condensed Consolidated Statements of Earnings and Comprehensive Income, (ii) Condensed Consolidated Statements of Financial Position, (iii) Condensed Consolidated Statements of Cash Flows, (iv) Condensed Consolidated Statements of Changes in Shareholders' Equity, and (v) Notes to Condensed Consolidated Financial Statements

\+ Management contract or compensatory plan or arrangement

* Filed with this report

** Furnished with this report

Table of Contents

NORTHROP GRUMMAN CORPORATION

SIGNATURES

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

NORTHROP GRUMMAN CORPORATION
(Registrant)

By: /s/ Michael A. Hardesty

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

Date: April 25, 2017