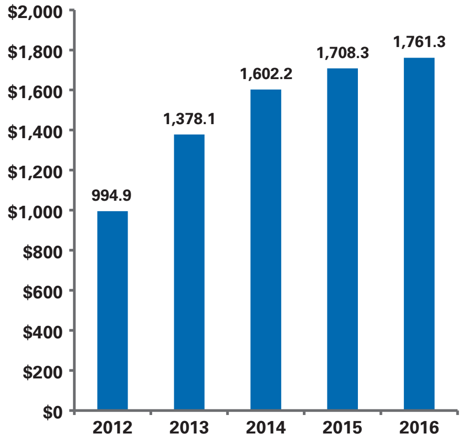
AEROJET ROCKETDYNE
Holdings, Inc.

2016 ANNUAL REPORT

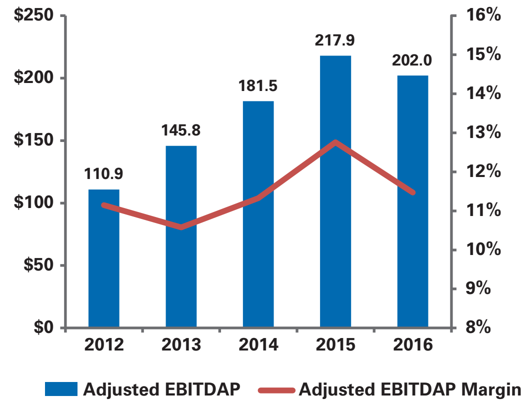
Aerojet Rocketdyne Holdings Financial Performance Highlights

(In millions, except percentage amounts)

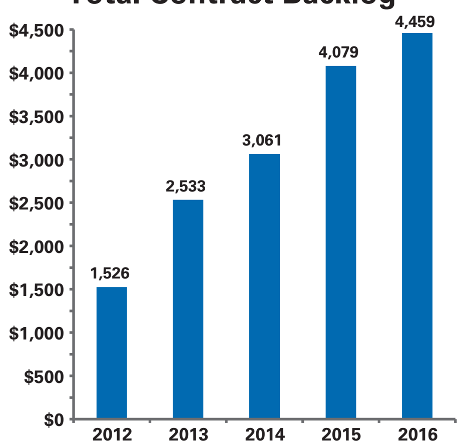
Net Sales



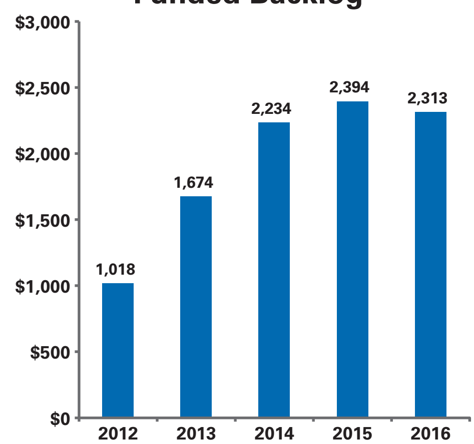
Adjusted EBITDAP (1)



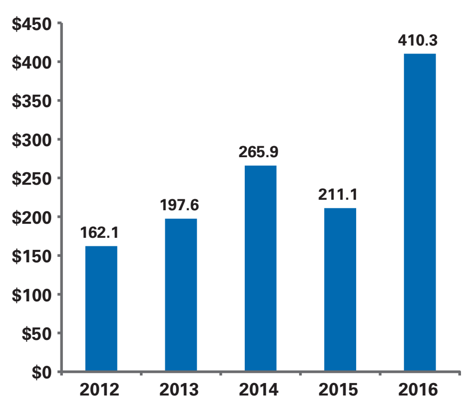
Total Contract Backlog



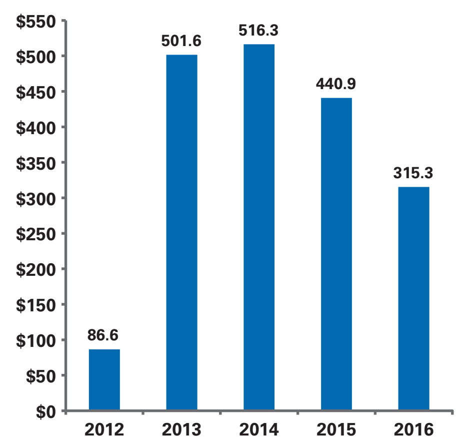
Funded Backlog



Cash and Cash Equivalents



Net Debt (2)



Notes:

(1) Non-GAAP Measure. The Company defines Adjusted EBITDAP as GAAP income (loss) from continuing operations before income taxes adjusted to exclude interest expense, interest income, depreciation and amortization, retirement benefit expense net of cash funding that is recoverable under our U.S. government contracts and unusual items.

(2) Non-GAAP Measure. Defined as debt principal less cash and marketable securities.

Dear Fellow Shareholders,

In my letter to you last year, I outlined several foundational initiatives and accomplishments intended to position our company for the future. These included the successful integration of heritage Aerojet and heritage Rocketdyne, key leadership appointments, and the launch of our Competitive Improvement Plan (CIP). I'm proud to say these initiatives continued to gain momentum in 2016 and yielded strong operational execution, key awards and solid financial performance. Our overarching goal: creating significant value for our customers and shareholders.

Our broad platform of existing programs performed well in 2016. We saw yet another year of flawless performance from our multiple systems onboard United Launch Alliance's (ULA) Atlas V and Delta IV launch vehicles. We also delivered our 300th Terminal High Altitude Area Defense (THAAD) booster motor and Divert / Attitude Control System (DACS). Our pipeline of future programs also remains robust, with great progress on the future RS-25 and AR1 engines for heavy-lift applications and the expansion of our work in both hypersonic propulsion and the Ground-Based Strategic Deterrent programs.

In 2016, Aerojet Rocketdyne Holdings, Inc. delivered another year of strong financial performance. Sales grew 3% to nearly $1.8 billion, despite headwind from the Hillsborough land transaction booked at the Easton Development Company in 2015. Excluding the impact of this 2015 transaction, sales grew 6%. Backlog as of December 31, 2016 was $4.5 billion, up 12.5% over the prior year. Adjusted EBITDAP of $202 million was down 7%, including the impact of the prior year gain from Hillsborough. Cash flow generation was exceptional, with free cash flow of $111 million, up 292% year-over-year and more than six times net income. Net debt ended the year at $315 million, down 29% from 2015 levels.

Execution remains our top priority. Based on the belief that sound operating practices produce sound operating results, in 2016 we took several key steps on our journey to enhance efficiency, improve the company's competitive posture, and align our programs with our operating capabilities and our customers. (1) We continued our focus on cost reduction through implementation of our CIP. Now, almost halfway through our planned four-year CIP implementation period, we are delighted with the progress to date and excited about realization of the full potential of the program. (2) We launched a data-driven, process-oriented business operating system to align and focus the enterprise and drive business results. This proactive, preventative system lowers risk and reduces process and product defects. The goal is achieving affordability and margin goals, improvement of operational execution including product and service quality improvements, and high customer satisfaction. (3) To enhance communication, create focus and reduce cost, we restructured the organization, consolidating the previous six business units into two: Space and Defense. (4) Over the last 12 months, we bolstered our board and senior leadership team with four key appointments.

Warren Lichtenstein was named executive chairman of the company in June 2016, formalizing his role and recognizing his ongoing contributions since being appointed Chairman of the Board in 2013. Arjun Kampani was named VP, General Counsel in April 2016; Paul Lundstrom was named VP and Chief Financial Officer in November 2016; and in February 2017, we named Jerry Tarnacki as the SVP of our Space business. And (5), we raised over $1 billion of debt and debt facilities, greatly improving the affordability and capacity of our capital structure. This overhaul of our capital structure lowers our interest rate, increases our capital allocation flexibility by removing the restrictive covenants inherent in the prior credit facility, and gives us optionality for multiple capital deployment strategies.

We are now positioned to excel, particularly as growth returns in our end markets – and I am cautiously optimistic about that growth. Amazing things continue to happen in America's space program and I believe we are well-positioned to benefit from the overall growth in interest to explore, live and work in space. On the defense side, there remain prospects for geopolitical surprises that could reshape or reinvigorate U.S. defense spending forecasts, and the new administration, by all accounts, appears to be both pro-space and pro-defense. That, coupled with the space and defense programs we have cultivated over the last several years, should provide a solid growth platform for years to come.

Space

As an industry leader in propulsion and power, the company stands ready to support the nation's commitment to assured access to space and assist in ushering in a new era of human and scientific exploration of space.The propulsion and power management and distribution products we produce are vital components of the overall space infrastructure.

> *It's very exciting when you think about what Aerojet Rocketdyne has contributed to the human race and our exploration of deep space.*

In 2016, we continued to support our nation's assured access to space imperative with our RS-68, RL10, and AJ-60 propulsion products, as well as pressurization tanks and reaction control thrusters all performing flawlessly for ULA's Atlas V and Delta IV launch vehicles, helping to extend their streak of successful launches without a failure to 115, an unmatched record of success. Again in 2017, we look forward to supporting their continued success.

We achieved major milestones in the development of AR1, our solution to ending our nation's reliance on Russian-built rocket engines. Early in the year, we entered into a Public-Private Partnership with the U.S. Air Force and ULA that secured funding to jointly develop the AR1 engine. And, through a series of tests, we successfully verified key pre-burner injector design parameters, keeping us on track for a critical design review in 2018 on our way to delivery of a flight-ready engine for certification in 2019.

As NASA prepares to take astronauts further into space than ever before, teams across the company are working hard to ensure their systems will have the performance needed to get them there safely. We continue to test RS-25 engines under multiple scenarios to ensure America's next heavy-lift rocket, the Space Launch System (SLS), will provide unsurpassed heavy-lift capability for the nation. Additionally, manufacturing and testing of key propulsion systems, such as the jettison motor and thrusters for the Orion spacecraft, continues. The SLS and Orion programs have enjoyed wide bipartisan support in both houses of Congress and remain a top Congressional priority as evidenced by the inclusion of a provision in the current Continuing Resolution to allow NASA the funding flexibility for SLS and Orion to remain on track for first flight. The first integrated launch of SLS and the Orion spacecraft is slated for 2018.

Next year is also the anticipated launch for Boeing's CST-100 Starliner to Low-Earth-Orbit (LEO). We successfully completed a series of hot-fire tests for both the Launch Abort Engines (LAE) and Reaction Control System (RCS) engines and we delivered the first set of hardware for Boeing's CST-100 Starliner service module, a critical component of the system that is being developed for NASA to safely and reliably send humans back to space from American soil.

2016 also saw the industry tap into Aerojet Rocketdyne's successful history with electric propulsion systems for the talent, expertise and experience needed to foment electric power technologies for space applications. We were selected to supply the electrical power system for Sierra Nevada Corporation's (SNC) Dream Chaser, a commercial spacecraft that will carry cargo to and from the International

Space Station. We also teamed with SNC to conduct an architectural design study for a habitation system that would enable astronauts to live for extended durations beyond LEO. NASA awarded us a contract to develop a high-power electric propulsion system that will enable key elements of their plans for exploration of cislunar space and beyond to Mars. We see a diverse set of future applications for this technology for a range of NASA, defense and commercial missions. 2016 was not without its challenges in our electric propulsion business. Most notably, cost growth and manufacturing inefficiencies on electric propulsion development contracts weighed heavily throughout parts of the year.

We must invest in the next generation of space capabilities to ensure the U.S. maintains its space superiority and has the capabilities and capacities to defend our critical space assets.

We were also awarded a contract to mature development of a modular non-toxic "Green" propellant propulsion system for CubeSats, SmallSats and Nanosats, giving us the opportunity to harness the coming small satellite revolution. This new class of propulsion system can be used in future NASA, military and commercial missions, and the benefits for the public and private sectors could be immense. When fully developed, our MPS-130 green propulsion system will provide small satellites with increased capabilities (similar to those of much larger satellites), such as extending mission life, increasing architectural resiliency, maneuvering to higher and lower orbits, performing complex proximity operations, and formation flying.

Defense

When the new administration submits its Pentagon spending request in April, it should be the first indication of what defense spending might look like for the next four years. Following multiple years of positive but subdued rates of growth, we believe the defense sector is likely to experience stronger growth with this administration. In concert with many of our prime customers, we are upbeat on both international and domestic defense spending, but remain unclear about the timing and magnitude.

The U.S. Department of Defense has approved the release of Raytheon company's Standard Missile-6 to several international customers.

Similar to the last several years, missile defense remains a top priority for our nation and the new administration has signaled continued strong support. Missile defense products are the core of our Defense Business Unit as we provide the propulsion to power and guide interceptors on all major missile defense platforms: Patriot, THAAD, Standard Missile, and the Ground-Based Midcourse Defense Exoatmospheric Kill Vehicle.

During fiscal 2016, we shipped the 300th THAAD boost motor and DACS units, delivering on our commitment to establish the capacity to produce at the rate necessary to meet the growing demand for the THAAD interceptor. We also supported a complex U.S. Army-led missile defense intercept test and transitioned to production of our new, more-capable Missile Segment Enhanced boost motor for the Patriot Advanced Capability-3 missile.

We saw significant expansion of our work in the field of hypersonic propulsion with competitive wins on the Hypersonic Air Breathing Weapons Concept, Advanced Full Range Engine, and Tactical Boost Glide concept development programs.

In July, the U.S. Air Force kicked off the Technology Maturation and Risk Reduction phase of the Ground-Based Strategic Deterrent program with the release of a request for proposal. The U.S. Air Force expects to begin deploying the new weapon in the late 2020s at an expected cost of $62.3 billion over 30 years. Bids from the prime contractors were due in October and the U.S. Air Force plans to award up to two contracts in the fourth quarter of fiscal 2017 for an estimated 36-month period of performance. We are working diligently to garner our share of this long-term solid rocket motor program.

Lastly, and more recently, we acquired Coleman Aerospace from L3 Technologies in February 2017. The Coleman business develops and integrates air- and ground-launched ballistic missile targets and mission planning for the U.S. Missile Defense Agency, and is a great complement to our already robust portfolio of defense-related products.

Easton Development Company, LLC

Although no new significant real estate sales were recorded in 2016, the company continued to make headway in its efforts to reposition, entitle and monetize 5,563 acres of land in the Sacramento, California, region under the brand name Easton. Our efforts to position Easton for development progressed with the creation of additional infrastructure/engineering plans for Phase 1 of both the Glenborough and Easton Place projects, completion of infrastructure plans for the Birkmont Business Park and Automall, and full entitlement of the Rio Del Oro property (2,309 acres). Westborough (1,659 acres) is the last remaining large, specific plan project area with entitlement and approval of Environmental Impact Reports still in process.

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Again in 2016, the performance of our team was remarkable, embracing the “One Aerojet Rocketdyne” culture while remaining committed to our values and our customers. I want to offer a sincere “Thank you” to all of the hard working employees who made it all possible. What they do matters – to our company and to our country.

I would also like to thank our customers and shareholders for their continued trust and confidence in Aerojet Rocketdyne as we endeavor to power the space launch and spacecraft of today and tomorrow, and to provide advanced propulsion for the weapons and national security systems that protect America and its allies.

Sincerely,

Eileen P. Drake, Chief Executive Officer and President
Aerojet Rocketdyne Holdings, Inc.
March 15, 2017

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

FORM 10-K

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

For the fiscal year ended: December 31, 2016

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 and Chicago 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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☒	Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

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

The aggregate market value of the voting common equity held by nonaffiliates of the registrant as of June 30, 2016 was approximately $1.2 billion.

As of February 21, 2017, there were 74.8 million outstanding shares of the Company's Common Stock, including redeemable common stock and unvested common shares, $0.10 par value.

Portions of the 2017 Proxy Statement of Aerojet Rocketdyne Holdings, Inc. relating to its annual meeting of stockholders scheduled to be held on May 4, 2017 are incorporated by reference into Part III of this Report.

Aerojet Rocketdyne Holdings, Inc.
Annual Report on Form 10-K
For the Fiscal Year Ended December 31, 2016

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* The information called for by Items 10, 11, 12, 13, and 14, to the extent not included in this Report, is incorporated herein by reference to the information to be included under the captions "Proposal 1 — Election of Directors," "Section 16(a) Beneficial Ownership Reporting Compliance," "Communications with Directors," "Board Committees," "Executive Compensation," "2016 Director Compensation Table," "Compensation Discussion and Analysis," "Summary Compensation Table," "2016 Grants of Plan-Based Awards," "Outstanding Equity Awards at 2016 Fiscal Year End, "2016 Option/SAR Exercises and Stock Vested," "2016 Pension Benefits," "2016 Non-Qualified Deferred Compensation," "Director Compensation," "Organization & Compensation Committee Report" "Compensation Committee Interlocks and Insider Participation," "Security Ownership of Certain Beneficial Owners," "Security Ownership of Officers and Directors," "Employment Agreement and Indemnity Agreements," "Potential Payments upon Termination of Employment or Change in Control," "Determination of Independence of Directors," "Related Person Transaction Policy," "Proposal 4 — Ratification of the Appointment of Independent Auditors," "Audit Fees," "Audit-Related Fees," "Tax Fees," "All Other Fees" and "Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of the Company's Independent Auditors" in Aerojet Rocketdyne Holdings, Inc.'s 2017 Proxy Statement, to be filed within 120 days after the close of our fiscal year.

Part I

Item 1. *Business*

Unless otherwise indicated or required by the context, as used in this Annual Report on Form 10-K ("Report"), the terms "we," "our," "us," and the "Company" refer to Aerojet Rocketdyne Holdings, Inc. and all of its subsidiaries that are consolidated in conformity with accounting principles generally accepted in the United States of America ("U.S.").

Certain information contained in this Annual Report on Form 10-K should be considered "forward-looking statements" as defined by Section 21E of the Private Securities Litigation Reform Act of 1995. All statements in this Report other than historical information may be deemed forward-looking statements. These statements present (without limitation) the expectations, beliefs, plans, and objectives of management and future financial performance and assumptions underlying, or judgments concerning, the matters discussed in the statements. The words "believe," "estimate," "anticipate," "project" and "expect," and similar expressions, are intended to identify forward-looking statements. Forward-looking statements involve certain risks, estimates, assumptions, and uncertainties, including with respect to future sales and activity levels, cash flows, contract performance, the outcome of litigation and contingencies, environmental remediation, availability of capital, and anticipated costs of capital. A variety of factors could cause actual results or outcomes to differ materially from those expected and expressed in our forward-looking statements. Important risk factors that could cause actual results or outcomes to differ from those expressed in the forward-looking statements are described in the section "Risk Factors" in Item 1A of this Report. Additional risk factors may be described from time to time in our future filings with the Securities and Exchange Commission ("SEC").

Overview

We are an innovative technology-based manufacturer of aerospace and defense products and systems, with a real estate segment that includes activities related to the entitlement, sale, and leasing of our excess real estate assets. Our operations are organized into two segments:

Aerospace and Defense — includes the operations of our 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 U.S. government, including the Department of Defense ("DoD"), the National Aeronautics and Space Administration ("NASA"), major aerospace and defense prime contractors as well as portions of the commercial sector.

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

In June 2013, we acquired the Pratt & Whitney Rocketdyne division (the "Rocketdyne Business") from United Technologies Corporation ("UTC").

Sales, segment performance, total assets, and other financial data of our segments for fiscal 2016, 2015, 2014, and one month ended December 31, 2015 are set forth in Note 9 in notes to consolidated financial statements included in Item 8 of this Report.

In January 2016, our board of directors approved a change in our fiscal year-end from November 30 of each year to December 31 of each year. The fiscal year of our subsidiary, Aerojet Rocketdyne, ends on the last Saturday in December. As a result of the change, we had a one month transition period in December 2015. The audited results for the one month ended December 31, 2015 and the unaudited results for the one month ended December 31, 2014 are included in Item 8 of this Report. Further, as a result of the 2016 calendar, Aerojet Rocketdyne had 53 weeks of operations in fiscal 2016 compared to 52 weeks of operations in fiscal 2015 and 2014. The additional week of operations, which occurred in the fourth quarter of fiscal 2016, accounted for \$32.2 million in additional net sales.

We were incorporated in Ohio in 1915 and reincorporated to the State of Delaware on April 11, 2014. Our principal executive offices are located at 222 N. Sepulveda Blvd, Suite 500, El Segundo, California 90245.

Our Internet website address is www.AerojetRocketdyne.com. We have made available through our Internet website, free of charge, our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after such materials were electronically filed with, or furnished to, the SEC. We also make available on our Internet website our corporate governance guidelines and the charters for each of the following committees of our Board of Directors: Audit; Corporate Governance & Nominating; and Organization & Compensation. Our corporate governance guidelines and such charters are also available in print to anyone who requests them.

Aerospace and Defense

Aerojet Rocketdyne is a world-recognized technology-based engineering and manufacturing company that develops and produces specialized propulsion systems, as well as armament systems. We are considered a domestic market leader in liquid launch propulsion, in-space propulsion, missile defense propulsion, tactical missile propulsion and hypersonic propulsion systems. We develop and manufacture all four propulsion types (liquid, solid, air-breathing, and electric) for defense, civil and commercial applications. Our propulsion systems range in thrust size from a few grams to over half a million pounds. Aerojet Rocketdyne is a trusted supplier of technically sophisticated products and systems for military, civil and commercial customers and we maintain strong market positions across several product lines that are mission-critical to national defense and U.S. access to space. Our sales are diversified across multiple programs, prime contractors and end users and we believe we are well positioned to benefit from spending in several areas of high priority for the U.S. government including support of the nation's ability to maintain access to space and a strong missile defense. Principal customers and end users include the DoD, NASA, The Boeing Company ("Boeing"), Lockheed Martin Corporation ("Lockheed Martin"), Raytheon Company ("Raytheon"), and United Launch Alliance ("ULA").

