AEROJET ROCKETDYNE HOLDINGS, INC.

FORM 10-K/A
(Amended Annual Report)

Filed 03/13/18 for the Period Ending 12/31/17

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SIC Code	3760 - Guided Missiles And Space Vehicles And Parts
Industry	Aerospace & Defense
Sector	Industrials
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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K/A

Amendment No. 1

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

For the fiscal year ended: December 31, 2017

or

☐ **Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the transition period from __________ to __________

Commission File Number 1-01520

Aerojet Rocketdyne Holdings, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**34-0244000**
(State of Incorporation)	*(I.R.S. Employer Identification No.)*
222 N. Sepulveda Blvd., Suite 500 El Segundo, California	**90245**
(Address of Principal Executive Offices)	*(Zip Code)*

Registrant's telephone number, including area code

(310) 252-8100

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, $0.10 par value per share	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

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 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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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. (Check one):

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

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

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

The aggregate market value of the voting common equity held by nonaffiliates of the registrant as of June 30, 2017 was approximately $1.6 billion .

As of February 15, 2018 , there were 75.1 million outstanding shares of the Company's common stock, including unvested common shares, $0.10 par value.

Portions of the 2018 Proxy Statement of Aerojet Rocketdyne Holdings, Inc. relating to its annual meeting of stockholders scheduled to be held on May 8, 2018 are incorporated by reference into Part III of this Report.

Explanatory Note

In this Amendment No. 1 to the Annual Report on Form 10-K (the “Amended Filing”) for the year ended December 31, 2017, Aerojet Rocketdyne Holdings, Inc. (the “Company”) is amending the Form 10-K as filed with the Securities and Exchange Commission (the “SEC”) on February 21, 2018 (the “Original Filing”).

The Amended Filing is being filed solely to change the location of the Report of Independent Registered Public Accounting Firm of PricewaterhouseCoopers LLP from Los Angeles, California to Sacramento, California.

The change in location to the filed copy of the Report of Independent Registered Public Accounting Firm of PricewaterhouseCoopers LLP does not affect PricewaterhouseCoopers LLP's unqualified opinion on the Company's financial statements included in the Original Filing and Amended Filing or on the effectiveness of the Company's internal control over financial reporting as of December 31, 2017.

Except for the inclusion of new certifications required by Rule 13a-14 under the Securities Exchange Act of 1934, as amended, a revised report and new consent of the independent registered public accounting firm (and related amendment to the Exhibit Index to reflect the addition of such certifications and consent), this Amended Filing speaks only as of the date of the Original Filing and does not modify or update any other disclosures contained in our Original Filing. This Amended Filing should be read in conjunction with the Original Filing and reports filed with the SEC subsequent to the Original Filing.

Item 8. *Consolidated Financial Statements and Supplementary Data*

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Aerojet Rocketdyne Holdings, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Aerojet Rocketdyne Holdings, Inc. and its subsidiaries (the "Company") as of December 31, 2017 and 2016, and the related consolidated statements of operations, of comprehensive income (loss), of stockholders' equity (deficit), and of cash flows for the years then ended, for the one month ended December 31, 2015, and for the year ended November 30, 2015, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for the years then ended, the one month ended December 31, 2015, and the year ended November 30, 2015 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

Sacramento, California
February 21, 2018

We have served as the Company's auditor since 2006.

Aerojet Rocketdyne Holdings, Inc.
Consolidated Statements of Operations

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions, except per share amounts)			
Net sales	$ 1,877.2	$ 1,761.3	$ 1,708.3	$ 96.3
Operating costs and expenses:				
Cost of sales (exclusive of items shown separately below)	1,615.4	1,527.4	1,459.5	75.4
AR1 research and development	—	—	32.1	—
Selling, general and administrative expense	67.0	53.6	49.0	2.8
Depreciation and amortization	72.6	64.9	65.1	5.1
Other expense, net:				
Legal settlement	—	—	50.0	—
Other	7.9	19.8	16.5	0.2
Total operating costs and expenses	1,762.9	1,665.7	1,672.2	83.5
Operating income	114.3	95.6	36.1	12.8
Non-operating (income) expense:				
Loss on debt	—	34.5	1.9	—
Interest income	(3.5)	(0.6)	(0.3)	—
Interest expense	30.9	32.5	50.4	3.8
Total non-operating expense, net	27.4	66.4	52.0	3.8
Income (loss) before income taxes	86.9	29.2	(15.9)	9.0
Income tax provision	96.1	11.2	0.3	2.0
Net (loss) income	$ (9.2)	$ 18.0	$ (16.2)	$ 7.0
(Loss) income per share of common stock				
Basic:				
Net (loss) income per share	$ (0.13)	$ 0.27	$ (0.27)	$ 0.11
Diluted:				
Net (loss) income per share	$ (0.13)	$ 0.27	$ (0.27)	$ 0.10
Weighted average shares of common stock outstanding, basic	73.0	65.6	61.1	62.9
Weighted average shares of common stock outstanding, diluted	73.0	65.7	61.1	72.5

See Notes to Consolidated Financial Statements.

Aerojet Rocketdyne Holdings, Inc.
Consolidated Statements of Comprehensive Income (Loss)

	Year Ended			One month ended
	December 31, 2017	**December 31, 2016**	**November 30, 2015**	**December 31, 2015**
	(In millions)			
Net (loss) income	$ (9.2)	$ 18.0	$ (16.2)	$ 7.0
Other comprehensive income (loss):				
Amortization of net actuarial losses, net of $24.5 million, $23.2 million, $31.3 million, and $1.7 million of income taxes in fiscal 2017, 2016, 2015, and one month ended December 31, 2015, respectively	39.0	37.1	49.4	3.4
Actuarial (losses) gains, net of $2.9 million, $4.8 million, $36.9 million, and $4.6 million of income taxes in fiscal 2017, 2016, 2015, and one month ended December 31, 2015, respectively	(8.5)	7.5	(56.6)	(8.6)
Amortization of prior service credits, net of $0.0 million, $0.4 million, $0.4 million, and $0.0 million of income taxes in fiscal 2017, 2016, 2015, and one month ended December 31, 2015, respectively	(0.1)	(0.6)	(0.8)	(0.1)
Other comprehensive income (loss), net of income taxes	30.4	44.0	(8.0)	(5.3)
Comprehensive income (loss)	$ 21.2	$ 62.0	$ (24.2)	$ 1.7

See Notes to Consolidated Financial Statements.

Aerojet Rocketdyne Holdings, Inc.
Consolidated Balance Sheets

	As of December 31,	
	2017	2016
	(In millions, except per share amounts)	
ASSETS		
Current Assets		
Cash and cash equivalents	$ 535.0	$ 410.3
Marketable securities	20.0	—
Accounts receivable	215.5	136.4
Inventories	136.4	185.1
Other current assets, net	109.8	122.9
Total Current Assets	1,016.7	854.7
Noncurrent Assets		
Property, plant and equipment, net	359.0	366.0
Recoverable from the U.S. government and other third parties for environmental remediation costs	231.1	239.8
Deferred income taxes	145.8	292.5
Goodwill	161.3	158.1
Intangible assets	85.5	94.4
Other noncurrent assets, net	259.3	244.0
Total Noncurrent Assets	1,242.0	1,394.8
Total Assets	$ 2,258.7	$ 2,249.5
LIABILITIES, REDEEMABLE COMMON STOCK, AND STOCKHOLDERS' EQUITY		
Current Liabilities		
Current portion of long-term debt	$ 25.0	$ 55.6
Accounts payable	100.9	96.2
Reserves for environmental remediation costs	35.2	37.1
Advance payments on contracts	237.8	221.8
Other current liabilities	195.9	173.0
Total Current Liabilities	594.8	583.7
Noncurrent Liabilities		
Long-term debt	591.4	608.0
Reserves for environmental remediation costs	306.2	312.6
Pension benefits	492.8	548.2
Other noncurrent liabilities	171.1	161.4
Total Noncurrent Liabilities	1,561.5	1,630.2
Total Liabilities	2,156.3	2,213.9
Commitments and contingencies (Note 8)		
Redeemable common stock, par value of $0.10; none issued and outstanding December 31, 2017; 0.1 million shares issued and outstanding as of December 31, 2016	—	1.1
Stockholders' Equity		
Preference stock, par value of $1.00; 15.0 million shares authorized; none issued or outstanding	—	—
Common stock, par value of $0.10; 150.0 million shares authorized; 73.6 million shares issued and outstanding as of December 31, 2017; 69.2 million shares issued and outstanding as of December 31, 2016	7.4	6.9
Other capital	503.1	456.9
Treasury stock at cost, 3.5 million shares as of December 31, 2017 and 2016	(64.5)	(64.5)
Accumulated deficit	(71.0)	(61.8)
Accumulated other comprehensive loss, net of income taxes	(272.6)	(303.0)
Total Stockholders' Equity	102.4	34.5
Total Liabilities, Redeemable Common Stock and Stockholders' Equity	$ 2,258.7	$ 2,249.5

See Notes to Consolidated Financial Statements.

Aerojet Rocketdyne Holdings, Inc.
Consolidated Statements of Stockholders' Equity (Deficit)

	Common Stock						
	Shares	Amount	Other Capital	Treasury Stock	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity (Deficit)
					(In millions)		
November 30, 2014	56.9	$ 5.9	$ 287.4	$ (64.5)	$ (70.6)	$ (333.7)	$ (175.5)
Net loss	—	—	—	—	(16.2)	—	(16.2)
Other comprehensive loss, net of income taxes	—	—	—	—	—	(8.0)	(8.0)
Reclassification of redeemable common stock	(0.1)	—	0.7	—	—	—	0.7
Tax benefit from shares issued under equity plans	—	—	2.5	—	—	—	2.5
Conversion of debt to common stock	5.5	0.5	48.5	—	—	—	49.0
Repurchase of shares to satisfy tax withholding obligations	(0.3)	—	(6.7)	—	—	—	(6.7)
Stock-based compensation and shares issued under equity plans, net	0.9	0.1	7.7	—	—	—	7.8
November 30, 2015	62.9	6.5	340.1	(64.5)	(86.8)	(341.7)	(146.4)
Net income	—	—	—	—	7.0	—	7.0
Other comprehensive loss, net of income taxes	—	—	—	—	—	(5.3)	(5.3)
Reclassification from redeemable common stock	—	—	(0.7)	—	—	—	(0.7)
Tax benefit from shares issued under equity plans	—	—	2.4	—	—	—	2.4
Repurchase of shares to satisfy tax withholding obligations	—	—	(0.2)	—	—	—	(0.2)
Stock-based compensation and other, net	—	—	1.0	—	—	—	1.0
December 31, 2015	62.9	6.5	342.6	(64.5)	(79.8)	(347.0)	(142.2)
Net income	—	—	—	—	18.0	—	18.0
Other comprehensive income, net of income taxes	—	—	—	—	—	44.0	44.0
Reclassification of redeemable common stock	—	—	0.5	—	—	—	0.5
Tax benefit from shares issued under equity plans	—	—	0.3	—	—	—	0.3
Equity component of convertible debt	—	—	54.5	—	—	—	54.5
Conversion of debt to common stock	5.4	0.4	48.6	—	—	—	49.0
Repurchase of shares for option cost and to satisfy tax withholding obligations	(0.3)	—	(3.9)	—	—	—	(3.9)
Stock-based compensation and shares issued under equity plans, net	1.2	—	14.3	—	—	—	14.3
December 31, 2016	69.2	6.9	456.9	(64.5)	(61.8)	(303.0)	34.5
Net loss	—	—	—	—	(9.2)	—	(9.2)
Other comprehensive income, net of income taxes	—	—	—	—	—	30.4	30.4
Reclassification of redeemable common stock	0.1	—	0.9	—	—	—	0.9
Cumulative effect of change in accounting guidance	—	—	0.3	—	—	—	0.3
Conversion of debt to common stock	3.9	0.4	35.2	—	—	—	35.6
Repurchase of shares for option cost and to satisfy tax withholding obligations	—	—	(6.2)	—	—	—	(6.2)
Stock-based compensation and shares issued under equity plans, net	0.4	0.1	16.0	—	—	—	16.1
December 31, 2017	73.6	$ 7.4	$ 503.1	$ (64.5)	$ (71.0)	$ (272.6)	$ 102.4

See Notes to Consolidated Financial Statements.

Aerojet Rocketdyne Holdings, Inc.
Consolidated Statements of Cash Flows

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions)			
Operating Activities				
Net (loss) income	$ (9.2)	$ 18.0	$ (16.2)	$ 7.0
Adjustments to reconcile net (loss) income to net cash provided by operating activities:				
Depreciation and amortization	72.6	64.9	65.1	5.1
Amortization of debt discount and deferred financing costs	8.5	2.3	2.7	0.2
Stock-based compensation	22.0	12.9	8.6	(0.4)
Retirement benefits, net	(8.2)	30.5	61.4	5.4
Loss on debt repurchased	—	34.4	1.9	—
Other, net	0.7	0.6	(0.3)	—
Changes in assets and liabilities, net of effects from acquisition:				
Accounts receivable	(67.6)	33.1	(1.0)	2.0
Inventories	48.6	(28.9)	(19.5)	1.3
Other current assets, net	13.0	(23.8)	(25.7)	(4.8)
Recoverable from the U.S. government and other third parties for environmental remediation costs	8.7	(32.6)	(127.8)	3.2
Other noncurrent assets	(31.4)	(12.6)	10.2	(0.1)
Accounts payable	1.6	27.0	(5.1)	(41.0)
Advance payments on contracts	16.0	(9.1)	6.3	27.2
Other current liabilities	8.2	(37.4)	(18.8)	5.6
Deferred income taxes	125.7	4.8	(27.6)	(7.1)
Reserves for environmental remediation costs	(8.3)	47.4	140.1	(3.8)
Other noncurrent liabilities and other	11.9	27.2	13.3	0.3
Net Cash Provided by Operating Activities	212.8	158.7	67.6	0.1
Investing Activities				
Purchases of marketable securities	(24.0)	—	—	
Sale of marketable securities	4.0	—	—	
Purchase of Coleman Aerospace	(17.0)	—	—	—
Proceeds from sale of technology	—	0.5	1.0	—
Capital expenditures	(29.4)	(47.6)	(36.8)	(1.2)
Net Cash Used in Investing Activities	(66.4)	(47.1)	(35.8)	(1.2)
Financing Activities				
Proceeds from issuance of debt	—	800.0	—	—
Debt issuance costs including equity component of convertible debt	—	(9.5)	—	—
Debt repayments/repurchases	(20.0)	(700.6)	(81.2)	(1.3)
Proceeds from shares issued under equity plans, net	4.5	4.2	1.3	—
Repurchase of shares for option cost and to satisfy tax withholding obligations	(6.2)	(3.9)	(6.7)	(0.2)
Net Cash (Used in) Provided by Financing Activities	(21.7)	90.2	(86.6)	(1.5)
Net Increase (Decrease) in Cash and Cash Equivalents	124.7	201.8	(54.8)	(2.6)
Cash and Cash Equivalents at Beginning of Period	410.3	208.5	265.9	211.1
Cash and Cash Equivalents at End of Period	$ 535.0	$ 410.3	$ 211.1	$ 208.5
Supplemental disclosures of cash flow information				
Cash paid for interest	$ 22.2	$ 39.0	$ 49.3	$ 2.7
Cash paid for income taxes	3.0	31.2	27.9	—
Cash refund for income taxes	22.9	0.1	—	—
Capital leases	0.9	—	—	—
Conversion of debt to common stock	35.6	49.0	49.0	—

See Notes to Consolidated Financial Statements.

Note 1. Summary of Significant Accounting Policies

a. Basis of Presentation and Nature of Operations

The consolidated financial statements of Aerojet Rocketdyne Holdings, Inc. ("Aerojet Rocketdyne Holdings" or the "Company") include the accounts of the parent company and its 100% owned and majority owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. Certain reclassifications have been made to financial information for prior years to conform to the current year's presentation.

The Company is a manufacturer of aerospace and defense products and systems with a real estate segment. The Company's operations are organized into two segments:

Aerospace and Defense — includes the operations of the Company's wholly-owned subsidiary Aerojet Rocketdyne, Inc. ("Aerojet Rocketdyne"), a leading technology-based designer, developer and manufacturer of aerospace and defense products and systems for the United States ("U.S.") government, including the Department of Defense ("DoD"), the National Aeronautics and Space Administration ("NASA"), and major aerospace and defense prime contractors.

Real Estate — includes the activities of the Company's wholly-owned subsidiary Easton Development Company, LLC ("Easton") related to the re-zoning, entitlement, sale, and leasing of the Company's excess real estate assets. The Company is currently in the process of seeking zoning changes and other governmental approvals on its excess real estate assets to optimize its value.

In January 2016, the Company's Board of Directors approved a change in the Company's fiscal year-end from November 30 of each year to December 31 of each year. The fiscal year of the Company's subsidiary, Aerojet Rocketdyne, ends on the last Saturday in December. As a result of the change, the Company had a one month transition period in December 2015. Further, as a result of the 2016 calendar, Aerojet Rocketdyne had 53 weeks of operations in fiscal 2016 compared with 52 weeks of operations in fiscal 2017 and fiscal 2015. The additional week of operations, which occurred in the fourth quarter of fiscal 2016, accounted for $32.2 million in additional net sales.

The preparation of the consolidated financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires the Company to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

b. Cash and Cash Equivalents

All highly liquid debt instruments purchased with a remaining maturity at the date of purchase of three months or less are considered to be cash equivalents. The Company aggregates its cash balances by bank, and reclassifies any negative balances, if applicable, to accounts payable.

c. Fair Value of Financial Instruments

Financial instruments are classified using a three-tiered fair value hierarchy, which prioritizes the inputs used in measuring fair value. These tiers include: Level 1, defined as observable inputs such as quoted prices in active markets; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions. The following are measured at fair value:

	Total	Fair value measurement at December 31, 2017 Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
		(In millions)		
Money market funds	$ 155.0	$ 155.0	$ —	$ —
Commercial paper	135.6	—	135.6	—
U.S. treasury notes	4.1	—	4.1	—
Total	$ 294.7	$ 155.0	$ 139.7	$ —

	Total	Fair value measurement at December 31, 2016 Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
		(In millions)		
Money market funds	$ 328.5	$ 328.5	$ —	$ —

The carrying amounts of certain of the Company’s financial instruments, including cash and cash equivalents, accounts receivable, accounts payable, accrued compensation, and other accrued liabilities, approximate fair value because of their short maturities.

The following table summarizes the estimated fair value and principal amount for outstanding debt obligations:

	Fair Value		Principal Amount	
	December 31, 2017	December 31, 2016	December 31, 2017	December 31, 2016
	(In millions)			
Term loan	$ 370.0	$ 390.0	$ 370.0	$ 390.0
2.25% Convertible Senior Notes ("2 1/4% Notes")	415.3	294.9	300.0	300.0
4 1/16% Convertible Subordinated Debentures (“4 1/16% Debentures”)	—	70.8	—	35.6
Capital leases	0.9	—	0.9	—
	$ 786.2	$ 755.7	$ 670.9	$ 725.6

The fair values of the 2 1/4% Notes and 4 1/16% Debentures were determined using broker quotes that are based on open markets for the Company’s debt securities (Level 2 securities). The term loan bore interest at variable rates, which adjusted based on market conditions, and its carrying value approximated fair value.

d. Accounts Receivable

Accounts receivable associated with long-term contracts consist of billed and unbilled amounts. Billed amounts include invoices presented to customers that have not been paid. Unbilled amounts relate to sales that have been recorded and billings that have not been presented to customers. Amounts for overhead disallowances or billing decrements are reflected in unbilled receivables and primarily represent estimates of potential overhead costs which may not be successfully negotiated and collected.

Other receivables represent amounts billed where sales were not derived from long-term contracts.

e. Inventories

Inventories are stated at the lower of cost or market, generally using the average cost method. Costs on long-term contracts and programs in progress represent recoverable costs incurred for production, contract-specific facilities and equipment, allocable operating overhead, advances to suppliers, environmental expenses and, in the case of contracts with the U.S. government, allocable costs deemed allowable from U.S. government procurement regulations for bid and proposal, research and development, and selling, general and administrative expenses. The Company capitalizes costs incurred in advance of contract award or funding in inventories if it determines that contract award or funding is probable. Amounts previously capitalized are expensed when a contract award or funding is no longer probable. Pursuant to contract provisions, agencies of the U.S. government and certain other customers have title to, or a security interest in, inventories related to such contracts as a result of performance-based and progress payments. Such progress payments are reflected as an offset against the related inventory balances.

f. Income Taxes

The Company files a consolidated U.S. federal income tax return with its 100% owned consolidated subsidiaries. The deferred tax assets and/or liabilities are determined by multiplying the differences between the financial reporting and tax reporting bases for assets and liabilities by the enacted tax rates expected to be in effect when such differences are recovered or settled. The effect on deferred taxes of a change in tax rates is recognized in the period of the enactment date of the change.

The carrying value of the Company’s deferred tax assets is dependent upon its ability to generate sufficient taxable income in the future. A valuation allowance is required when it is more likely than not that all or a portion of a deferred tax asset will not be realized. A review of all available positive and negative evidence is considered, including the Company’s past and future performance, the market environment in which it operates, the utilization of tax attributes in the past, the length of carryback and carryforward periods, and evaluation of potential tax planning strategies.

Despite the Company’s belief that its tax return positions are consistent with applicable tax laws, the Company believes that certain positions are likely to be challenged by taxing authorities. Settlement of any challenge can result in no change, a complete disallowance, or some partial adjustment reached through negotiations or litigation. The Company’s tax reserves reflect the difference between the tax benefit claimed on tax returns and the amount recognized in the financial statements. The accounting standards provide guidance for the recognition and measurement in financial statements for uncertain tax positions taken or expected to be taken in a tax return. The evaluation of a tax position is a two-step process, the first step being recognition. The Company determines whether it is more likely than not that a tax position will be sustained upon tax examination, including resolution of any related appeals or litigation, based on only the technical merits of the position. The technical merits of a tax position are derived from both statutory and judicial authority (legislation and statutes, legislative intent, regulations, rulings, and case law) and their applicability to the facts and circumstances of the tax position. If a tax position does not meet the more likely than not recognition threshold, the benefit of that position is not recognized in the financial statements. The second step is measurement. A tax position that meets the more likely than not recognition threshold is measured to determine the amount of benefit to recognize in the financial statements. The tax position is measured as the largest amount of benefit that is greater than 50% likely of being realized upon ultimate resolution with a taxing authority. As the examination process progresses with tax authorities, adjustments to tax reserves may be necessary to reflect taxes payable upon settlement. Tax reserve adjustments related to positions impacting the effective tax rate affect the provision for income taxes. Tax reserve adjustments related to positions impacting the timing of deductions impact deferred tax assets and liabilities.

g. Property, Plant and Equipment, net

Property, plant and equipment are recorded at cost. Refurbishment costs are capitalized in the property accounts, whereas ordinary maintenance and repair costs are expensed as incurred. Depreciation is computed principally by accelerated methods based on the following useful lives:

Buildings and improvements	3 - 40 years
Machinery and equipment	6 - 10 years

Costs related to software acquired, developed or modified solely to meet the Company's internal requirements and for which there are no substantive plans to market for sale are capitalized. Only costs incurred after the preliminary planning stage of the project and after management has authorized and committed funds to the project are eligible for capitalization.

h. Real Estate Held for Entitlement and Leasing

The Company capitalizes all costs associated with the real estate entitlement and leasing process. The Company classifies activities related to the entitlement, sale, and leasing of its excess real estate assets as operating activities in the consolidated statements of cash flows. Real estate held for entitlement and leasing is included as a component of other noncurrent assets.

i. Goodwill

Goodwill represents the excess of the purchase price of an acquired enterprise or assets over the fair values of the identifiable assets acquired and liabilities assumed. All of the Company's recorded goodwill resides in the Aerospace and Defense reporting unit. Tests for impairment of goodwill are performed on an annual basis, or at any other time if events occur or circumstances indicate that the carrying amount of goodwill may not be recoverable. Circumstances that could trigger an impairment test include but are not limited to: a significant adverse change in the business climate or legal factors; adverse cash flow trends; an adverse action or assessment by a regulator; unanticipated competition; loss of key personnel; decline in stock price; and results of testing for recoverability of a significant asset group within a reporting unit.

The Company evaluates qualitative factors (including macroeconomic conditions, industry and market considerations, cost factors, and overall financial performance) to determine whether it is necessary to perform the first step of the goodwill test. This step is referred to as the “Step Zero" analysis. If it is determined that it is more likely than not (a likelihood of more than 50%) that the fair value of a reporting unit is less than its carrying amount, the Company will proceed to the quantitative (“Step One”) analysis to determine the existence and amount of any goodwill impairment. The Company evaluated goodwill using a “Step Zero" analysis as of October 1, 2017, October 1, 2016, and September 1, 2016 (first day of the Company's fourth quarter), and determined that goodwill was not impaired.

There can be no assurance that the Company’s estimates and assumptions made for purposes of its goodwill impairment testing will prove to be accurate predictions of the future. If the Company’s assumptions and estimates are incorrect, the Company may be required to record goodwill impairment charges in future periods.

During the year ended December 31, 2016, and in connection with the Company's change in fiscal year end, as described in Note 1(a), from November 30 to December 31, the Company changed its annual test of goodwill impairment from September 1 of each year to October 1 of each year. With respect to its annual goodwill testing date, management believes that this voluntary change in accounting method is preferable as it aligns the annual impairment testing date with the Company's long-range planning cycle, the timing of which has changed consistent with the change in the Company's fiscal year end and which is a significant element in the testing process. In connection with this change, the Company first performed an impairment test as of September 1, 2016 and then performed an additional test as of October 1, 2016. This change in annual testing date did not delay, accelerate or avoid an impairment charge.

j. Intangible Assets

Identifiable intangible assets, such as patents, trademarks, and licenses are recorded at cost or when acquired as part of a business combination at estimated fair value. Identifiable intangible assets are amortized based on when they provide the Company economic benefit, or using the straight-line method, over their estimated useful life. Amortization periods for identifiable intangible assets range from 7 years to 30 years .

k. Environmental Remediation

The Company expenses, on a current basis, recurring costs associated with managing hazardous substances and contamination in ongoing operations. The Company accrues for costs associated with the remediation of environmental contamination when it becomes probable that a liability has been incurred, and the amount can be reasonably estimated. In most cases only a range of reasonably possible costs can be estimated. In establishing the Company’s reserves, the most probable estimated amount is used when determinable, and the minimum amount is used when no single amount in the range is more probable. Environmental reserves include the costs of completing remedial investigation and feasibility studies, remedial and corrective actions, regulatory oversight costs, the cost of operation and maintenance of the remedial action plan, and employee compensation costs for employees who are expected to devote a significant amount of time to remediation efforts. Calculation of environmental reserves is based on the evaluation of currently available information with respect to each individual environmental site and considers factors such as existing technology, presently enacted laws and regulations, and prior experience in remediation of contaminated sites. Such estimates are based on the expected costs of investigation and remediation and the likelihood that other potentially responsible parties will be able to fulfill their commitments at sites where the Company may be jointly or severally liable.

At the time a liability is recorded for future environmental costs, the Company records an asset for estimated future recoveries that are estimable and probable. Some of the Company’s environmental costs are eligible for future recovery in the pricing of its products and services to the U.S. government and under existing third party agreements. The Company considers the recovery probable based on the Global Settlement, Northrop Grumman Corporation ("Northrop") Agreement, U.S. government contracting regulations, and its long history of receiving reimbursement for such costs (see Notes 8(c) and 8(d)).

l. Retirement Benefits

The Company's defined benefit pension plan future benefit accrual was discontinued in fiscal 2009. In addition, the Company provides medical and life insurance benefits (“postretirement benefits”) to certain eligible retired employees, with varied coverage by employee group. Annual charges are made for the cost of the plans, including administrative costs, interest costs on benefit obligations, and net amortization and deferrals, increased or reduced by the return on assets. The Company also sponsors a defined contribution 401(k) plan and participation in the plan is available to all employees (see Note 7).

m. Conditional Asset Retirement Obligations

Conditional asset retirement obligations (“CAROs”) are legal obligations associated with the retirement of long-lived assets. These liabilities are initially recorded at fair value and the related asset retirement costs are capitalized by increasing the carrying amount of the related assets by the same amount as the liability. Asset retirement costs are subsequently depreciated over the useful lives of the related assets. Subsequent to initial recognition, the Company records period-to-period changes in the CARO liability resulting from the passage of time and revisions to either the timing or the amount of the estimate of the undiscounted cash flows.

The Company’s estimate of CAROs associated with owned properties relates to estimated costs necessary for the legally required removal or remediation of various regulated materials, primarily asbestos disposal and radiological decontamination of an ordnance manufacturing facility. For leased properties, such obligations relate to the estimated cost of contractually required property restoration.

The changes in the carrying amount of CAROs since November 30, 2014 were as follows (in millions):

Balance as of November 30, 2014	$ 24.4
Additions and other, net	3.0
Accretion	1.9
Balance as of November 30, 2015	29.3
Accretion	0.2
Balance as of December 31, 2015	29.5
Additions and other, net	(0.9)
Accretion	2.0
Balance as of December 31, 2016	30.6
Additions and other, net	11.2
Accretion	2.2
Balance as of December 31, 2017	$ 44.0

n. Advance Payments on Contracts

The Company receives advances from customers which may exceed costs incurred on certain contracts. Such advances or billings in excess of cost and estimated earnings, other than those reflected as a reduction of inventories as progress payments, are classified as current liabilities.

o. Loss Contingencies

The Company is currently involved in certain legal proceedings and has accrued its estimate of the probable costs and recoveries (in relation to environmental costs) for resolution of these claims. These estimates are based upon an analysis of potential results, assuming a combination of litigation and settlement strategies. It is possible, however, that future results of operations or cash flows for any particular period could be materially affected by changes in estimates or the effectiveness of strategies related to these proceedings.

p. Warranties

The Company provides product warranties in conjunction with certain product sales. The majority of the Company's warranties are a one -year standard warranty for parts, workmanship, and compliance with specifications. On occasion, the Company has made commitments beyond the standard warranty obligation. While the Company has contracts with warranty provisions, there is not a history of any significant warranty claims experience. A reserve for warranty exposure is made on a product by product basis when it is both estimable and probable. These costs are included in the program's estimate at completion and are expensed in accordance with the Company's revenue recognition methodology for that particular contract.

q. Revenue Recognition

The Company considers the nature of the individual underlying contract and the type of products and services provided in determining the proper accounting for a particular contract. Each method is applied consistently to all contracts having similar characteristics, as described below.

Under the percentage of completion method, the Company recognizes sales based upon the Company's progress against the contracted performance objectives. Progress is generally measured as costs are incurred (cost-to-cost) or as units are delivered to customers (units-of-delivery) depending on the contractual terms and scope of work of each contract. The Company uses the cost-to-cost measure where the scope of work on contracts principally relates to research and/or development efforts, or the contract is predominantly a development effort with few deliverable units. Under cost-to-cost, the Company recognizes sales as costs are incurred. The Company uses the units-of-delivery measure to recognize sales when contracts require unit deliveries on a frequent and routine basis. Under units-of-delivery, the Company recognizes sales at the contractually agreed upon unit price as units are sold.

For fixed-priced contracts, variance in actual costs from the cost estimates used in determining the fixed price impact the overall profit from the contract. The Company recognizes these variances during the contact performance period. Fixed-priced and cost-reimbursable contracts may provide for variable consideration including awards, incentives, and/or penalties based upon the customer's assessment of performance against pre-established targets or other criteria. These targets may include factors such as cost, performance, quality, and schedule. The Company recognizes variable consideration over the contract performance period based upon the Company's estimates of performance against the established criteria.

In the Company’s Aerospace and Defense segment, recognition of profit on long-term contracts requires the use of assumptions and estimates related to total contract revenue, the total cost at completion and the measurement of progress towards completion. Due to the nature of the programs, developing the estimated total contract revenue and cost at completion requires the use of significant judgment. Estimates are continually evaluated as work progresses and are revised as necessary. Factors that must be considered in estimating the work to be completed include, but are not limited to: labor productivity, the nature and technical complexity of the work to be performed, availability and cost volatility of materials, subcontractor and vendor performance, warranty costs, volume assumptions, anticipated labor agreements, inflationary trends, schedule delays, availability of funding from the customer, and the recoverability of costs incurred outside the original contract included in any estimates to complete. The Company reviews contract performance and cost estimates at least quarterly and more frequently when circumstances significantly change. When a change in estimate is determined to have an impact on contract profit, the Company will record a positive or negative adjustment to the statement of operations. Changes in estimates and assumptions related to the status of certain long-term contracts may have a material effect on the Company’s operating results. The following table summarizes the impact of the change in significant contract accounting estimates on the Company’s Aerospace and Defense segment operating results accounted for under the percentage-of-completion method of accounting:

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions, except per share amounts)			
Favorable effect of the changes in contract estimates on income (loss) before income taxes	$ 37.2	$ 14.1	$ 41.2	$ 11.7
Favorable effect of the changes in contract estimates on net (loss) income	22.3	8.5	24.7	7.0
Favorable effect of the changes in contract estimates on basic net (loss) income per share	0.31	0.13	0.40	0.11
Favorable effect of the changes in contract estimates on diluted net (loss) income per share	0.31	0.11	0.40	0.09

The fiscal 2017 favorable changes in contract estimates were primarily driven by improved performance on numerous programs as a result of overhead cost reductions and reduced program risks, most notably on the Terminal High Altitude Area Defense ("THAAD") program, partially offset by cost growth and manufacturing inefficiencies in fiscal 2017 on electric propulsion contracts. The fiscal 2016 favorable changes in contract estimates were primarily driven by improved performance on space launch systems primarily due to affordability initiatives and lower overhead costs, partially offset by cost growth and manufacturing inefficiencies on electric propulsion contracts. The one month ended December 31, 2015 favorable changes in contract estimates were primarily driven by improved performance on tactical and missile defense programs primarily due to affordability initiatives and lower overhead costs, partially offset by cost growth and manufacturing inefficiencies on an electric propulsion contract. The fiscal 2015 favorable changes in contract estimates were primarily due to improved performance on space launch systems and missile defense programs primarily due to affordability initiatives and lower overhead costs, and unexpected favorable contract performance on close-out activities on the J-2X program.

Revenue on service or time and material contracts is recognized when performed.

If at any time expected costs exceed the value of the contract, the loss is recognized immediately.

If change orders are in dispute or are unapproved in regard to both scope and price they are evaluated as claims. The Company recognizes revenue on claims when recovery of the claim is probable and the amount can be reasonably estimated. Revenue on claims is recognized only to the extent that contract costs related to the claims have been incurred and when it is probable that the claim will result in a bona fide addition to contract value that can be reliably estimated. No profit is recognized on a claim until final settlement occurs.

Revenue from real estate asset sales is recognized when a sufficient down-payment has been received, financing has been arranged and title, possession and other attributes of ownership have been transferred to the buyer. The allocation to cost of sales on real estate asset sales is based on a relative fair market value computation of the land sold which includes the basis on the Company’s book value, capitalized entitlement costs, and an estimate of the Company’s continuing financial commitment.

Revenue that is not derived from long-term development and production contracts, or real estate asset transactions, is recognized when persuasive evidence of a final agreement exists, delivery has occurred, the selling price is fixed or determinable and payment from the customer is reasonably assured. Sales are recorded net of provisions for customer pricing allowances.

r. Research and Development ("R&D")

Company-sponsored R&D expenses (reported as a component of cost of sales) were $44.6 million , $43.0 million , $74.4 million , and $4.6 million in fiscal 2017, 2016, 2015 and the one month ended December 31, 2015, respectively. Company-sponsored R&D expenses include the costs of technical activities that are useful in developing new products, services, processes, or techniques, as well as expenses for technical activities that may significantly improve existing products or processes. These expenses are generally allocated among all contracts and programs in progress under U.S. government contractual arrangements. From time to time, the Company believes it is in its best interests to self-fund and not allocate costs for certain R&D activities to the U.S. government contracts and the Company had $32.1 million of such costs in fiscal 2015 related to the AR1 engine, see discussion below.

Customer-sponsored R&D expenditures, which are funded from U.S. government contracts, totaled $561.1 million , $513.0 million , $485.8 million , and $33.7 million in fiscal 2017, 2016, 2015, and the one month ended December 31, 2015, respectively. Expenditures under customer-sponsored R&D funded U.S. government contracts are accounted for as sales and cost of products sold.

AR1 Research and Development

Company-sponsored R&D expenses (reported as a component of cost of sales) are generally reimbursed via allocation of such expenses among all contracts and programs in progress under U.S. government contractual arrangements. The newest large liquid booster engine development project, the AR1, accounted for $56.1 million of such reimbursable costs from inception through December 31, 2017 . In February 2016, pursuant to an Other Transaction Agreement, the U.S. Air Force selected Aerojet Rocketdyne and United Launch Alliance ("ULA") to share in a public-private partnership to develop jointly the AR1 engine. The total agreement is valued at $804.0 million with the U.S. Air Force investing two-thirds of the funding required to complete development of the AR1 engine by 2019. The work is expected to be completed no later than December 31, 2019, and is being conducted in four phases, with each being an option to progress the project at pre-defined decision points. Through December 31, 2017, the U.S. Air Force has obligated $174.0 million with Aerojet Rocketdyne contributing $77.3 million and ULA contributing $6.1 million in cash and $3.6 million in "in-kind" R&D expenses. On February 1, 2018, the U.S. Air Force authorized phase two of the program, which obligates the U.S. Air Force to an additional $95.5 million and Aerojet Rocketdyne and ULA to an additional $47.8 million . The total potential investment by Aerojet Rocketdyne and its partners, if all options are exercised, is $268.0 million . The U.S. Air Force contributions are recognized proportionately as an offset to R&D expenses. In the event the Company records a receivable for a milestone prior to expending the prospective proportional share to be contributed by the Company, the amount is recorded as an accrued liability until earned. The AR1 inception to date project costs at December 31, 2017 , were as follows (in millions):

AR1 R&D costs incurred	$	245.6
Less amounts funded by the U.S. Air Force		(147.7)
Less amounts funded by ULA		(9.7)
AR1 R&D costs net of reimbursements	$	88.2

Of the $88.2 million AR1 investment, $32.1 million was expensed and $56.1 million was applied to the Company's contracts.

s. Stock-based Compensation

The Company recognizes stock-based compensation in the statements of operations at the grant-date fair value of stock awards issued to employees and directors over the vesting period. The Company also grants Stock Appreciation Rights (“SARs”) awards which are similar to the Company’s employee stock options, but are settled in cash rather than in shares of common stock, and are classified as liability awards. Compensation cost for these awards is determined using a fair-value method and remeasured at each reporting date until the date of settlement. The Company accounts for forfeitures when they occur for consistency with the U.S. government recovery accounting practice.

t. Impairment or Disposal of Long-Lived Assets

Impairment of long-lived assets is recognized when events or circumstances indicate that the carrying amount of the asset, or related groups of assets, may not be recoverable. Circumstances which could trigger a review include, but are not limited to: significant decreases in the market price of the asset; significant adverse changes in the business climate or legal factors; accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of the asset; current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset; or a current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life. The carrying amount of a long-lived asset is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset. If the Company determines that an asset is not recoverable, then the Company would record an impairment charge if the carrying value of the asset exceeds its fair value.

A long-lived asset classified as “held for sale” is initially measured at the lower of its carrying amount or fair value less costs to sell. In the period that the “held for sale” criteria are met, the Company recognizes an impairment charge for any initial adjustment of the long-lived asset amount. Gains or losses not previously recognized resulting from the sale of a long-lived asset are recognized on the date of sale.

As of February 28, 2015, the Company classified approximately 550 acres, known as Hillsborough and representing a portion of the 5,563 acre Easton plan, as assets held for sale as a result of its plans to sell the Hillsborough land. During fiscal 2015, the Company finalized the Hillsborough land sale for a total purchase price of $57.0 million which was comprised of $46.7 million cash and $10.3 million of promissory notes. The total acreage covered by the Hillsborough land transaction was approximately 700 acres, of which approximately 550 acres was recognized as a sale in fiscal 2015. At the initial closing, the buyer paid $40.0 million cash and executed a $9.0 million promissory note secured by a first lien Deed of Trust on a portion of the sale property which resulted in a pre-tax gain of $30.6 million in fiscal 2015. In addition, approximately 150 acres of this land, including a 50 -acre portion known as “Area 40,” was held back from the initial closing. Upon receipt of regulatory approvals, a closing will take place for the sale of the developable portions of such holdback acreage for a purchase price of $6.7 million in cash. For operating segment reporting, the Hillsborough land has been reported as a part of the Real Estate segment. A summary of the impact of the land sale on the consolidated statement of operations for fiscal 2015 was as follows (in millions):

Net sales from land sale	$ 42.0
Cost of sales from land sale	11.4
Income before income taxes from land sale	30.6
Income tax provision related to land sale	12.7
Net income from land sale	$ 17.9

u. Concentrations

Dependence upon U.S. government programs and contracts

Sales to the U.S. government and its agencies, including sales to the Company’s significant customers discussed below, were as follows:

	Percentage of Net Sales
Fiscal 2017	92%
Fiscal 2016	91%
Fiscal 2015	90%
One month ended December 31, 2015	85%

The following are percentages of net sales for significant programs, all of which are included in the U.S. government sales and are comprised of multiple contracts.

	Year Ended			**One month ended**
	December 31, 2017	**December 31, 2016**	**November 30, 2015**	**December 31, 2015**
RS-25 program	14%	12%	12%	10%
Standard Missile program	9	12	14	12
THAAD program	9	13	13	13

The demand for certain of the Company’s services and products is directly related to the level of funding of U.S. government programs.

Major customers

Customers that represented more than 10% of net sales for the periods presented were as follows:

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
Lockheed Martin Corporation ("Lockheed Martin")	24%	27%	29%	24%
ULA	22	21	19	28
Raytheon Company ("Raytheon")	17	20	20	19
NASA	17	13	11	10

The Company's sales to each of the major customers listed above involve several product lines and programs.