Primary Markets and Programs

Our capabilities and resources are aligned with our customers and markets, and position us for long-term growth with improved efficiency. The markets and key programs we serve are:

Aerospace. We specialize in the development and production of propulsion systems for space applications and are considered a domestic market leader in liquid launch and in-space propulsion systems. For over half a century, we have been a domestic provider of launch vehicle propulsion systems to prime contractors providing launch services to the DoD, NASA, and other commercial customers. We have been a cornerstone of the U.S. space program since its inception more than five decades ago. Our propulsion systems have flown on every manned mission since the inception of the U.S. space program in 1959 and have powered spacecraft to every planet in the solar system that has been explored by NASA. Our products include a broad market offering of both chemical (liquid propellant engines and solid rocket motors) and electric propulsion required for launch vehicle and in-space applications in the defense, civil and commercial propulsion markets. Capabilities range across the entire spectrum of product maturation from technology demonstration through development, production, and flight support operations.

Our space launch systems have a long, successful history with the DoD where we continue to project strong support related to National Security Space requirements enabling communications, navigation, intelligence, surveillance, and reconnaissance activities. We provide booster and upper stage propulsion for ULA's Delta IV and Atlas V launch vehicles in support of the Evolved Expendable Launch Vehicle ("EELV") program, as well as a limited number of Delta II vehicles which are supporting commercial customers launching earth observation spacecraft. We continue to execute very effectively on production, delivery, and launch support operations for each of the multi-year contracts established in support of the EELV program.

During fiscal 2016, we achieved a number of significant milestones on the NASA Space Launch System ("SLS") and Commercial Crew programs. We completed initial testing of our RS-25 engine to improve its affordability and tailor it for use in the SLS. NASA also awarded us the contract to upgrade and integrate four of our RL10 engines into the new exploration upper stage for the SLS.

We continued to mature critical technologies for our nation's next generation of advanced hydrocarbon engines for future high-performance booster systems with the ability to eliminate the U.S. dependence on Russian-provided booster systems for National Security Space Launch. The U.S. Air Force awarded us an Other Transaction Agreement ("OTA") that can provide up to $536 million of U.S. government funding in addition to our investment to qualify our AR1 engine. To date we have been awarded Stages 1 and 2A under the OTA.

NASA also selected us for development of the solar electric advanced propulsion system that will be a key enabling technology for inter-planetary exploration. We started initial delivery of replacement lithium ion batteries to sustain the future operation of the International Space Station ("ISS").

A subset of our key space programs include: RS-68, RS-27, RL10 and Atlas AJ60 engines/boosters that power EELV launch vehicles, the AR1 large liquid engine for the next generation of launch vehicles, propulsion for the Orion human space capsule and the Starliner Commercial Crew Transportation Capability capsule, and multiple in-space electric and chemical propulsion systems to provide orbit raising and satellite station positioning.

Defense. We specialize in the development and production of propulsion systems for defense applications, armament systems for precision tactical systems and munitions, and are considered a domestic market leader in missile defense propulsion, tactical missile propulsion and hypersonic propulsion systems.

We design, develop, and produce propulsion and warhead systems for tactical missiles. Our commitment to researching and developing safe, effective and affordable products enables us to provide our customers with optimal tactical propulsion and warhead solutions. Our tactical products have been successfully fielded on numerous active U.S. and international weapon system platforms.

We also develop and manufacture liquid and solid divert and attitude control ("DAC") propulsion systems and booster motors for missile defense applications. Additionally, we develop and manufacture boost and post-boost rocket motors for strategic missiles. These systems provide launch capability and directional control for critical missile defense interceptors and for ground and sea-based strategic missiles.

During fiscal 2016, we experienced growth in our work in the field of hypersonic propulsion with competitive wins on the Hypersonic Airbreathing Weapons Concept, Advanced Full Range Engine, and Tactical Boost Glide concept development programs. We also extended our position in missile defense DACs propulsion as both the Terminal High Altitude Area Defense ("THAAD") liquid DACs and Standard Missile-3 solid DACs achieved significant production volume in fiscal 2016. In fiscal 2016, we also transitioned to production of the new, more-capable Missile Segment Enhanced boost motor for the Patriot Advanced Capability-3 ("PAC-3") missile.

A subset of our key defense programs include: Exoatmospheric Kill Vehicle ("EKV") Liquid DACs, booster and Liquid DACs for THAAD, boosters and solid DACs for the Navy's Standard Missile family, PAC-3, Guided Multiple Launch Rocket Systems, HAWK, Javelin, Tactical Tomahawk, and Tube-launched Optically-tracked Wire-guided warhead.

Our Competitive Strengths

Leadership in Propulsion — Our success is due in part to our ability to focus on the design, development and manufacture of products utilizing innovative, mission-enabling technology. For over 70 years, we have demonstrated a legacy of successfully meeting the most challenging missions by producing some of the world's most technologically advanced propulsion systems for our customers. For example, our propulsion systems have flown on every NASA Discovery mission as well as every manned space mission since the inception of the U.S. space program. We also have powered nearly all of NASA's human-rated launch vehicles to-date and powered space probes to nearly every planet in the solar system and have been a cornerstone to the U.S. space program since its inception. In addition, we have been a major supplier of a wide range of propulsion products to the DoD since the 1940s when we successfully developed and produced the first jet-assisted take off rockets for U.S. aircraft during World War II.

Diversified and Well Balanced Portfolio — We have been and continue to be a pioneer in the development of many enabling technologies and products that have strengthened multiple branches of the U.S. military and enabled the exploration of space. We believe Aerojet Rocketdyne maintains a unique competitive position due to a strategic focus on creating and maintaining a broad spectrum of propulsion and energetic products assisted by the growing market demand for its innovative energy management technologies.

High Visibility of Revenue with Multi-year Contracts and Sizable Backlog — A strong focus on our customers' highest priorities has been a critical factor in maintaining an enduring portfolio of products throughout major market cycles. The highly visible nature of our revenue comes from the long-term nature of the programs with which we are involved, our diverse and attractive contract base and our deep customer relationships. A substantial portion of our sales are derived from multi-year contract awards from major aerospace and defense prime contractors. In many cases, we operate under sole source contracts, some of which are follow-on contracts to contracts initially competed years ago and others have been sole source contracts since inception. High renewal rates, supported by our market leading technology provide us with a highly stable business base from which to grow. As of December 31, 2016, our contract backlog (funded and unfunded) was $4.5 billion and our funded backlog, which includes only amounts for which funding has been authorized by a customer and a purchase order has been received, totaled $2.3 billion. We are not subject to predictable seasonality. Primary factors affecting the timing of our sales include the timing of U.S. government awards, the availability of U.S. government funding, contractual product delivery requirements, customer acceptances, and regulatory issues.

Exceptional Long-Term Industry Relationships — We serve a broad set of customers and are major suppliers of propulsion products to top original equipment manufacturers such as Boeing, Lockheed Martin, Raytheon and ULA, as well as to the DoD, NASA and other U.S. government agencies. We have a long history of partnering with their respective prime contractors and have developed close relationships with key decision-makers in the rocket and missile propulsion markets. We are, in many instances, approached by multiple prime contractors early in the bidding process, which is a testament to the strength of our relationships and technological leadership in the industry. We believe these long-term relationships and our reputation for performance enhance customer loyalty and provide us with key competitive advantages in winning new contracts for new programs as well as follow-on and derivative contracts for existing programs.

Competition

The competitive dynamics of our multi-faceted marketplace vary by product line and customer as we experience many of the same influences felt by the broader aerospace and defense industry. The large majority of products we manufacture are highly complex, technically sophisticated and extremely hazardous to build, demanding rigorous manufacturing procedures and highly specialized manufacturing equipment. While historically these factors, coupled with the high cost to establish the infrastructure required to meet these needs, posed substantial barriers to entry, modern design tools and manufacturing techniques (e.g., additive manufacturing) available to new entrants with the ability to self-fund start-up as well as development costs has led to increased competition in space related markets. To date, the competition has been limited to a few participants who tend to be narrowly focused on products that are sub-elements of our overall product portfolio.

For example, entrepreneurs such as SpaceX and Blue Origin, who have been or are in the process of developing liquid fuel propulsion capabilities are primarily focused on the development of space propulsion systems for heavy lift launch vehicles and are not pursuing or participating in the missile defense or tactical propulsion business segments that make up a substantial portion of our overall business. These new entrepreneurs have signaled their intent to compete primarily on price and are therefore bringing pressure to bear on existing cost paradigms and manufacturing methodologies.

The table below lists the primary participants in the propulsion market:

Company	Parent	Propulsion Type
Aerojet Rocketdyne	Aerojet Rocketdyne Holdings, Inc.	Solid, liquid, air-breathing, electric
Airbus Defence and Space (formerly Astrium)	Airbus Group	Solid, liquid
Alliant Techsystems	Orbital ATK, Inc.	Solid, air-breathing
Avio	Avio S.p.A	Solid, liquid
Blue Origin LLC	Blue Origin	Liquid
Electron Technologies, Inc.	L-3 Communications Corporation	Electric
General Dynamics OTS	General Dynamics	Solid
Nammo Talley	Nammo Talley	Solid
Northrop Grumman Space Technology	Northrop Grumman Corporation (“Northrop”)	Liquid
Moog Inc.	Moog Inc.	Liquid, electric
Safran	Safran	Liquid, solid
SpaceX	SpaceX	Liquid

Industry Overview

Our primary aerospace and defense customers include the DoD and its agencies, NASA, and the prime contractors that supply products to these customers. We rely on U.S. government spending on propulsion systems for defense, space and armament systems, precision tactical weapon systems and munitions applications, and our backlog depends, in large part, on continued funding by the U.S. government for the programs in which we are involved. These funding levels are not generally correlated with any specific economic cycle, but rather follow the cycle of general public policy and political support for this type of funding. Moreover, although our contracts often contemplate that our services will be performed over a period of several years, the U.S. Congress must appropriate funds for a given program and the U.S. President must sign government budget legislation each government fiscal year (“GFY”) and may significantly increase, decrease or eliminate, funding for a program. A decrease in DoD and/or NASA expenditures, the elimination or curtailment of a material program in which we are or hope to be involved, or changes in payment patterns of our customers as a result of changes in U.S. government outlays, could have a material adverse effect on our operating results, financial condition, and/or cash flows.

Even with overall budget levels set for GFY 2017, Congress was not able to pass a full year appropriation for either the DoD or NASA prior to the start of GFY 2017 on October 1, 2016. As a result, Congress passed a short-term Continuing Resolution (“CR”) to fund the U.S. government until December 9, 2016. After the November U.S. presidential election, at the request of the Trump Administration, Congress passed another CR through April 28, 2017 to allow the new Administration to shape federal spending. Although details of the plans to address perceived shortfalls in DoD readiness and modernization remain unsettled, the Trump Administration has signaled strong support for nuclear modernization and missile defense.

The SLS appears to remain a top Congressional priority as the CR included a provision to allow NASA the funding flexibility for SLS and deep exploration to remain on track. The SLS program also has enjoyed wide, bipartisan support in both chambers of Congress. We maintain a strong relationship with NASA and our propulsion systems have been powering NASA launch vehicles and spacecraft since the inception of the U.S. space program. Our booster, upper stage and Orion vehicle propulsion systems are currently baselined on the new SLS vehicle and both upper stage and booster engines are in development for future SLS variants. Due to the retirement of the space shuttle fleet, U.S. astronauts have been dependent on Russian Soyuz flights for access to and from the ISS for the better part of this decade. NASA has been working to re-establish U.S. manned space capability as soon as possible through development of a new "space taxi" to ferry astronauts and cargo to the ISS. In 2014, Boeing's CST-100 Starliner capsule, powered by Aerojet Rocketdyne propulsion, was selected by NASA to transport astronauts to and from the ISS. As Boeing's teammate, Aerojet Rocketdyne will be providing the propulsion system for this new capsule, thereby supplementing its work for NASA on the SLS designed for manned deep space exploration. In both instances, we have significant propulsion content and we look forward to supporting these generational programs for NASA.

Major Customers

As a supplier to the aerospace and defense industry, we align ourselves with prime contractors on a project-by-project basis. We believe that our position as a merchant supplier has helped us become a trusted partner to our customers, enabling us to maintain strong, long-term relationships with a variety of prime contractors. Under each of our contracts, we act either as a prime contractor, where we sell directly to the end user, or as a subcontractor, where we sell our products to prime contractors. The principal end user customers of our products and technologies are primarily agencies of the U.S. government.

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

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
Lockheed Martin	27%	29%	28%	24%
ULA	21	19	25	28
Raytheon	20	20	17	19
NASA	13	11	11	10

Our sales to each of the major customers listed above involve several product lines and programs.

Direct sales to the U.S. government and its agencies, or government customers, and indirect sales to U.S. government customers via direct sales to prime contractors accounted for a total of approximately 91% of net sales in fiscal 2016. Sales to our aerospace and defense customers that provide products to international customers continue to grow. The following are percentages of net sales by principal end user in fiscal 2016:

U.S. Air Force	24%
NASA	24
U.S. Army	18
Missile Defense Agency	15
U.S. Navy	9
Other U.S. government	1
Total U.S. government customers	91
Other customers	9
Total	100%

Contract Types

Under each of its contracts, Aerojet Rocketdyne acts either as a prime contractor, where it sells directly to the end user, or as a subcontractor, selling its products to prime contractors. Research and development contracts are awarded during the inception stage of a program's development. Production contracts provide for the production and delivery of mature products for operational use. Aerojet Rocketdyne's contracts are largely categorized as either "fixed-price" (largely used by the U.S. government for production-type contracts) or "cost-reimbursable" (largely used by the U.S. government for development-type contracts). During fiscal 2016, approximately 62% of our net sales were from fixed-price contracts, 32% from cost-reimbursable contracts, and 6% from other sales including commercial contracts.

Fixed-price contracts are typically (i) fixed-price, (ii) fixed-price-incentive fee, or (iii) fixed-price level of effort contracts. For fixed-price contracts, Aerojet Rocketdyne performs work for a fixed price and realizes all of the profit or loss resulting from variations in costs during contract performance. For fixed-price-incentive fee contracts, Aerojet Rocketdyne receives increased or decreased fees or profits based upon actual performance against established targets or other criteria. For fixed-price level of effort contracts, Aerojet Rocketdyne generally receives a structured fixed price per labor hour, dependent upon the customer's labor hour needs. All fixed-price contracts present the risk of unreimbursed cost overruns potentially resulting in lower than expected contract profit margin and losses.

Cost-reimbursable contracts are typically (i) cost plus fixed fee, (ii) cost plus incentive fee, or (iii) cost plus award fee contracts. For cost plus fixed fee contracts, Aerojet Rocketdyne typically receives reimbursement of its costs, to the extent the costs are allowable under contractual and regulatory provisions, in addition to receiving a fixed fee. For cost plus incentive fee contracts and cost plus award fee contracts, Aerojet Rocketdyne receives adjustments to the contract fee, within designated limits, based on actual results as compared to contractual targets for factors such as cost, performance, quality, and schedule.

In addition, OTA contracts are becoming more prevalent in initial phases of U.S. government procurements, and are anticipated as an integral part of future Aerojet Rocketdyne business. See our discussion below under "Research and Development" on our OTA with the U.S. Air Force in a public-private partnership to jointly develop the AR1 engine.

Some programs under contract have product life cycles exceeding ten years. It is typical for U.S. government propulsion contracts to be of relatively small contract value during development phases that can last from two to five years, followed by low-rate and then full-rate production, where annual funding can grow significantly.

Government Contracts and Regulations

U.S. government contracts generally are subject to Federal Acquisition Regulations ("FAR"), agency-specific regulations that supplement FAR, such as the DoD's Defense Federal Acquisition Regulations, and other applicable laws and regulations. These regulations impose a broad range of requirements, many of which are unique to U.S. government contracting, including various procurement, import and export, security, contract pricing and cost, contract termination and adjustments, mandatory disclosure, and audit requirements. Our failure to comply with these regulations and requirements could result in reductions of the value of contracts, contract modifications or termination, inability to bill and collect receivables from customers, and the assessment of penalties and fines that could lead to suspension or debarment from U.S. government contracting or subcontracting. In addition, as a U.S. government contractor, we are subject to routine audits, reviews, and investigations by the Defense Contract Audit Agency ("DCAA"), the Defense Contract Management Agency, and other similar U.S. government agencies. Such reviews include but are not limited to our contract performance, compliance with applicable laws, regulations, and standards as well as the review of the adequacy of our accounting systems, purchasing systems, property management systems, estimating systems, earned value management systems, and material management and accounting systems.

Regulations for U.S. government contracts provide for the cost of restructuring activities occurring after a business combination as unallowable costs unless we can demonstrate through an external restructure cost and savings proposal that the savings as a result of the business combination will be at least twice the external restructuring costs. Restructuring costs that are not related to a business combination (i.e., “internal restructuring”) are generally allowable.

The U.S. government’s ability to unilaterally modify or terminate a contract or to discontinue funding for a particular program at any time could have a material adverse effect on our operating results, financial condition, and/or cash flows. The cancellation of a contract, if terminated for cause, could also subject us to liability for the excess costs incurred by the U.S. government in procuring undelivered items from another source. If terminated for convenience, our recovery of costs would be limited to amounts already incurred or committed (including severance costs for terminated employees), and our profit would be limited based on the work completed prior to termination.

Backlog

Backlog is an estimate of the amount of future net sales that we expect to recognize over the remaining life of existing contracts at a given date. Total backlog includes both funded backlog (unfilled orders for which funding is authorized, appropriated and contractually obligated by the customer) and unfunded backlog (firm orders for which funding has not been appropriated). Indefinite delivery and quantity contracts and unexercised options are not reported in total backlog. Backlog is subject to funding delays or program restructurings/cancellations which are beyond our control. A summary of our backlog:

	As of December 31,	
	2016	2015
	(In billions)	
Funded backlog	$2.3	$2.4
Unfunded backlog	2.2	1.6
Total contract backlog	$4.5	$4.0
Total contract backlog expected to be filled within one year	$1.7	$1.6

Our backlog does not include work we have under contracts obligated by the customer under an OTA. The U.S. Air Force awarded us an OTA that can provide up to $536.0 million of U.S. government funding in addition to our investment to qualify our AR1 engine discussed below.

Seasonality

Aerojet Rocketdyne’s business is not subject to predictable seasonality. Primary factors affecting the timing of our sales include the timing of U.S. government awards, the availability of U.S. government funding, contractual product delivery requirements, customer acceptances, and regulatory issues.

Appropriations bills for both the DoD and NASA have become increasingly difficult for Congress to pass by the start of the GFY resulting in funding delays to many of our customers and, in turn, delays in contract awards received by us. This generally leads to a decrease in the number of new and follow-on awards in the first half of our fiscal year and an increase during the second half, which translates to varying levels of uncertainty in the timing of annual awards received by Aerojet Rocketdyne.

Research and Development (“R&D”)

We view R&D efforts as critical to maintaining our leadership position in markets in which we compete. We maintain an active R&D effort supported primarily by customer funding. We believe that some customer-funded R&D expenditures that are subject to contract specifications may become key programs in the future. We believe customer-funded R&D activities are vital to our ability to compete for contracts and to enhance our technology base and future revenue growth.

Our company-funded R&D efforts include expenditures for technical activities that are vital to the development of new products, services, processes or techniques, as well as those expenses for significant improvements to existing products or processes.

Our R&D expenditures for the periods presented were as follows:

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Customer-sponsored	$513.0	$485.8	$481.2	$33.7
Company-sponsored	43.0	74.4	51.9	4.6
Total R&D expenditures	$556.0	$560.2	$533.1	$38.3

The Company-sponsored R&D expenditures in fiscal 2016, fiscal 2015, and the one month ended December 31, 2015 included $20.5 million, $48.2 million, and $2.7 million, respectively, of AR1 R&D expenses, see discussion below.

AR1

In February 2016, the U.S. Air Force selected Aerojet Rocketdyne and 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. The U.S. Air Force has obligated $115.3 million with Aerojet Rocketdyne contributing $52.7 million and ULA contributing $5.0 million. The total potential U.S. government investment, including all options, is $536.0 million. The total potential investment by Aerojet Rocketdyne and its partners, including all options, is $268.0 million. Under the terms of the AR1 agreement, the U.S. Air Force contributions are recognized proportionately as an offset to R&D expenses.

The AR1 inception to date project costs were as follows (in millions):

AR1 R&D costs incurred	$169.3
Less amounts funded by the U.S. Air Force	(92.9)
Less amounts funded by ULA	(5.0)
AR1 R&D costs net of reimbursements	71.4
AR1 R&D costs expensed and not applied to contracts	(32.1)
Net AR1 R&D costs applied to contracts	$ 39.3

Suppliers and Raw Materials

The national aerospace supply base continues to consolidate due to economic, environmental, and marketplace circumstances beyond our control. The loss of key qualified suppliers of technologies, components, and materials can cause significant disruption to our program performance and cost.