Credit Risk

Aside from investments held in the Company's retirement benefit plans, financial instruments that could potentially subject the Company to concentration of credit risk consist primarily of cash, cash equivalents, and trade receivables. The Company's cash and cash equivalents are held and managed by recognized financial institutions and are subject to the Company's investment policy. The investment policy outlines minimum acceptable credit ratings for each type of investment and limits the amount of credit exposure to any one security issue. The Company does not believe significant concentration of credit risk exists with respect to these investments.

Customers that represented more than 10% of accounts receivable for the periods presented were as follows:

	As of December 31,	
	2017	2016
The Boeing Company ("Boeing")	35%	13%
Raytheon	16	17
Lockheed Martin	12	17
NASA	11	14
ULA	11	20

Dependence on Single Source and Other Third Party Suppliers

The Company uses a significant quantity of raw materials that are highly dependent on market fluctuations and government regulations. Further, as a U.S. government contractor, the Company is often required to procure materials from suppliers capable of meeting rigorous customer and government specifications. As market conditions change for these companies, they often discontinue materials with low sales volumes or profit margins. The Company is often forced to either qualify new materials or pay higher prices to maintain the supply. To date the Company has been successful in establishing replacement materials and securing customer funding to address specific qualification needs of the programs. Prolonged disruptions in the supply of any of the Company's key raw materials, difficulty qualifying new sources of supply, implementing use of replacement materials or new sources of supply, and/or a continuing volatility in the prices of raw materials could have a material adverse effect on the Company's operating results, financial condition, and/or cash flows.

Workforce

As of December 31, 2017 , 14% of the Company's employees were covered by collective bargaining agreements.

v. Related Parties

Warren G. Lichtenstein, the Executive Chairman of the Company is also the Executive Chairman of Steel Partners Holdings L.P. ("Steel Holdings") and the Chief Executive Officer of Steel Partners Ltd. ("SPL"), which entities beneficially own 5.6% and less than 1% , respectively, of the Company's common stock according to a Schedule 13D/A filed on December 26, 2017 by Steel Holdings, SPL and certain other reporting persons listed therein. The Company received services of $0.6 million , $0.9 million , $1.1 million , and zero in fiscal 2017, 2016, 2015, and the one month ended December 31, 2015, respectively, from Steel Holdings and SPL, which primarily included administrative services and the use of an aircraft for business travel. As of December 31, 2017 and 2016, the Company had liabilities due to such entities of $0.2 million and $0.2 million , respectively.

FMR LLC (“FMR”) owned 3% and 13% of the Company’s Common Stock at December 31, 2017 and 2016, respectively. FMR is the parent company of Fidelity Workplace Services, LLC, Fidelity Stock Plan Services, LLC and other Fidelity subsidiaries which provide certain benefit services such as 401(k) plan administration, Health Savings Accounts administration, stock-based compensation administration, and Employee Stock Purchase Plan administration. In addition, certain of the investment alternatives provided through the Company’s 401(k) plan include funds managed by FMR. The Company received services of $0.8 million , $0.3 million , $0.4 million , and zero in fiscal 2017, 2016, 2015, and the one month ended December 31, 2015, respectively, from FMR primarily for employee benefit services. These amounts exclude expenses charged to the Company’s employees by FMR for investment management services. As of December 31, 2017 and 2016, the Company had a payable due to FMR of less than $0.1 million for both periods.

Lucas-Milhaupt, Inc., an indirect wholly-owned subsidiary of Steel Holdings, sold $0.2 million in raw materials to the Company for the manufacture of its products in fiscal 2017.

GAMCO Investors, Inc. (“GAMCO”) owned 12% of the Company's common stock at December 31, 2017 and 2016. The Company received services of $1.1 million , $1.1 million , $1.1 million , and $0.1 million in fiscal 2017, 2016, 2015, and the one month ended December 31, 2015, respectively, from GAMCO for investment management fees of the Company’s defined benefit pension plan assets.

BlackRock, Inc. (“BlackRock”) owned 15% and 12% of the Company's common stock at December 31, 2017 and 2016, respectively. The Company invests in money market funds managed by BlackRock.

The Vanguard Group, Inc. (“Vanguard”) owned 10% of the Company’s common stock at December 31, 2017. Certain of the investment alternatives offered through the Company’s 401(k) plan include funds managed by Vanguard.

w. Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In August 2014, the Financial Accounting Standards Board (“FASB”) issued an amendment to the accounting guidance related to the evaluation of an entity's ability to continue as a going concern. The amendment establishes management’s responsibility to evaluate whether there is substantial doubt about an entity’s ability to continue as a going concern in connection with preparing financial statements for each annual and interim reporting period. The update also gives guidance to determine whether to disclose information about relevant conditions and events when there is substantial doubt about an entity’s ability to continue as a going concern. The Company adopted this guidance as of December 31, 2016 and no additional information was required to be presented as a result of the adoption. As such, the new standard did not have an impact on the Company's financial position, results of operations, or cash flows.

In November 2015, the FASB issued guidance that requires deferred tax liabilities and assets to be classified as noncurrent in the consolidated balance sheet. The standard is effective for financial statements issued for annual periods beginning after December 15, 2016, and interim periods within those annual periods. Early adoption is permitted for financial statements that have not been previously issued. The Company adopted this guidance retrospectively to all periods presented as of December 31, 2016, which resulted in $36.5 million of current deferred income taxes as of December 31, 2015, being reclassified as noncurrent. As the accounting standard only impacted presentation, the new standard did not have an impact on the Company's financial position, results of operations, or cash flows.

In March 2016, the FASB amended the existing accounting guidance related to stock compensation. The amendment requires all income tax effects of awards to be recognized in the income statement when awards vest and allows a choice to account for forfeitures on an estimated or actual basis. There is also a requirement to present excess income tax benefits as an operating activity on the statement of cash flows. Effective January 1, 2017, the Company adopted the amendment requiring recognition of excess tax benefits and tax deficiencies in the income statement prospectively. In addition, the Company elected to change its accounting policy to account for forfeitures when they occur for consistency with the U.S. government recovery accounting practices on a modified retrospective basis. The Company also elected to adopt the amendment related to the presentation of excess tax benefits within operating activities on the statement of cash flows, retrospectively.

In January 2017, the FASB issued an amendment to the accounting guidance related to goodwill impairment. The update eliminates "Step 2" which involves determining the implied fair value of goodwill and comparing it to the carrying amount of goodwill to measure the goodwill impairment loss, if any. The quantitative assessment "Step 1" will be used to determine both the existence and amount of goodwill impairment. The standard should be applied on a prospective basis and is effective for annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019, with early adoption permitted. The Company adopted this new accounting guidance in conjunction with its annual impairment test on October 1, 2017. The adoption did not have an impact on the Company's financial position, results of operations, or cash flows.

In August 2016, the FASB issued an amendment to the accounting guidance related to classification of certain cash receipts and cash payments in the statement of cash flows. The standard provides guidance for eight targeted changes with respect to how cash receipts and cash payments are classified in the statement of cash flows, with the objective of reducing diversity in practice. The Company adopted this new accounting guidance on December 31, 2017. The adoption did not have an impact on the Company's financial position, results of operations, or cash flows.

In November 2016, the FASB issued an amendment to the accounting guidance for the presentation of restricted cash in the statement of cash flows. The new guidance requires that the statement of cash flows explain the difference during the period in total cash, cash equivalents, and restricted cash. Also, when cash, cash equivalents, and restricted cash are presented on more than one line item within the statement of financial position, a reconciliation of those line items to the total cash, cash equivalents, and restricted cash presented on the statement of cash flows must be disclosed. The Company adopted this new accounting guidance on December 31, 2017. The adoption did not have an impact on the Company's financial position, results of operations, or cash flows.

On December 22, 2017, Staff Accounting Bulletin No. 118 ("SAB 118") was issued to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting for certain income tax effects of the Tax Cuts and Jobs Act ("Tax Act"). In accordance with SAB 118, we have recorded $64.6 million of deferred tax expense in connection with the remeasurement of certain deferred tax assets and liabilities. The Company does not expect any additional material adjustments; however, since the Tax Act was passed late in the fourth quarter of fiscal 2017 and ongoing guidance and accounting interpretation is expected over the next several months, it is reasonably possible that additional adjustments will be required during the one year measurement period.

Recently Issued Accounting Pronouncements

In May 2014, the FASB amended the existing accounting standards for revenue recognition. The amendments are based on the principle that revenue should be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The effective date of the new standard is for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The amendments may be applied retrospectively to each prior period presented or retrospectively with the cumulative effect recognized as of the date of initial application (modified retrospective method). The Company plans to adopt the guidance during the first quarter of fiscal 2018 using the modified retrospective method. The Company has developed a comprehensive implementation plan across all segments that include evaluating the impact of the new guidance on existing contracts, and updating impacted accounting policies, processes, controls and systems. The Company expects the primary impact of the new guidance will be a change in the timing of when revenue is recognized on certain fixed price and cost reimbursable type contracts. The new guidance prescribes that an entity recognizes revenue when (or as) it satisfies a performance obligation by transferring a promised good or service to a customer. A good or service is transferred when (or as) the customer obtains control of that asset. Under this new guidance, the Company expects to discontinue the use of the units-of-delivery measure on certain customer contracts and remeasure progress toward completion using the cost-to-cost method. The units-of-delivery method totaled 48% of net sales for fiscal 2017. The Company expects the adoption of this new standard will have a material impact on net sales and operating results recognized in any given fiscal year and a material impact on the amount reported for contract backlog. The adoption will also result in the reclassification of certain contract related assets and liabilities on the consolidated balance sheet.

In February 2016, the FASB issued guidance requiring lessees to recognize a right-of-use asset and a lease liability on the balance sheet for all leases with the exception of short-term leases. For lessees, leases will continue to be classified as either operating or finance leases in the income statement. Lessor accounting is similar to the current model but updated to align with certain changes to the lessee model. Lessors will continue to classify leases as operating, direct financing or sales-type leases. The effective date of the new standard is for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. The new standard must be adopted using a modified retrospective transition method and requires application of the new guidance at the beginning of the earliest comparative period presented. The Company is evaluating the impact of adopting this new accounting guidance on its financial position, results of operations, or cash flows.

In March 2017, the FASB amended the existing accounting guidance relating to the presentation of net periodic pension cost and net periodic postretirement benefit cost (the “NPPC”) in the income statement. The amended guidance requires the service cost component to be presented in the same line item or items as other compensation arising from the services rendered by the pertinent employees during the period, and other components of the NPPC to be presented in the statement of operations separately from service cost components and outside a subtotal of income from operations. If a separate line item or items are used to present the other components of the NPPC, that line item or items must be appropriately described. If a separate line item or items are not used, the line item or items used in the statement of operations to present the other components of NPPC must be disclosed. The new guidance is effective for financial statements issued for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. The Company plans to adopt this new accounting guidance in the first quarter of fiscal 2018. The Company expects the adoption to result in an increase in operating income of $73.2 million and $68.9 million for fiscal 2017 and 2016, respectively, and a corresponding increase in total non-operating expense, net for each fiscal year. The Company does not expect any impact to segment performance, net (loss) income, or cash flows as a result of the adoption.

In February 2018, the FASB issued guidance that permits the reclassification of the income tax effects of the 2017 Tax Cuts and Jobs Act on items within accumulated other comprehensive loss to accumulated deficit. The FASB refers to these amounts as "stranded tax effects." The amended guidance also requires certain new disclosures. The new guidance is effective for financial statements issued for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The Company is evaluating the impact of adopting this new accounting guidance on its financial position, results of operations, or cash flows.

Note 2. (Loss) Income Per Share of Common Stock

A reconciliation of the numerator and denominator used to calculate basic and diluted (loss) income per share of common stock ("EPS"):

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions, except per share amounts)			
Numerator:				
Net (loss) income	$ (9.2)	$ 18.0	$ (16.2)	$ 7.0
Income allocated to participating securities	—	(0.4)	—	(0.2)
Net (loss) income for basic EPS	(9.2)	17.6	(16.2)	6.8
Interest on 4 1/16% Debentures	—	—	—	0.3
Net (loss) income for diluted EPS	$ (9.2)	$ 17.6	$ (16.2)	$ 7.1
Denominator:				
Basic weighted average shares	73.0	65.6	61.1	62.9
Effect of:				
4 1/16% Debentures	—	—	—	9.4
Employee stock options and stock purchase plan	—	0.1	—	0.2
Diluted weighted average shares	73.0	65.7	61.1	72.5
Basic:				
Net (loss) income per share	$ (0.13)	$ 0.27	$ (0.27)	$ 0.11
Diluted:				
Net (loss) income per share	$ (0.13)	$ 0.27	$ (0.27)	$ 0.10

The following table sets forth the potentially dilutive securities excluded from the computation because their effect would have been anti-dilutive:

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions)			
4 1/16% Debentures	0.1	7.1	11.0	—
Employee stock options and stock purchase plan	0.1	—	0.2	—
Unvested restricted shares	1.6	1.6	1.6	1.3
Total potentially dilutive securities	1.8	8.7	12.8	1.3

The Company's 2 1/4% Notes were not included in the computation of diluted EPS for fiscal 2017 and 2016 because the average market price of the common stock did not exceed the conversion price and the Company only expects the conversion premium for the 2 1/4% Notes to be settled in common shares.

Note 3. Balance Sheet Accounts and Supplemental Disclosures

a. Marketable Securities

As of December 31, 2017 , the Company's short-term available-for-sale investments were as follows:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
	(In millions)			
Commercial paper	$ 135.6	$ —	$ —	$ 135.6
U.S. treasury notes	4.1	—	—	4.1
Marketable securities	$ 139.7	$ —	$ —	$ 139.7

As of December 31, 2017, of the total estimated fair value, $119.7 million was classified as cash and cash equivalents as the remaining maturity at date of purchase was less than three months, and $20.0 million was classified as marketable securities. At December 31, 2017, the contractual maturities of the Company's available-for-sale marketable securities were less than one year.

b. Accounts Receivable

	As of December 31,	
	2017	2016
	(In millions)	
Billed	$ 62.1	$ 55.7
Unbilled	195.5	124.1
Reserve for overhead rate disallowance	(42.8)	(44.5)
Total receivables under long-term contracts	214.8	135.3
Other receivables	0.7	1.1
Accounts receivable	$ 215.5	$ 136.4

The gross unbilled receivable amounts as of December 31, 2017 expected to be collected after one year are $113.7 million .

c. Inventories

	As of December 31,	
	2017	2016
	(In millions)	
Long-term contracts at average cost	$ 562.3	$ 551.9
Progress payments	(427.1)	(368.2)
Total long-term contract inventories	135.2	183.7
Total other inventories	1.2	1.4
Inventories	$ 136.4	$ 185.1

Long-term contract inventories included an allocation of general and administrative costs incurred throughout fiscal 2017 and 2016 amounting to $238.4 million and $257.4 million , respectively, and the cumulative amount of general and administrative costs in long-term contract inventories is estimated to be $11.4 million and $21.1 million as of December 31, 2017 and 2016 , respectively.

d. Other Current Assets, net

	As of December 31,	
	2017	2016
	(In millions)	
Recoverable from the U.S. government for acquisition integration costs	$ 10.9	$ 11.9
Recoverable from the U.S. government and other third parties for environmental remediation costs	25.6	25.2
Receivable from Northrop for environmental remediation costs	6.0	6.0
Prepaid expenses	19.2	16.5
Cost-share and other receivables, net	7.5	17.8
Recoverable from the U.S. government for competitive improvement program obligations	14.9	7.6
Income tax receivable	20.5	26.8
Other	5.2	11.1
Other current assets, net	$ 109.8	$ 122.9

e. Property, Plant and Equipment, net

	As of December 31,	
	2017	2016
	(In millions)	
Land	$ 71.2	$ 71.4
Buildings and improvements	368.3	345.1
Machinery and equipment	493.2	499.9
Construction-in-progress	30.3	30.4
	963.0	946.8
Less: accumulated depreciation	(604.0)	(580.8)
Property, plant and equipment, net	$ 359.0	$ 366.0

Depreciation expense for fiscal 2017, 2016, 2015, and one month ended December 31, 2015 was $56.7 million , $49.6 million , $49.8 million , and $3.8 million , respectively. The Company had $2.9 million of non-cash property, plant and equipment additions as of December 31, 2017.

f. Goodwill.

The goodwill balance as of December 31, 2017 and 2016 relates to the Company’s Aerospace and Defense segment. The change of $3.2 million in the carrying amount of goodwill since December 31, 2015 was due to the Coleman Aerospace acquisition in fiscal 2017 (see Note 4).

g. Intangible Assets

	As of December 31, 2017		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
		(In millions)	
Customer related	$ 87.2	$ 46.9	$ 40.3
Intellectual property\trade secrets	34.2	11.8	22.4
Trade name	21.0	3.1	17.9
Acquired technology	19.2	14.3	4.9
Intangible assets	$ 161.6	$ 76.1	$ 85.5

	As of December 31, 2016		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
		(In millions)	
Customer related	$ 83.8	$ 37.4	$ 46.4
Intellectual property\trade secrets	34.2	9.2	25.0
Non-compete agreements	0.5	0.5	—
Trade name	20.5	2.4	18.1
Acquired technology	18.3	13.4	4.9
Intangible assets	$ 157.3	$ 62.9	$ 94.4

Amortization expense related to intangible assets was $13.7 million , $13.3 million , $13.4 million , and $1.1 million in fiscal 2017, 2016, 2015, and one month ended December 31, 2015, respectively.

Future amortization expense for the five succeeding years is estimated to be as follows:

Year Ending December 31,	Future Amortization Expense
	(In millions)
2018	$ 13.7
2019	13.6
2020	13.4
2021	9.9
2022	6.6
	$ 57.2

h. Other Noncurrent Assets, net

	As of December 31,	
	2017	2016
	(In millions)	
Real estate held for entitlement and leasing	$ 94.0	$ 91.8
Receivable from Northrop for environmental remediation costs	58.5	62.0
Recoverable from the U.S. government for acquisition integration costs	—	10.9
Recoverable from the U.S. government for conditional asset retirement obligations	22.7	20.3
Recoverable from the U.S. government for competitive improvement program obligations	18.4	1.3
Recoverable from the U.S. government for restructuring costs	25.5	12.8
Grantor trust	24.2	16.6
Note receivable, net	9.0	9.0
Income tax receivable	—	10.8
Other	7.0	8.5
Other noncurrent assets, net	$ 259.3	$ 244.0

i. Other Current Liabilities

	As of December 31,	
	2017	2016
	(In millions)	
Accrued compensation and employee benefits	$ 113.4	$ 105.7
Contract related liabilities	41.7	24.7
Income taxes	0.8	2.1
Competitive improvement program obligations	15.0	7.6
Postretirement medical and life insurance benefits	4.8	5.2
Interest payable	0.6	4.1
Contract loss provisions	3.8	6.8
Other	15.8	16.8
Other current liabilities	$ 195.9	$ 173.0

j. Other Noncurrent Liabilities

	As of December 31,	
	2017	2016
	(In millions)	
Conditional asset retirement obligations	$ 44.0	$ 30.6
Pension benefits, non-qualified	17.6	17.5
Deferred compensation	29.4	19.8
Deferred revenue	12.7	13.3
Postretirement medical and life insurance benefits	32.7	37.4
Competitive improvement program obligations	18.4	1.3
Uncertain income tax positions	2.8	28.4
Other	13.5	13.1
Other noncurrent liabilities	$ 171.1	$ 161.4

k. Accumulated Other Comprehensive Loss, Net of Income Taxes

Changes in accumulated other comprehensive loss by components, net of income taxes:

	Actuarial Losses, Net	Prior Service Credits, Net	Total
		(In millions)	
November 30, 2015	$ (342.6)	$ 0.9	$ (341.7)
Actuarial losses arising during the period, net of income taxes	(8.6)	—	(8.6)
Amortization of actuarial losses and prior service credits, net of income taxes	3.4	(0.1)	3.3
December 31, 2015	(347.8)	0.8	(347.0)
Actuarial gains arising during the period, net of income taxes	7.5	—	7.5
Amortization of actuarial losses and prior service credits, net of income taxes	37.1	(0.6)	36.5
December 31, 2016	(303.2)	0.2	(303.0)
Actuarial losses arising during the period, net of income taxes	(8.5)	—	(8.5)
Amortization of actuarial losses and prior service credits, net of income taxes	39.0	(0.1)	38.9
December 31, 2017	$ (272.7)	$ 0.1	$ (272.6)

The estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic benefit expense in fiscal 2018:

	Pension Benefits	Medical and Life Insurance Benefits
	(In millions)	
Actuarial losses (gains), net	$ 70.7	$ (3.7)
Prior service costs (credits), net	0.1	(0.2)
	$ 70.8	$ (3.9)

l. Redeemable Common Stock

The Company inadvertently failed to register with the Securities Exchange Commission ("SEC") the issuance of certain of its common shares in its defined contribution 401(k) employee benefit plan (the "Plan"). As a result, certain Plan participants who purchased such securities pursuant to the Plan may have had the right to rescind certain of their purchases for consideration equal to the purchase price paid for the securities (or if such security has been sold, to receive consideration with respect to any loss incurred on such sale) plus interest from the date of purchase. In June 2008, the Company filed a registration statement on Form S-8 to register future transactions in the Company's stock fund in the Plan.

On May 30, 2017, the Company made a registered rescission offer to buy back unregistered shares from eligible Plan participants at the original purchase price plus interest, or to reimburse eligible Plan participants for losses they may have incurred if their shares had been sold. The registered rescission offer expired on June 30, 2017, and settlement payments of $3.5 million under the offer were completed in the third quarter of fiscal 2017 (see Note 13).

Note 4. Acquisition

On February 24, 2017, the Company closed on an agreement to purchase substantially all of the assets of Coleman Aerospace, a systems engineering and integration provider, from L3 Technologies, Inc. ("L3"). Coleman Aerospace operates now as a subsidiary of Aerojet Rocketdyne and was renamed Aerojet Rocketdyne Coleman Aerospace, Inc. ("Coleman"). The acquisition builds upon and expands the Company's capabilities in mission analysis and systems engineering, and increases its product portfolio to include vehicle integration for small-, medium- and intermediate-range ballistic missile targets and other small launch vehicles.

The aggregate consideration paid to L3 for the purchase of Coleman was $17.0 million , which included $15.0 million of cash paid at closing and a $2.0 million working capital adjustment paid in the third quarter of fiscal 2017. The Company incurred $1.0 million of expenses related to the acquisition of Coleman.

The preliminary purchase price allocation has been developed based on preliminary estimates of the fair value of the assets and liabilities of Coleman that the Company acquired. In addition, the allocation of the preliminary purchase price to acquired intangible assets is based on preliminary fair value estimates.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the acquisition date (in millions):

Current assets	$ 12.0
Property, plant and equipment	1.9
Total tangible assets acquired	13.9
Intangible assets acquired	4.8
Deferred income taxes	0.3
Total assets acquired	19.0
Liabilities assumed, current	(5.2)
Total identifiable net assets acquired	13.8
Goodwill (Consideration less total identifiable net assets acquired)	$ 3.2

The purchase price allocation resulted in the recognition of $3.2 million in goodwill, all of which is deductible for tax purposes and included within the Company's Aerospace and Defense segment. Goodwill recognized from the acquisition primarily relates to the expected contributions of Coleman to the Company's overall corporate strategy.

The estimated fair value of Coleman's intangible assets acquired included the following:

	Gross Carrying Amount (in millions)	Amortization Period (years)
Trade name	$ 0.5	8
Customer related	3.4	7
Acquired technology	0.9	10
Total intangible assets	$ 4.8	

The acquisition of Coleman was not considered a significant business combination.

Note 5. Income Taxes

The Company files a consolidated U.S. federal income tax return with its wholly-owned subsidiaries. The components of the Company's income tax provision:

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions)			
Current				
U.S. federal	$ (30.6)	$ 3.2	$ 33.0	$ 7.9
State and local	1.0	3.2	3.4	1.2
	(29.6)	6.4	36.4	9.1
Deferred				
U.S. federal	116.0	2.8	(41.2)	(6.2)
State and local	9.7	2.0	5.1	(0.9)
	125.7	4.8	(36.1)	(7.1)
Income tax provision	$ 96.1	$ 11.2	$ 0.3	$ 2.0

The following table shows the reconciling items between the income tax provision using the U.S. federal statutory rate and the Company's reported income tax provision.

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
Statutory U.S. federal income tax - provision (benefit)	$ 30.4	$ 10.2	$ (5.6)	$ 3.1
State income taxes	7.0	3.2	5.9	0.4
Reserve adjustments	(4.6)	(0.3)	0.4	—
Non-deductible convertible subordinated notes interest	—	0.8	1.4	0.1
R&D credits	(1.2)	(4.1)	—	(0.2)
Retroactive change in federal tax law	—	—	(1.9)	(1.7)
Benefit of manufacturing deductions	—	0.5	(1.0)	(0.6)
Lobbying costs	0.7	0.8	0.6	—
Deferred tax adjustment	(0.1)	(0.4)	—	0.7
Stock compensation excess tax benefits	(1.4)	—	—	—
Other, net	0.7	0.5	0.5	0.2
New legislation - tax rate changes	64.6	—	—	—
Income tax provision	$ 96.1	$ 11.2	$ 0.3	$ 2.0

A reconciliation of the U.S. federal statutory income tax rate to the Company’s effective income tax rate on earnings in percentages was as follows:

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
Statutory U.S. federal income tax rate	35.0 %	35.0 %	(35.0)%	35.0 %
State income taxes	8.0	11.0	35.2	4.9
Reserve adjustments	(5.3)	(1.0)	2.2	(0.3)
Non-deductible convertible subordinated notes interest	—	2.7	8.0	1.2
R&D credits	(1.4)	(14.0)	—	(2.8)
Retroactive change in federal tax law	—	—	(11.6)	(19.4)
Benefit of manufacturing deductions	—	1.7	(5.8)	(7.0)
Lobbying costs	0.8	2.7	3.6	0.4
Deferred tax adjustment	(0.1)	(1.4)	—	7.8
Stock compensation excess tax benefits	(1.6)	—	—	—
Other, net	0.8	1.7	5.3	2.4
New legislation - tax rate changes	74.4	—	—	—
Effective income tax rate	110.6 %	38.4 %	1.9 %	22.2 %

In fiscal 2017, the Company’s effective tax rate was an income tax expense of 110.6% on pre-tax income of $86.9 million . The Company’s effective tax rate differed from the 35.0% statutory federal income tax rate primarily due to the change in the federal statutory tax rate from 35% to 21% under the recently enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the “Tax Act”). In accordance with the rate reduction, the Company wrote down its net deferred tax assets by $64.6 million which unfavorably affected the effective tax rate by 74.4% . The effective tax rate also includes an increase from state income taxes partially offset by favorable adjustments to the Company's uncertain tax positions and R&D credits.

In fiscal 2016, the Company’s effective tax rate was an income tax expense of 38.4% on pre-tax income of $29.2 million . The Company’s effective tax rate differed from the 35.0% statutory federal income tax rate due largely to state income taxes and certain expenditures which are permanently not deductible for tax purposes, partially offset by the impact of R&D credits.

In fiscal 2015, the Company’s effective tax rate was an income tax expense of 1.9% on a pre-tax loss of $15.9 million . The Company’s effective tax rate differed from the 35.0% statutory federal income tax rate due largely to state income taxes and certain non-deductible interest expense partially offset by the retroactive reinstatement of the federal R&D credit and benefits allowed by Section 199 of the Internal Revenue Service ("IRS") code allowed to manufacturers.

In the one month ended December 31, 2015, the Company’s effective tax rate was an income tax expense of 22.2% on pre-tax income of $9.0 million . The Company’s effective tax rate differed from the 35% statutory federal income tax rate primarily due to the re-enactment of the federal R&D credit in December 2015 for calendar year 2015 which has been treated as a discrete event for the December 2015 one-month period, as well as impacts from state income taxes, benefits allowed by Section 199 of the IRS code allowed to manufacturers, and R&D credits.

The timing of recording or releasing a valuation allowance requires significant management judgment. The amount of the valuation allowance released by the Company represents a portion of deferred tax assets that was deemed more-likely-than-not that the Company will realize the benefits based on the analysis in which the positive evidence outweighed the negative evidence.

A valuation allowance is required when it is more-likely-than-not that all or a portion of deferred tax assets may not be realized. Establishment and removal of a valuation allowance requires management to consider all positive and negative evidence and to make a judgmental decision regarding the amount of valuation allowance required as of a reporting date. The weight given to the evidence is commensurate with the extent to which it can be objectively verified. In the evaluation as of December 31, 2017, management has considered all available evidence, both positive and negative, including but not limited to the following:

Positive evidence

- The Company is in a three year cumulative income position as of December 31, 2017;
- Positive operating results before income taxes for fiscal 2017;

- Eligibility of some of the Company’s environmental costs for future recovery in the pricing of its products and services to the U.S. government and under existing third party agreements;
- Establishment and execution of the Competitive Improvement Program evidencing increasing growth and profitability; and
- Increase in the Company’s contract backlog.

Negative evidence

- The Company’s exposure to environmental remediation obligations and the related uncertainty as to the ultimate exposure upon settlement; and
- The significance of the Company’s defined benefit pension obligation and related impact it could have in future years.

As of December 31, 2017, management believes that the weight of the positive evidence outweighed the negative evidence regarding the realization of the net deferred tax assets. Management will continue to evaluate the ability to realize the Company’s net deferred tax assets and the remaining valuation allowance on a quarterly basis.

The Company is routinely examined by domestic and foreign tax authorities. While it is difficult to predict the outcome or timing of a particular tax matter, the Company believes it has adequately provided reserves for any reasonable foreseeable outcome related to these matters.

Tax returns for the years ended November 30, 2014 through December 31, 2016 remain open to examination for U.S. federal tax jurisdiction. Tax returns for the years ended November 30, 2013 through December 31, 2016 remain open to examination for state income tax jurisdictions.

A reconciliation of the beginning and ending amount of unrecognized tax benefits consisted of the following:

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions)			
Balances at beginning of fiscal year	$ 29.5	$ 7.1	$ 6.8	$ 6.7
Increases based on tax positions in prior years	1.0	25.8	1.0	0.6
Decreases based on tax position in prior years	(25.1)	(1.2)	(1.8)	(0.2)
Increases based on tax positions in current year	0.4	0.7	0.7	—
Lapse of statute of limitations	(1.4)	(2.9)	—	—
Balances at end of fiscal year	$ 4.4	$ 29.5	$ 6.7	$ 7.1

As of December 31, 2017, the total amount of unrecognized tax benefits is $4.4 million . Of the $4.4 million of unrecognized tax benefits, $4.2 million would affect the effective tax rate. The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. As of December 31, 2017, the Company’s accrued interest and penalties related to uncertain tax positions was $0.3 million . It is reasonably possible that a reduction of up to $0.5 million of unrecognized tax benefits and related interest and penalties may occur within the next 12 months as a result of the expiration of certain statutes of limitations.

Deferred Income Taxes

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of the Company’s assets and liabilities for financial reporting and income tax purposes. Deferred tax assets and liabilities are determined by multiplying such differences by the enacted tax rates expected to be in effect when such differences are recovered or settled. In December 2017, as a result of the Tax Act, the Company remeasured its federal deferred tax assets and liabilities from 35% to 21%.

Deferred tax assets and liabilities were as follows:

	As of December 31,	
	2017	2016
	(In millions)	
Deferred Tax Assets		
Accrued estimated costs	$ 56.1	$ 82.0
Basis difference in assets and liabilities	2.1	8.5
Tax losses and credit carryforwards	12.9	6.5
Net cumulative defined benefit pension plan losses	114.7	212.9
Retiree medical and life insurance benefits	9.2	16.2
Valuation allowance	(1.7)	(1.7)
Total deferred tax assets	193.3	324.4
Deferred Tax Liabilities		
Revenue recognition differences	40.4	21.7
Basis differences in intangible assets	7.1	10.2
Total deferred tax liabilities	47.5	31.9
Total net deferred tax assets	$ 145.8	$ 292.5

Realization of deferred tax assets is primarily dependent on generating sufficient taxable income in future periods. The Company believes it is more-likely-than not its deferred tax assets, net of valuation allowances, will be realized. The Company's valuation allowance of $1.7 million remained unchanged from prior year. The changes in the Company's valuation allowance by period was as follows:

	Balance at Beginning of Period	Tax Valuation Allowance Charged to Income Tax Provision	Tax Valuation Allowance Credited to Income Tax Provision	Balance at End of Period
	(In millions)			
Fiscal 2017	$ 1.7	$ —	$ —	$ 1.7
Fiscal 2016	1.2	0.5	—	1.7
One month ended December 31, 2015	1.7	—	(0.5)	1.2
Fiscal 2015	2.6	0.6	(1.5)	1.7

The Company's federal net operating loss carryforwards of $20.4 million are set to expire from December 31, 2036 through December 31, 2037. The Company's state net operating loss carryforwards of $33.0 million are set to expire from December 31, 2032 through December 31, 2037. The Company's foreign net operating loss carryforwards of $8.0 million have a full valuation allowance and no expiration date.

The Company's federal and California credit carryovers are $3.4 million and $3.4 million , respectively. The federal credit carryovers are set to expire from December 31, 2036 through December 31, 2037. The Company's California credit carryovers have no expiration date.

Note 6. Long-Term Debt

	As of December 31,	
	2017	2016
	(In millions)	
Senior debt	$ 368.3	$ 388.0
Convertible senior notes	247.2	240.0
Convertible subordinated notes	—	35.6
Capital lease obligations	0.9	—
Total debt, carrying amount	616.4	663.6
Less: Amounts due within one year	(25.0)	(55.6)
Total long-term debt, carrying amount	$ 591.4	$ 608.0

As of December 31, 2017 , the earlier of the Company’s contractual debt principal maturities or the next debt redemption date that could be exercised at the option of the debt holder, are summarized by fiscal year:

	Total	2018	2019	2020	2021	Thereafter
	(In millions)					
Senior debt	$ 370.0	$ 25.0	$ 30.0	$ 35.0	$ 280.0	$ —
Convertible senior notes	300.0	—	—	—	—	300.0
Total debt principal	$ 670.0	$ 25.0	$ 30.0	$ 35.0	$ 280.0	$ 300.0

See a summary of the minimum payments under capital lease obligations in Note 6(d).

The Company amortizes deferred financing costs over the estimated life of the related debt (a portion of which is classified as a contra liability). Amortization of deferred financing costs was $1.8 million , $2.0 million , $2.7 million and $0.2 million in fiscal 2017, 2016, 2015 and the one month ended December 31, 2015, respectively.

a. Senior Debt:

	As of December 31,	
	2017	2016
	(In millions)	
Term loan, bearing interest at variable rates (rate of 3.82% as of December 31, 2017), maturing in June 2021	$ 370.0	$ 390.0
Unamortized deferred financing costs	(1.7)	(2.0)
Total senior debt	$ 368.3	$ 388.0

On June 17, 2016, the Company entered into a new $750.0 million senior secured senior credit facility (the "Senior Credit Facility"). The Senior Credit Facility matures on June 17, 2021 and consists of (i) a $350.0 million revolving line of credit (the "Revolver") and (ii) a $400.0 million term loan (the "Term Loan"). Under the Revolver, up to an aggregate of $100.0 million is available for the issuance of letters of credit and up to an aggregate of $10.0 million is available for swingline loans. The Senior Credit Facility amends and replaces the prior $300.0 million credit facility which was set to mature in May 2019.

On the closing date, the Company borrowed $100.0 million of loans under the Revolver and used the proceeds to repay in full the $90.0 million of outstanding term loans under the prior credit facility, fees incurred for the Senior Credit Facility, and for general corporate purposes. As of December 31, 2017, the Company had $370.0 million outstanding under the Term Loan, zero borrowings under the Revolver, and had issued $38.6 million letters of credit.

The Term Loan and loans under the Revolver bear interest at LIBOR (or the base rate) plus an applicable margin ranging from 175 to 250 basis points based on the Company's leverage ratio (the "Consolidated Net Leverage Ratio") at the end of the most recent fiscal quarter. In addition to interest, the Company must also pay certain fees including (i) letter of credit fees ranging from 175 to 250 basis points per annum on the amount of issued but undrawn letters of credit and (ii) commitment fees ranging from 30 to 45 basis points per annum on the unused portion of the Revolver.

The Term Loan amortizes at a rate of 5.0% per annum of the original drawn amount starting on September 30, 2016, increasing to 7.5% per annum on September 30, 2018, and increasing to 10.0% per annum from September 30, 2020 to be paid in equal quarterly installments with any remaining amounts, along with outstanding borrowings under the Revolver, due on the maturity date. Outstanding borrowings under the Revolver and the Term Loan may be voluntarily repaid at any time, in whole or in part, without premium or penalty.

Subject to certain restrictions, all the obligations under the Senior Credit Facility are guaranteed by the Company and the existing and future material domestic subsidiaries, other than Easton (the "Guarantors"). As collateral security for the amount outstanding under the Senior Credit Facility and the guarantees thereof, the Company and the Guarantors (collectively, the "Loan Parties") have granted to the administrative agent for the benefit of the lenders: (i) certain equity interests of the Loan Parties; (ii) first priority liens on substantially all of the tangible and intangible personal property of the Loan Parties; and (iii) first priority liens on certain real properties located in Los Angeles, California, Culpepper, Virginia and Redmond, Washington (but excluding all other owned real properties).

The Senior Credit Facility contains covenants requiring the Company to (i) maintain an interest coverage ratio (the "Consolidated Interest Coverage Ratio") of not less than 3.00 to 1.00 and (ii) maintain a Consolidated Net Leverage Ratio not to exceed 3.75 to 1.00 for periods ending from December 31, 2017 through September 30, 2018; and 3.50 to 1.00 for periods ending from December 31, 2018 thereafter, provided that the maximum leverage ratio for all periods shall be increased by 0.50 to 1.00 for two quarters after consummation of a qualified acquisition.

The Company may generally make certain investments, redeem debt subordinated to the Senior Credit Facility and make certain restricted payments (such as stock repurchases) if the Company's Consolidated Net Leverage Ratio does not exceed 3.25 to 1.00 pro forma for such transaction. The Company is otherwise subject to customary covenants including limitations on asset sales, incurrence of additional debt, and limitations on certain investments and restricted payments.

Financial Covenant	Actual Ratios as of December 31, 2017	Required Ratios
Consolidated Interest Coverage Ratio, as defined under the Senior Credit Facility	10.13 to 1.00	Not less than: 3.00 to 1.00
Consolidated Net Leverage Ratio, as defined under the Senior Credit Facility	2.64 to 1.00	Not greater than: 3.75 to 1.00

The Company was in compliance with its financial and non-financial covenants as of December 31, 2017 .

b. Convertible Senior Notes:

	As of December 31,			
	2017		2016	
	(In millions)			
Senior convertible notes, bearing interest at 2.25% per annum, interest payments due in June and December, maturing in December 2023	$	300.0	$	300.0
Unamortized discount and deferred financing costs		(52.8)		(60.0)
Total convertible senior notes	$	247.2	$	240.0

On December 14, 2016, the Company issued $300.0 million aggregate principal amount of 2¼% Notes in a private placement to qualified institutional buyers pursuant to Rule 144A under the Securities Act of 1933, as amended (the “Securities Act”). The 2¼% Notes bear cash interest at a rate of 2.25% per annum on the principal amount of the 2¼% Notes from December 14, 2016, payable semi-annually in arrears on June 15 and December 15 of each year, beginning June 15, 2017. The 2¼% Notes will mature on December 15, 2023, subject to earlier repurchase, redemption or conversion in certain circumstances described below.

The 2¼% Notes are general unsecured senior obligations, which (i) rank senior in right of payment to all of the Company’s existing and future senior indebtedness that is expressly subordinated in right of payment to the 2¼% Notes; (ii) rank equal in right of payment with all of the Company’s existing and future unsecured indebtedness that is not so subordinated; (iii) rank effectively junior in right of payment to any of the Company’s secured indebtedness to the extent of the value of the assets securing such indebtedness; and (iv) rank structurally junior to all indebtedness and other liabilities (including trade payables) of the Company’s subsidiaries.

The 2¼% Notes may be converted into cash, shares of the Company’s common stock or a combination thereof initially at a conversion rate of 38.4615 shares of common stock per $1,000 principal amount of 2¼% Notes (equivalent to a conversion price of approximately $26.00 per share of common stock), subject to adjustment from time to time as described in the indenture governing the 2¼% Notes. Holders may convert their 2¼% Notes at their option (i) at any time prior to the close of business on the business day immediately preceding September 15, 2023 under certain circumstances and (ii) at any time on or after September 15, 2023 until the close of business on the business day immediately preceding the maturity date, irrespective of such circumstances. In addition, if holders of the 2¼% Notes elect to convert their 2¼% Notes in connection with the occurrence of a make-whole fundamental change, as defined in the indenture governing the 2¼% Notes, such holders will be entitled to an increase in the conversion rate upon conversion in certain circumstances.

The Company may redeem for cash all or any portion of the 2¼% Notes, at its option, on or after December 21, 2020, if the last reported sale price of the Company's common stock has been at least 150% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending on, and including, the trading day immediately preceding the date on which the Company provides notice of redemption at a redemption price equal to 100% of the principal amount of the 2¼% Notes to be redeemed, plus accrued and unpaid interest to, but excluding, the redemption date.

If a fundamental change, as defined in the indenture governing the 2¼% Notes, occurs prior to maturity, subject to certain conditions, holders of the 2¼% Notes will have the right to require the Company to repurchase all or part of their 2¼% Notes for cash at a fundamental change repurchase price equal to 100% of their principal amount, plus accrued and unpaid interest, if any, up to, but excluding, the fundamental change repurchase date.

The 2¼% Notes contain customary events of default, including, among other things, payment default, covenant default and certain cross-default provisions linked to the payment of other indebtedness of the Company or its significant subsidiaries.

Issuance of the 2¼% Notes generated proceeds of $294.2 million net of debt issuance costs, which were used to repurchase long-term debt and for working capital and other general corporate purposes.