Availability of raw materials and supplies has been generally sufficient. We sometimes are dependent, for a variety of reasons, upon sole-source or qualified suppliers and have, in some instances in the past, experienced difficulties meeting production and delivery obligations because of delays in delivery or reliance on such suppliers. We closely monitor sources of supply to ensure adequate raw materials and other supplies needed in our manufacturing processes are available. Further, as a U.S. government contractor, we are often required to procure materials from certain 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. We are often forced to either qualify new materials or pay higher prices to maintain the supply. Although we have been successful in establishing replacement materials and securing customer funding to address specific qualification needs of the programs, we may be unable to continue to do so.

The supply of ammonium perchlorate, a principal raw material used in solid propellant, is limited to a domestic independent single source that supplies the majority of the domestic solid propellant industry and actual pricing is based on the total industry demand. The completion of the Space Shuttle Program reduced demand, resulting in significant unit price increases. In the majority of our contracts, we anticipated this price increase and incorporated abnormal escalation pricing language into our proposals and contracts.

We are also impacted, as is the rest of the industry, by fluctuations in the sustained availability, prices and lead-times of raw materials used in production on various fixed-price contracts, particularly on multi-year programs. We continue to experience volatility in the price and lead-times of certain commodity metals, electronic components, and constituent chemicals. Additionally, we may not be able to continue to negotiate with our customers for economic and/or price adjustment clauses tied to obsolete materials and commodity indices to reduce program impact. The DoD also continues to rigorously enforce the provisions of the "Berry Amendment" which imposes a requirement to procure certain strategic materials critical to national security only from U.S. sources. While availability has not been a significant issue, cost remains a concern as this industry continues to quote "price in effect" at time of shipment terms, increasing the cost risk to our programs. An emerging challenge to the extended supply chain is the NASA/FAR requirements to comply with stringent cyber security regulations that may influence the cost of materials and services on U.S. government contracts. We are actively working to identify these costs to obtain protection in our contracts.

Intellectual Property

Where appropriate, Aerojet Rocketdyne obtains patents in the U.S. and other countries for new and useful processes, machines, manufactures or compositions of matter, or any new and useful improvements thereof relating to its products and services. We use patents selectively to protect from an unauthorized third party making, using, selling, offering to sell and importing the claimed inventions of the patents. Our patents are maintained through the statutory limit of time, which is typically 20 years from the date of filing of the patent application, where the claimed invention has value in the markets in which we compete. We rely on trade secret protection for financial, technical and personnel information that provides an economic competitive advantage by virtue of not being known by the relevant public. If properly protected, trade secrets can be maintained in perpetuity. Aerojet Rocketdyne takes reasonable steps to prevent disclosure of its trade secrets in order to maintain protection under applicable state and federal laws. As our products and services typically embody complex systems that include many technologies, no single patent or trade secret is material to us.

Real Estate

We own 11,451 acres of land adjacent to U.S. Highway 50 between Rancho Cordova and Folsom, California east of Sacramento ("Sacramento Land"). Acquired in the early 1950s for our aerospace and defense operations, there were large portions used solely to provide safe buffer zones around hazardous operations. Modern changes in propulsion technology coupled with the relocation of certain of our propulsion operations led us to determine large portions of the Sacramento Land were no longer needed for operations. Consequently, our plan has been to re-entitle the Sacramento Land for new uses and explore various opportunities to optimize its value.

The Sacramento Land is made up of 5,203 acres used for our aerospace and defense operations, 685 acres available for future entitlement, and 5,563 acres for future development under the brand name "Easton". Within Easton, we currently have 3,904 acres that are fully entitled. The term "entitlements" is generally used to denote the required set of regulatory approvals required to allow land to be zoned for new requested uses. Required regulatory approvals vary with each jurisdiction and each zoning proposal and may include permits, land use master plans, zoning designations, state and federal environmental documentation, and other regulatory approvals unique to the land.

As Easton continues to execute re-entitlement and pre-development activities, we are pursuing all monetization options and are exploring how to maximize value from Easton. Value creation and monetization may include outright land sales and/or joint ventures with real estate developers, residential builders, and/or other third parties. The new housing market and local economy in the Sacramento region are in recovery and we expect this trend to continue. We believe the long-term prospect for the Sacramento region represents an attractive and affordable alternative to the San Francisco Bay Area and other large metropolitan areas of California. We believe the Sacramento area demographics and the long-term real estate market fundamentals support our objective of creating value through new entitlements and the creation of Easton.

The following table summarizes the Sacramento Land (in acres):

	Environmentally Unrestricted	Environmentally Restricted (1)	Total	Entitled (2)
Glenborough and Easton Place	1,043	349	1,392	1,392
Rio del Oro	1,818	491	2,309	2,309
Westborough	1,387	272	1,659	—
Hillsborough (3)	51	97	148	148
Office Park and Auto Mall	47	8	55	55
Total Easton acreage	4,346	1,217	5,563	3,904
Operations land (4)	24	5,179	5,203	
Land available for future entitlement (5)	443	242	685	
Total Sacramento Land	4,813	6,638	11,451	

(1) The environmentally restricted acreage described above is subject to restrictions imposed by state and/or federal regulatory agencies because of our historical propulsion system testing and manufacturing activities. We are actively working with the various regulatory agencies to have the restrictions removed as early as practicable, and the solutions to use these lands within Easton have been accounted for in the various land use plans and granted entitlements. See Note 7(c) in notes to consolidated financial statements for a discussion of the federal and/or state environmental restrictions affecting portions of the Sacramento Land.

(2) The term "entitled" is generally used to denote the set of local regulatory approvals required to allow land to be zoned for requested uses. Required regulatory approvals vary with each land zoning proposal and may include permits, general plan amendments, land use master plans, zoning designations, state and federal environmental documentation, and other regulatory approvals unique to the land. The entitlement and development process in California is long and uncertain with approvals required from various authorities,

including local jurisdictions, and in select projects, permits required by federal agencies such as the U.S. Army Corps of Engineers and the U.S. Department of Interior, Fish and Wildlife Service, and others prior to construction.

(3) The remaining 148 acres designated in Hillsborough will be transferred, per the completed Purchase and Sale contract, when the required environmental remediation work is completed. See Note 3(g) of the notes to the consolidated financial statements.

(4) We believe that the operations land is adequate for our long-term needs. As we reassess needs in the future and as propulsion technology continues to advance, portions of this land may become available for entitlement.

(5) We believe it will be several years before any of this excess Sacramento Land is available for future change in entitlement. Some of this excess land is outside the current Urban Services Boundary established by the County of Sacramento and all of it is far from existing infrastructure, making it uneconomical to pursue entitlement for this land at this time.

Leasing & Other Real Estate

We currently lease approximately 0.4 million square feet of office space in Sacramento to various third parties. These leasing activities generated $6.5 million in revenue in fiscal 2016.

We also own approximately 580 acres of land in Chino Hills, California. This property was used for the manufacture and testing of ordnance. With the sale of our ordnance business in the mid-1990s, we closed this facility and commenced clean-up of the site. We continue to work with state regulators and the City of Chino Hills to complete those efforts.

Environmental Matters

Our current and former business operations are subject to, and affected by, federal, state, and local environmental laws and regulations relating to the discharge, treatment, storage, disposal, investigation, and remediation of certain materials, substances, and wastes. Our policy is to conduct our business with due regard for the preservation and protection of the environment. We continually assess compliance with these regulations and we believe our current operations are materially in compliance with all applicable environmental laws and regulations.

We review on a quarterly basis estimated future remediation costs and have 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 Baldwin Park Operable Unit (“BPOU”) site are currently estimated through the term of a new project agreement as proposed by Aerojet Rocketdyne, which San Gabriel Basin Water Quality Authority, the Main San Gabriel Basin Watermaster, and five water companies (the “Water Entities”) and the U.S. Environmental Protection Agency (“EPA”) have rejected. There can be no assurance that the term of the new project agreement will not be longer than the term we estimated and/or broader in scope and, if so, we may be required to make an additional accrual to reflect the longer term and/or broader scope.

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 our 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 we periodically evaluate and revise these estimates as new information becomes available. We 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 to design, construct, and implement the remedy.

The following table summarizes our recoverable amounts, environmental reserves, and range of liability, as of December 31, 2016:

	Recoverable Amount (1)	Reserve	Estimated Range of Liability
		(In millions)	
Aerojet Rocketdyne — Sacramento	$159.6	$210.1	$210.1 - $326.0
Aerojet Rocketdyne — BPOU	96.3	126.8	126.8 - 178.3
Other Aerojet Rocketdyne sites	8.5	8.5	8.5 - 14.4
Total Aerojet Rocketdyne	264.4	345.4	345.4 - 518.7
Other sites	0.6	4.3	4.3 - 6.3
Total	$265.0	$349.7	$349.7 - $525.0

(1) Excludes the receivable from Northrop of $68.0 million as of December 31, 2016 related to environmental costs already paid (and therefore not reserved) in prior years and reimbursable under the Northrop Agreement (see below).

Operation and maintenance costs associated with environmental compliance and management of contaminated sites are a normal, recurring part of operations. Most of our environmental costs are incurred by our Aerospace and Defense segment, and certain of these costs are allowable and allocable as reimbursable general and administrative costs allocated to our contracts with the U.S. government or reimbursable by Northrop, subject to an annual and a cumulative limitation. The current annual billing limitation to Northrop is $6.0 million. See Note 7(d) in notes to consolidated financial statements for additional information.

On January 12, 1999, Aerojet Rocketdyne and the U.S. government implemented the October 1997 Agreement in Principle (“Global Settlement”) resolving certain prior environmental and facility disagreements, with retroactive effect to December 1, 1998. Under the Global Settlement, Aerojet Rocketdyne and the U.S. government resolved disagreements about an appropriate cost-sharing ratio with respect to the cleanup costs of the environmental contamination. The Global Settlement cost-sharing ratio does not have a defined term over which costs will be recovered. Additionally, in conjunction with the sale of our Electronics and Information Systems (“EIS”) business in 2001, we 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 and a cumulative limitation.

Most of our environmental costs are incurred by our Aerospace and Defense segment, and certain of these future costs are allowable to be included in our contracts with the U.S. government, and allocable to Northrop until the cumulative expenditure limitation is reached. Excluding the receivable from Northrop of $68.0 million discussed in Note 7(d) in notes to consolidated financial statements in Item 8 of this Report, we currently estimate approximately 24% of our future Aerospace and Defense segment environmental costs will not likely be reimbursable.

Allowable environmental costs are charged to our 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 under U.S. government contracts and programs.

The inclusion of environmental costs in our contracts with the U.S. government impacts our competitive pricing; however, we believe that this impact is mitigated by driving improvements and efficiencies across our operations as well as our ability to deliver innovative and quality products to our customers.

Under existing U.S. environmental laws, Potentially Responsible Parties (“PRPs”), are jointly and severally liable, and therefore we are potentially liable to the U.S. government or other third parties for the full cost of remediating the contamination at our facilities or former facilities or at third-party sites where we have been designated as a PRP by the EPA or state environmental agencies. The nature of environmental investigation and cleanup activities requires significant management judgment to determine the timing and amount of any estimated future costs that may be required for remediation measures. Further, environmental standards change from time to time. However, we perform quarterly reviews of these matters and accrue for costs associated with environmental remediation when it becomes probable that a liability has been incurred and the amount of the liability, usually based on proportionate sharing, can be reasonably estimated. These liabilities have not been discounted to their present value as the amounts and timing of cash payments are not fixed or reliably determinable.

We did not incur material capital expenditures for environmental control facilities in fiscal 2016 nor do we anticipate any material capital expenditures in fiscal 2017 and 2018. See Management's Discussion and Analysis in Part II, Item 7 "Environmental Matters" of this Report for additional information.

Additional information on the risks related to environmental matters can be found under "Risk Factors" in Item 1A of this Report, including the material effects on compliance with environmental regulations that may impact our competitive position and operating results.

Employees

As of December 31, 2016, 15% of our 4,965 employees were covered by collective bargaining agreements. Significant collective bargaining agreements are due to expire in the summer of 2017 and fall of 2018. We believe that our relations with our employees and unions are good.

Item 1A. *Risk Factors*

Future reductions or changes in U.S. government spending could adversely affect our financial results.

Our primary aerospace and defense customers include the DoD and its agencies, NASA, and the prime contractors that supply products to these customers. We are seeing more opportunities for commercial in-launch and in-space business. In addition, sales to our aerospace and defense customers that provide products to international customers continue to grow. However, we continue to rely on particular levels of U.S. government spending on propulsion systems for defense, space and armament systems for precision tactical weapon systems and munitions applications, and our backlog depends, in a large part, on continued funding by the U.S. government for the programs in which we are involved. These spending levels are not generally correlated with any specific economic cycle, but rather follow the cycle of general public policy and political support for this type of spending. Moreover, although our contracts often contemplate that our services will be performed over a period of several years, the U.S. President must propose and Congress must appropriate funds for a given program each GFY and may significantly change, increase, reduce or eliminate, funding for a program.

A decrease in DoD and/or NASA expenditures, the elimination or curtailment of a material program in which we are involved, or changes in payment patterns of our customers as a result of changes in U.S. government spending, could have a material adverse effect on our operating results, financial condition, and/or cash flows.

The cancellation or material modification of one or more significant contracts could adversely affect our financial results.

Sales, directly and indirectly, to the U.S. government and its agencies accounted for approximately 91% of our total net sales in fiscal 2016. Our contracts typically permit the U.S. government to unilaterally modify or terminate a contract or to discontinue funding for a particular program at any time. The cancellation of a contract, if terminated for cause, could also subject us to liability for the excess costs incurred by the U.S. government in procuring undelivered items from another source. If terminated for convenience, our recovery of costs would be limited to amounts already incurred or committed (including severance costs for terminated employees), and our profit would be limited based on the work completed prior to termination.

In addition, termination or suspension of any of our significant commercial contracts could result in the loss of future sales and unreimbursable expenses that could have a material adverse effect on our operating results, financial condition, and/or cash flows. Furthermore, the termination of any such contracts for default could also have a material adverse effect on our reputation and ability to obtain new business in the future.

Our business could be adversely affected by a negative audit by the U.S. government.

U.S. government agencies, including the DCAA and various agency Inspectors General, routinely audit and investigate government contractors. These agencies review a contractor's performance under its contracts, cost structure, and compliance with applicable laws, regulations, and standards. The U.S. government also reviews the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's accounting systems, purchasing systems, property management systems, estimating systems, earned value management systems, and material management and accounting systems. Any costs found to be misclassified may be subject to repayment. If an audit or investigation uncovers improper or illegal activities, we may be subject to civil or criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, suspension of payments, fines, and suspension or prohibition from doing business with the U.S. government. In addition, we could suffer serious reputational harm if allegations of impropriety were made against us.

The estimates and judgments we make, or the assumptions on which we rely, in preparing our consolidated financial statements could prove inaccurate.

Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the U.S. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of our assets, liabilities, revenues and expenses. Such estimates and judgments include those related to revenue recognition, accrued expenses, purchase accounting, retirement benefits, assumptions in the valuation of stock-based compensation and income taxes. We base our estimates and judgments on historical experience, facts and circumstances known to us and on various assumptions that we believe to be reasonable under the circumstances. These estimates and judgments, or the assumptions underlying them, may change over time or prove inaccurate. If the estimates or judgments we make, or the assumptions on which we rely, in preparing our consolidated financial statements prove inaccurate, our actual results may vary materially from those reflected in our consolidated financial statements, which may subject us to a number of additional costs and risks.

If we experience cost overruns on our contracts, we would have to absorb the excess costs which could adversely affect our financial results and our ability to win new contracts.

In fiscal 2016, approximately 62% of our net sales were from fixed-price contracts, most of which are in mature production mode. Under fixed-price contracts, we agree to perform specified work for a fixed price and realize all of the profit or loss resulting from variations in the costs of performing the contract. As a result, all fixed-price contracts involve the inherent risk of unreimbursed cost overruns. To the extent we were to incur unanticipated cost overruns on a program or platform subject to a fixed-price contract, our profitability would be adversely affected. Future profitability is subject to risks including the ability of suppliers to deliver components of acceptable quality on schedule and the successful implementation of automated tooling in production processes.

In fiscal 2016, approximately 32% of our net sales were from cost reimbursable contracts. Under cost reimbursable contracts, we agree to be reimbursed for allowable costs and be paid a fee. If our costs are in excess of the final target cost, fees and our margin may be adversely affected. If our costs exceed authorized contract funding or they do not qualify as allowable costs under applicable regulations, those costs are expensed and we will not be reimbursed for those costs. Cost overruns may adversely affect our financial performance and our ability to win new contracts.

Also, certain costs such as those related to charitable contributions, advertising, interest expense, and public relations are generally not allowable, and therefore not recoverable through U.S. government contracts. Unexpected variances in unallowable costs may adversely affect our financial performance.

If our subcontractors or suppliers fail to perform their contractual obligations, our contract performance and our ability to win new contracts may be adversely affected.

We rely on subcontractors to perform a portion of the services we agree to provide our customers, and on suppliers to provide raw materials and component parts for our contract performance. A failure by one or more of our subcontractors or suppliers to satisfactorily provide on a timely basis the agreed-upon services or supplies may affect our ability to perform our contractual obligations. Deficiencies in the performance of our subcontractors and/or suppliers could result in liquidated damages or our customer terminating our contract for default. A termination for default could expose us to liability and adversely affect our financial performance and our ability to win new contracts.

Our success and growth in our Aerospace and Defense segment depends on our ability to execute long-standing programs and periodically secure new contracts in a competitive environment.

Aerojet Rocketdyne's revenue is primarily derived from long-standing contracts (often sole source) where Aerojet Rocketdyne is the long-term incumbent. The challenge for Aerojet Rocketdyne is to successfully utilize its technical, engineering, manufacturing, and management skills to execute these programs for the customer, to continue to innovate and refine its solutions, and to offer the customer increasing affordability in an era of fiscal restraint. If Aerojet Rocketdyne is unable to successfully execute these long-standing programs, our ability to retain existing customers and attract new customers may be impaired.

In addition, in sectors where there is competition, it can be intense. For example, we face increasing competition from entrepreneurs such as SpaceX and Blue Origin, who have been or are in the process of developing liquid fuel propulsion capabilities which are primarily focused on the development of space propulsion systems for heavy lift launch vehicles. These new entrepreneurs have signaled their intent to compete primarily on price and are therefore bringing pressure to bear on existing cost paradigms and our manufacturing methodologies. The U.S. government also has its own manufacturing capabilities in some areas. We may be unable to compete successfully with our competitors and our inability to do so could result in a decrease in sales, profits, and cash flows that we historically have generated from certain contracts. Further, the U.S. government may open to competition programs on which we are currently the sole supplier, which could have a material adverse effect on our operating results, financial condition, and/or cash flows.

Our Aerospace and Defense segment is subject to procurement and other related laws and regulations inherent in contracting with the U.S. government, non-compliance with which could adversely affect our financial results.

In the performance of contracts with the U.S. government, we operate in a highly regulated environment and are routinely audited and reviewed by the U.S. government and its agencies, such as the DCAA. These agencies review performance under our contracts, our cost structure and our compliance with applicable laws, regulations and standards, as well as the adequacy of, and our compliance with, our internal control systems and policies. Systems that are subject to review include, but are not limited to, our accounting systems, purchasing systems, property management systems, estimating systems, earned value management systems, and material management and accounting system. Any costs ultimately found to be unallowable or improperly allocated to a specific contract will not be reimbursed or must be refunded if already reimbursed. If an audit uncovers improper or illegal activities, we may be subject to civil and criminal penalties, sanctions or suspension or debarment from doing business with the U.S. government. Whether or not illegal activities are alleged, the U.S. government also has the ability to decrease or withhold certain payments when it deems systems subject to its review to be inadequate. In addition, we could suffer serious reputational harm if allegations of impropriety were made against us. If such actions were to result in suspension or debarment, this could have a material adverse effect on our business.

These laws and regulations provide for ongoing audits and reviews of incurred costs as well as contract procurement, performance and administration. The U.S. government may, if it deems appropriate, conduct an investigation into possible illegal or unethical activity in connection with these contracts. Investigations of this nature are common in the aerospace and defense industry, and lawsuits may result. In addition, the U.S. government and its principal prime contractors periodically investigate the financial viability of their contractors and subcontractors as part of its risk assessment process associated with the award of new contracts. If the U.S. government or one or more prime contractors were to determine that we were not financially viable, our ability to continue to act as a U.S. government contractor or subcontractor would be impaired.

Aerojet Rocketdyne's international sales are subject to applicable laws relating to export controls, the violation of which could adversely affect its operations.

A portion of the Aerojet Rocketdyne activities is subject to export control regulation by the U.S. Department of State under the U.S. Arms Export Control Act and International Traffic in Arms Regulations ("ITAR"). The export of certain defense-related products, hardware, software, services and technical data is regulated by the State Department's Office of Defense Trade Controls Compliance ("DTCC") under ITAR. DTCC administers the State Department's authority under ITAR to impose civil penalties and other administrative sanctions for violations, including debarment from engaging in the export of defense articles or defense services. Violations of ITAR could result in significant sanctions including fines, more onerous compliance requirements, debarments from export privileges or loss of authorizations needed to conduct aspects of the Aerojet Rocketdyne's international business.