The Company separately accounted for the liability and equity components of the 2¼% Notes. The initial liability component of the 2¼% Notes was valued based on the present value of the future cash flows using an estimated borrowing rate at the date of the issuance for similar debt instruments without the conversion feature, which equals the effective interest rate of 5.8% on the liability component. The equity component, or debt discount, was initially valued equal to the principal value of the 2¼% Notes, less the liability component. The debt discount is being amortized as a non-cash charge to interest expense over the period from the issuance date through December 15, 2023.

The debt issuance costs of $5.8 million incurred in connection with the issuance of the 2¼% Notes were capitalized and bifurcated into deferred financing costs of $4.7 million and equity issuance costs of $1.1 million . The deferred financing costs are being amortized to interest expense from the issuance date through December 15, 2023.

The 2¼% Notes consisted of the following (in millions, except years, percentages, conversion rate, and conversion price):

	As of December 31,	
	2017	2016
Carrying value, long-term	$ 247.2	$ 240.0
Unamortized discount and deferred financing costs	52.8	60.0
Principal amount	$ 300.0	$ 300.0
Carrying amount of equity component, net of equity issuance costs	$ 54.5	$ 54.5
Remaining amortization period (years)	6.0	7.0
Effective interest rate	5.8%	5.8%
Conversion rate (shares of common stock per $1,000 principal amount)	38.4615	38.4615
Conversion price (per share of common stock)	$ 26.00	$ 26.00

Based on the Company's closing stock price of $31.20 on December 31, 2017, the if-converted value of the 2¼% Notes exceeded the aggregate principal amount of the 2¼% Notes by $60.0 million .

The following table presents the interest expense components for the 2¼% Notes:

	Year-Ended December 31,	
	2017	2016
	(In millions)	
Interest expense-contractual interest	$ 6.8	$ 0.3
Interest expense-amortization of debt discount	6.7	0.3
Interest expense-amortization of deferred financing costs (1)	0.6	—

(1) Less than $0.1 million in fiscal 2016.

c. Convertible Subordinated Notes:

	As of December 31,	
	2017	2016
	(In millions)	
Convertible subordinated debentures, bearing interest at 4.0625% per annum, interest payments due in June and December, maturing in December 2039	$ —	$ 35.6
Total convertible subordinated notes	$ —	$ 35.6

As of December 31, 2017 , the Company fully redeemed the outstanding principal amount of its 4 $^{1}/_{16}$% Debentures. In December 2016, the Company notified holders of its 4 $^{1}/_{16}$% Debentures that the Company would redeem, on February 3, 2017, all of their 4 $^{1}/_{16}$% Debentures at a purchase price equal to 100% of the principal amount of the 4 $^{1}/_{16}$% Debentures to be redeemed, plus any accrued and unpaid interest. In January 2017, $35.6 million of the 4 $^{1}/_{16}$% Debentures (the entire amount outstanding as of December 31, 2016) were converted to 3.9 million shares of common stock.

d. Capital Lease Obligations:

	As of December 31,	
	2017	2016
	(In millions)	
Capital lease obligations	$ 0.9	$ —
Total capital lease obligations	$ 0.9	$ —

As of December 31, 2017, the Company has capital lease obligations for certain information technology equipment. The future minimum rental commitments under non-cancelable capital leases as of December 31, 2017 were as follows (in millions):

Fiscal 2018	$ 0.2
Fiscal 2019	0.2
Fiscal 2020	0.2
Fiscal 2021	0.2
Fiscal 2022	0.2
Total minimum rentals	1.0
Less: imputed interest	(0.1)
Present value of minimum capital lease payments	$ 0.9

In September 2017, the Company entered into an agreement to lease 122,000 -square feet of office space in Huntsville, Alabama. The term of the lease is twenty years and is expected to commence in March 2018 resulting in an estimated financial commitment of $47.8 million representing a present value of $24.9 million . The liability has not been recorded as of December 31, 2017 and the commitment minimum payments over the next five fiscal years is as follows: $1.1 million in fiscal 2018, $2.0 million each year for fiscal 2019 through fiscal 2021, $2.1 million in fiscal 2022.

In October 2017, the Company entered into an agreement to lease a new 136,000 -square-foot advanced manufacturing facility located in Huntsville, Alabama. The term of the lease is thirty-one years and is expected to commence in December 2018 resulting in an estimated financial commitment of $35.3 million representing a present value of $21.0 million . The liability has not been recorded as of December 31, 2017 and the commitment minimum payments over the next five fiscal years is as follows: $1.1 million in fiscal 2018 and $1.7 million each year for fiscal 2019 through fiscal 2022.

Note 7. Retirement Benefits

a. Plan Descriptions

Pension Benefits

The Company's defined benefit pension plan future benefit accrual was discontinued in fiscal 2009. As of December 31, 2017 , the assets, projected benefit obligations, and unfunded pension obligation were $931.2 million , $1,442.9 million , and $511.7 million , respectively.

The Company expects to make cash contributions of approximately $42.0 million to its tax-qualified defined benefit pension plan in fiscal 2018. The Company is generally able to recover these contributions related to its tax-qualified defined benefit pension plan as allowable costs on its U.S. government contracts, but there is a lag between when the Company contributes cash to its tax-qualified defined benefit pension plan under pension funding rules and recovers the cash under the U.S. government Cost Accounting Standards. During fiscal 2017, the Company made cash contributions of $75.8 million to its tax-qualified defined benefit pension plan of which $33.7 million was recoverable from the Company's U.S. government contracts in fiscal 2017 with the remaining $42.1 million expected to be recoverable from the Company's U.S. government contracts in the future.

The funded status of the Company's tax-qualified pension plan may be adversely affected by the investment experience of the plan's assets, by any changes in U.S. law and by changes in the statutory interest rates used by tax-qualified pension plans in the U.S. to calculate funding requirements. Accordingly, if the performance of the plan's assets does not meet assumptions, if there are changes to the Internal Revenue Service regulations or other applicable law, or if other actuarial assumptions are modified, future contributions to the underfunded pension plans could be higher than the Company expects.

Medical and Life Insurance Benefits

The Company provides medical and life insurance benefits to certain eligible retired employees, with varied coverage by employee group. Generally, employees hired after January 1, 1997 are not eligible for retiree medical and life insurance benefits. The medical benefit plan provides for cost sharing between the Company and its retirees in the form of retiree contributions, deductibles, and coinsurance. Medical and life insurance benefit obligations are unfunded. Medical and life insurance benefit cash payments for eligible retired employees are recoverable from the Company’s U.S. government contracts.

Defined Contribution 401(k) Benefits

The Company sponsors a defined contribution 401(k) plan and participation in the plan is available to all employees. The Company makes matching contributions in cash equal to 100% of the first 3% of the participants’ compensation contributed and 50% of the next 3% of the compensation contributed. The cost of the 401(k) plan was $21.2 million , $20.7 million , $24.9 million , and $1.3 million in fiscal 2017 , 2016 , 2015, and the one month ended December 31, 2015, respectively.

b. Plan Results

Summarized below is the balance sheet impact of the Company’s pension benefits and medical and life insurance benefits. Pension benefits include the consolidated tax-qualified plan and the unfunded non-qualified plan for benefits provided to employees beyond those provided by the Company’s tax-qualified plan. Assets, benefit obligations, and the funded status of the plans were determined at December 31, 2017 and 2016 .

	Pension Benefits		Medical and Life Insurance Benefits	
	As of December 31,			
	2017	2016	2017	2016
	(In millions)			
Change in fair value of assets:				
Fair value - beginning of period	$ 925.1	$ 931.4	$ —	$ —
Gain on assets	96.8	93.7	—	—
Employer contributions	77.2	34.1	4.2	4.3
Benefits paid (1)	(133.2)	(134.1)	(4.2)	(4.3)
Settlements (2)	(34.7)	—	—	—
Fair value - end of period	$ 931.2	$ 925.1	$ —	$ —
Change in benefit obligation:				
Benefit obligation - beginning of period	$ 1,492.1	$ 1,531.0	$ 42.6	$ 50.8
Service cost	15.0	14.0	—	—
Interest cost	57.6	64.1	1.5	1.9
Actuarial losses (gains)	46.1	17.1	(2.4)	(5.8)
Benefits paid	(133.2)	(134.1)	(4.2)	(4.3)
Settlements (2)	(34.7)	—	—	—
Benefit obligation - end of period (3)	$ 1,442.9	$ 1,492.1	$ 37.5	$ 42.6
Funded status of the plans	$ (511.7)	$ (567.0)	$ (37.5)	$ (42.6)
Amounts recognized in the consolidated balance sheets:				
Postretirement medical and life insurance benefits, current	$ —	$ —	$ (4.8)	$ (5.2)
Postretirement medical and life insurance benefits, noncurrent	—	—	(32.7)	(37.4)
Pension liability, non-qualified current (component of other current liabilities)	(1.3)	(1.3)	—	—
Pension liability, non-qualified (component of other noncurrent liabilities)	(17.6)	(17.5)	—	—
Pension benefits, noncurrent (4)	(492.8)	(548.2)	—	—
Net liability recognized in the consolidated balance sheets	$ (511.7)	$ (567.0)	$ (37.5)	$ (42.6)

(1) Benefits paid for medical and life insurance benefits are net of the Medicare Part D Subsidy of $0.1 million and $0.1 million received in fiscal 2017 and 2016 , respectively.
(2) On October 17, 2017, the Company's tax-qualified defined benefit pension plan purchased non-participating annuity contracts in the amount of $34.7 million for approximately 2,800 participants.
(3) Pension benefit obligation includes $18.9 million and $18.8 million as of December 31, 2017 and 2016 , respectively, for the non-qualified plan.
(4) The net cash flow impact of the pension benefit obligation in fiscal 2017 was $42.3 million .

The accumulated benefit obligation for the defined benefit pension plans was $1,442.9 million and $1,492.1 million as of the December 31, 2017 and 2016 measurement dates, respectively.

Components of retirement benefit expense (income) were:

	Pension Benefits				Medical and Life Insurance Benefits			
	Year Ended			One month ended	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions)							
Service cost	$ 15.0	$ 14.0	$ 10.8	$ 1.1	$ —	$ —	$ —	$ —
Interest cost on benefit obligation	57.6	64.1	63.6	5.3	1.5	1.9	1.9	0.2
Assumed return on assets (1)	(64.5)	(70.1)	(88.1)	(6.0)	—	—	—	—
Amortization of prior service costs (credits)	0.1	0.1	—	—	(0.2)	(1.2)	(1.1)	(0.1)
Amortization of net losses (gains)	67.8	63.7	84.0	5.4	(4.1)	(3.6)	(3.5)	(0.3)
	$ 76.0	$ 71.8	$ 70.3	$ 5.8	$ (2.8)	$ (2.9)	$ (2.7)	$ (0.2)

(1) The actual return and rate of return on assets was as follows:

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions, except rate of return)			
Actual gain (loss) on assets	$ 96.8	$ 93.7	$ (64.2)	$ (22.2)
Actual rate of return on assets	10.8%	11.0%	(6.1)%	(2.3)%

Market conditions and interest rates significantly affect assets and liabilities of the pension plans. Pension accounting permits market gains and losses to be deferred and recognized over a period of years. This "smoothing" results in the creation of other accumulated income or loss which will be amortized to pension costs in future years. The accounting method the Company utilizes recognizes one-fifth of the unamortized gains and losses in the market-related value of pension assets and all other gains and losses including changes in the discount rate used to calculate the benefit obligation each year. Investment gains or losses for this purpose are the difference between the expected return and the actual return on the market-related value of assets which smoothes asset values over three years . Although the smoothing period mitigates some volatility in the calculation of annual retirement benefit expense, future expenses are impacted by changes in the market value of assets and changes in interest rates.

c. Plan Assumptions

The Company used the following assumptions, calculated based on a weighted-average, to determine the benefit obligations:

	Pension Benefits		Medical and Life Insurance Benefits	
	As of December 31,		As of December 31,	
	2017	2016	2017	2016
Discount rate	3.59%	4.02%	3.37%	3.68%
Discount rate (non-qualified plan)	3.62%	4.07%	*	*
Ultimate healthcare trend rate	*	*	5.00%	5.00%
Initial healthcare trend rate (pre 65/post 65)	*	*	6.50%	7.00%
Year ultimate rate attained (pre 65/post 65)	*	*	2021	2021

* Not applicable

The Company used the following assumptions, calculated based on a weighted-average, to determine the retirement benefit expense (income):

	Pension Benefits				Medical and Life Insurance Benefits			
	Year Ended			One month ended	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
Discount rate	4.02%	4.36%	3.96%	4.26%	3.68%	3.99%	3.54%	3.87%
Discount rate (non-qualified plan)	4.07%	4.41%	4.01%	4.32%	*	*	*	*
Expected long-term rate of return on assets	7.00%	7.00%	8.00%	7.00%	*	*	*	*
Ultimate healthcare trend rate	*	*	*	*	5.00%	5.00%	5.00%	5.00%
Initial healthcare trend rate (pre 65/post 65)	*	*	*	*	7.00%	7.00%	7.00%	7.00%
Year ultimate rate attained (pre 65/post 65)	*	*	*	*	2021	2021	2021	2021

* Not applicable

Certain actuarial assumptions, such as assumed discount rate, long-term rate of return, and assumed healthcare cost trend rates can have a significant effect on amounts reported for periodic cost of pension benefits and medical and life insurance benefits, as well as respective benefit obligation amounts. The assumed discount rate represents the market rate available for investments in high-quality fixed income instruments with maturities matched to the expected benefit payments for pension and medical and life insurance benefit plans.

The expected long-term rate of return on assets represents the rate of earnings expected in the funds invested, and funds to be invested, to provide for anticipated benefit payments to plan participants. The Company evaluated historical investment performance, current and expected asset allocation, and, with input from the Company’s external advisors, developed best estimates of future investment performance. Based on this analysis, the Company assumed a long-term expected rate of return of 7.0% in fiscal 2017.

The Company reviews external data and its own historical trends for healthcare costs to determine the healthcare cost trend rates for the medical benefit plans. For fiscal 2017 medical benefit obligations, the Company assumed a 6.5% annual rate of increase for pre and post 65 participants in the per capita cost of covered healthcare claims with the rate decreasing over three years until reaching 5.0% .

A one percentage point change in the key assumptions would have the following effects on the projected benefit obligations as of December 31, 2017 and on retirement benefit expense for fiscal 2017 :

	Pension Benefits and Medical and Life Insurance Benefits Discount Rate		Expected Long-term Rate of Return	Assumed Healthcare Cost Trend Rate	
	Net Periodic Benefit Expense	Projected Benefit Obligation	Net Periodic Pension Benefit Expense	Net Periodic Medical and Life Insurance Benefit Expense	Accumulated Benefit Obligation
			(In millions)		
1% decrease	$21.7	$153.5	$9.2	$(0.2)	$(0.7)
1% increase	(18.5)	(128.9)	(9.2)	0.3	0.8

d. Plan Assets and Investment Policy

The Company’s investment policy is to maximize the total rate of return within a prudent risk framework, while maintaining adequate liquidity throughout volatile market cycles to meet benefit obligations when due. The Company's strategies employ active management and are generally focused on minimizing the permanent loss of capital. The Company's asset diversification objectives target a global portfolio that invests across the capital structure via strategies with complimentary risk and return profiles. Diversification is achieved by investing in various asset types, which may include cash, fixed income, equities, and private equity and credit holdings. Further, the Company's strategy allows for diversification as to the types of investment vehicle structures, investment and redemption periods, and the number of investment managers used to carry out its strategy. Allocations between asset types, structures and managers may change as a result of changing market conditions, tactical investment opportunities, planned Company contributions, and cash obligations of the plan.

The asset allocations by asset category were as follows:

	As of December 31,	
	2017	2016
Cash and cash equivalents	6%	26%
Equity securities	52	43
Fixed income	16	15
Private assets	10	8
Hedge funds	16	8
Total	100%	100%

The fair value by asset category and by level was as follows:

	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(In millions)			
December 31, 2017				
Cash and cash equivalents	$ 28.2	$ 28.2	$ —	$ —
Equity securities:				
Domestic equity securities	440.9	437.1	—	3.8
International equity securities	39.9	39.9	—	—
Fixed income:				
Corporate debt securities	87.1	—	75.8	11.3
Asset-backed securities	33.8	—	33.8	—
Foreign bonds	0.1	—	0.1	—
U.S. government securities	10.7	—	10.7	—
Private assets	25.7	—	—	25.7
Total	666.4	$ 505.2	$ 120.4	$ 40.8
Investment measured at Net Asset Value ("NAV")				
Private assets	69.0			
Hedge funds	153.7			
Registered investment companies	10.5			
Common/collective trusts ("CCTs")	39.3			
Total investments measured at NAV	272.5			
Receivables	1.0			
Payables	(8.7)			
Total assets	$ 931.2			

	Total		Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)
			(In millions)				
December 31, 2016							
Cash and cash equivalents	$	31.3	$	31.3	$	—	$ —
Equity securities:							
Domestic equity securities		377.2		373.8		1.2	2.2
International equity securities		16.2		16.2		—	—
Derivatives:							
Written options		(0.1)		(0.1)		—	—
Short sales		(0.1)		(0.1)		—	—
Fixed income:							
Corporate debt securities		33.8		—		27.0	6.8
Asset-backed securities		71.5		—		71.5	—
Municipal bonds		26.3		—		26.3	—
Short sales		(0.2)		—		(0.2)	—
Real estate investments		0.5		—		—	0.5
Total		556.4	$	421.1	$	125.8	$ 9.5
Investment measured at NAV							
Private assets		70.7					
Hedge funds		79.3					
CCTs		219.4					
Total investments measured at NAV		369.4					
Receivables		1.8					
Payables		(2.5)					
Total assets	$	925.1					

Below is a description of the significant investment strategies and valuation methodologies used for the investments measured at fair value, including the general classification of such investments pursuant to the valuation hierarchy. There have been no changes in the methodologies used at December 31, 2017 and 2016 .

Cash and cash equivalents

Cash and cash equivalents are held in money market accounts or invested in Short-Term Investment Funds (“STIFs”). Cash and cash equivalents held in money market accounts are classified as Level 1 investments. STIFs are measured at NAV and included in CCTs as a reconciling item to the fair value tables above.

Equity securities

Equity securities are invested broadly in U.S. and non-U.S. companies in a variety of sectors and market capitalizations. These investments are comprised of common stocks, exchange-traded funds (“ETFs”), CCTs, derivatives and other investment vehicles. Common stocks and ETFs are stated at fair value as quoted on a recognized securities exchange and are valued at the last reported sales price on the last business day of the fiscal year and are classified as Level 1 investments. Derivatives include call and put options on common stocks or ETFs, which are all listed on an exchange and active market and classified as Level 1 investments. Short sales are short equity positions which are all listed on an exchange and active market and classified as Level 1 investments. Equity securities that are invested in common stock or preferred stock and priced using observable inputs are classified as Level 2 investments. Equity securities that are invested in common stock of private companies and priced using unobservable inputs are classified as Level 3 investments. CCTs invested in equity securities are measured at NAV and included as a reconciling item to the fair value tables above.

Fixed income securities

Fixed income securities are invested in a variety of instruments, including, but not limited to, corporate debt securities, CCTs, registered investment companies, asset-backed securities, and other investment vehicles. Corporate debt securities are invested in corporate bonds or ETFs. ETFs are traded in an exchange and active market and classified as Level 1 investments.

Corporate bonds that are valued at bid evaluations using observable and market-based inputs are classified as Level 2 investments. Corporate bonds that are priced by brokers using unobservable inputs are classified as Level 3 investments. Asset-backed securities, including government-backed mortgage securities, non-government-backed collateralized mortgage obligations, asset-backed securities, and commercial mortgage-backed securities, are valued at bid evaluations and are classified as Level 2 investments. Short sales are short fixed income positions which are classified as Level 1 investments if they are listed on an exchange and active market, and are classified as Level 2 investments if they are valued at bid evaluation using observable and market-based inputs. Registered investment companies and CCTs invested in fixed income securities are measured at NAV and included as a reconciling item to the fair value tables above.

Real estate investments

Real estate investments include residential lots located in Benicia, California and are classified as Level 3 investments.

Private assets

Private assets are primarily limited partnerships and fund-of-funds that mainly invest in U.S. and non-U.S. leveraged buyout, venture capital and special situation strategies. Generally, the individual investments within the partnerships or funds are valued at public market, private market, or appraised value. Private assets are valued by investment managers using unobservable inputs such as extrapolated data, proprietary data, or indicative quotes. The majority of the private assets are valued at NAV and included as a reconciling item to the fair value tables above. Private assets for which there is no NAV are classified as Level 3 investments. Valuations of certain assets were based on the NAV or market value three months prior to the fiscal year-end. The Company made adjustments amounting to an increase of $0.3 million and $11.3 million for fiscal 2017 and 2016, respectively, to account for changes since the valuation date.

Hedge funds

Hedge funds primarily consist of multi-strategy hedge funds that invest across a range of equity and debt securities in a variety of industry sectors. Hedge funds are valued at NAV calculated by investment managers using unobservable inputs such as extrapolated data, proprietary data, or indicative quotes and are included as a reconciling item to the fair value tables above. Valuations of certain assets were based on the NAV or total market value three months prior to the fiscal year-end. The Company made adjustments amounting to an increase of $0.3 million for fiscal 2017 to account for changes since the valuation date.

Changes in the fair value of the Level 3 investments were as follows:

	December 31, 2016	Unrealized Gains	Purchases, Sales, and Settlements, net	December 31, 2017
		(In millions)		
Domestic equity securities	$ 2.2	$ 2.9	$ (1.3)	$ 3.8
Corporate debt securities	6.8	2.0	2.5	11.3
Real estate investments	0.5	—	(0.5)	—
Private assets	—	1.2	24.5	25.7
Total	$ 9.5	$ 6.1	$ 25.2	$ 40.8

	December 31, 2015	Unrealized Gains	Purchases, Sales, and Settlements, net	December 31, 2016
		(In millions)		
Domestic equity securities	$ 0.5	$ 0.1	$ 1.6	$ 2.2
Corporate debt securities	—	—	6.8	6.8
Real estate investments	0.7	—	(0.2)	0.5
Total	$ 1.2	$ 0.1	$ 8.2	$ 9.5

e. Benefit Payments

The following table presents estimated future benefit payments:

Year Ending December 31,	Pension Benefit Payments	Medical and Life Insurance Benefits		
		Gross Benefit Payments	Medicare D Subsidy	Net Benefit Payments
	(In millions)			
2018	$ 116.2	$ 5.0	$ 0.2	$ 4.8
2019	113.9	4.7	0.2	4.5
2020	110.7	4.4	0.2	4.2
2021	107.2	4.0	0.1	3.9
2022	103.6	3.6	0.1	3.5
Years 2023 - 2027	463.2	13.1	0.4	12.7

Note 8. Commitments and Contingencies

a. Operating Lease Commitments and Income

The Company and its subsidiaries lease certain facilities, machinery and equipment, and office buildings under long-term, non-cancelable operating leases. The leases generally provide for renewal options ranging from one to five years and require the Company to pay for utilities, insurance, taxes, and maintenance. Rent expense was $20.7 million in fiscal 2017, $21.2 million in fiscal 2016, $18.5 million in fiscal 2015, and $1.8 million in the one month ended December 31, 2015.

The Company also leases certain surplus facilities to third parties. The Company recorded lease income of $6.4 million in fiscal 2017, $6.5 million in fiscal 2016, $6.3 million in fiscal 2015, and $0.5 million in the one month ended December 31, 2015 related to these arrangements, which have been included in net sales.

The future minimum rental commitments under non-cancelable operating leases with initial or remaining terms of one year or more and lease revenue in effect as of December 31, 2017 were as follows:

Year Ending December 31,	Future Minimum Rental Commitments	Future Minimum Rental Income
	(In millions)	
2018	$ 15.1	$ 4.8
2019	14.6	2.5
2020	14.1	0.7
2021	14.2	0.7
2022	13.2	0.2
Thereafter	23.9	—
	$ 95.1	$ 8.9

b. Legal Matters

The Company and its subsidiaries are subject to legal proceedings, including litigation in U.S. federal and state courts, which arise out of, and are incidental to, the ordinary course of the Company's on-going and historical businesses. The Company is also subject from time to time to suits under the U.S. federal False Claims Act, known as " *qui tam* " actions, and to governmental investigations by federal and state agencies. The Company cannot predict the outcome of such proceedings with any degree of certainty. Loss contingency provisions are recorded for probable losses at management's best estimate of a loss, or when a best estimate cannot be made, a minimum loss contingency amount is recorded. These estimates are often initially developed substantially earlier than when the ultimate loss is known, and are refined each quarterly reporting period as additional information becomes available.

Asbestos Litigation

The Company has been, and continues to be, named as a defendant in lawsuits alleging personal injury or death due to exposure to asbestos in building materials, products, or in manufacturing operations. The majority of cases are pending in Texas and Illinois. There were 59 asbestos cases pending as of December 31, 2017 .

Given the lack of any significant consistency to claims (i.e., as to product, operational site, or other relevant assertions) filed against the Company, the Company is generally unable to make a reasonable estimate of the future costs of pending claims or unasserted claims. As of December 31, 2017 , the Company has accrued an immaterial amount related to pending claims.

Socorro

On May 12, 2015, a complaint for personal injuries, loss of consortium and punitive damages was filed by James Chavez, Andrew Baca, and their respective spouses, against Aerojet Rocketdyne and the Board of Regents of New Mexico Tech in the Seventh Judicial District, County of Socorro, New Mexico, *James Chavez, et al., vs. Aerojet Rocketdyne, Inc., et al., Case No. D725CV201500047* . Messrs. Chavez and Baca were employees of Aerotek, a contractor to Aerojet Rocketdyne, who were injured when excess energetic materials being managed by the Energetic Materials Research and Testing Center, a research division of New Mexico Tech, ignited in an unplanned manner. The complaint alleges causes of action based on negligence and negligence per se, strict liability, and willful, reckless and wanton conduct against Aerojet Rocketdyne, and seeks unspecified compensatory and punitive damages. Trial is scheduled for June 18, 2018. No liability for this matter has been recorded by the Company as of December 31, 2017 .

Department of Justice ("DOJ") Investigation

The Company is responding to a civil investigative demand issued by the DOJ in the first quarter of fiscal 2017 requesting information relating to allegations under the False Claims Act that the Company may have previously made false representations to the U.S. government regarding the Company's compliance with certain regulatory cybersecurity requirements. The Company is cooperating with the DOJ in its investigation of the false claim allegations.

c. Environmental Matters

The Company is involved in approximately forty environmental matters under the Comprehensive Environmental Response Compensation and Liability Act, the Resource Conservation Recovery Act, and other federal, state, local, and foreign laws relating to soil and groundwater contamination, hazardous waste management activities, and other environmental matters at some of its current and former facilities. The Company is also involved in a number of remedial activities at third party sites, not owned by the Company, where it is designated a potentially responsible party ("PRP") by either the U.S. Environmental Protection Agency ("EPA") and/or a state agency. In many of these matters, the Company is involved with other PRPs. In some instances, the Company's liability and proportionate share of costs have not been determined largely due to uncertainties as to the nature and extent of site conditions and the Company's involvement. While government agencies frequently claim PRPs are jointly and severally liable at such sites, in the Company's experience, interim and final allocations of liability and costs are generally made based on relative contributions of waste or contamination. Anticipated costs associated with environmental remediation that are probable and estimable are accrued. In cases where a date to complete remedial activities at a particular site cannot be determined by reference to agreements or otherwise, the Company projects costs over an appropriate time period not exceeding fifteen years . In such cases, generally the Company does not have the ability to reasonably estimate environmental remediation costs that are beyond this period. Factors that could result in changes to the Company's estimates include completion of current and future soil and groundwater investigations, new claims, future agency demands, discovery of more or less contamination than expected, discovery of new contaminants, modification of planned remedial actions, changes in estimated time required to remediate, new technologies, and changes in laws and regulations.

As of December 31, 2017 , the aggregate range of these anticipated environmental costs was $341.4 million to $503.4 million and the accrued amount was $341.4 million . See Note 8(d) for a summary of the environmental reserve activity. Of these accrued liabilities, approximately 99% relates to the Company's U.S. government contracting business and a portion of this liability is recoverable. The significant environmental sites are discussed below. The balance of the accrued liabilities, which are not recoverable from the U.S. government, relate to other sites for which the Company's obligations are probable and estimable.

Sacramento, California Site

In 1989, a federal district court in California approved a Partial Consent Decree ("PCD") requiring Aerojet Rocketdyne, among other things, to conduct a Remedial Investigation and Feasibility Study to determine the nature and extent of impacts due to the release of chemicals from the Sacramento, California site, monitor the American River and offsite public water supply wells, operate Groundwater Extraction and Treatment facilities that collect groundwater at the site perimeter, and pay certain government oversight costs. The primary chemicals of concern for both on-site and off-site groundwater are trichloroethylene, perchlorate, and n-nitrosodimethylamine. The 2002 PCD revision (a) separated the Sacramento site into multiple operable units to allow quicker implementation of remedy for critical areas; (b) required the Company to guarantee up to $75 million (in addition to a prior $20 million guarantee) to assure that Aerojet Rocketdyne's Sacramento remediation activities are fully funded; and (c) removed approximately 2,600 acres of non-contaminated land from the EPA superfund designation.

Aerojet Rocketdyne is involved in various stages of soil and groundwater investigation, remedy selection, design, construction, operation and maintenance associated with the operable units, all of which are conducted under the direction and oversight of the EPA, including unilateral administrative orders, and the California Department of Toxic Substances Control

("DTSC") and Regional Water Quality Control Board, Central Valley Region ("RWQCB"). On September 22, 2016, the EPA completed its first five-year remedy review of the Sacramento superfund site. The five-year review required by statute and regulation applies to all remedial actions which result in hazardous substances above levels that allow unlimited use and unrestricted exposure. The Company is working with the EPA to address the findings of the five-year remedy review.

The entire southern portion of the site known as Rio Del Oro was under state orders issued in the 1990s from DTSC and the RWQCB to investigate and remediate soil and groundwater contamination. In 2008, the DTSC released all but approximately 400 acres of the Rio Del Oro property from DTSC's environmental orders regarding soil contamination although the property remains subject to the RWQCB's orders to investigate and remediate groundwater environmental contamination emanating offsite from the property.

As of December 31, 2017 , the estimated range of anticipated costs discussed above for the Sacramento, California site was $206.5 million to $325.2 million and the accrued amount was $206.5 million included as a component of the Company's environmental reserves. Expenditures associated with this matter are partially recoverable. See Note 8(d) below for further discussion on recoverability.

Baldwin Park Operable Unit ("BPOU")

As a result of its former Azusa, California operations, in 1994 Aerojet Rocketdyne was named a PRP by the EPA in the area of the San Gabriel Valley Basin superfund site known as the BPOU. In 2002, Aerojet Rocketdyne, along with seven other PRPs (the "Cooperating Respondents") signed a project agreement in late March 2002 with the San Gabriel Basin Water Quality Authority, the Main San Gabriel Basin Watermaster, and five water companies (the "Water Entities"). The 2002 project agreement terminated in 2017 and the parties executed a new project agreement which became operational on May 9, 2017. The new agreement has a ten -year term and requires the Cooperating Respondents to fund through an escrow account the ongoing operation, maintenance, and administrative costs of certain treatment and water distribution facilities owned and operated by the water companies. There are also provisions in the project agreement for maintaining financial assurance.

Pursuant to an agreement with the remaining Cooperating Respondents, Aerojet Rocketdyne's current share of future BPOU costs will be approximately 74% .

As of December 31, 2017 , the estimated range of anticipated costs was $116.4 million to $152.5 million and the accrued amount was $116.4 million included as a component of the Company's environmental reserves. Expenditures associated with this matter are partially recoverable. See Note 8(d) below for further discussion on recoverability.

d. Environmental Reserves and Estimated Recoveries

Environmental Reserves

The Company reviews on a quarterly basis estimated future remediation costs and has an established practice of estimating environmental remediation costs over a fifteen year period, except for those environmental remediation costs with a specific contractual term. Environmental liabilities at the BPOU site are currently estimated through the term of the new project agreement which expires in May 2027. As the period for which estimated environmental remediation costs lengthens, the reliability of such estimates decreases. These estimates consider the investigative work and analysis of engineers, outside environmental consultants, and the advice of legal staff regarding the status and anticipated results of various administrative and legal proceedings. In most cases, only a range of reasonably possible costs can be estimated. In establishing the Company's reserves, the most probable estimate is used when determinable; otherwise, the minimum amount is used when no single amount in the range is more probable. Accordingly, such estimates can change as the Company periodically evaluates and revises these estimates as new information becomes available. The Company cannot predict whether new information gained as projects progress will affect the estimated liability accrued. The timing of payment for estimated future environmental costs is influenced by a number of factors such as the regulatory approval process, and the time required designing, constructing, and implementing the remedy.

A summary of the Company's environmental reserve activity:

	Aerojet Rocketdyne-Sacramento	Aerojet Rocketdyne-BPOU	Other Aerojet Rocketdyne Sites	Total Aerojet Rocketdyne	Other	Total Environmental Reserve
			(In millions)			
November 30, 2014	$ 130.4	$ 21.7	$ 8.1	$ 160.2	$ 5.8	$ 166.0
Additions	44.3	129.7	2.0	176.0	0.6	176.6
Expenditures	(21.7)	(11.3)	(2.3)	(35.3)	(1.2)	(36.5)
November 30, 2015	153.0	140.1	7.8	300.9	5.2	306.1
Additions	0.5	—	—	0.5	—	0.5
Expenditures	(0.9)	(3.4)	—	(4.3)	—	(4.3)
December 31, 2015	152.6	136.7	7.8	297.1	5.2	302.3
Additions	80.0	3.5	3.9	87.4	—	87.4
Expenditures	(22.5)	(13.4)	(3.2)	(39.1)	(0.9)	(40.0)
December 31, 2016	210.1	126.8	8.5	345.4	4.3	349.7
Additions	19.2	3.3	8.0	30.5	0.8	31.3
Expenditures	(22.8)	(13.7)	(2.8)	(39.3)	(0.3)	(39.6)
December 31, 2017	$ 206.5	$ 116.4	$ 13.7	$ 336.6	$ 4.8	$ 341.4

The effect of the final resolution of environmental matters and the Company's obligations for environmental remediation and compliance cannot be accurately predicted due to the uncertainty concerning both the amount and timing of future expenditures and due to regulatory or technological changes. The Company continues its efforts to mitigate past and future costs through pursuit of claims for recoveries from insurance coverage and other PRPs and continued investigation of new and more cost effective remediation alternatives and associated technologies.

As part of the acquisition of the Atlantic Research Corporation ("ARC") propulsion business in 2003, Aerojet Rocketdyne entered into an agreement with ARC pursuant to which Aerojet Rocketdyne is responsible for up to $20.0 million of costs ("Pre-Close Environmental Costs") associated with environmental issues that arose prior to Aerojet Rocketdyne's acquisition of the ARC propulsion business. ARC is responsible for any cleanup costs relating to the ARC acquired businesses in excess of $20.0 million . Pursuant to a separate agreement with the U.S. government which was entered into prior to the completion of the ARC acquisition, these costs are recovered through the establishment of prices for Aerojet Rocketdyne's products and services sold to the U.S. government. The Company reached the $20.0 million cap on cleanup costs in the first quarter of fiscal 2017 and expects that additional costs will be incurred due to contamination existing at the time of the acquisition and still requiring remediation and monitoring. On May 6, 2016, ARC informed Aerojet Rocketdyne that it was disputing certain costs that Aerojet Rocketdyne attributed to the $20.0 million Pre-Close Environmental Costs ("ARC Claim"). The Company has met with ARC and responded to the ARC Claim on June 23, 2017. Certain costs related to the ARC Claim will be determined in conjunction with the Company's evaluation and ultimate resolution of the ARC Claim.

Estimated Recoveries

On January 12, 1999, Aerojet Rocketdyne and the U.S. government reached a settlement agreement ("Global Settlement") which established a cost-sharing ratio with respect to the clean-up costs of prior environmental contamination. Additionally, in conjunction with the sale of the EIS business in 2001, Aerojet Rocketdyne entered into an agreement with Northrop (the "Northrop Agreement") whereby Aerojet Rocketdyne is reimbursed by Northrop for a portion of environmental expenditures eligible for recovery under the Global Settlement, subject to an annual billing limitation of $6.0 million and a cumulative limitation of $189.7 million . The cumulative expenditure limitation of $189.7 million was reached in the second quarter of fiscal 2017. A summary of the Northrop Agreement activity is shown below (in millions):

Total reimbursable costs under the Northrop Agreement	$ 189.7
Amount reimbursed through December 31, 2017	(125.2)
Receivable from Northrop included in the consolidated balance sheet as of December 31, 2017	$ 64.5

Environmental remediation costs are primarily incurred by the Company's Aerospace and Defense segment, and certain of these costs are recoverable from the Company's contracts with the U.S. government. The Company currently estimates approximately 24% of its future Aerospace and Defense segment environmental remediation costs will not likely be reimbursable and are expensed.

Allowable environmental remediation costs are charged to the Company’s contracts as the costs are incurred. Because these costs are recovered through forward-pricing arrangements, the ability of Aerojet Rocketdyne to continue recovering these costs from the U.S. government depends on Aerojet Rocketdyne’s sustained business volume from U.S. government contracts and programs.

While the Company is currently seeking an arrangement with the U.S. government to recover environmental expenditures in excess of the reimbursement ceiling identified in the Northrop Agreement and Global Settlement, there can be no assurances that such a recovery will be obtained, or if not obtained, that such unreimbursed environmental expenditures will not have a materially adverse effect on the Company’s operating results, financial condition, and/or cash flows.

Environmental reserves and estimated recoveries impact to the consolidated statements of operations

The expenses associated with adjustments to the environmental reserves are recorded as a component of other expense, net in the consolidated statements of operations. Summarized financial information for the impact of environmental reserves and recoveries to the consolidated statements of operations were as follows:

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions)			
Estimated recoverable amounts from U.S. government contracts and other third parties	$ 23.1	$ 69.1	$ 159.3	$ 0.6
Expense (benefit) to consolidated statement of operations	8.2	18.3	17.3	(0.1)
Total environmental reserve adjustments	$ 31.3	$ 87.4	$ 176.6	$ 0.5

e. Arrangements with Off-Balance Sheet Risk

As of December 31, 2017 , arrangements with off-balance sheet risk consisted of:

- $38.6 million in outstanding commercial letters of credit, the majority of which may be renewed, primarily to collateralize obligations for environmental remediation and insurance coverage.
- $52.8 million in outstanding surety bonds to primarily satisfy indemnification obligations for environmental remediation coverage.
- Up to $120.0 million aggregate in guarantees by the Company of Aerojet Rocketdyne’s obligations to U.S. government agencies for environmental remediation activities.
- $121.9 million in commitments associated with outsourcing certain information technology and cyber security functions.
- $83.1 million in commitments associated with the Company's new facilities located in Huntsville, Alabama.
- Guarantees, jointly and severally, by the Company’s material domestic subsidiaries of their obligations under the Senior Credit Facility.

In addition to the items discussed above, the Company has and will from time to time enter into certain types of contracts that require the Company to indemnify parties against potential third-party and other claims. These contracts primarily relate to: (i) divestiture agreements, under which the Company may provide customary indemnification to purchasers of its businesses or assets including, for example, claims arising from the operation of the businesses prior to disposition, and liability to investigate and remediate environmental contamination existing prior to disposition; (ii) certain real estate leases, under which the Company may be required to indemnify property owners for claims arising from the use of the applicable premises; and (iii) certain agreements with officers and directors, under which the Company may be required to indemnify such persons for liabilities arising out of their relationship with the Company. The terms of such obligations vary. Generally, a maximum obligation is not explicitly stated.

Additionally, the Company issues purchase orders to suppliers for equipment, materials, and supplies in the normal course of business. These purchase commitments are generally for volumes consistent with anticipated requirements to fulfill purchase orders or contracts for product deliveries received, or expected to be received, from customers and would be subject to reimbursement if a cost-plus contract is terminated.

The Company provides product warranties in conjunction with certain product sales. The majority of the Company’s warranties are a one -year standard warranty for parts, workmanship, and compliance with specifications. On occasion, the Company has made commitments beyond the standard warranty obligation. While the Company has contracts with warranty provisions, there is not a history of any significant warranty claims experience. A reserve for warranty exposure is made on a product by product basis when it is both estimable and probable. These costs are included in the program’s estimate at completion and are expensed in accordance with the Company’s revenue recognition methodology as allowed under GAAP for that particular contract.

Note 9. Stockholders’ Equity

a. Preference Stock

As of December 31, 2017 and 2016 , 15.0 million shares of preferred stock were authorized and none were issued or outstanding.

b. Common Stock

As of December 31, 2017 , the Company had 150.0 million authorized shares of common stock, par value $0.10 per share, of which 73.6 million shares were issued and outstanding, and 20.2 million shares were reserved for future issuance for the exercise of stock options (seven and ten year contractual life) and restricted stock (no maximum contractual life), payment of awards under stock-based compensation plans, and conversion of the Company’s convertible debt.

c. Treasury Stock

The Company has repurchased 3.5 million of its common shares at a cost of $64.5 million . The Company reflects stock repurchases in its financial statements on a “settlement” basis.

d. Stock-based Compensation

Total stock-based compensation expense (benefit) by type of award was as follows:

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions)			
SARs	$ 9.3	$ 2.2	$ 1.8	$ (1.4)
Restricted stock, service based	4.1	3.6	5.6	0.3
Restricted stock, performance based	6.8	5.7	0.1	0.6
Employee stock purchase plan ("ESPP")	0.6	0.5	0.3	—
Stock options	1.2	0.9	0.8	0.1
Total stock-based compensation expense (benefit)	$ 22.0	$ 12.9	$ 8.6	$ (0.4)

Stock Appreciation Rights: As of December 31, 2017 , a total of 1.0 million SARs were outstanding under the 1999 Equity and Performance Incentive Plan (“1999 Plan”) and 2009 Equity and Performance Incentive Plan (“2009 Plan”). SARs granted to employees generally vest in one-third increments at one year, two years, and three years from the date of grant and have a ten year contractual life under the 1999 Plan and a seven year contractual life under the 2009 Plan. SARs granted to directors of the Company typically vest over a one year service period (half after six months and half after one year) and have a ten year contractual life under the 1999 Plan and a seven year contractual life under the 2009 Plan. These awards are similar to the Company’s employee stock options, but are settled in cash rather than in shares of common stock, and are classified as liability awards. Compensation cost for these awards is determined using a fair-value method and remeasured at each reporting date until the date of settlement.