By virtue of recent U.S. export control reform, certain Aerojet Rocketdyne international sales that were under Department of State jurisdiction are now regulated by the U.S. Department of Commerce Bureau of Industry and Security ("BIS") under the Export Administration Act and the Export Administration Regulations ("EAR"), specifically those sales involving controlled U.S.-origin commodities with restrictions as to certain end uses, end users or destinations. BIS addresses administrative or criminal enforcement of EAR violations. Similar to penalties and sanctions in violation of ITAR, BIS evaluates violations based upon factors which include destination of the export, degree of willfulness involved in the violation and specific factors of mitigation or aggravation. The range of penalties is similar to those discussed above with regard to ITAR violations.

In connection with the acquisition of the Rocketdyne Business, DTCC levied certain conditions regarding integration of the two companies' ITAR compliance programs. These conditions were required in order to release the Rocketdyne Business from a Consent Agreement between DTCC and UTC.

A future violation of ITAR or EAR could materially adversely affect our business, operating results, financial condition, and/or cash flows.

Our competitive improvement program ("CIP") may not be successful in aligning our operations to current market conditions.

In March 2015, we initiated the CIP comprised of activities and initiatives aimed at reducing costs in order for us to continue to compete successfully. The company-wide initiative is being undertaken after a comprehensive assessment of our product portfolio to underpin Aerojet Rocketdyne's technological and competitive leadership in our markets through continued research and development. The CIP is composed of three major components: (i) facilities optimization and footprint reduction; (ii) product affordability; and (iii) reduced administrative and overhead costs. Implementation of the CIP involves reductions in our workforce and facilities and, in certain instances, the relocation of products, technologies and personnel. We have incurred and will continue to incur significant expenditures to implement the CIP and we expect to realize significant future cost savings as a result. The cost savings will be realized by the U.S government in the form of more competitive pricing. The CIP may not be successful in achieving these cost savings and other benefits within the expected timeframes, may be insufficient to successfully restructure our operations through, among other ways, the relocation of programs or the inability to transition institutional program knowledge, to conform with the changes affecting our industry, may disrupt our operations, or may be more costly than currently anticipated. See additional information in Notes 3(f) and 10 in notes to the consolidated financial statements.

We may expand our operations through acquisitions, which may divert management's attention and expose us to unanticipated liabilities and costs. Also, acquisitions may increase our non-reimbursable costs. We may experience difficulties integrating any acquired operations, and we may incur costs relating to acquisitions that are never consummated.

Our business strategy may lead us to expand our Aerospace and Defense segment through acquisitions. However, our ability to consummate any future acquisitions on terms that are favorable to us may be limited by U.S. government regulations, the number of attractive acquisition targets, internal demands on our resources, and our ability to obtain financing. Our success in integrating newly acquired businesses will depend upon our ability to retain key personnel, avoid diversion of management's attention from operational matters, implement internal controls, integrate general and administrative services and key information processing systems and, where necessary, re-qualify our customer programs. In addition, future acquisitions could result in the incurrence of additional debt, costs, and/or contingent liabilities. We may also incur costs and divert management attention to acquisitions that are never consummated. Integration of acquired operations may take longer, or be more costly or disruptive to our business, than originally anticipated.

Although we undertake a due diligence investigation of each business that we have acquired or may acquire, there may be liabilities of the acquired companies that we fail to, or were unable to, discover during the due diligence investigation and for which we, as a successor owner, may be responsible. In connection with acquisitions, we generally seek to minimize the impact of these types of potential liabilities through indemnities and warranties from the seller. However, these indemnities and warranties, if obtained, may not fully cover the liabilities due to limitations in scope, amount or duration, financial limitations of the indemnitor or warrantor, or other reasons.

Our inability to adapt to rapid technological changes could impair our ability to remain competitive.

The aerospace and defense industry continues to undergo rapid and significant technological development. Our competitors may implement new technologies before us, allowing them to provide more effective products at more competitive prices. Future technological developments could:

- adversely impact our competitive position if we are unable to react to these developments in a timely or efficient manner;
- require us to write-down obsolete facilities, equipment, and technology;
- require us to discontinue production of obsolete products before we can recover any or all of our related research, development and commercialization expenses; or
- require significant capital expenditures for research, development, and launch of new products or processes.

Our business and operations could be adversely impacted in the event of a failure of our information technology infrastructure or adversely impacted by a successful cyber-attack.

As a U.S. defense contractor, we face cyber threats, insider threats, threats to the physical security of our facilities and employees, and terrorist acts, as well as the potential for business disruptions associated with information technology failures, natural disasters, or public health crises.

We routinely experience cyber security threats, threats to our information technology infrastructure and unauthorized attempts to gain access to our sensitive information, as do our customers, suppliers, and subcontractors. We may experience similar security threats at customer sites that we operate and manage as a contractual requirement.

Prior cyber attacks directed at us have not had a material impact on our financial results, however this may not continue to be the case in the future. Cyber security assessment analyses undertaken by us identified and prioritized steps to enhance our cyber security safeguards. We are in the process of implementing these recommendations to enhance our threat detection and mitigation processes and procedures. Despite the implementation of these new safeguards, there can be no assurance that we will be adequately protecting our information or that we will not experience any future successful attacks. The threats we face vary from attacks common to most industries to more advanced and persistent, highly organized adversaries who target us because we protect national security information. If we are unable to protect sensitive information, our customers or governmental authorities could question the adequacy of our threat mitigation and detection processes and procedures. Due to the evolving nature of these security threats, however, the impact of any future incident cannot be predicted.

We are also currently anticipating outsourcing certain information technology and cyber security functions to third-party contractors in order to take advantage of advanced cyber security technologies. While we have engaged in extensive processes and planning in preparation for the migration, the transition may present unexpected security vulnerabilities, additional costs, and result in our having less control over the performance and delivery of such services.

Although we work cooperatively with our customers, suppliers, and subcontractors to seek to minimize the impact of cyber threats, other security threats or business disruptions, we must rely on the safeguards put in place by these entities, which may affect the security of our information. These entities have varying levels of cyber security expertise and safeguards and their relationships with U.S. government contractors, such as Aerojet Rocketdyne, may increase the likelihood that they are targeted by the same cyber threats we face.

The DoD and NASA have contract provisions that require contractors at the prime and subcontract level to comply with Safeguarding Covered Defense Information and Cyber Incident Reporting and Security Requirements for Unclassified Information Technology Resources in accordance with their agency guidelines. These clauses are being inserted in or made applicable to U.S. government contracts and non-compliance may impact our ability to receive contracts if we cannot comply or use alternative approaches to comply with the contract information security requirements.

We may be required to expend significant additional resources to modify our cyber security protective measures, to investigate and remediate vulnerabilities or other exposures or to make required notifications, and we may be subject to litigation and financial losses. These costs related to cyber or other security threats or disruptions may not be fully insured or indemnified by other means. Occurrence of any of these events could adversely affect our internal operations, the services we provide to our customers, our future financial results, our reputation or our stock price; or such events could result in the loss of competitive advantages derived from our research and development efforts or other intellectual property, early obsolescence of our products and services, or contractual penalties.

We may experience warranty claims for product failures, schedule delays or other problems with existing or new products and systems.

Many of the products we develop and manufacture are technologically advanced systems that must function under demanding operating conditions. Even though we believe that we employ sophisticated and rigorous design, manufacturing and testing processes and practices, we may not be able to successfully launch or manufacture our products on schedule or our products may not perform as intended.

If our products fail to perform adequately, some of our contracts require us to forfeit a portion of our expected profit, receive reduced payments, provide a replacement product or service or reduce the price of subsequent sales to the same customer. Performance penalties may also be imposed if we fail to meet delivery schedules or other measures of contract performance. We do not generally insure against potential costs resulting from any required remedial actions or costs or loss of sales due to postponement or cancellation of scheduled operations or product deliveries.

The release or explosion of dangerous materials used in our business could disrupt our operations and could adversely affect our financial results.

Our business operations involve the handling and production of potentially explosive materials and other dangerous chemicals, including materials used in rocket propulsion and explosive devices. Despite our use of specialized facilities to handle dangerous materials and intensive employee training programs, the handling and production of hazardous materials could result in incidents that temporarily shut down or otherwise disrupt our manufacturing operations and could cause production delays. It is possible that a release of these chemicals or an explosion could result in death or significant injuries to employees and others. Material property damage to us and third parties could also occur. The use of these products in applications by our customers could also result in liability if an explosion or fire were to occur. Any release or explosion could expose us to adverse publicity or liability for damages or cause production delays, any of which could have a material adverse effect on our operating results, financial condition, and/or cash flows.

Disruptions in the supply of key raw materials, difficulties in the supplier qualification process or increases in prices of raw materials could adversely affect our financial results.

We use a significant quantity of raw materials that are subject to market fluctuations and government regulations. Further, as a U.S. government contractor, we are 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. We are often forced to either qualify new materials or pay higher prices to maintain the supply. Although to-date we have been successful in establishing replacement materials and securing customer funding to address specific qualification needs of the programs, we may be unable to continue to do so.

The supply of ammonium perchlorate, a principal raw material used in solid propellant, is limited to a domestic independent single source that supplies the majority of the domestic solid propellant industry and actual pricing is based on the total industry demand. The completion of the Space Shuttle Program reduced demand, resulting in significant unit price increases. In the majority of our contracts, we anticipated this price increase and incorporated abnormal escalation pricing language into our proposals and contracts.

We are also impacted, as is the rest of the industry, by fluctuations in the sustained availability, prices and lead-times of raw materials used in production on various fixed-price contracts, particularly on multi-year programs. We continue to experience volatility in the price and lead-times of certain commodity metals, electronic components, and constituent chemicals. Additionally, we may not be able to continue to negotiate with our customers for economic and/or price adjustment clauses tied to obsolete materials and commodity indices to reduce program impact. The DoD also continues to rigorously enforce the provisions of the “Berry Amendment” which imposes a requirement to procure certain strategic materials critical to national security only from U.S. sources. While availability has not been a significant issue, cost remains a concern as this industry continues to quote “price in effect” at time of shipment terms, increasing the cost risk to our programs. An emerging challenge to the extended supply chain is the U.S. government contracting regulations to comply with stringent cyber security regulations that may influence the cost of material and services on U.S. government contracts. We are actively working to identify these costs to obtain protection in our contracts.

Prolonged disruptions in the supply of any of our 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 our operating results, financial condition, and/or cash flows.

Our pension plans are currently underfunded and we expect to be required to make cash contributions in future periods, which may reduce the cash available for our businesses.

As of the last measurement date at December 31, 2016, the assets, projected benefit obligations, and unfunded pension obligation for the tax-qualified pension plan were approximately $925.1 million, $1,492.1 million, and $548.2 million, respectively. We generally are able to recover cash contributions related to our tax-qualified defined benefit pension plan as allowable costs on our U.S. government contracts, but there is a lag between when we contribute cash to our tax-qualified defined benefit pension plan under pension funding rules and recover it under the U.S. government Cost Accounting Standards (“CAS”). We expect to make cash contributions of approximately $72.0 million to our tax-qualified defined benefit pension plan in fiscal 2017 of which $37.0 million is expected to be recoverable in our U.S. government contracts in fiscal 2017 with the remaining $35.0 million being potentially recoverable in our U.S. government contracts in the future. During fiscal 2016, we made cash contributions of $32.8 million to our tax-qualified defined benefit pension plan of which $27.5 million was recoverable in our U.S. government contracts in fiscal 2016 with the remaining $5.3 million being potentially recoverable in our U.S. government contracts in the future.

The funded status of our pension plans may be adversely affected by the investment experience of the plans’ 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 our plans’ assets does not meet our assumptions, if there are changes to the Internal Revenue Service (“IRS”) regulations or other applicable law or if other actuarial assumptions are modified, our future contributions to our underfunded pension plans could be higher than we expect.

Additionally, the level of returns on retirement benefit assets, changes in interest rates, increases in Pension Benefit Guaranty Corporations premiums, changes in regulations, changes in mortality rate assumptions, and other factors affect our financial results. The timing of recognition of retirement benefit expense or income in our financial statements differs from the timing of the required funding under the Pension Protection Act (“PPA”) or the amount of funding that can be recorded in our overhead rates through our U.S. government contracting business. Significant cash contributions in future periods could materially adversely affect our business, operating results, financial condition, and/or cash flows.

The level of returns on retirement benefit assets, changes in interest rates, changes in legislation, and other factors affects our financial results.

Our earnings are positively or negatively impacted by the amount of expense or income we record for our employee retirement benefit plans. We calculate the expense for the plans based on actuarial valuations. These valuations are based on assumptions that we make relating to financial market and other economic conditions. Changes in key economic indicators result in changes in the assumptions we use. The key assumptions used to estimate retirement benefit expense for the following year are the discount rate and expected long-term rate of return on assets. Our pension expense or income can also be affected by legislation and other government regulatory actions.

Our operations and properties are currently the subject of significant environmental liabilities, and the numerous environmental and other government requirements to which we are subject may become more stringent in the future.

We are subject to federal, state and local laws and regulations that, among other things, require us to obtain permits to operate and install pollution control equipment and regulate the generation, storage, handling, transportation, treatment, and disposal of hazardous and solid wastes. These requirements may become more stringent in the future. Additional regulations dictate how and to what level we remediate contaminated soils and the level to which we are required to clean contaminated groundwater. These requirements may also become more stringent in the future. We may also be subject to fines and penalties relating to the operation of our existing and formerly owned businesses. We have been and are subject to toxic tort and asbestos lawsuits as well as other third-party lawsuits, due to either our past or present use of hazardous substances or the alleged on-site or off-site contamination of the environment through past or present operations. We may incur material costs in defending these claims and lawsuits and any similar claims and lawsuits that may arise in the future. Contamination at our current and former properties is subject to investigation and remediation requirements under federal, state and local laws and regulations, and the full extent of the required remediation has not yet been determined. Any adverse judgment or cash outlay could have a significant adverse effect on our operating results, financial condition, and/or cash flows.

Although some of our environmental expenditures may be recoverable and we have established reserves, given the many uncertainties involved in assessing liability for environmental claims, our reserves may not be sufficient, which could adversely affect our financial results and cash flows.

As of December 31, 2016, the aggregate range of our estimated future environmental obligations was $349.7 million to $525.0 million and the accrued amount was $349.7 million. We believe the accrued amount for future remediation costs represents the costs that could be incurred by us over the contractual term, if any, or the next fifteen years of the estimated remediation, to the extent they are probable and reasonably estimable. However, in many cases the nature and extent of the required remediation has not yet been determined. Given the many uncertainties involved in assessing liability for environmental claims, our reserves may prove to be insufficient. For example, in fiscal 2016, we reached a decision with the U.S. government on the treatment of certain utility costs related to the Sacramento site resulting in a reserve increase of $59.4 million. We evaluate the adequacy of those reserves on a quarterly basis, and adjust them as appropriate. In addition, the reserves are based only on known sites and the known contamination at those sites. It is possible that additional sites needing remediation may be identified or that unknown contamination at previously identified sites may be discovered. It is also possible that the regulatory agencies may change clean-up standards for chemicals of concern such as ammonium perchlorate and trichloroethylene. This could lead to additional expenditures for environmental remediation in the future and, given the uncertainties involved in assessing liability for environmental claims, our reserves may prove to be insufficient.

Most of our environmental costs are incurred by our Aerospace and Defense segment, and certain of these future costs are allowable to be included in our contracts with the U.S. government, and allocable to Northrop until the cumulative expenditure limitation is reached. We currently estimate approximately 24% of our Aerospace and Defense segment environmental costs will not likely be reimbursable.

Our environmental expenses related to non-Aerojet Rocketdyne sites are generally not recoverable and a significant increase in these estimated environmental expenses could have a significant adverse effect on our operating results, financial condition, and/or cash flows.

We are from time to time subject to significant litigation, the outcome of which could adversely affect our financial results.

We and our subsidiaries are subject to material litigation. We may be unsuccessful in defending or pursuing these lawsuits or claims. Regardless of the outcome, litigation can be very costly and can divert management's efforts. Adverse outcomes in litigation could have a material adverse effect on our operating results, financial condition, and/or cash flows.

We face certain significant risk exposures and potential liabilities that may not be adequately covered by indemnity or insurance.

A significant portion of our business relates to developing and manufacturing propulsion systems for defense and space applications, armament systems for precision tactical weapon systems, and munitions applications. New technologies may be untested or unproven. In addition, we may incur significant liabilities that are unique to our products and services. In some, but not all, circumstances, we may receive indemnification from the U.S. government. While we maintain insurance for certain risks, the amount of our insurance coverage may not be adequate to cover all claims or liabilities, and it is not possible to obtain insurance to protect against all operational risks and liabilities. Accordingly, we may be forced to bear substantial costs resulting from risks and uncertainties of our business, which could have a material adverse effect on our operating results, financial condition, and/or cash flows.

Our inability to protect our patents and proprietary rights could adversely affect our businesses' prospects and competitive positions.

We seek to protect proprietary technology and inventions through patents and other proprietary-right protection. If we are unable to obtain or maintain these protections, we may not be able to prevent third parties from using our proprietary rights. In addition, we may incur significant expense in protecting our intellectual property.

We also rely on trade secrets, proprietary know-how and continuing technological innovation to remain competitive. We have taken measures to protect our trade secrets and know-how, including the use of confidentiality agreements with our employees, consultants and advisors. These agreements may be breached and remedies for a breach may not be sufficient to compensate us for damages incurred. We generally control and limit access to our product documentation and other proprietary information. Other parties may independently develop our know-how or otherwise obtain access to our technology.

Business disruptions could seriously affect us.

Our business may be affected by disruptions including, but not limited to: threats to physical security of our facilities and employees, including senior executives; terrorist acts; information technology attacks or failures; damaging weather or other acts of nature; and pandemics or other public health crises. The costs related to these events may not be fully mitigated by insurance or other means. Disruptions could affect our internal operations or services provided to customers, which could have a material adverse effect on our operating results, financial condition, and/or cash flows.

If our operating subsidiaries do not generate sufficient cash flow or if they are not able to pay dividends or otherwise distribute their cash to us, or if we have insufficient funds on hand, we may not be able to service our debt.

All of the operations of our Aerospace and Defense and Real Estate segments are conducted through subsidiaries. Consequently, our cash flow and ability to service our debt obligations will be largely dependent upon the earnings and cash flows of our operating subsidiaries and the distribution of those earnings to us, or upon loans, advances or other payments made by these subsidiaries to us. The ability of our subsidiaries to pay dividends or make other payments or advances to us will depend upon their operating results and cash flows and will be subject to applicable laws and any contractual restrictions contained in the agreements governing their debt, if any.

We have a substantial amount of debt. Our ability to operate is limited by the agreements governing our debt.

We have a substantial amount of debt for which we are required to make interest and principal payments. Interest on long-term financing is not a recoverable cost under our U.S. government contracts. As of December 31, 2016, we had $725.6 million of debt principal. Subject to the limits contained in some of the agreements governing our outstanding debt, we may incur additional debt in the future. Our maintenance of higher levels of indebtedness could have adverse consequences including impairing our ability to obtain additional financing in the future.

Our level of debt places significant demands on our cash resources, which could:

- make it more difficult to satisfy our outstanding debt obligations;
- require us to dedicate a substantial portion of our cash for payments related to our debt, reducing the amount of cash flow available for working capital, capital expenditures, entitlement of our real estate assets, contributions to our tax-qualified pension plan, and other general corporate purposes;
- limit our flexibility in planning for, or reacting to, changes in the industries in which we compete;
- place us at a competitive disadvantage with respect to our competitors, some of which have lower debt service obligations and greater financial resources than we do;
- limit our ability to borrow additional funds;
- limit our ability to expand our operations through acquisitions; and
- increase our vulnerability to general adverse economic and industry conditions.

If we are unable to generate sufficient cash flow to service our debt and fund our operating costs, our liquidity may be adversely affected.

We are obligated to comply with financial and other covenants outlined in our debt indentures and agreements that could restrict our operating activities. A failure to comply could result in a default which would, if not waived by the lenders, likely would come with substantial cost and accelerate the payment of our debt.

Our debt instruments generally contain various restrictive covenants which include, among others, provisions which may restrict our ability to:

- access the full amount of our revolving credit facility and/or incur additional debt;
- enter into certain leases;
- make certain distributions, investments, and other restricted payments;
- cause our restricted subsidiaries to make payments to us;
- enter into transactions with affiliates;
- create certain liens;
- purchase assets or businesses;

- sell assets and, if sold, retain excess cash flow from these sales; and
- consolidate, merge or sell all or substantially all of our assets.

Our secured debt also contains other customary covenants, including, among others, provisions:

- relating to the maintenance of the property collateralizing the debt; and
- restricting our ability to pledge assets or create other liens.

In addition, certain covenants in our bank facility require that we maintain certain financial ratios.

Based on our existing debt agreements, we were in compliance with our financial and non-financial covenants as of December 31, 2016. Any of the covenants described in this risk factor may restrict our operations and our ability to pursue potentially advantageous business opportunities. Our failure to comply with these covenants could result in an event of default that, if not cured or waived, could result in the acceleration of our amended and restated senior credit facility entered into on June 17, 2016 (the "Senior Credit Facility") with the lenders identified therein and Bank of America, N.A., as administrative agent and the 2.25% Convertible Senior Notes ("2 $^1/_4$% Notes"). In addition, our failure to pay principal and interest when due is a default under the Senior Credit Facility, and in certain cases, would cause cross defaults on the 2 $^1/_4$% Notes.