A summary of the status of the Company’s SARs as of December 31, 2017 and changes during fiscal 2017 :

	SARs (In millions)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (years)	Aggregate Intrinsic Value (In millions)
Outstanding at December 31, 2016	1.0	$ 11.52		
Granted	0.4	22.35		
Exercised	(0.3)	6.97		
Canceled	(0.1)	17.21		
Outstanding at December 31, 2017	1.0	$ 16.62	4.7	$ 14.6
Exercisable at December 31, 2017	0.2	$ 8.17	1.2	$ 5.4

The weighted average grant date fair value for SARs granted in fiscal 2017 and 2016 was $15.41 and $7.66 , respectively. No SARs were granted in fiscal 2015 and the one month ended December 31, 2015. The total intrinsic value for SARs liabilities paid in fiscal 2017, 2016, and 2015 was $4.9 million , $2.3 million , and $3.3 million , respectively. As of

December 31, 2017 , there was $7.5 million of total stock-based compensation related to nonvested SARs. That cost is expected to be recognized over an estimated weighted-average amortization period of 23 months .

Restricted Stock, service-based: As of December 31, 2017 , a total of 0.4 million shares of service-based restricted stock were outstanding which vest based on years of service under the 2009 Plan. Restricted shares are granted to key employees and directors of the Company. The fair value of the restricted stock awards was based on the closing market price of the Company's common stock on the date of award and is being amortized on a straight line basis over the service period.

A summary of the status of the Company's service-based restricted stock as of December 31, 2017 and changes during fiscal 2017 :

	Service Based Restricted Stock (In millions)	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2016	0.6	$ 18.06
Granted	0.1	24.98
Exercised	(0.3)	18.12
Outstanding at December 31, 2017	0.4	$ 20.14
Expected to vest at December 31, 2017	0.4	$ 20.14

As of December 31, 2017 , there was $5.0 million of total stock-based compensation related to nonvested service-based restricted stock. That cost is expected to be recognized over an estimated weighted-average amortization period of six months . At December 31, 2017, the intrinsic value of the service-based restricted stock outstanding and expected to vest was $11.7 million . The weighted average grant date fair values for service-based restricted stock granted in fiscal 2016 and 2015 was $17.65 and $20.70 , respectively.

Restricted Stock, performance-based Company metrics: As of December 31, 2017 , a total of 1.0 million shares of performance-based restricted shares were outstanding under the 2009 Plan. The performance-based restricted stock vests if the Company meets various operations and earnings targets set by the Organization & Compensation Committee of the Board of Directors. The fair value of the performance-based restricted stock awards was based on the closing market price of the Company's common stock on the date of award and is being amortized over the estimated service period to achieve the operations and earnings targets.

A summary of the status of the Company's performance-based restricted stock as of December 31, 2017 and changes during fiscal 2017 :

	Performance Based Restricted Stock (In millions)	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2016	1.1	$ 17.85
Granted	0.5	22.35
Exercised	(0.3)	15.80
Canceled	(0.3)	18.48
Outstanding at December 31, 2017	1.0	$ 19.73
Expected to vest at December 31, 2017	0.6	$ 19.74

As of December 31, 2017 , there was $4.9 million of total stock-based compensation related to nonvested performance-based restricted stock. That cost is expected to be recognized over an estimated weighted-average amortization period of 17 months . At December 31, 2017, the intrinsic value of the performance-based restricted stock outstanding was $32.7 million and the intrinsic value of the performance-based restricted stock expected to vest was $17.8 million . The weighted average grant date fair values for performance-based restricted stock granted in fiscal 2016 and 2015 was $15.97 and $21.33 , respectively.

Employee Stock Purchase Plan: The ESPP enables eligible employees the opportunity to purchase the Company's common stock at a price not less than 85% of the fair market value of the common stock on the last day of the respective offering period. A maximum of 1.5 million shares are authorized for issuance under the ESPP under the 2009 Plan. During fiscal 2017, 0.1 million shares were issued under the ESPP at an average price of $25.43 per share. During fiscal 2016, 0.2 million shares were issued under the ESPP at an average price of $18.11 per share. During the one month ended December 31, 2015, 0.1 million shares were issued under the ESPP at an average price of $15.66 per share. During fiscal 2015, 0.1 million shares were issued under the ESPP at an average price of $20.61 per share.

Stock Options: As of December 31, 2017 , a total of 0.4 million stock options were outstanding under the 1999 Plan and 2009 Plan. The stock options granted in fiscal 2016 related to an award granted to the Executive Chairman, see the discussion below.

A summary of the status of the Company's stock options as of December 31, 2017 and changes during fiscal 2017 :

	Stock Options (In millions)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (years)	Intrinsic Value (In millions)
Outstanding at December 31, 2016	0.6	$ 15.48		
Exercised	(0.2)	6.54		
Outstanding at December 31, 2017	0.4	$ 18.86	4.6	$ 5.1
Exercisable at December 31, 2017	0.3	$ 17.09	4.8	$ 4.1
Expected to vest at December 31, 2017	0.1	$ 23.06	4.2	$ 1.0

The total intrinsic value for options exercised in fiscal 2017, 2016, and 2015 was $2.9 million , $2.1 million , and $3.9 million , respectively. No options were exercised in the one month ended December 31, 2015. The weighted average grant date fair value for stock options granted in fiscal 2016 and 2015 was $18.01 and $23.04 .

The following table summarizes the range of exercise prices and weighted-average exercise prices for options outstanding as of December 31, 2017 under the Company's stock option plans:

		Outstanding		
Period Granted	Range of Exercise Prices	Stock Options Outstanding (In millions)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (years)
Fiscal 2015	$20.48 - $23.06	0.2	$ 23.03	4.2
Fiscal 2016	$18.01	0.2	$ 18.01	5.6
		0.4		

Common Shares and Stock Options, performance-based : In August 2016, the Company granted the Executive Chairman 0.2 million performance-based common shares and 0.2 million performance-based stock options that vest according to the attainment of share prices ranging from $22.00 per share to $27.00 per share of the Company's stock. The performance-based common shares were valued at a weighted average price of $12.99 using a Monte Carlo model. The performance-based stock options were valued at a weighted average price of $5.81 using a Monte Carlo model. The Company recognized the grant-date fair value of these awards as stock-based compensation expense ratably over the estimated vesting period based on the number of awards expected to vest at each reporting date or earlier if the market condition was satisfied. All of the performance based awards vested during fiscal 2017 as a result of the attainment of share prices. The Company used the following weighted average assumptions to value the awards for the year ended December 31, 2016:

	Performance- based common shares	Performance-based stock options
Expected life (in years)	1.04	0.99
Volatility	32.97%	39.58%
Risk-free interest rate	1.17%	1.43%

The Monte Carlo Model requires a single expected dividend yield as an input. The Senior Credit Facility restricts the payment of dividends and the Company does not anticipate paying cash dividends in the foreseeable future. Accordingly, the Company did not apply an expected dividend yield to the Monte Carlo Model.

Valuation Assumptions: The fair value of stock options was estimated using a Black-Scholes Model (except for the performance-based stock options discussed in the section above) with the following weighted average assumptions:

	Year ended November 30, 2015
Expected life (in years)	7.0
Volatility	58.06%
Risk-free interest rate	1.94%

The Company did not grant any stock options during fiscal 2017.

The fair value of SARs was estimated using a Black-Scholes Model with the following weighted average assumptions:

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
Expected life (in years)	4.8	4.0	2.1	2.0
Volatility	34.00%	36.00%	34.00%	34.00%
Risk-free interest rate	2.23%	1.65%	0.94%	0.79%

Expected Term: The Company's expected term represents the period that the Company's stock-based awards are expected to be outstanding and was determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards and vesting schedules.

Expected Volatility: The fair value of stock-based payments was determined using the Black-Scholes Model with a volatility factor based on the Company's historical stock prices. The range of expected volatility used in the Black-Scholes Model was 32.2% to 42.7% as of December 31, 2017 .

Expected Dividend: The Black-Scholes Model requires a single expected dividend yield as an input. The Senior Credit Facility restricts the payment of dividends and the Company does not anticipate paying cash dividends in the foreseeable future. Accordingly, the Company did not apply an expected dividend yield to the Black-Scholes Model for all periods presented.

Risk-Free Interest Rate: The Company bases the risk-free interest rate used in the Black-Scholes Model on the implied yield currently available on U.S. Treasury zero-coupon issues with an equivalent remaining term. The range of risk-free interest rates used in the Black-Scholes Model was 1.66% to 2.40% as of December 31, 2017 .

Note 10. Operating Segments and Related Disclosures

The Company’s operations are organized into two operating segments based on different products and customer bases: Aerospace and Defense, and Real Estate. Sales to significant customers and other concentrations information is presented in Note 1(u). The accounting policies of the operating segments are the same as those described in the summary of significant accounting policies (see Note 1).

The Company evaluates its operating segments based on several factors, of which the primary financial measure is segment performance. Segment performance represents net sales less applicable costs, expenses and unusual items relating to the segment operations. Segment performance excludes corporate income and expenses, unusual items not related to the segment operations, interest expense, interest income, and income taxes.

Selected financial information for each reportable segment:

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions)			
Net Sales:				
Aerospace and Defense	$ 1,870.8	$ 1,753.9	$ 1,660.0	$ 95.8
Real Estate	6.4	7.4	48.3	0.5
Total Net Sales	$ 1,877.2	$ 1,761.3	$ 1,708.3	$ 96.3
Segment Performance:				
Aerospace and Defense	$ 202.9	$ 184.1	$ 165.7	$ 19.6
Environmental remediation provision adjustments	(7.5)	(18.3)	(16.6)	0.1
Retirement benefits, net (1)	(19.5)	(22.5)	(50.2)	(4.1)
Unusual items	2.0	—	(50.0)	(0.4)
Aerospace and Defense Total	177.9	143.3	48.9	15.2
Real Estate	2.5	4.3	34.4	0.2
Total Segment Performance	$ 180.4	$ 147.6	$ 83.3	$ 15.4
Reconciliation of segment performance to income (loss) before income taxes:				
Segment performance	$ 180.4	$ 147.6	$ 83.3	$ 15.4
Interest expense	(30.9)	(32.5)	(50.4)	(3.8)
Interest income	3.5	0.6	0.3	—
Stock-based compensation	(22.0)	(12.9)	(8.6)	0.4
Corporate retirement benefits	(20.0)	(18.9)	(17.4)	(1.5)
Corporate and other	(23.1)	(20.1)	(22.1)	(1.5)
Unusual items	(1.0)	(34.5)	(1.9)	—
Income (loss) before income taxes	$ 86.9	$ 29.3	$ (16.8)	$ 9.0
Aerospace and Defense	$ 29.3	$ 46.4	$ 36.8	$ 1.2
Real Estate	—	—	—	—
Corporate	0.1	1.2	—	—
Capital Expenditures	$ 29.4	$ 47.6	$ 36.8	$ 1.2
Aerospace and Defense	$ 71.6	$ 64.2	$ 64.4	$ 5.0
Real Estate	0.7	0.6	0.7	0.1
Corporate	0.3	0.1	—	—
Depreciation and Amortization	$ 72.6	$ 64.9	$ 65.1	$ 5.1

(1) Retirement benefits are net of cash funding to the Company's tax-qualified defined benefit pension plan which are recoverable costs under its U.S. government contracts. The Company's recoverable tax-qualified pension costs in fiscal 2017 and 2016 totaled $33.7 million and $27.5 million , respectively.

	As of December 31,	
	2017	2016
	(In millions)	
Assets:		
Aerospace and Defense (1)	$ 1,477.8	$ 1,571.3
Real Estate	125.9	128.7
Operating segment assets	1,603.7	1,700.0
Corporate	655.0	549.5
Total Assets	$ 2,258.7	$ 2,249.5

(1) The Aerospace and Defense operating segment had $161.3 million and $158.1 million of goodwill as of December 31, 2017 and 2016, respectively. In addition, as of December 31, 2017 and 2016, intangible assets balances (other than goodwill) were $85.5 million and $94.4 million , respectively, in the Aerospace and Defense operating segment.

Note 11. Cost Reduction Plans

During fiscal 2015, the Company initiated the first phase ("Phase I") of the competitive improvement program (the "CIP") comprised of activities and initiatives aimed at reducing costs in order for the Company to continue to compete successfully. Phase I is composed of three major components: (i) facilities optimization and footprint reduction; (ii) product affordability; and (iii) reduced administrative and overhead costs. On April 6, 2017, the Board of Directors approved the second phase ("Phase II") of the Company's previously announced CIP. Pursuant to Phase II, the Company plans to expand its CIP and further consolidate its Sacramento, California, and Gainesville, Virginia sites, while centralizing and expanding its existing presence in Huntsville, Alabama. The Company currently estimates that it will incur restructuring and related costs of the Phase I and II programs of approximately $235.1 million (including approximately $60.5 million of capital expenditures). The Company has incurred $79.5 million of such costs through December 31, 2017, including $32.5 million in capital expenditures. A summary of the Company's severance and retention liabilities related to Phase I and II activity is shown below:

	Severance	Retention	Total
		(In millions)	
November 30, 2014	$ —	$ —	$ —
Accrual established	12.9	2.7	15.6
Payments	(1.8)	—	(1.8)
November 30, 2015	11.1	2.7	13.8
Accrual	(0.2)	0.2	—
Payments	—	(1.2)	(1.2)
December 31, 2015	10.9	1.7	12.6
Accrual	—	2.3	2.3
Payments	(0.9)	(1.9)	(2.8)
Adjustments	(3.2)	—	(3.2)
December 31, 2016	6.8	2.1	8.9
Accrual	26.1	2.2	28.3
Payments	(2.9)	(0.9)	(3.8)
December 31, 2017	$ 30.0	$ 3.4	$ 33.4

The costs associated with the CIP will be a component of the Company's U.S. government forward pricing rates, and therefore, will be recovered through the pricing of the Company's products and services to the U.S. government. In addition to the employee-related CIP obligations, the Company incurred non-cash accelerated depreciation expense of $3.9 million , $0.7 million and $0.8 million in fiscal 2017, 2016, and 2015, respectively, associated with changes in the estimated useful life of long-lived assets impacted by the CIP.

Note 12. Quarterly Financial Data (Unaudited)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(In millions, except per share amounts)			
Fiscal 2017				
Net sales	$ 405.3	$ 459.6	$ 484.1	$ 528.2
Cost of sales (exclusive of items shown separately on Statement of Operations)	352.7	383.9	417.1	461.7
Income before income taxes	9.2	36.2	18.6	22.9
Net income (loss)	5.9	24.3	12.6	(52.0)
Basic and Diluted net income (loss) per share	0.08	0.32	0.17	(0.71)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(In millions, except per share amounts)			
Fiscal 2016				
Net sales	$ 356.9	$ 408.4	$ 463.8	$ 532.2
Cost of sales (exclusive of items shown separately on Statement of Operations)	309.7	356.5	405.4	455.8
Income (loss) before income taxes	8.6	11.5	(25.3)	34.4
Net income (loss)	5.1	5.9	(11.1)	18.1
Basic net income (loss) per share	0.08	0.09	(0.17)	0.26
Diluted net income (loss) per share	0.08	0.09	(0.17)	0.25

Note 13. Unusual Items

Total unusual items, comprised of a component of other expense, net and loss on debt in the consolidated statements of operations, was as follows:

	Year Ended			One month ended
	December 31, 2017	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions)			
Aerospace and Defense:				
(Gain) loss on legal matters and settlements (1)	$ (2.0)	$ —	$ 50.0	$ 0.4
Aerospace and defense unusual items	(2.0)	—	50.0	0.4
Corporate:				
Loss on debt repurchased (2)	—	34.4	1.9	—
Acquisition costs (1)	1.0	—	—	
Loss on bank amendment (1)	—	0.1	—	—
Corporate unusual items	1.0	34.5	1.9	—
Total unusual items	$ (1.0)	$ 34.5	$ 51.9	$ 0.4

(1) Operating (income) expense
(2) Non-operating expense

Fiscal 2017 Activity:

The Company recorded $2.0 million of realized gains, net of interest associated with the failure to register with the SEC the issuance of certain of the Company's common shares under the defined contribution 401(k) employee benefit plan (see Note 3(l)).

The Company recorded $1.0 million of costs related to the acquisition of Coleman (see Note 4).

Fiscal 2016 Activity:

On July 18, 2016, the Company redeemed $460.0 million principal amount of its 7 $^{1}/_{8}$% Notes, representing all of the outstanding 7 $^{1}/_{8}$% Notes, at a redemption price equal to 105.344% of the principal amount, plus accrued and unpaid interest. The Company incurred a pre-tax charge of $34.1 million in the third quarter of fiscal 2016 associated with the extinguishment of the 7 $^{1}/_{8}$% Notes. The $34.1 million pre-tax charge was the result of the $24.6 million paid in excess of the par value and $9.5 million associated with the write-off of unamortized deferred financing costs. The Company funded the redemption in part through a $400.0 million term loan under the Company's Senior Credit Facility.

The Company retired $13.0 million principal amount of its delayed draw term loan resulting in a loss of $0.3 million .

The Company recorded a charge of $0.1 million associated with an amendment to the Senior Credit Facility.

Fiscal 2015 Activity:

The Company recorded an expense of $50.0 million associated with a legal settlement.

The Company retired $76.0 million principal amount of its delayed draw term loan resulting in $1.9 million of losses associated with the write-off of deferred financing fees.

December 2015 Activity:

The Company recorded $0.4 million for realized losses and interest associated with the failure to register with the SEC the issuance of certain of the Company's common shares under the defined contribution 401(k) employee benefit plan.

Item 9. ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

None.

Item 9A. ***Controls and Procedures***

Disclosure Controls and Procedures

As of December 31, 2017, we conducted an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended ("Exchange Act"), means controls and other procedures of a company that are designed to provide reasonable assurance that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures are also designed to provide reasonable assurance that such information is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded as of December 31, 2017 that our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate "internal control over financial reporting," as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. The rules define internal control over financial reporting as a process designed by, or under the supervision of, the Company's Chief Executive Officer and Chief Financial Officer, 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. Our internal control over financial reporting includes those policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

With the participation of the Chief Executive Officer and the Chief Financial Officer, our management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission

(“COSO”). Based on this evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2017.

The effectiveness of our internal control over financial reporting as of December 31, 2017 has been audited by PricewaterhouseCoopers LLP, our independent registered public accounting firm. Their report appears in Item 8 of this Form 10-K/A.

Remediation of Prior Year Material Weakness

We previously identified and disclosed in our Form 10-K for the year ended December 31, 2016, as well as in our Forms 10-Q for each interim period in fiscal 2017, a material weakness in our internal control over financial reporting as we did not maintain adequate controls over the completeness and accuracy of our accounting for income taxes, including the income tax provision and related tax assets and liabilities.

Throughout fiscal 2017, we implemented changes to our processes to improve our internal control over financial reporting related to the controls over the completeness and accuracy of our accounting for income taxes. The following steps have been taken to remediate the conditions leading to the above stated material weakness:

- Management has strengthened the income tax function by hiring additional key internal tax personnel with the requisite background and knowledge.
- Beginning in the third quarter of fiscal 2017, management, including the key tax resources noted above, has designed and implemented quarterly controls to validate the completeness and accuracy of financial information utilized in the preparation of our income tax provision, including the related income tax assets and liabilities.
- During the fourth quarter of fiscal 2017, key tax resources, including the Vice President and Director of Tax, designed and implemented an annual control to validate the tax return-to-provision adjustment to ensure the completeness and accuracy of our deferred tax balances.

Changes in Internal Control Over Financial Reporting

The control implemented during the fourth quarter of fiscal 2017, as described in the “Remediation of Prior Year Material Weakness” section above, was a change in internal control over financial reporting that occurred during the most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the effectiveness of our internal control over financial reporting.

Item 9B. *Other Information*

On February 20, 2018, the Company appointed Daniel L. Boehle, Vice President and Controller, to serve as the Company’s principal accounting officer for purposes of its filings with the U.S. Securities and Exchange Commission.

Mr. Boehle, 46, has served as the Company’s Vice President and Controller since August 2017. Prior to joining the Company, Mr. Boehle held several senior level accounting positions with Northrop Grumman Corporation (“Northrop”), including as Director, Aerospace Systems Sector Financial Planning, Reporting, and Analysis from February 2013 through July 2017, and as Director, Corporate Internal Audit - Financial Audits from June 2012 to January 2013. Before joining Northrop in 2001, Mr. Boehle was an Audit Senior Manager with KPMG LLP. Mr. Boehle is a certified public accountant in the State of California and holds a bachelor’s degree in Accounting from Loyola Marymount University and a master’s degree in Business Administration from UCLA.