The real estate market involves significant risk, which could adversely affect our financial results.

Our real estate activities involve significant risks, which could adversely affect our financial results. We are subject to various risks, including the following:

- we may be unable to obtain, or suffer delays in obtaining, necessary re-zoning, land use, building, occupancy, and other required governmental permits and authorizations, which could result in increased costs or our abandonment of these projects;
- we may be unable to complete environmental remediation or to have state and federal environmental restrictions on our property lifted, which could cause a delay or abandonment of these projects;
- we may be unable to obtain sufficient water sources to service our projects, which may prevent us from executing our plans;
- our real estate activities may require significant expenditures and we may not be able to obtain financing on favorable terms, which may render us unable to proceed with our plans;
- economic and political uncertainties could have an adverse effect on consumer buying habits, construction costs, availability of labor and materials and other factors affecting us and the real estate industry in general;
- our property is subject to federal, state, and local regulations and restrictions that may impose significant limitations on our plans;
- much of our property is raw land that includes the natural habitats of various endangered or protected wildlife species requiring mitigation;
- if our land use plans are approved by the appropriate governmental authorities, we may face lawsuits from those who oppose such plans. Such lawsuits and the costs associated with such opposition could be material and have an adverse effect on our ability to sell property or realize income from our projects; and
- the time frame required for approval of our plans means that we will have to wait years for a significant cash return.

Substantially all of our excess real estate, that we are in the process of entitling for new opportunities, is located in Sacramento County, California, making us vulnerable to changes in economic and other conditions in that particular market.

As a result of the geographic concentration of our properties, our long-term real estate performance and the value of our properties will depend upon conditions in the Sacramento region, including:

- the sustainability and growth of industries located in the Sacramento region;
- the financial strength and spending of the State of California;
- local real estate market conditions;
- changes in neighborhood characteristics;
- changes in interest rates; and
- real estate tax rates.

If unfavorable economic or other conditions continue in the region, our plans and business strategy could be adversely affected.

We may incur additional costs related to past or future divestitures, which could adversely affect our financial results.

In connection with our divestitures in prior periods, we have incurred and may incur additional costs. As part of our divestitures, we have provided customary indemnification to the purchasers for such matters as claims arising from the operation of the businesses prior to disposition, including income tax matters and the liability to investigate and remediate certain environmental contamination existing prior to disposition. These additional costs and the indemnification of the purchasers of our former or current businesses may require additional cash expenditures, which could have a material adverse effect on our operating results, financial condition, and/or cash flows.

In order to be successful, we must attract and retain key employees.

Our business has a continuing need to attract large numbers of skilled personnel, including personnel holding security clearances, to support the growth of the enterprise and to replace individuals who have terminated employment due to retirement or for other reasons. To the extent that the demand for qualified personnel exceeds supply, we could experience higher labor, recruiting, or training costs in order to attract and retain such employees, or could experience difficulties in performing under our contracts if our needs for such employees were unmet. In addition, our inability to appropriately plan for the transfer or replacement of appropriate intellectual capital and skill sets critical to us could result in business disruptions and impair our ability to achieve business objectives.

A strike or other work stoppage, or our inability to renew collective bargaining agreements on favorable terms, could adversely affect our financial results.

As of December 31, 2016, 15% of our 4,965 employees were covered by collective bargaining agreements. In the future, if we are unable to negotiate acceptable new agreements with the unions, upon expiration of the existing contracts, we could experience a strike or work stoppage. Even if we are successful in negotiating new agreements, the new agreements could call for higher wages or benefits paid to union members, which would increase our operating costs and could adversely affect our profitability. If our unionized workers were to engage in a strike or other work stoppage, or other non-unionized operations were to become unionized, we could experience a significant disruption of operations at our facilities or higher ongoing labor costs. A strike or other work stoppage in the facilities of any of our major customers or suppliers could also have similar effects on us.

Due to the nature of our business, our sales levels may fluctuate causing our quarterly operating results to fluctuate.

Our quarterly and annual sales are affected by a variety of factors that may lead to significant variability in our operating results. In our Aerospace and Defense segment, sales earned under long-term contracts are recognized either on a cost basis, when deliveries are made, or when contractually defined performance milestones are achieved. The timing of deliveries or milestones may fluctuate from quarter to quarter. In our Real Estate segment, sales of land may be made from time to time, which may result in variability in our operating results and cash flows.

The restatement of our previously issued financial statements has been time-consuming, expensive and could expose us to additional risks that could materially adversely affect our financial position, results of operations and cash flows.

We have incurred expenses, including audit, legal, consulting and other professional fees, in connection with the restatement of our previously issued financial statements and the remediation of weaknesses in our internal control over financial reporting. We have taken a number of steps, including adding significant internal resources and implemented a number of additional procedures, in order to strengthen our accounting function and attempt to reduce the risk of additional misstatements in our financial statements. To the extent these steps are not successful, we could be forced to incur additional time and expense. Our management's attention has also been diverted from the operation of our business in connection with the restatements and remediation of material weaknesses in our internal controls.

In addition, any stockholder, U.S. governmental or other actions brought based on the restatement of our previously issued financial statements could, regardless of the outcome, consume management's time and attention and result in additional legal, accounting, insurance and other costs.

Failure to maintain effective internal controls in accordance with the Sarbanes-Oxley Act could negatively impact the market price of our common stock.

We identified a material weakness in our internal controls associated with the completeness and accuracy of our accounting for income taxes, including the income tax provision and related tax assets and liabilities. As a result of this material weakness, errors occurred in several significant accounts in fiscal 2016 and 2015 consolidated financial statements that were not timely detected. This material weakness resulted in errors to deferred tax assets, income taxes payable, uncertain tax positions and income tax expense accounts in the consolidated financial statements for the year ended December 31, 2016. Due to the material weakness, management believes that as of December 31, 2016, our internal control over financial reporting was not effective based on the Committee of Sponsoring Organizations of the Treadway Commission criteria. We have and will continue to implement various initiatives in fiscal 2017 to improve our internal controls over financial reporting and address the matters discussed in Management's Report on Internal Control over Financial Reporting. The implementation of the initiatives and the consideration of additional necessary improvements are among our highest priorities. Management will continually assess the progress of the initiatives and the improvements, and take further actions as deemed necessary. In addition, management will report such progress to the board of directors, under the direction of the Audit Committee. Until the identified material weakness is eliminated, there is a risk of a material adverse effect on our financial results.

In addition, we have in the past recorded, and may in the future record, revisions or out of period adjustments to our consolidated financial statements. In making such adjustments we apply the analytical framework of SEC Staff Accounting Bulletin No. 99, "Materiality" ("SAB 99"), to determine whether the effect of any adjustment to our consolidated financial statements is material and whether such adjustments, individually or in the aggregate, would require us to restate our consolidated financial statements for previous periods. Under SAB 99, companies are required to apply quantitative and qualitative factors to determine the "materiality" of particular adjustments. In the future, we may identify further errors impacting our interim or annual consolidated financial statements. Depending upon the complete qualitative and quantitative analysis, this could result in us restating previously issued consolidated financial statements.

Item 1B. *Unresolved Staff Comments*

None.

Item 2. *Properties*

Significant operating, manufacturing, research, design, and/or marketing locations are set forth below.

Facilities

Corporate Headquarters

Aerojet Rocketdyne Holdings, Inc.
222 N. Sepulveda Blvd, Suite 500
El Segundo, California 90245

Operating/Manufacturing/Research/Design/Marketing Locations

Aerospace and Defense	**Design/Manufacturing Facilities:**	**Marketing/Sales Offices:**
Aerojet Rocketdyne El Segundo, California*	Camden, Arkansas (owned and leased); Carlstadt, New Jersey*; Chatsworth, California; Gainesville, Virginia*; Hancock County, Mississippi*; Huntsville, Alabama*; Jonesborough, Tennessee**; Orange, Virginia; Rancho Cordova, California (owned); Redmond, Washington; Socorro, New Mexico; Vernon, California*; West Palm Beach, Florida*	Arlington, Virginia*
Real Estate Folsom, California*		

* An asterisk next to a facility listed above indicates that it is a leased property.

** This facility is owned and operated by Aerojet Ordnance Tennessee, Inc., a 100% owned subsidiary of Aerojet Rocketdyne.

We believe each of the facilities is adequate for the business conducted at that facility. The facilities are suitable and adequate for their intended purpose and taking into account current and planned future needs.

Item 3. *Legal Proceedings*

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 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. For legal settlements where the cash payments are fixed and determinable, the Company will estimate an interest factor and discount the liability accordingly.

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 Pennsylvania. There were 64 asbestos cases pending as of December 31, 2016.

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, 2016, the estimated range of the Company's loss on a pending claim was $0.2 million to $0.6 million and the accrued amount was $0.2 million.

The following table sets forth information related to our historical product liability costs associated with our asbestos litigation (dollars in millions):

	Year Ended			One Month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
Claims filed	17(1)	16	14(3)	1
Claims dismissed	30	50	23	3
Claims settled	4	—	3	0
Claims pending	64	83	117	81
Aggregate settlement costs	$ 0.1	$—	$ 0.3	$—
Average settlement costs	$— (2)	$—	$ 0.1	$—
Legal and administrative fees associated with asbestos cases	$ 0.4	$ 0.2	$ 0.4	$— (2)

(1) This number is net of three cases tendered to a third party under a contractual indemnity obligation.
(2) Less than $0.1 million.
(3) This number is net of two cases tendered to a third party under a contractual indemnity obligation.

Inflective, Inc. ("Inflective") Litigation

On December 18, 2014, Inflective filed a complaint against Aerojet Rocketdyne and Kathleen E. Redd, individually, in the Superior Court of the State of California, Sacramento County, *Inflective, Inc. v Aerojet Rocketdyne, Inc., Kathleen E. Redd, et al, Case No. 34-2014-00173068.* Inflective asserted in the complaint causes for breach of contract, breach of implied contract, false promise, inducing breach of contract, intentional interference with contractual relations, negligent interference with prospective economic relations, and intentional interference with prospective economic relations and is seeking compensatory damages in excess of $3.0 million, punitive damages, interest and attorney's costs. The complaint arose out of the Company's implementation of ProjectOne, a company-wide enterprise resource planning ("ERP") system, for which Inflective had been a consultant to the Company. On February 6, 2015, Aerojet Rocketdyne and Ms. Redd filed a demurrer to the complaint. On June 9, 2015, the Court sustained the demurrer in part and overruled the demurrer in part, with leave to amend. On June 18, 2015, Inflective filed an amended complaint in which it reiterated all the causes of action dismissed by the Court. On June 30, 2015, Aerojet Rocketdyne and Ms. Redd filed a demurrer and motion to strike seeking to have (a) all claims and references to a purported "finder's fee" stricken from the case and (b) the causes of action against Ms. Redd for intentional and negligent interference with prospective business relations dismissed with prejudice. On October 16, 2015, the Court sustained Aerojet Rocketdyne's demurrer and motion to strike with respect to the "finder's fee" claims, dismissing those claims with prejudice, but overruled Ms. Redd's demurrer. On October 26, 2015, Aerojet Rocketdyne and Ms. Redd answered the amended complaint and filed a Cross-Complaint against Plaintiff and its principal for breach of contract, intentional misrepresentation, negligent misrepresentation and negligence. Inflective filed a demurrer to the intentional misrepresentation, negligent misrepresentation and negligence causes of action, leaving the breach of contract cause of action unchallenged. After a hearing on the demurrer on February 18, 2016, the court granted the plaintiffs' request to strike the claim for punitive damages on the negligence count, but denied the plaintiffs' demurrer and allowed the Company's claims for intentional misrepresentation, negligent misrepresentation, and negligence causes of action to remain along with the breach of contract claim. On August 10, 2016, Aerojet Rocketdyne filed a Motion for Summary Judgment on the claims brought against Ms. Redd individually, arguing that as an agent for Aerojet Rocketdyne, Ms. Redd cannot be held personally liable for any alleged interference of economic advantage between Inflective and Aerojet Rocketdyne. On December 2, 2016, the Court granted Aerojet Rocketdyne's Motion for Summary Judgment on the claims brought against Ms. Redd.

Separately, Satish Rachaiah, a former consultant on ProjectOne (working for Inflective), attempted to intervene in the action and assert claims against Aerojet Rocketdyne arising out of Aerojet Rocketdyne's alleged interference with his employment with Inflective. Aerojet Rocketdyne opposed intervention, and the Court ultimately denied Mr. Rachaiah's motion to intervene. On December 30, 2015, Rachaiah filed a separate lawsuit in the Superior Court of the State of California, Sacramento County, *Satish Rachaiah v. Aerojet Rocketdyne, Inc.*, *Case No. 34-2015-00188516*. The Company received the complaint on April 7, 2016 and an amended complaint was served on June 17, 2016. Rachaiah asserted the same claims in the complaint as attempted when he tried to intervene. On June 3, 2016, the court granted Rachaiah's motion to consolidate the case with the Inflective litigation, finding that two cases involve common parties, witnesses, legal issues and facts. Aerojet Rocketdyne filed a demurrer to Rachaiah's first amended complaint on July 22, 2016. On September 26, 2016, the Court granted the demurrer in part and overruled it in part, dismissing the plaintiff's claims for intentional and negligent interference with prospective economic relations with leave to amend. On October 6, 2016, Rachaiah filed a second amended complaint, once again asserting claims for intentional and negligent interference with prospective economic relations. Aerojet Rocketdyne filed its Answer to the second amended complaint on November 11, 2016.

Now that the issues to be tried have been set, discovery has commenced. No trial date for either case has been established. The Company has not recorded any liability for either of these matters as of December 31, 2016.

Occupational Safety

On January 16, 2015, the Company received a notice that the State of California, Division of Occupational Safety & Health ("Cal\OSHA"), Bureau of Investigation ("BOI") is conducting an investigation into an accident that occurred at the Rancho Cordova facility in November 2013. The accident involved the deflagration of solid rocket propellant following a remote cutting operation and resulted in injuries to two employees, one of whom ultimately died from his injuries. Cal\OSHA issued nine citations relating to the accident with penalties of approximately $0.1 million, all of which the Company has appealed. The BOI is the criminal investigatory arm of Cal\OSHA and is required by law to investigate any occupational fatality to determine if criminal charges will be recommended. In August 2016, the BOI advised that it had completed its investigation and the criminal aspect of the case was closed. A pre-hearing conference on the Company's appeal of the citations was originally scheduled for January 9, 2017, but was postponed and will be rescheduled.

Item 4. ***Mine Safety Disclosures***

None.

PART II

Item 5. *Market for Registrant's Common Equity, Related Stockholders' Matters and Issuer Purchases of Equity Securities*

As of February 21, 2017, there were 6,523 holders of record of the common stock. On February 21, 2017, the last reported sale price of our common stock on the New York Stock Exchange was $19.33 per share.

Our Senior Credit Facility (described in Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations under the caption "Liquidity and Capital Resources") restricts the payment of dividends and we do not anticipate paying cash dividends in the foreseeable future.

Information concerning long-term debt, including material restrictions relating to payment of dividends on our common stock, appears in Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations under the caption "Liquidity and Capital Resources" and in Part II, Item 8. Consolidated Financial Statements and Supplementary Data at Note 5 in notes to consolidated financial statements. Information concerning securities authorized for issuance under our equity compensation plans appears in Part III, Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters under the caption "Equity Compensation Plan Information."

Common Stock

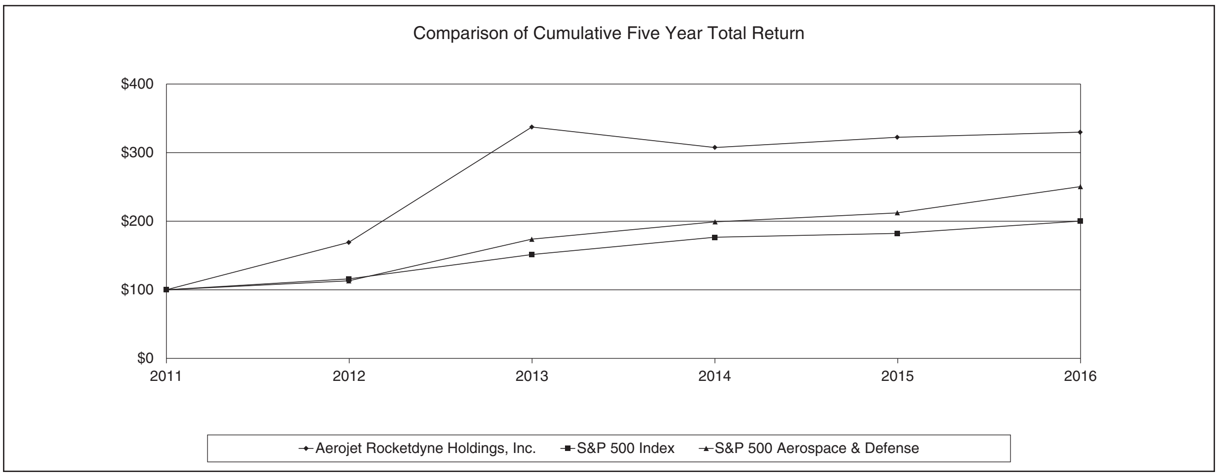
Our common stock is listed on the New York Stock Exchange under the trading symbol "AJRD." In January 2016, the Board of Directors approved a change in our fiscal year-end from November 30 of each year to December 31 of each year. The following table lists, on a per share basis for the periods indicated, the high and low sale prices for the common stock as reported by the New York Stock Exchange:

	Common Stock Price	
	High	**Low**
Year ended December 31, 2016		
First Quarter	$17.20	$13.98
Second Quarter	$18.86	$15.52
Third Quarter	$19.16	$16.80
Fourth Quarter	$21.40	$16.04
Month ended December 31, 2015	$18.87	$15.50
Year ended November 30, 2015		
First Quarter	$19.44	$16.20
Second Quarter	$23.39	$19.10
Third Quarter	$24.35	$19.47
Fourth Quarter	$23.46	$14.86

Stock Performance Graph

The following graph compares the cumulative total stockholder returns, calculated on a dividend reinvested basis, on $100 invested in our Common Stock in November 2011 with the cumulative total return of (i) the Standard & Poor's 500 Composite Stock Price Index ("S&P 500 Index"), and (ii) the Standard & Poor's 500 Aerospace & Defense Index. The stock price performance shown on the graph is not necessarily indicative of future performance.

Comparison of Cumulative Total Stockholder Return Among Aerojet Rocketdyne, S&P 500 Index, and the S&P 500 Aerospace & Defense Index, November 2011 through December 2016



Company/Index	Base Period 2011	Year ended November 30, 2012	November 30, 2013	November 30, 2014	November 30, 2015	December 31, 2016
Aerojet Rocketdyne Holdings, Inc.	$100.00	$169.12	$337.13	$306.99	$322.43	$329.96
S&P 500 Index	100.00	116.13	151.32	176.83	181.69	200.21
S&P 500 Aerospace & Defense	100.00	113.10	173.81	199.01	212.19	250.32

Item 6. *Selected Financial Data*

The following selected financial data is qualified by reference to and should be read in conjunction with the consolidated financial statements, including the notes thereto in Item 8. Consolidated Financial Statements and Supplementary Data, and Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

	Year end					One month ended
	December 31, 2016	**November 30, 2015**	**November 30, 2014**	**November 30, 2013**	**November 30, 2012**	**December 31, 2015**
	(In millions, except per share amounts)					
Net sales	$1,761.3	$1,708.3	$1,602.2	$1,378.1	$994.9	$ 96.3
Net income (loss):						
Income (loss) from continuing operations, net of income taxes	$ 18.1	$ (17.1)	$ (49.3)	$ 162.7	$ (5.7)	$ 7.0
(Loss) income from discontinued operations, net of income taxes	(0.1)	0.9	(0.7)	0.2	3.1	—
Net income (loss)	$ 18.0	$ (16.2)	$ (50.0)	$ 162.9	$ (2.6)	$ 7.0
Basic income (loss) per share of Common Stock						
Income (loss) from continuing operations, net of income taxes	$ 0.27	$ (0.28)	$ (0.85)	$ 2.68	$ (0.09)	$ 0.11
(Loss) income from discontinued operations, net of income taxes	—	0.01	(0.01)	—	0.05	—
Total	$ 0.27	$ (0.27)	$ (0.86)	$ 2.68	$ (0.04)	$ 0.11
Diluted income (loss) per share of Common Stock						
Income (loss) from continuing operations, net of income taxes	$ 0.27	$ (0.28)	$ (0.85)	$ 2.05	$ (0.09)	$ 0.10
(Loss) income from discontinued operations, net of income taxes	—	0.01	(0.01)	—	0.05	—
Total	$ 0.27	$ (0.27)	$ (0.86)	$ 2.05	$ (0.04)	$ 0.10
Supplemental statement of operations information:						
Income (loss) from continuing operations before income taxes	$ 29.3	$ (16.8)	$ (33.0)	$ (35.7)	$ 13.2	$ 9.0
Interest expense	32.5	50.4	52.7	48.7	22.3	3.8
Interest income	(0.6)	(0.3)	(0.1)	(0.2)	(0.6)	—
Depreciation and amortization	64.9	65.1	63.7	43.5	22.3	5.1
Retirement benefit expense, net (1)	41.4	67.6	36.5	65.0	41.0	5.6
Unusual items in continuing operations:						
Rocketdyne Business acquisition costs	—	—	—	20.0	11.6	—
Loss (gain) on legal matters and settlements	—	50.0	0.9	(0.5)	0.7	0.4
Loss on bank amendment	0.1	—	0.2	—	—	—
Loss on debt repurchased/ redeemed	34.4	1.9	60.6	5.0	0.4	—
Adjusted EBITDAP (Non-GAAP measure)	$ 202.0	$ 217.9	$ 181.5	$ 145.8	$110.9	$ 23.9
Adjusted EBITDAP (Non-GAAP measure) as a percentage of net sales	11.5%	12.8%	11.3%	10.6%	11.1%	24.8%
Additional statement of operations information:						
Stock-based compensation expense (benefit)	$ 12.9	$ 8.6	$ 5.7	$ 14.1	$ 6.5	$ (0.4)
Environmental remediation provision adjustments	18.3	17.3	10.8	8.4	11.6	(0.1)
Cash flow information:						
Cash flow provided by (used in) operating activities	$ 158.4	$ 65.1	$ 150.6	$ 77.4	$ 86.2	$ (2.3)
Cash flow used in investing activities	(47.1)	(35.8)	(35.7)	(474.9)	(36.6)	(1.2)
Cash flow provided by (used in) financing activities	90.5	(84.1)	(46.6)	433.0	(75.5)	0.9
Balance Sheet information:						
Total assets	$2,249.5	$2,034.9	$1,918.6	$1,752.1	$919.3	$2,023.3
Outstanding debt principal	725.6	652.0	782.2	699.2	248.7	650.6

(1) Retirement benefit expense is net of cash funding to our tax-qualified defined benefit pension plan which are recoverable costs under our U.S. government contracts. We funded $27.5 million to our tax-qualified defined benefit pension plan in fiscal 2016 that was recoverable in our fiscal 2016 U.S. government contracts.

Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*

Unless otherwise indicated or required by the context, as used in this Form 10-K, the terms "we," "our" and "us" refer to Aerojet Rocketdyne Holdings, Inc. and all of its subsidiaries that are consolidated in conformity with accounting principles generally accepted in the United States of America ("GAAP").

The following discussion should be read in conjunction with the other sections of this Report, including the consolidated financial statements and notes thereto appearing in Item 8. Consolidated Financial Statements and Supplementary Data of this Report, the risk factors appearing in Item 1A. Risk Factors of this Report, and the disclaimer regarding forward-looking statements appearing at the beginning of Item 1. Business of this Report. Historical results set forth in Item 6. Selected Financial Data and Item 8. Consolidated Financial Statements and Supplementary Data of this Report should not be taken as indicative of our future operations.

In January 2016, our board of directors approved a change in our fiscal year-end from November 30 of each year to December 31 of each year. The fiscal year of our subsidiary, Aerojet Rocketdyne, ends on the last Saturday in December. As a result of the change, we had a one month transition period in December 2015. The audited results for the one month ended December 31, 2015 and the unaudited results for the one month ended December 31, 2014 are included in Item 8 of this Report. Further, as a result of the 2016 calendar, Aerojet Rocketdyne had 53 weeks of operations in the twelve months ended December 31, 2016 compared to 52 weeks of operations in the twelve months ended November 30, 2015 and 2014. The additional week of operations, which occurred in the fourth quarter of fiscal 2016, accounted for $32.2 million in additional net sales. Financial information for twelve months ended December 31, 2015 has not been included in this Form 10-K for the following reasons: (i) the twelve months ended November 30, 2015 provide a meaningful comparison for the twelve months ended December 31, 2016; (ii) there are no significant factors, seasonal or other, that would impact the comparability of information if the results for the twelve months ended December 31, 2015 were presented in lieu of results for twelve months ended November 30, 2015; and (iii) it was not practicable or cost justified to prepare this information.

Overview

We are a manufacturer of aerospace and defense products and systems with a real estate segment. Our operations are organized into two segments:

Aerospace and Defense — includes the operations of our wholly-owned subsidiary Aerojet Rocketdyne, a leading technology-based designer, developer and manufacturer of aerospace and defense products and systems for the U.S. government, including the DoD, NASA, major aerospace and defense prime contractors as well as portions of the commercial sector.

Real Estate — includes the activities of our wholly-owned subsidiary Easton related to the re-zoning, entitlement, sale, and leasing of our excess real estate assets. We are currently in the process of seeking zoning changes and other governmental approvals on our excess real estate assets to optimize its value.

A summary of the significant financial highlights for fiscal 2016 which management uses to evaluate our operating performance and financial condition is presented below.

- Net sales for fiscal 2016 totaled $1,761.3 million compared to $1,708.3 million for fiscal 2015.
- Net income for fiscal 2016 was $18.0 million, or $0.27 diluted income per share, compared to net loss of $(16.2) million, or $(0.27) loss per share, for fiscal 2015.
- Adjusted EBITDAP (Non-GAAP measure*) for fiscal 2016 was $202.0 million, or 11.5% of net sales, compared to $217.9 million, or 12.8% of net sales, for fiscal 2015.
- Segment performance before environmental remediation provision adjustments, retirement benefit expense, and unusual items was $188.4 million for fiscal 2016, compared to $200.1 million for fiscal 2015.

- Cash provided by operating activities in fiscal 2016 totaled $158.4 million, compared to $65.1 million in fiscal 2015.
- Free cash flow (Non-GAAP measure*) in fiscal 2016 totaled $110.8 million, compared to $28.3 million in fiscal 2015.
- Funded contract backlog as of December 31, 2016 was $2.3 billion compared to $2.4 billion as of December 31, 2015.
- Total contract backlog as of December 31, 2016 was $4.5 billion compared to $4.0 billion as of December 31, 2015.
- Net debt (Non-GAAP measure*) as of December 31, 2016 was $315.3 million compared to $442.1 million as of December 31, 2015.

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* We provide Non-GAAP measures as a supplement to financial results based on GAAP. A reconciliation of the Non-GAAP measures to the most directly comparable GAAP measures is presented later in the Management's Discussion and Analysis under the heading "Operating Segment Information" and "Use of Non-GAAP Financial Measures."

We are operating in an environment that is characterized by both increasing complexity in the global security environment and continuing worldwide economic pressures. A significant component of our strategy in this environment is to focus on delivering excellent performance to our customers, driving improvements and efficiencies across our operations, and creating value through the enhancement and expansion of our business.

We continuously evaluate a broad range of options that could be implemented to increase operational efficiency across all sites, and improve our overall market competitiveness. Our decisions will be focused on moving us forward to solidify our leadership in the propulsion markets.

Some of the significant challenges we face are as follows: dependence upon U.S. government programs and contracts, future reductions or changes in U.S. government spending in our markets, implementation of the CIP, environmental matters, capital structure, and our underfunded retirement benefit plans.

Major Customers

The principal end user customers of our products and technology are primarily agencies of the U.S. government. Since a majority of our sales are, directly or indirectly, to the U.S. government, funding for the purchase of our products and services generally follows trends in U.S. aerospace and defense spending. However, individual U.S. government agencies, which include the military services, NASA, the Missile Defense Agency, and the prime contractors that serve these agencies, exercise independent purchasing power within "budget top-line" limits. Therefore, sales to the U.S. government are not regarded as sales to one customer, but rather each contracting agency is viewed as a separate customer.

Sales to the U.S. government and its agencies, including sales to our significant customers disclosed below, were as follows:

	Percentage of Net Sales
Fiscal 2016	91%
Fiscal 2015	90%
Fiscal 2014	92%
One month ended December 31, 2015	85%

The Standard Missile program, which is included in the U.S. government sales and is comprised of multiple contracts, represented 12%, 14%, 12%, and 12% of net sales for fiscal 2016, fiscal 2015, fiscal 2014, and the one month ended December 31, 2015, respectively. The THAAD program, which is included in the U.S. government sales and is comprised of multiple contracts, represented 13%, 13%, 12%, and 13% of net sales for fiscal 2016, fiscal 2015, fiscal 2014, and the one month ended December 31, 2015, respectively. The demand for certain of our services and products is directly related to the level of funding of U.S. government programs.

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

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
Lockheed Martin	27%	29%	28%	24%
ULA	21	19	25	28
Raytheon	20	20	17	19
NASA	13	11	11	10

Our sales to each of the major customers listed above involve several product lines and programs.

Industry Update

Our primary aerospace and defense customers include the DoD and its agencies, NASA, and the prime contractors that supply products to these customers. We rely on U.S. government spending on propulsion systems for defense, space and armament systems, precision tactical weapon systems and munitions applications, and our backlog depends, in large part, on continued funding by the U.S. government for the programs in which we are involved. These funding levels are not generally correlated with any specific economic cycle, but rather follow the cycle of general public policy and political support for this type of funding. Moreover, although our contracts often contemplate that our services will be performed over a period of several years, the U.S. Congress must appropriate funds for a given program and the U.S. President must sign government budget legislation each GFY and may significantly increase, decrease or eliminate, funding for a program. A decrease in DoD and/or NASA expenditures, the elimination or curtailment of a material program in which we are or hope to be involved, or changes in payment patterns of our customers as a result of changes in U.S. government outlays, could have a material adverse effect on our operating results, financial condition, and/or cash flows.

Even with overall budget levels set for GFY 2017, Congress was not able to pass a full year appropriation for either the DoD or NASA prior to the start of GFY 2017 on October 1, 2016. As a result, Congress passed a short-term CR to fund the U.S. government until December 9, 2016. After the November U.S. presidential election, at the request of the incoming Trump Administration, Congress passed another CR through April 28, 2017 to allow the new Administration to shape federal spending. Although details of the plans to address perceived shortfalls in DoD readiness and modernization remain unsettled, the Trump Administration has signaled strong support for nuclear modernization and missile defense.

The SLS appears to remain a top Congressional priority as the CR included a provision to allow NASA the funding flexibility for SLS and deep exploration to remain on track. The SLS program also has enjoyed wide, bipartisan support in both chambers of Congress. We maintain a strong relationship with NASA and our propulsion systems have been powering NASA launch vehicles and spacecraft since the inception of the U.S. space program. Our booster, upper stage and Orion vehicle propulsion systems are currently baselined on the new SLS vehicle and both upper stage and booster engines are in development for future SLS variants. Due to the retirement of the space shuttle fleet, U.S. astronauts are now dependent on Russian Soyuz flights for access to and from the ISS for the better part of this decade. NASA has been working to re-establish U.S. manned space capability as soon as possible through development of a new “space taxi” to ferry astronauts and cargo to the ISS. In 2014, Boeing’s CST-100 Starliner capsule, powered by Aerojet Rocketdyne propulsion, was selected by NASA to transport astronauts to and from the ISS. As Boeing’s teammate, Aerojet Rocketdyne will be providing the propulsion system for this new capsule, thereby supplementing its work for NASA on the SLS designed for manned deep space exploration. In both instances, we have significant propulsion content and we look forward to supporting these generational programs for NASA.

The competitive dynamics of our multi-faceted marketplace vary by product sector and customer as we experience many of the same influences felt by the broader aerospace and defense industry. The large majority of products we manufacture are highly complex, technically sophisticated and extremely hazardous to build, demanding rigorous manufacturing procedures and highly specialized manufacturing equipment. While historically these factors, coupled with the high cost to establish the infrastructure required to meet these needs, posed substantial barriers to entry, modern design tools and manufacturing techniques (e.g., additive manufacturing) available to new entrants with the ability to self-fund start-up as well as development costs has led to increased competition in space related markets. To date, the competition has been limited to a few participants who tend to be narrowly focused on products that are sub-elements of our overall product portfolio. For example, entrepreneurs such as SpaceX and Blue Origin, who have been or are in the process of developing liquid fuel propulsion capabilities are primarily focused on the development of space propulsion systems for heavy lift launch vehicles and are not pursuing or participating in the missile defense or tactical propulsion business segments that make up a substantial portion of our overall business. These new entrepreneurs have signaled their intent to compete primarily on price and are therefore bringing pressure to bear on existing cost paradigms and manufacturing methodologies.

Competitive Improvement Program

In March 2015, we initiated the CIP comprised of activities and initiatives aimed at reducing costs in order for us to continue to compete successfully. The company-wide initiative is being undertaken after a comprehensive assessment of our product portfolio to underpin Aerojet Rocketdyne's technological and competitive leadership in our markets through continued research and development. The CIP is composed of three major components: (i) facilities optimization and footprint reduction; (ii) product affordability; and (iii) reduced administrative and overhead costs. Under the CIP, we expect an estimated 500 headcount reduction. We currently estimate that we will incur restructuring and related costs over the four-year CIP program of approximately $82 million (excluding approximately $31 million of capital expenditures). The revisions to the estimated costs of the CIP in fiscal 2016 were primarily driven by reduced severance costs as employees left voluntarily at a higher rate than anticipated. When fully implemented, we anticipate that the CIP will result in annual cost savings of approximately $145 million beginning in fiscal 2019. As a result of this effort, we will be better positioned to deliver our innovative, high quality and reliable products at a lower cost to our customers. The cost savings will be realized by the U.S. government in the form of more competitive pricing. The CIP costs will consist primarily of severance and other employee related costs totaling approximately $25 million, operating facility costs totaling approximately $19 million, and $38 million for other costs relating to product re-qualification, knowledge transfer and other CIP implementation costs. We have incurred $18.4 million related to the CIP program through December 31, 2016 and additionally we have incurred $28.9 million in capital expenditures to support the CIP. The costs associated with the CIP will be a component of our U.S. government forward pricing rates, and therefore, will be recovered through the pricing of our products and services to the U.S. government.

Environmental Matters

Our current and former business operations are subject to, and affected by, federal, state, local, and foreign environmental laws and regulations relating to the discharge, treatment, storage, disposal, investigation, and remediation of certain materials, substances, and wastes. Our policy is to conduct our business with due regard for the preservation and protection of the environment. We continually assess compliance with these regulations and we believe our current operations are materially in compliance with all applicable environmental laws and regulations.

The following table summarizes our recoverable amounts, environmental reserves, and range of liability, as of December 31, 2016:

	Recoverable Amount (1)	Reserve	Estimated Range of Liability
		(In millions)	
Aerojet Rocketdyne — Sacramento	$159.6	$210.1	$210.1 - $326.0
Aerojet Rocketdyne — BPOU	96.3	126.8	126.8 - 178.3
Other Aerojet Rocketdyne sites	8.5	8.5	8.5 - 14.4
Total Aerojet Rocketdyne	264.4	345.4	345.4 - 518.7
Other sites	0.6	4.3	4.3 - 6.3
Total	$265.0	$349.7	$349.7 - $525.0

(1) Excludes the receivable from Northrop of $68.0 million as of December 31, 2016 related to environmental costs already paid (and therefore not reserved) in prior years and reimbursable under the Northrop Agreement.

Most of our environmental costs are incurred by our Aerospace and Defense segment, and certain of these future costs are allowable to be included in our contracts with the U.S. government and allocable to Northrop until the cumulative expenditure limitation is reached. See Note 7(c) and (d) of the notes to consolidated financial statements and "Environmental Matters" below for summary of our environmental reserve activity.

Capital Structure

We have a substantial amount of debt for which we are required to make interest and principal payments. Interest on long-term financing is not a recoverable cost under our U.S. government contracts. As of December 31, 2016, we had $725.6 million of debt principal outstanding.

Retirement Benefits

We expect to make cash contributions of approximately $72.0 million to our tax-qualified defined benefit pension plan in fiscal 2017 of which $37.0 million is expected to be recoverable in our U.S. government contracts in fiscal 2017 with the remaining $35.0 million being potentially recoverable in our U.S. government contracts in the future. We generally are able to recover cash contributions related to our tax-qualified defined benefit pension plan as allowable costs on our U.S. government contracts, but there is a lag between when we contribute cash to our tax-qualified defined benefit pension plan under pension funding rules and recover it under the CAS. During fiscal 2016, we made cash contributions of $32.8 million to our tax-qualified defined benefit pension plan of which $27.5 million was recoverable in our U.S. government contracts in fiscal 2016 with the remaining $5.3 million being potentially recoverable in our U.S. government contracts in the future.

The funded status of our retirement benefit plans may be adversely affected by investment experience, 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 our retirement benefit assets does not meet our assumptions, if there are changes to the IRS regulations or other applicable law or if other actuarial assumptions are modified, our future contributions to our underfunded retirement benefit plans could be higher than we expect.

Additionally, the level of returns on retirement benefit assets, changes in interest rates, changes in legislation, and other factors affect our financial results. The timing of recognition of retirement benefit expense or income in our financial statements differs from the timing of the required funding under the PPA or the amount of funding that can be recorded in our overhead rates through our U.S. government contracting business.

Results of Operations:

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions, except per share amounts)			
Net sales	$1,761.3	$1,708.3	$1,602.2	$96.3
Operating costs and expenses:				
Cost of sales (exclusive of items shown separately below)	1,527.4	1,459.5	1,406.2	75.4
AR1 research and development	—	32.1	—	—
Selling, general and administrative	53.6	49.0	38.2	2.8
Depreciation and amortization	64.9	65.1	63.7	5.1
Other expense, net:				
Loss on debt	34.5	1.9	60.8	—
Legal settlement	—	50.0	—	—
Other	19.7	17.4	13.7	0.2
Total operating costs and expenses	1,700.1	1,675.0	1,582.6	83.5
Operating income	61.2	33.3	19.6	12.8
Non-operating (income) expense:				
Interest income	(0.6)	(0.3)	(0.1)	—
Interest expense	32.5	50.4	52.7	3.8
Total non-operating expense, net	31.9	50.1	52.6	3.8
Income (loss) from continuing operations before income taxes	29.3	(16.8)	(33.0)	9.0
Income tax provision	11.2	0.3	16.3	2.0
Income (loss) from continuing operations	18.1	(17.1)	(49.3)	7.0
(Loss) income from discontinued operations, net of income taxes	(0.1)	0.9	(0.7)	—
Net income (loss)	$ 18.0	$ (16.2)	$ (50.0)	$ 7.0
Income (loss) per share of common stock				
Basic:				
Income (loss) from continuing operations	$ 0.27	$ (0.28)	$ (0.85)	$0.11
(Loss) income from discontinued operations, net of income taxes	—	0.01	(0.01)	—
Net income (loss) per share	$ 0.27	$ (0.27)	$ (0.86)	$0.11
Diluted:				
Income (loss) from continuing operations	$ 0.27	$ (0.28)	$ (0.85)	$0.10
(Loss) income from discontinued operations, net of income taxes	—	0.01	(0.01)	—
Net income (loss) per share	$ 0.27	$ (0.27)	$ (0.86)	$0.10
Weighted average shares of common stock outstanding, basic	65.6	61.1	57.9	62.9
Weighted average shares of common stock outstanding, diluted	65.7	61.1	57.9	72.5

Net Sales:

	Year Ended			Year Ended		
	December 31, 2016	November 30, 2015	Change*	November 30, 2015	November 30, 2014	Change**
	(In millions)					
Net sales:	$1,761.3	$1,708.3	$53.0	$1,708.3	$1,602.2	$106.1

* *Primary reason for change.* The increase in net sales was primarily due to the following (i) an increase of $95.0 million on space launch programs primarily driven by increased deliveries on the RL10 program, and the transition of the Commercial Crew Development program from development activities to initial production and (ii) an increase of $37.2 million on air defense programs primarily driven by the transition of the PAC-3 contracts to full-rate production. These factors were partially offset by (i) the sale of approximately 550 acres of our Sacramento Land for $42.0 million in fiscal 2015 and (ii) a decrease of $36.8 million in the various Standard Missile contracts primarily from the timing of deliveries on the Standard Missile-3 Block IB contract and Standard Missile MK72 booster contract. Further, as a result of the 2016 calendar, Aerojet Rocketdyne had 53 weeks of operations in fiscal 2016 compared to 52 weeks of operations in fiscal 2015. The additional week of operations, which occurred in the fourth quarter of fiscal 2016 and accounted for $32.2 million in additional net sales, is included in the above discussion of program changes.

** *Primary reason for change.* The increase in net sales was primarily due to the following: (i) an increase of $84.3 million in space advanced programs primarily driven by the RS-25 program which is currently engaged in a significant development and integration effort in support of the SLS development program and increased development work on the Orion program partially offset by the successful completion of current J-2X program; (ii) an increase of $80.3 million in missile defense and strategic systems programs primarily driven by the increased deliveries on the THAAD and Standard Missile programs; and (iii) sale of approximately 550 acres of our Sacramento Land for $42.0 million. The increase in net sales was partially offset by a decrease of $109.7 million in space launch programs primarily associated with the RL10 and RS-68 programs as a result of the timing of deliveries and costs incurred on these multi-year contracts and lower sales related to the Antares AJ-26 program close-out (see discussion below).

	One month ended December 31, 2015
	(In millions)
Net sales:	$96.3

Net sales for the month ended December 31, 2015 was primarily comprised of the following: (i) sales of $32.4 million in missile defense and strategic systems programs primarily driven by the deliveries on the THAAD and Standard Missile programs; (ii) sales of $26.4 million in our space launch programs primarily associated with the RL10 program as a result of deliveries on this multi-year contract and deliveries on the Atlas V program; and (iii) sales of $26.1 million in space advanced programs primarily driven by work on the Commercial Crew Development program and the RS-25 program which is currently engaged in a significant development and integration effort in support of the SLS program.

Cost of Sales (exclusive of items shown separately below):

	Year Ended			Year Ended		
	December 31, 2016	November 30, 2015	Change*	November 30, 2015	November 30, 2014	Change**
	(In millions, except percentage amounts)					
Cost of sales:	$1,527.4	$1,459.5	$67.9	$1,459.5	$1,406.2	$53.3
Percentage of net sales	86.7%	85.4%		85.4%	87.8%	
Percentage of net sales excluding retirement benefit expense and step-up in fair value of inventory	83.9%	82.5%		82.5%	86.0%	
Components of cost of sales:						
Cost of sales excluding retirement benefit expense and step-up in fair value of inventory	$1,477.2	$1,409.0	$68.2	$1,409.0	$1,377.8	$31.2
Cost of sales associated with the Acquisition step-up in fair value of inventory not allocable to our U.S. government contracts	0.2	0.3	(0.1)	0.3	3.2	(2.9)
Retirement benefit expense	50.0	50.2	(0.2)	50.2	25.2	25.0
Cost of sales	$1,527.4	$1,459.5	$67.9	$1,459.5	$1,406.2	$53.3

* *Primary reason for change.* The increase in cost of sales as a percentage of net sales excluding retirement benefit expense and the step-up in fair value of inventory was primarily due to the fiscal 2015 land sale of approximately 550 acres of Sacramento Land resulting in gross profit of $30.6 million.

** *Primary reason for change.* The decrease in cost of sales as a percentage of net sales excluding retirement benefit expense and the step-up in fair value of inventory was primarily due to (i) land sale of approximately

550 acres of Sacramento Land resulting in gross profit of $30.6 million and (ii) the close-out of the Antares AJ-26 program. Aerojet Rocketdyne entered into a Settlement and Mutual Release Agreement (the "Agreement") with Orbital Sciences Corporation ("Orbital") pursuant to which the parties mutually agreed to a termination for convenience of the contract relating to the provision by Aerojet Rocketdyne of 20 AJ-26 liquid propulsion rocket engines to Orbital for the Antares program (the "Contract"). The Agreement also settles all claims the parties may have had against one another arising out of the Contract and the launch failure that occurred on October 28, 2014 of an Antares launch vehicle carrying the Cygnus ORB-3 service and cargo module. We incurred a $50.0 million legal settlement charge reported as an unusual item and not included in cost of sales related to the legal settlement.

	Year Ended		
	November 30, 2015	November 30, 2014	Change
	(In millions, except percentage amounts)		
Antares AJ-26 program:			
Net sales	$ (2.2)	$ 7.9	$(10.1)
Cost of sales — (benefit) expense	(10.3)	40.2	(50.5)
Gross contract profit (loss)	$ 8.1	$(32.3)	$ 40.4
Gross contract profit (loss) as a percentage of net sales	0.5%	(2.0)%	

	One month ended December 31, 2015
	(In millions, except percentage amounts)
Cost of sales (exclusive of items shown separately below):	$75.4
Percentage of net sales	78.3%
Percentage of net sales excluding retirement benefit expense and step-up in fair value of inventory	73.9%
Components of cost of sales:	
Cost of sales excluding retirement benefit expense and step-up in fair value of inventory	$71.2
Cost of sales associated with the Rocketdyne acquisition step-up in fair value of inventory not allocable to our U.S. government contracts	0.1
Retirement benefit expense	4.1
Cost of sales	$75.4

Cost of sales as a percentage of net sales excluding retirement benefit expense and the step-up in fair value of inventory for the month ended December 31, 2015 included favorable changes in contract estimates due to better than expected performance primarily on the Standard Missile and THAAD programs as a result of manufacturing efficiencies and risk mitigation. These favorable factors were partially offset by contract losses on an electric propulsion contract.

AR1 Research and Development:

	Year Ended			Year Ended		
	December 31, 2016	November 30, 2015	Change*	November 30, 2015	November 30, 2014	Change*
	(In millions, except percentage amounts)					
AR1 R&D:	$—	$32.1	$(32.1)	$32.1	$—	$32.1
Percentage of net sales	— %	1.9%		1.9%	— %	

* *Primary reason for change.* Our company-sponsored R&D expenses (reported as a component of cost of sales) are generally allocated among all contracts and programs in progress under U.S. government contractual arrangements. From time to time, we believe it is in our best interests to self-fund and not allocate costs for certain R&D activities to the U.S. government contracts. In fiscal 2015, we self-funded $32.1 million of engine development expenses associated with our newest liquid booster engine, the AR1, and did not allocate these costs to the U.S. government. The table below summarizes total AR1 R&D costs net of reimbursements:

	Year Ended		One month ended
	December 31, 2016	November 30, 2015	December 31, 2015
	(In millions)		
AR1 R&D costs allocated to U.S. government contracts	$20.5	$16.1	$ 2.7
AR1 R&D costs not allocated to U.S. government contracts	—	32.1	—
Total	$20.5	$48.2	$ 2.7

Selling, General and Administrative ("SG&A"):

	Year Ended			Year Ended		
	December 31, 2016	November 30, 2015	Change*	November 30, 2015	November 30, 2014	Change**
	(In millions, except percentage amounts)					
SG&A:	$53.6	$49.0	$ 4.6	$49.0	$38.2	$10.8
Percentage of net sales	3.0%	2.9%		2.9%	2.4%	
Percentage of net sales excluding retirement benefit expense and stock-based compensation	1.2%	1.3%		1.3%	1.3%	
Components of SG&A:						
SG&A excluding retirement benefit expense and stock-based compensation	$21.8	$23.0	$(1.2)	$23.0	$21.2	$ 1.8
Stock-based compensation	12.9	8.6	4.3	8.6	5.7	2.9
Retirement benefit expense	18.9	17.4	1.5	17.4	11.3	6.1
SG&A	$53.6	$49.0	$ 4.6	$49.0	$38.2	$10.8

* *Primary reason for change.* The increase in SG&A expense was primarily driven by an increase of $4.3 million in stock-based compensation which was primarily a result of an increase in performance based stock compensation.

** *Primary reason for change.* The increase in SG&A expense was primarily driven by: (i) an increase of $6.1 million in non-cash retirement benefit plan expense (see discussion of "Retirement Benefit Plans" below) and (ii) an increase of $2.9 million in stock-based compensation primarily as a result of increases in the fair value of the stock appreciation rights.

	One month ended December 31, 2015
	(In millions, except percentage amounts)
SG&A:	$ 2.8
Percentage of net sales	2.9%
Components of SG&A:	
SG&A excluding retirement benefit expense and stock-based compensation	$ 1.7
Stock-based compensation	(0.4)
Retirement benefit expense	1.5
SG&A	$ 2.8

SG&A expense as a percentage of net sales for the month ended December 31, 2015 was relatively proportional to the first quarter of fiscal 2016 and 2015.

Depreciation and Amortization:

	Year Ended			Year Ended		
	December 31, 2016	November 30, 2015	Change*	November 30, 2015	November 30, 2014	Change**
			(In millions)			
Depreciation and amortization:	$64.9	$65.1	$(0.2)	$65.1	$63.7	$ 1.4
Components of depreciation and amortization:						
Depreciation	$49.6	$49.8	$(0.2)	$49.8	$48.5	$ 1.3
Amortization	13.3	13.4	(0.1)	13.4	13.5	(0.1)
Accretion	2.0	1.9	0.1	1.9	1.7	0.2
Depreciation and amortization	$64.9	$65.1	$(0.2)	$65.1	$63.7	$ 1.4

* *Primary reason for change.* Depreciation and amortization expense was essentially unchanged for the period.

** *Primary reason for change.* The increase in depreciation and amortization was primarily due to the non-cash accelerated depreciation expense of $0.8 million in fiscal 2015 associated with changes in the estimated useful life of long-lived assets impacted by the CIP.

	One month ended December 31, 2015
	(In millions)
Depreciation and amortization:	$5.1
Components of depreciation and amortization:	
Depreciation	$3.8
Amortization	1.1
Accretion	0.2

Depreciation and amortization expense for the month ended December 31, 2015 was relatively proportional to the first quarter of fiscal 2016.

Other Expense, net:

	Year Ended			Year Ended		
	December 31, 2016	November 30, 2015	Change*	November 30, 2015	November 30, 2014	Change**
			(In millions)			
Other expense, net:	$54.2	$69.3	$(15.1)	$69.3	$74.5	$(5.2)

* *Primary reason for change.* The decrease in other expense, net was primarily due to a decrease of $17.4 million in unusual items charges (see discussion of unusual items below).

** *Primary reason for change.* The decrease in other expense, net was primarily due to a decrease of $9.8 million in unusual items charges (see discussion of unusual items below). The decrease in unusual items was partially offset by an increase of $6.5 million in environmental remediation expense primarily associated with higher reserve requirements at the BPOU site offset by the advance agreement between Aerojet Rocketdyne and the U.S. government entered into in the fourth quarter of fiscal 2015 (see discussion of "Environmental Matters" below).

	One month ended December 31, 2015
	(In millions)
Other expense, net:	$0.2

The $0.2 million of other expense, net for the month ended December 31, 2015 was insignificant.

Total unusual items expense, a component of other expense, net in the consolidated statements of operations:

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
		(In millions)		
Aerospace and Defense:				
Loss on legal matters and settlements	$ —	$50.0	$ 0.9	$ 0.4
Aerospace and defense unusual items	—	50.0	0.9	0.4
Corporate:				
Loss on debt repurchased\ redeemed	34.4	1.9	60.6	—
Loss on bank amendment	0.1	—	0.2	—
Corporate unusual items	34.5	1.9	60.8	—
Total unusual items	$34.5	$51.9	$61.7	$ 0.4

Fiscal 2016 Activity:

On July 18, 2016, we redeemed $460.0 million principal amount of our 7.125% Second-Priority Senior Secured Notes ("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. We incurred a pre-tax charge of $34.1 million in 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.

We retired $13.0 million principal amount of our delayed draw term loan resulting in a loss of $0.3 million.

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

Fiscal 2015 Activity:

We recorded an expense of $50.0 million associated with a legal settlement. See discussion in ("Cost of Sales" section above).

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

Fiscal 2014 Activity:

We recorded $0.9 million for realized losses and interest associated with the failure to register with the SEC the issuance of certain of our common shares under the defined contribution 401(k) employee benefit plan.

A summary of our loss on the 4 $^{1}/_{16}$% Convertible Subordinated Debentures ("4 $^{1}/_{16}$% Debentures") repurchased (in millions):

Principal amount repurchased	$ 59.6
Cash repurchase price	(119.9)
Write-off of deferred financing costs	(0.3)
Loss on 4 $^{1}/_{16}$% Debentures repurchased	$ (60.6)

We recorded a charge of $0.2 million related to an amendment to the Senior Credit Facility.

December 2015 Activity:

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

Interest Income:

	Year Ended			Year Ended		
	December 31, 2016	November 30, 2015	Change*	November 30, 2015	November 30, 2014	Change*
			(In millions)			
Interest income:	$0.6	$0.3	$0.3	$0.3	$0.1	$0.2

* *Primary reason for change.* Interest income was immaterial for the periods presented.

Interest Expense:

	Year Ended			Year Ended		
	December 31, 2016	November 30, 2015	Change*	November 30, 2015	November 30, 2014	Change**
			(In millions)			
Interest expense:	$32.5	$50.4	$(17.9)	$50.4	$52.7	$(2.3)
Components of interest expense:						
Contractual interest and other	30.2	47.7	(17.5)	47.7	49.1	(1.4)
Amortization of debt discount and deferred financing costs	2.3	2.7	(0.4)	2.7	3.6	(0.9)
Interest expense	$32.5	$50.4	$(17.9)	$50.4	$52.7	$(2.3)

* *Primary reason for change.* The decrease in interest expense was primarily due to the retirement of the principal amount of our delayed draw term loan in the first quarter of fiscal 2016 and the redemption of the 7 $^{1}/_{8}$% Notes in the third quarter of fiscal 2016. The decrease was partially offset by interest expense on the debt incurred on the Senior Credit Facility at a lower variable interest rate (3.02% as of December 31, 2016) and to a lesser extent the issuance of the 2 ¼% Notes in December 2016 at an effective interest rate of 5.8%.

** *Primary reason for change.* The decrease in interest expense was primarily due to the $49.0 million of 4 $^{1}/_{16}$% Debentures that were converted to 5.5 million shares of our common stock in fiscal 2015.

	One month ended December 31, 2015
	(In millions)
Interest expense:	$3.8
Components of interest expense:	
Contractual interest and other	3.6
Amortization of deferred financing costs	0.2
Interest expense	$3.8

Interest expense for the month ended December 31, 2015 was proportional to our interest expense for the first quarter of fiscal 2016.

Income Tax Provision:

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Income tax provision	$11.2	$0.3	$16.3	$2.0

The following table shows the reconciling items between the income tax provision using the federal statutory rate and our reported income tax provision.

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Statutory U.S. federal income tax rate	$10.3	$(5.9)	$(11.5)	$ 3.1
State and local income taxes, net of U.S. federal income tax effect	(0.7)	2.7	3.7	0.4
Changes in state income tax rates	3.9	3.2	(0.2)	—
Reserve adjustments	(0.3)	0.4	(0.3)	—
Valuation allowance adjustments	—	—	0.1	—
Rescindable common stock interest and realized losses	—	—	0.3	—
Non-deductible convertible subordinated notes interest	0.8	1.4	2.3	0.1
Non-deductible premiums on repurchase of convertible subordinated notes	—	—	21.1	—
R&D credits	(4.1)	—	1.3	(0.2)
Retroactive change in federal tax law	—	(1.9)	—	(1.7)
Benefit of manufacturing deductions	0.5	(1.0)	(1.4)	(0.6)
Lobbying costs	0.8	0.6	0.4	—
Deferred tax adjustment	(0.4)	—	—	0.7
Other, net	0.4	0.8	0.5	0.2
Income tax provision	$11.2	$ 0.3	$ 16.3	$ 2.0

In fiscal 2016, the income tax provision recorded differs from the expected tax that would be calculated by applying the federal statutory rate to our income before income taxes primarily due to the impacts from 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 income tax provision recorded differs from the expected tax that would be calculated by applying the federal statutory rate to our loss before income taxes primarily due 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 IRS code allowed to manufacturers.

In fiscal 2014, the income tax provision recorded differs from the expected tax that would be calculated by applying the federal statutory rate to our loss before income taxes primarily due to the non-deductible premiums paid upon the redemption of portions of the convertible debt, certain non-deductible interest expense, state income taxes, and impacts from the final R&D credit study, partially offset by benefits allowed by Section 199 of the IRS code allowed to manufacturers.

In the month ended December 31, 2015, the income tax provision recorded differs from the expected tax that would be calculated by applying the federal statutory rate to our income before income taxes 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 carrying value of our deferred tax assets is dependent on our ability to generate sufficient taxable income in the future. We need $439.7 million in pre-tax income and $343.7 million in other comprehensive income to realize the net deferred tax assets as of December 31, 2016. We project that future taxable income will increase as a result of increased income from continuing operations resulting from improved contract profit margins related to the Rocketdyne Business acquisition integration and improved margins beginning in fiscal 2015 due to anticipated contributions to our tax qualified defined benefit pension plan, which are recoverable through our U.S. government contracts. These increases in income from continuing operations will be partially offset by book to tax adjustments, primarily related to retirement benefit plan payments, state tax deductions, and our manufacturing deductions.

The timing of recording or releasing a valuation allowance requires significant management judgment. The amount of the valuation allowance released by us represents a portion of deferred tax assets that was deemed more-likely-than-not that we 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 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, 2016 and 2015, management has considered all available evidence, both positive and negative, including but not limited to the following:

Positive evidence

- Positive results from continuing operations before income taxes for the year ended December 31, 2016;
- Our recent history of generating taxable income which has allowed for the utilization of tax credit carryforwards;
- CAS rules that allow us to recover certain tax-qualified defined benefit pension plan cash contributions through our U.S. government contracts;
- Eligibility of some of our environmental costs for future recovery in the pricing of our 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;
- Increase in our contract backlog;
- Lower interest costs as a result of our fiscal 2016 debt refinancing efforts; and
- Favorable trends with respect to the market value of certain real estate assets.

Negative evidence

- Our three year comprehensive cumulative loss position as of December 31, 2016;
- Our exposure to environmental remediation obligations and the related uncertainty as to the ultimate exposure upon settlement;
- The significance of our defined benefit pension obligation and related impact it could have in future years; and
- The interest expense arising from additional indebtedness incurred in fiscal 2016.

During fiscal 2016 and 2015, we continued to evaluate the need for a valuation allowance and have concluded in each quarter, including year end, that the amount of valuation allowance currently recorded was appropriate. We will continue to evaluate the ability to realize our net deferred tax assets to determine if an increase to our valuation allowance may be required to reduce deferred tax assets, which could have a material impact on our results of operations.

Retirement Benefit Plans:

Components of retirement benefit expense:

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Service cost	$ 14.0	$ 10.8	$ 8.9	$ 1.1
Interest cost on benefit obligation	66.0	65.5	69.6	5.5
Assumed return on assets	(70.1)	(88.1)	(92.6)	(6.0)
Amortization of prior service credits	(1.1)	(1.1)	(0.9)	(0.1)
Amortization of net losses	60.1	80.5	51.5	5.1
	$ 68.9	$ 67.6	$ 36.5	$ 5.6

We estimate that our retirement benefit expense will be approximately $73 million in fiscal 2017.

Market conditions and interest rates significantly affect the assets and liabilities of our retirement benefit 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 losses which will be amortized to retirement benefit expense or benefit in future years. The accounting method we utilize recognizes one-fifth of the unamortized gains and losses associated with the market-related value of pension assets and all other gains and losses, including changes in the discount rate used to calculate benefit costs 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 market related 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.

Operating Segment Information:

We evaluate our operating segments based on several factors, of which the primary financial measure is segment performance. Segment performance represents net sales from continuing operations less applicable costs, expenses and provisions for unusual items relating to the segment. Excluded from segment performance are: corporate income and expenses, interest expense, interest income, income taxes, legacy income or expenses, and unusual items not related to the segment. We believe that segment performance provides information useful to investors in understanding our underlying operational performance. In addition, we provide the Non-GAAP financial measure of our operational performance called segment performance before environmental remediation provision adjustments, retirement benefit expense, Rocketdyne purchase accounting adjustments, and unusual items. We believe the exclusion of the items listed above permits an evaluation and a comparison of results for ongoing business operations, and it is on this basis that management internally assesses operational performance.

Aerospace and Defense Segment

	Year Ended			Year Ended		
	December 31, 2016	November 30, 2015	Change*	November 30, 2015	November 30, 2014	Change**
	(In millions, except percentage amounts)					
Net sales	$1,753.9	$1,660.0	$93.9	$1,660.0	$1,596.0	$ 64.0
Segment performance	143.3	48.9	94.4	48.9	113.7	(64.8)
Segment margin	8.2%	2.9%		2.9%	7.1%	
Segment margin before environmental remediation provision adjustments, retirement benefit expense, Rocketdyne purchase accounting adjustments, and unusual items (Non-GAAP measure)	11.6%	11.4%		11.4%	11.1%	
Components of segment performance:						
Aerospace and Defense	$ 203.1	$ 189.2	$13.9	$ 189.2	$ 177.3	$ 11.9
Environmental remediation provision adjustments	(18.3)	(16.6)	(1.7)	(16.6)	(8.8)	(7.8)
Retirement benefit expense, net (1)	(22.5)	(50.2)	27.7	(50.2)	(25.2)	(25.0)
Unusual items	—	(50.0)	50.0	(50.0)	(0.9)	(49.1)
Rocketdyne purchase accounting adjustments not allocable to our U.S. government contracts:						
Amortization of the Rocketdyne Business' intangible assets	(12.0)	(12.0)	—	(12.0)	(12.0)	—
Depreciation associated with the step-up in the fair value of the Rocketdyne Business' tangible assets	(6.8)	(11.2)	4.4	(11.2)	(13.5)	2.3
Cost of sales associated with the step-up in the fair value of the Rocketdyne Business' inventory	(0.2)	(0.3)	0.1	(0.3)	(3.2)	2.9
Aerospace and Defense total	$ 143.3	$ 48.9	$94.4	$ 48.9	$ 113.7	$(64.8)

(1) Retirement benefit expense is net of cash funding to our tax-qualified defined benefit pension plan which are recoverable costs under our U.S. government contracts. We funded $27.5 million to our tax-qualified defined benefit pension plan in fiscal 2016 that was recoverable in our fiscal 2016 U.S. government contracts.

* *Primary reason for change.* The increase in net sales was primarily due to the following (i) an increase of $95.0 million on space launch programs primarily driven by increased deliveries on the RL10 program, and the transition of the Commercial Crew Development program from development activities to initial production and (ii) an increase of $37.2 million on air defense programs primarily driven by the transition of the PAC-3 contracts to full-rate production. These factors were partially offset by a decrease of $36.8 million in the various Standard Missile contracts primarily from the timing of deliveries on the Standard Missile-3 Block IB contract and Standard Missile MK72 booster contract. Further, as a result of the 2016 calendar, Aerojet Rocketdyne had 53 weeks of operations in fiscal 2016 compared to 52 weeks of operations in fiscal 2015. The additional week of operations, which occurred in the fourth quarter of fiscal 2016 and accounted for $32.2 million in additional net sales, is included in the above discussion of program changes.