The Company has not entered into or amended any material plan, contract or arrangement in connection with Mr. Boehle’s appointment to serve as principal accounting officer. Mr. Boehle does not have any family relationships with any of the directors, executive officers, or any people nominated or chosen by the Company to become a director or executive officer. Mr. Boehle is not a party to any transactions listed in Item 404(a) of Regulation S-K.

Part IV

Item 15. *Exhibits and Financial Statement Schedules*

(a) The following documents are filed as part of this report:

(1) FINANCIAL STATEMENTS

(b) EXHIBITS

Refer to Exhibit Index.

Item 16. 10-K Summary

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

March 13, 2018

Aerojet Rocketdyne Holdings, Inc.

By: /s/ EILEEN P. DRAKE

Eileen P. Drake

Chief Executive Officer and President

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ EILEEN P. DRAKE Eileen P. Drake	Chief Executive Officer, President and Director (Principal Executive Officer)	March 13, 2018
/s/ PAUL R. LUNDSTROM Paul R. Lundstrom	Vice President, Chief Financial Officer (Principal Financial Officer)	March 13, 2018
/s/ DANIEL L. BOEHLE Daniel L. Boehle	Vice President, Controller (Principal Accounting Officer)	March 13, 2018
* Warren G. Lichtenstein	Executive Chairman	March 13, 2018
* Thomas A. Corcoran	Director	March 13, 2018
* James R. Henderson	Director	March 13, 2018
* Lance W. Lord	Director	March 13, 2018
* Merrill A. McPeak	Director	March 13, 2018
* James H. Perry	Director	March 13, 2018
* Martin Turchin	Director	March 13, 2018
* By: /s/ PAUL R. LUNDSTROM Paul R. Lundstrom	Attorney-in-Fact pursuant to Power of Attorney	March 13, 2018

EXHIBIT INDEX

Table Item No.	Exhibit Description
2.1	Amended and Restated Stock and Asset Purchase Agreement, dated as of June 12, 2013, by and between United Technologies Corporation and GenCorp Inc. was filed as Exhibit 2.1 to GenCorp Inc.'s Current Report on Form 8-K dated June 14, 2013 (File No. 1-01520), and is incorporated herein by reference. **
2.2	Plan of Conversion, dated April 11, 2014 was filed as Exhibit 2.1 to GenCorp Inc.'s Current Report on Form 8-K dated April 11, 2014 (File No. 1-01520), and is incorporated herein by reference.
3.1	Certificate of Conversion, as filed with the Secretary of State of the State of Ohio on April 11, 2014 was filed as Exhibit 3.1 to GenCorp Inc.'s Current Report on Form 8-K dated April 11, 2014 (File No. 1-01520), and is incorporated herein by reference.
3.2	Certificate of Conversion, as filed with the Secretary of State of the State of Delaware on April 11, 2014 was filed as Exhibit 3.2 to GenCorp Inc.'s Current Report on Form 8-K dated April 11, 2014 (File No. 1-01520), and is incorporated herein by reference.
3.3	Certificate of Incorporation, as of April 11, 2014, as amended on April 27, 2015 was filed as Exhibit 3.3 to Aerojet Rocketdyne Holdings, Inc.'s Annual Report on Form 10-K for the fiscal year ended November 30, 2015 (File No. 1-01520), and is incorporated herein by reference.
3.4	Aerojet Rocketdyne Holdings, Inc. Second Amended and Restated Bylaws was filed as Exhibit 3.1 to Aerojet Rocketdyne Holdings, Inc.'s Current Report on Form 8-K dated January 20, 2016 (File No. 1-01520), and is incorporated herein by reference.
4.1	GenCorp Retirement Savings Plan was filed as Exhibit 4.1 to GenCorp Inc.'s Registration Statement on Form S-8 filed on June 30, 2008 (File No. 333-0152032) and incorporated herein by reference.
4.2	Form of Common Stock Certificate was filed as Exhibit 4.1 to GenCorp Inc.'s Current Report on Form 8-K dated April 11, 2014 (File No. 1-01520), and is incorporated herein by reference.
4.3	GenCorp Inc. Amended and Restated 2009 Equity and Performance Incentive Plan was filed as Exhibit 4.1 to GenCorp Inc.'s Registration Statement on Form S-8 dated April 9, 2015 (File No. 333-203319), and is incorporated herein by reference.
4.4	Indenture, dated as of December 14, 2016, between Aerojet Rocketdyne Holdings, Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to Aerojet Rocketdyne Holdings, Inc.'s 2.25% Convertible Senior Notes due 2023 was filed as Exhibit 4.1 to Aerojet Rocketdyne Holding, Inc.'s Current Report on Form 8-K dated December 14, 2016 (File No. 1-01520), and is incorporated herein by reference .
4.5	Form of 2.25% Convertible Senior Note due 2023 was filed as Exhibit 4.2 to Aerojet Rocketdyne Holdings, Inc.'s Current Report on Form 8-K dated December 14, 2016 (File No. 1-01520), and is incorporated herein by reference.
10.1	Amended and Restated Environmental Agreement by and between Aerojet and Northrop Grumman, dated October 19, 2001 was filed as Exhibit 2.4 to the Company's Current Report on Form 8-K dated November 5, 2001 (File No. 1-01520), and is incorporated herein by reference.
10.2†	GenCorp 1996 Supplemental Retirement Plan for Management Employees effective March 1, 1996 was filed as Exhibit B to GenCorp Inc.'s Annual Report on Form 10-K for the fiscal year ended November 30, 1996 (File No. 1-01520), and is incorporated herein by reference.
10.3†	2009 Benefit Restoration Plan for the GenCorp Inc. Pension Plan was filed as Exhibit 10.1 to GenCorp Inc.'s Current Report on Form 8-K filed on January 7, 2009 (File No. 1-01520), and is incorporated herein by reference.
10.4†	2009 Benefit Restoration Plan for the GenCorp Inc. 401(k) Plan was filed as Exhibit 10.2 to GenCorp Inc.'s Current Report on Form 8-K filed on January 7, 2009 (File No. 1-01520), and is incorporated herein by reference.
10.5†	Deferred Bonus Plan of GenCorp Inc. and Participating Subsidiaries was filed as Exhibit 10.6 to GenCorp Inc.'s Annual Report on Form 10-K for the fiscal year ended November 30, 2008 (File No. 1-01520), and is incorporated herein by reference.
10.6†	GenCorp Inc. Deferred Compensation Plan for Nonemployee Directors, as amended was filed as Exhibit 10.7 to GenCorp Inc.'s Annual Report on Form 10-K for the fiscal year ended November 30, 2008 (File No. 1-01520), and is incorporated herein by reference.
10.7†	GenCorp Inc. 1999 Equity and Performance Incentive Plan as amended was filed as Exhibit 10.11 to GenCorp Inc.'s Annual Report on Form 10-K for the fiscal year ended November 30, 2007 (File No. 1-01520), and is incorporated herein by reference.
10.8†	Form of Restricted Stock Agreement between the Company and Nonemployee Directors providing for payment of part of Directors' compensation for service on the Board of Directors in Company stock was filed as Exhibit 10.1 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the fiscal quarter ended February 28, 1998 (File No. 1-01520), and is incorporated herein by reference.

10.9†	Form of Restricted Stock Agreement between the Company and Nonemployee Directors providing for payment of part of Directors' compensation for service on the Board of Directors in Company stock was filed as Exhibit 10.1 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the fiscal quarter ended February 28, 1999 (File No. 1-01520), and is incorporated herein by reference.
10.10†	Form of Restricted Stock Agreement between the Company and Directors or Employees for grants of time-based vesting of restricted stock under the GenCorp Inc. 1999 Equity and Performance Incentive Plan was filed as Exhibit 10.26 to GenCorp Inc.'s Annual Report on Form 10-K for the fiscal year ended November 30, 2004 (File No. 1-01520), and is incorporated herein by reference.
10.11†	Form of Stock Appreciation Rights Agreement between the Company and Employees for grants of stock appreciation rights under the GenCorp Inc. 1999 Equity and Performance Incentive Plan was filed as Exhibit 10.27 to GenCorp Inc.'s Annual Report on Form 10-K for the fiscal year ended November 30, 2004 (File No. 1-01520), and is incorporated herein by reference.
10.12†	Form of Stock Appreciation Rights Agreement between the Company and Directors for grants of stock appreciation rights under the GenCorp Inc. 1999 Equity and Performance Incentive Plan was filed as Exhibit 10.28 to GenCorp Inc.'s Annual Report on Form 10-K for the fiscal year ended November 30, 2004 (File No. 1-01520), and is incorporated herein by reference.
10.13†	Form of Restricted Stock Agreement between the Company and Employees for grants of performance-based vesting of restricted stock under the GenCorp Inc. 1999 Equity and Performance Incentive Plan was filed as Exhibit 10.29 to GenCorp Inc.'s Annual Report on Form 10-K for the fiscal year ended November 30, 2004 (File No. 1-01520), and is incorporated herein by reference.
10.14†	Form of Director Nonqualified Stock Option Agreement between the Company and Nonemployee Directors providing for annual grant of nonqualified stock options prior to February 28, 2002, valued at $30,000 was filed as Exhibit 10.1 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the fiscal quarter ended May 31, 2002 (File No. 1-01520), and is incorporated herein by reference.
10.15†	Form of Director Nonqualified Stock Option Agreement between the Company and Nonemployee Directors providing for an annual grant of nonqualified stock options on or after February 28, 2002, valued at $30,000 in lieu of further participation in Retirement Plan for Nonemployee Directors was filed as Exhibit 10.2 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the fiscal quarter ended May 31, 2002 (File No. 1-01520), and is incorporated herein by reference.
10.16†	Form of Restricted Stock Agreement Version 2 between the Company and Employees for grants of performance-based vesting of restricted stock under the GenCorp Inc. 1999 Equity and Performance Incentive Plan was filed as Exhibit 10.33 to GenCorp Inc.'s Annual Report on Form 10-K for the fiscal year ended November 30, 2005 (File No. 1-01520) and is incorporated herein by reference.
10.17	Second Amended and Restated Shareholder Agreement dated as of March 5, 2008, by and between GenCorp Inc. and Steel Partners II L.P. was filed as Exhibit 10.1 to GenCorp Inc.'s Current Report on Form 8-K filed on March 10, 2008 (File No. 1-01520), and is incorporated herein by reference.
10.18†	Director Stock Appreciation Rights Agreement between GenCorp Inc. and Directors for grants of stock appreciation rights under the GenCorp Inc. 2009 Equity and Performance Incentive Plan was filed as Exhibit 10.4 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the third quarter ended August 31, 2009 (File No. 1-01520), and is incorporated herein by reference.
10.19†	Amendment to the Benefits Restoration Plan for Salaried Employees of GenCorp Inc. and Certain Subsidiary Companies, effective October 6, 2009 was filed as Exhibit 10.5 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the third quarter ended August 31, 2009 (File No. 1-01520), and is incorporated herein by reference.
10.20†	Amendment to the 2009 Benefit Restoration Plan for the GenCorp Inc. 401(k) Plan, effective October 6, 2009 was filed as Exhibit 10.6 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the third quarter ended August 31, 2009 (File No. 1-01520), and is incorporated herein by reference.
10.21†	Amendment to the 2009 Benefits Restoration Plan for the GenCorp Inc. Pension Plan, effective October 6, 2009 was filed as Exhibit 10.7 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the third quarter ended August 31, 2009 (File No. 1-01520), and is incorporated herein by reference.
10.22†	Amendment to the Deferred Bonus Plan of GenCorp Inc. and Participating Subsidiaries, effective October 6, 2009 was filed as Exhibit 10.8 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the third quarter ended August 31, 2009 (File No. 1-01520), and is incorporated herein by reference.
10.23†	Amendment to the GenCorp Inc. Deferred Compensation Plan for Nonemployee Directors, as amended, effective October 6, 2009 was filed as Exhibit 10.9 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the third quarter ended August 31, 2009 (File No. 1-01520), and is incorporated herein by reference.
10.24†	Amendment to the GenCorp Inc. 1996 Supplemental Retirement Plan for Management Employees, effective October 6, 2009 was filed as Exhibit 10.10 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the third quarter ended August 31, 2009 (File No. 1-01520), and is incorporated herein by reference.
10.25	Settlement Agreement by and between Aerojet and United States of America, dated November 29, 1992, was filed as Exhibit 10.52 to GenCorp Inc.'s Annual Report on Form 10-K for the fiscal year ended November 30, 2009 (File No. 1-01520), and is incorporated herein by reference.

10.26	Modification No. 1 to the November 29, 1992 Settlement Agreement by and between Aerojet and United States of America, dated October 27, 1998, was filed as Exhibit 10.53 to GenCorp Inc.'s Annual Report on Form 10-K for the fiscal year ended November 30, 2009 (File No. 1-01520), and is incorporated herein by reference.
10.27†	Form of Restricted Stock Agreement between the Company and Employees for grants of time-based vesting of restricted stock under the GenCorp Inc. Amended and Restated 2009 Equity and Performance Incentive Plan was filed as Exhibit 10.1 to GenCorp Inc.'s Current Report on Form 8-K dated May 13, 2013 (File No. 1-1520), and is incorporated herein by reference .
10.28†	Amendment to the GenCorp Inc. Deferred Compensation Plan for Nonemployee Directors, as amended, effective April 11, 2013 was filed as Exhibit 10.1 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the second quarter ended May 31, 2013 (File No. 1-01520), and is incorporated herein by reference.
10.29†	Stock Option Cancellation Agreement, dated July 9, 2013, between GenCorp Inc. and Kathleen E. Redd was filed as Exhibit 10.1 to GenCorp Inc.'s Current Report on Form 8-K dated July 12, 2013 (File No. 1-01520), and is incorporated herein by reference.
10.30	Form of Indemnification Agreement was filed as Exhibit 10.1 to GenCorp Inc.'s Current Report on Form 8-K dated April 11, 2014 (File No. 1-01520), and is incorporated herein by reference.
10.31	Amended and Restated 2013 Employee Stock Purchase Plan, dated as of June 24, 2014 was filed as Exhibit 10.1 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the fiscal quarter ended August 31, 2014 (File No. 1-01520), and is incorporated herein by reference.
10.32†	Amended and Restated Deferred Compensation Plan for Nonemployee directors, dated as of June 24, 2014 was filed as Exhibit 10.2 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the fiscal quarter ended August 31, 2014 (File No. 1-01520), and is incorporated herein by reference.
10.33†	Form of Restricted Stock Agreement between the Company and Directors for grants of time-based vesting of restricted stock under the GenCorp Inc. Amended and Restated 2009 Equity and Performance Incentive Plan was filed as Exhibit 10.4 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the fiscal quarter ended August 31, 2014 (File No. 1-01520), and is incorporated herein by reference.
10.34†	Form of Unrestricted Stock Agreement between the Company and Directors for grants of common stock under the GenCorp Inc. Amended and Restated 2009 Equity and Performance Incentive Plan was filed as Exhibit 10.5 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the fiscal quarter ended August 31, 2014 (File No. 1-01520), and is incorporated herein by reference.
10.35†	Form of Director Nonqualified Stock Option Agreement between the Company and Directors for grants of nonqualified stock options under the GenCorp Inc. Amended and Restated 2009 Equity and Performance Incentive Plan was filed as Exhibit 10.6 to GenCorp Inc.'s Quarterly Report on Form 10-Q for the fiscal quarter ended August 31, 2014 (File No. 1-01520), and is incorporated herein by reference.
10.36†	Offer letter between GenCorp and Eileen Drake, dated March 2, 2015 was filed as Exhibit 10.1 to GenCorp Inc.'s Current Report on Form 8-K dated March 2, 2015 (File No. 1-01520), and is incorporated herein by reference.
10.37†	Executive Employment Agreement, dated as of November 23, 2015, between Aerojet Rocketdyne Holdings, Inc. and Eileen Drake was filed as Exhibit 10.1 to Aerojet Rocketdyne Holdings, Inc.'s Current Report on Form 8-K dated November 23, 2015 (File No. 1-01520), and is incorporated herein by reference.
10.38†	Separation Agreement and General Release between Aerojet Rocketdyne Holdings, Inc. and Christopher C. Cambria dated June 8, 2016 was filed as Exhibit 10.1 to Aerojet Rocketdyne Holdings, Inc.'s Current Report on Form 8-K dated June 8, 2016 (File No. 1-01520), and is incorporated herein by reference.
10.39	Fourth Amended and Restated Credit Agreement, dated as of June 17, 2016, among Aerojet Rocketdyne Holdings, Inc., as Borrower, each of those Material Domestic Subsidiaries of the Borrower identified as a "Guarantor" on the signature pages thereto and such other Material Domestic Subsidiaries of the Borrower as may from time to time become a party thereto, the several banks and other financial institutions from time to time parties thereto, and Bank of America, N.A., as Administrative Agent, Swingline Lender and an L/C Issuer was filed as Exhibit 10.1 to Aerojet Rocketdyne Holdings, Inc.'s Current Report on Form 8-K dated June 17, 2016 (File No. 1-01520), and is incorporated herein by reference.
10.40†	Amended and Restated Deferred Compensation Plan for Directors, dated August 17, 2016 was filed as Exhibit 10.1 to Aerojet Rocketdyne Holdings, Inc.'s Current Report on Form 8-K dated August 17, 2016 (File No. 1-01520), and is incorporated herein by reference.
10.41†	Offer Letter between Aerojet Rocketdyne Holdings, Inc. and Paul R. Lundstrom, dated September 27, 2016 was filed as Exhibit 10.1 to Aerojet Rocketdyne Holdings, Inc.'s Current Report on Form 8-K dated October 25, 2016 (File No. 1-01520), and is incorporated herein by reference.
10.42†	Transition and General Release Agreement between Aerojet Rocketdyne Holdings, Inc. and Kathleen E. Redd, dated December 20, 2016 was filed as Exhibit 10.1 to Aerojet Rocketdyne Holdings, Inc.'s Current Report on Form 8-K dated December 20, 2016 (File No. 1-01520), and is incorporated herein by reference.
10.43†	Amended and Restated Deferred Compensation Plan for Directors, dated as of February 22, 2017 was filed as Exhibit 10.1 to Aerojet Rocketdyne Holdings, Inc.'s Current Report on Form 10-Q dated May 8, 2017 (File No. 1-01520), and is incorporated herein by reference.

10.44†	Aerojet Rocketdyne Holdings, Inc. Executive Change in Control Severance Policy was filed as Exhibit 10.1 to Aerojet Rocketdyne Holdings, Inc.'s Current Report on Form 10-Q dated November 2, 2017 (File No. 1-01520), and is incorporated herein by reference.
21.1	Subsidiaries of the Company.
23.1*	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney
31.1*	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended.
31.2*	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended.
32.1*	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Rule 13a-14(b) under the Securities Exchange Act of 1934 as amended, and 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

* Filed herewith. All other exhibits have been previously filed.

** Schedules and Exhibits have been omitted, but will be furnished to the SEC upon request.

† Management contract or compensatory plan or arrangement.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-35621, 333-91783, 333-152032, 333-158870, 333-165978, 333-180400, 333-187802, 333-203319) of Aerojet Rocketdyne Holdings, Inc. of our report dated February 21, 2018 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K/A.

/s/ PricewaterhouseCoopers LLP

Sacramento, California
March 13, 2018

Exhibit 31.1

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

I, Eileen P. Drake, certify that:

1. I have reviewed this Amendment No.1 to the annual report on Form 10-K of Aerojet Rocketdyne Holdings, Inc.;

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 registrant as of, and for, the periods presented in this report;

4. The registrant'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 registrant 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 registrant, 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 registrant'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 registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant'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 registrant'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 registrant's internal control over financial reporting.

Date: March 13, 2018

/s/ Eileen P. Drake

Eileen P. Drake
Chief Executive Officer and President
(Principal Executive Officer)

Exhibit 31.2

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

I, Paul R. Lundstrom, certify that:

1. I have reviewed this Amendment No. 1 to the annual report on Form 10-K of Aerojet Rocketdyne Holdings, Inc.;

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 registrant as of, and for, the periods presented in this report;

4. The registrant'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 registrant 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 registrant, 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 registrant'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 registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant'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 registrant'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 registrant's internal control over financial reporting.

Date: March 13, 2018

/s/ Paul R. Lundstrom

Paul R. Lundstrom
Vice President, Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION OF ANNUAL REPORT ON FORM 10-K

Pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, in connection with the filing of Amendment No. 1 to the Annual Report on Form 10-K of Aerojet Rocketdyne Holdings, Inc. (the “Company”) for the fiscal year ended December 31, 2017 , as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned officer of the Company certifies that, to her knowledge:

- the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

/s/ Eileen P. Drake

Eileen P. Drake
Chief Executive Officer and President
(Principal Executive Officer)

Date: March 13, 2018

Pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, in connection with the filing of Amendment No. 1 to the Annual Report on Form 10-K of Aerojet Rocketdyne Holdings, Inc. (the “Company”) for the fiscal year ended December 31, 2017 , as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned officer of the Company certifies that, to his knowledge:

- the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

/s/ Paul R. Lundstrom

Paul R. Lundstrom
Vice President, Chief Financial Officer
(Principal Financial Officer)

Date: March 13, 2018