Segment margin before environmental remediation provision adjustments, retirement benefit expense, Rocketdyne purchase accounting adjustments, and unusual items in fiscal 2016 compared to fiscal 2015 was relatively unchanged. Items that had a significant impact include the following: (i) favorable contract performance on the THAAD program as a result of operating performance and lower overhead costs; (ii) a gross contract benefit of $8.1 million in fiscal 2015 associated with the Antares AJ-26 Settlement Agreement (see discussion in "Cost of Sales" above); and (iii) cost growth and manufacturing inefficiencies in the current period on electric propulsion contracts.

** *Primary reason for change.* The increase in net sales was primarily due to the following (i) an increase of $84.3 million in space advanced programs primarily driven by the RS-25 program which is currently engaged in a significant development and integration effort in support of the SLS development program and increased development work on the Orion program partially offset by the successful completion of current J-2X program and (ii) an increase of $80.3 million in missile defense and strategic systems programs primarily driven by the increased deliveries on the THAAD and Standard Missile programs. The increase in net sales was partially offset by a decrease of $109.7 million in space launch programs primarily associated with the RL10 and RS-68 programs as a result of the timing of deliveries and costs incurred on these multi-year contracts and lower sales related to the Antares AJ-26 program close-out (see discussion below).

The increase in the segment margin before environmental remediation provision adjustments, retirement benefit expense, Rocketdyne purchase accounting adjustments, and unusual items in fiscal 2015 compared to fiscal 2014 was primarily due to the close-out of the Antares AJ-26 program (see discussion of "Cost of Sales" above) and costs associated with the AR1 program. During the third quarter of fiscal 2015, we began separately reporting the portion of the engine development expenses associated with our newest liquid booster engine, the AR1, which are currently not allocated across all contracts and programs in progress under U.S. governmental contractual arrangements (see additional discussion in Note 1(r) of the notes to consolidated financial statements). See segment information below:

	Year Ended		
	November 30, 2015	November 30, 2014	Change
	(In millions)		
Segment margin before environmental remediation provision adjustments, retirement benefit expense, Rocketdyne purchase accounting adjustments, and unusual items (Non-GAAP measure)	$189.2	$177.3	$ 11.9
AR1 research and development	32.1	—	32.1
(Income) loss on Antares AJ-26 program (1)	(8.1)	32.3	(40.4)
	$213.2	$209.6	$ 3.6

(1) We incurred a $50.0 million legal settlement charge related to the Antares AJ-26 program reported as an unusual item in fiscal 2015.

	One month ended December 31, 2015
	(In millions, except percentage amounts)
Net sales	$95.8
Segment performance	15.2
Segment margin	15.9%
Segment margin before environmental remediation provision adjustments, retirement benefit plan expense, Rocketdyne purchase accounting adjustments, and unusual items (Non-GAAP measure)	22.2%
Components of segment performance:	
Aerospace and Defense	$21.3
Environmental remediation provision adjustments	0.1
Retirement benefit plan expense	(4.1)
Unusual items	(0.4)
Rocketdyne purchase accounting adjustments not allocable to our U.S. government contracts:	
Amortization of the Rocketdyne Business' intangible assets	(1.0)
Depreciation associated with the step-up in the fair value of the Rocketdyne Business' tangible assets	(0.6)
Cost of sales associated with the step-up in the fair value of the Rocketdyne Business' inventory	(0.1)
Aerospace and Defense total	$15.2

Net sales for the month ended December 31, 2015 was primarily comprised of the following: (i) sales of $32.4 million in missile defense and strategic systems programs primarily driven by the deliveries on the THAAD and Standard Missile programs; (ii) sales of $26.4 million in our space launch programs primarily associated with the RL10 program as a result of deliveries on this multi-year contract and deliveries on the Atlas V program; and (iii) sales of $26.1 million in space advanced programs primarily driven by development work on the Commercial Crew Development program and the RS-25 program which is currently engaged in a significant development and integration effort in support of the SLS program.

The segment margin before environmental remediation provision adjustments, retirement benefit plan expense, Rocketdyne purchase accounting adjustments, and unusual items included (i) favorable changes in contract estimates due to better than expected performance on the Standard Missile and THAAD programs as a result of manufacturing efficiencies and risk mitigation and (ii) costs recoveries on retirement benefit plan contributions. These favorable factors were partially offset by contract losses on an electric propulsion contract.

The following table summarizes our backlog:

	As of December 31,	
	2016	2015
	(In billions)	
Funded backlog	$2.3	$2.4
Unfunded backlog	2.2	1.6
Total contract backlog	$4.5	$4.0
Total contract backlog expected to be filled within one year	$1.7	$1.6

Real Estate Segment

	Year Ended			Year Ended		
	December 31, 2016	November 30, 2015	Change*	November 30, 2015	November 30, 2014	Change*
	(In millions)					
Net sales	$7.4	$48.3	$(40.9)	$48.3	$6.2	$42.1
Segment performance	4.3	34.4	(30.1)	34.4	4.2	30.2

* *Primary reason for change.* During fiscal 2016 and 2014, net sales and segment performance consisted primarily of rental property operations. During fiscal 2015, we recognized net sales of $42.0 million associated with a land sale of approximately 550 acres which resulted in a pre-tax gain of $30.6 million.

	One month ended December 31,
	2015
	(In millions)
Net sales	$0.5
Segment performance	0.2

Net sales and segment performance consisted primarily of rental property operations.

Use of Non-GAAP Financial Measures

In addition to segment performance (discussed above), we provide the Non-GAAP financial measure of our operational performance called Adjusted EBITDAP. We use this metric to measure our operating performance. We believe that to effectively compare core operating performance from period to period, the metric should exclude items relating to retirement benefits (pension and postretirement benefits), significant non-cash expenses, the impacts of financing decisions on earnings, and items incurred outside the ordinary, on-going and customary course of our operations. Accordingly, we define Adjusted EBITDAP as GAAP income (loss) from continuing operations before income taxes adjusted to exclude interest expense, interest income, depreciation and amortization, retirement benefit expense net of cash funding to our tax-qualified defined benefit pension plan that are recoverable under our U.S. government contracts, and unusual items which we do not believe are reflective of such ordinary, on-going and customary activities. Adjusted EBITDAP does not represent, and should not be considered an alternative to, net income (loss), as determined in accordance with GAAP.

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Income (loss) from continuing operations before income taxes	$ 29.3	$ (16.8)	$ (33.0)	$ 9.0
Interest expense	32.5	50.4	52.7	3.8
Interest income	(0.6)	(0.3)	(0.1)	—
Depreciation and amortization	64.9	65.1	63.7	5.1
Retirement benefit expense, net (1)	41.4	67.6	36.5	5.6
Unusual items	34.5	51.9	61.7	0.4
Adjusted EBITDAP	$202.0	$217.9	$181.5	$23.9
Adjusted EBITDAP as a percentage of net sales	11.5%	12.8%	11.3%	24.8%

(1) Retirement benefit expense is net of cash funding to our tax-qualified defined benefit pension plan which are recoverable costs under our U.S. government contracts. We funded $27.5 million to our tax-qualified defined benefit pension plan in fiscal 2016 that was recoverable in our fiscal 2016 U.S. government contracts.

In addition to segment performance and Adjusted EBITDAP, we provide the Non-GAAP financial measures of free cash flow and net debt. We use these financial measures, both in presenting our results to stakeholders and the investment community, and in our internal evaluation and management of the business. Management believes that these financial measures are useful because it presents our business using the same tools that management uses to evaluate progress in achieving our performance metrics for annual cash and long-term compensation incentive plans.

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Net cash provided by (used in) operating activities	$158.4	$ 65.1	$150.6	$(2.3)
Capital expenditures	(47.6)	(36.8)	(43.4)	(1.2)
Free cash flow (1)	$110.8	$ 28.3	$107.2	$(3.5)

(1) Free Cash Flow, a Non-GAAP financial measure, is defined as cash flow from operating activities less capital expenditures. Free Cash Flow should not be considered in isolation, as a measure of residual cash flow available for discretionary purposes, or as an alternative to cash flows from operations presented in accordance with GAAP. We believe Free Cash Flow is useful as it provides supplemental information to assist investors in viewing the business using the same tools that management uses to evaluate progress in achieving our goals.

	December 31, 2016	December 31, 2015
	(In millions)	
Debt principal	$ 725.6	$ 650.6
Cash and cash equivalents	(410.3)	(208.5)
Net debt	$ 315.3	$ 442.1

Because our method for calculating the Non-GAAP measures may differ from other companies' methods, the Non-GAAP measures presented above may not be comparable to similarly titled measures reported by other companies. These measures are not recognized in accordance with GAAP, and we do not intend for this information to be considered in isolation or as a substitute for GAAP measures.

Environmental Matters

Our policy is to conduct our businesses with due regard for the preservation and protection of the environment. We devote a significant amount of resources and management attention to environmental matters and actively manage our ongoing processes to comply with environmental laws and regulations. We are involved in the remediation of environmental conditions that resulted from generally accepted manufacturing and disposal practices at certain plants in the 1950s and 1960s. In addition, we have been designated a Potentially Responsible Parties ("PRP") with other companies at third party sites undergoing investigation and remediation.

Estimating environmental remediation costs is difficult due to the significant uncertainties inherent in these activities, including the extent of remediation required, changing governmental regulations and legal standards regarding liability, evolving technologies and the long period of time over which most remediation efforts take place. We:

- accrue for costs associated with the remediation of environmental pollution when it becomes probable that a liability has been incurred and when our proportionate share of the costs can be reasonably estimated; and
- record related estimated recoveries when such recoveries are deemed probable.

In addition to the costs associated with environmental remediation discussed above, we incur expenditures for recurring costs associated with managing hazardous substances or pollutants in ongoing operations which totaled $6.5 million in fiscal 2016, $5.5 million in fiscal 2015, $7.1 million in fiscal 2014, and $0.3 million in the one month ended December 31, 2015.

The following table summarizes our recoverable amounts, environmental reserves, and range of liability, as of December 31, 2016:

	Recoverable Amount (1)	Reserve	Estimated Range of Liability
		(In millions)	
Aerojet Rocketdyne — Sacramento	$159.6	$210.1	$210.1 - $326.0
Aerojet Rocketdyne — BPOU	96.3	126.8	126.8 - 178.3
Other Aerojet Rocketdyne sites	8.5	8.5	8.5 - 14.4
Total Aerojet Rocketdyne	264.4	345.4	345.4 - 518.7
Other sites	0.6	4.3	4.3 - 6.3
Total	$265.0	$349.7	$349.7 - $525.0

(1) Excludes the receivable from Northrop of $68.0 million as of December 31, 2016 related to environmental costs already paid (and therefore not reserved) in prior years and reimbursable under the Northrop Agreement.

Reserves

We review 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 a new project agreement as proposed by Aerojet Rocketdyne, which the Water Entities and the EPA have rejected. There can be no assurance that the term of the new project agreement will not be longer than the term we estimated and/or broader in scope and, if so, we may be required to make an additional accrual to reflect the longer term and/or broader scope. 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 our 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 we periodically evaluate and revise these estimates as new information becomes available. We 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 to design, construct, and implement the remedy.

A summary of our environmental reserve activity:

	Aerojet Rocketdyne-Sacramento	Aerojet Rocketdyne-BPOU	Other Aerojet Rocketdyne Sites	Total Aerojet Rocketdyne	Other (1)	Total Environmental Reserve
			(In millions)			
November 30, 2013	$128.0	$ 26.9	$ 8.2	$163.1	$ 8.2	$171.3
Additions	24.0	4.5	3.3	31.8	1.9	33.7
Expenditures	(21.6)	(9.7)	(3.4)	(34.7)	(4.3)	(39.0)
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

(1) Related to the Company's legacy business operations that are primarily non-recoverable environmental remediation expenses from the U.S. government.

The $87.4 million of environmental reserve additions in fiscal 2016 was primarily due to the following items: (i) in fiscal 2016 we reached a decision with the U.S. government on the treatment of certain utility costs related to the Sacramento site resulting in a reserve increase of $59.4 million for the estimated impact over the current period and a fifteen year reserve period; (ii) $10.4 million of additional operations and maintenance for treatment facilities; (iii) $5.9 million of remediation related to inactive test sites and landfill clean-up; and (iv) $2.7 million of remediation related to operable treatment units; and (v) $9.0 million related to other environmental clean-up matters.

The $0.5 million of environmental reserve additions in the one month ended December 31, 2015 were insignificant.

The $176.6 million of environmental reserve additions in fiscal 2015 was primarily due to the following items: (i) $126.3 million associated with our detailed review estimate related to the BPOU site to reflect the anticipated costs through the term of a new project agreement, and the amount reserved is based on the proposal by Aerojet Rocketdyne; (ii) $13.8 million associated with water replacement; (iii) $13.5 million of remediation related to operable treatment units; (iv) $5.2 million of additional operations and maintenance for treatment facilities; and (v) $17.8 million related to other environmental clean-up matters.

The $33.7 million of environmental reserve additions in fiscal 2014 was primarily due to the following items: (i) $8.1 million of additional operations and maintenance for treatment facilities; (ii) $5.8 million associated with annual detailed review estimate updates; (iii) $4.0 million associated with water replacement; (iv) $3.0 million of remediation related to operable treatment units; (v) $1.5 million of costs related to the Camden, Arkansas site; and (vi) $11.3 million related to other environmental clean-up matters.

The effect of the final resolution of environmental matters and our obligations for environmental remediation and compliance cannot be predicted with complete certainty due to changes in both the amount and timing of future expenditures as well as regulatory or technological changes. We believe, on the basis of presently available information, that the resolution of environmental matters and our obligations for environmental remediation and compliance will not have a material adverse effect on our business, liquidity and/or financial condition. We will continue our 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. A summary of the Pre-Close Environmental Costs (in millions):

Pre-Close Environmental Costs	$ 20.0
Amount spent through December 31, 2016	(19.9)
Remaining Pre-Close Environmental Costs	$ 0.1

We expect that the cumulative clean-up costs will exceed $20 million in fiscal 2017 after which ARC will be responsible for such costs 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 is disputing certain costs that Aerojet Rocketdyne is attributing to the $20 million Pre-Close Environmental Costs. Aerojet Rocketdyne is evaluating the claim.

Estimated Recoveries

On January 12, 1999, Aerojet Rocketdyne and the U.S. government implemented the Global Settlement resolving certain prior environmental and facility disagreements, with retroactive effect to December 1, 1998. Under the Global Settlement, Aerojet Rocketdyne and the U.S. government resolved disagreements about an appropriate cost-sharing ratio with respect to the cleanup costs of the environmental contamination. The Global Settlement cost-sharing ratio does not have a defined term over which costs will be recovered. Additionally, in conjunction with the sale of the EIS business in 2001, Aerojet Rocketdyne entered into 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 a cumulative limitation.

Most of our environmental costs are incurred by our Aerospace and Defense segment, and certain of these future costs are allowable to be included in our contracts with the U.S. government and allocable to Northrop until the cumulative expenditure limitation is reached. Excluding the receivable from Northrop of $68.0 million discussed in Note 7(d) in notes to consolidated financial statements in Item 8 of this Report, we currently estimate approximately 24% of our future Aerospace and Defense segment environmental costs will not likely be reimbursable and are expensed.

Allowable environmental costs are charged to our 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 under U.S. government contracts and programs.

Pursuant to the Northrop Agreement, environmental expenditures to be reimbursed are subject to annual limitations and the total reimbursements are limited to a ceiling of $189.7 million. A summary of the Northrop Agreement activity (in millions):

Total reimbursable costs under the Northrop Agreement	$ 189.7
Amount reimbursed through December 31, 2016	(119.2)
Potential future cost reimbursements available	70.5
Receivable from Northrop in excess of the annual limitation included in the consolidated balance sheet as of December 31, 2016	(68.0)
Potential future recoverable amounts available under the Northrop Agreement	$ 2.5

While we are 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 our operating results, financial condition, and/or cash flows.

The following table summarizes the activity in the current and non-current recoverable amounts from Northrop and the U.S. government:

	Recoverable Environmental Remediation — U.S. government	Recoverable Environmental Remediation — Northrop	Total Recoverable — U.S. government and Northrop
		(In millions)	
November 30, 2013	$ 99.2	$87.9	$187.1
Additions	21.4	—	21.4
Reimbursements	(23.2)	(7.8)	(31.0)
Other adjustments	1.7	5.4	7.1
Change in Northrop noncurrent receivable (see discussion above)	—	(3.2)	(3.2)
November 30, 2014	99.1	82.3	181.4
Additions	133.6	—	133.6
Reimbursements	(27.2)	(4.0)	(31.2)
Other adjustments	21.1	4.3	25.4
Change in Northrop noncurrent receivable (see discussion above)	—	(6.1)	(6.1)
November 30, 2015	226.6	76.5	303.1
Additions	0.4	—	0.4
Reimbursements	(3.3)	(0.5)	(3.8)
Other adjustments	0.2	—	0.2
Change in Northrop noncurrent receivable (see discussion above)	—	0.5	0.5
December 31, 2015	223.9	76.5	300.4
Additions	67.3	—	67.3
Reimbursements	(30.7)	(4.4)	(35.1)
Other adjustments	2.0	(0.4)	1.6
Change in Northrop noncurrent receivable (see discussion above)	—	(1.2)	(1.2)
December 31, 2016	$262.5	$70.5	$333.0

Fiscal 2016 Activity

Fiscal 2016 additions — The $67.3 million of additions to the environmental recoverable asset was primarily due to the following items: (i) the treatment of certain utility costs related to the Sacramento site resulting in an increase of $45.0 million; (ii) $7.8 million of additional operations and maintenance for treatment facilities; (iii) $5.1 million of remediation related to inactive test sites and landfill clean-up; and (iv) $2.0 million of remediation related to operable treatment units; and (v) $7.4 million related to other environmental clean-up matters.

Fiscal 2016 reimbursements — The $35.1 million of environmental expenditures that were reimbursed related to the following items: (i) $15.7 million for operations and maintenance of treatment facilities; (ii) $3.8 million associated with water supply replacement; (iii) $3.6 million of remediation related to operable treatment units; (iv) $2.7 million associated with test sampling and analysis; (v) $2.1 million of costs related to the Camden, Arkansas site; and (vi) $7.2 million related to other environmental clean-up matters.

One month ended December 31, 2015 Activity

One month ended December 31, 2015 additions — The $0.4 million of additions to the environmental recoverable were insignificant.

One month ended December 31, 2015 reimbursements — The $3.8 million of environmental expenditures that were reimbursed related primarily to $3.6 million of additional operations and maintenance for treatment facilities.

Fiscal 2015 Activity

Fiscal 2015 additions — The $133.6 million of additions to the environmental recoverable asset was primarily due to the following items: (i) $95.6 million associated with our detailed review estimate related to the BPOU site to reflect the anticipated costs through the term of a new project agreement, and the amount reserved is based on the proposal by Aerojet Rocketdyne; (ii) $10.5 million associated with water replacement; (iii) $10.2 million of remediation related to operable treatment units; (iv) $3.9 million of additional operations and maintenance for treatment facilities; and (v) $13.4 million related to other environmental clean-up matters.

Fiscal 2015 reimbursements — The $31.2 million of environmental expenditures that were reimbursed related to the following items: (i) $13.8 million for operations and maintenance of treatment facilities; (ii) $6.8 million of remediation related to operable treatment units; (iii) $3.4 million associated with water supply replacement; (iv) $2.8 million associated with test sampling and analysis; (v) $1.1 million of costs related to the Camden, Arkansas site; and (vi) $3.3 million related to other environmental clean-up matters.

Fiscal 2015 other adjustments — The $25.4 million of other adjustments primarily relates to the impact of the Advance Agreement with the U.S. government revising the percent of environmental costs allocable to Northrop and the U.S. government. We currently estimate approximately 24% of our Aerospace and Defense segment environmental costs will not likely be reimbursable and are expensed to the consolidated statements of operations.

Fiscal 2014 Activity

Fiscal 2014 additions — The $21.4 million of additions to the environmental recoverable asset was primarily due to the following items: (i) $5.1 million of additional operations and maintenance for treatment facilities; (ii) $3.7 million associated with annual detailed review estimate updates; (iii) $2.5 million associated with water replacement; (iv) $1.9 million of remediation related to operable treatment units; (v) $1.5 million of additional estimated costs related to the Camden, Arkansas site; and (vi) $6.7 million related to other environmental clean-up matters.

Fiscal 2014 reimbursements — The $31.0 million of environmental expenditures that were reimbursed related to the following items: (i) $12.6 million for operations and maintenance of treatment facilities; (ii) $8.1 million of remediation related to operable treatment units; (iii) $2.7 million associated with test sampling and analysis; (iv) $1.7 million of additional estimated costs related to the Camden, Arkansas site; (v) $1.3 million associated with water supply replacement; and (vi) $4.6 million related to other environmental clean-up matters.

Environmental reserves and 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, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Estimated recoverable amounts under U.S. government contracts and Northrop	$69.1	$159.3	$22.9	$ 0.6
Expense (benefit) to consolidated statement of operations	18.3	17.3	10.8	(0.1)
Total environmental reserve adjustments	$87.4	$176.6	$33.7	$ 0.5

Recently Adopted Accounting Pronouncements

See Note 1(x) to our consolidated financial statements in Item 8. Consolidated Financial Statements of this Report for information relating to our discussion of the effects of recent accounting pronouncements.

Liquidity and Capital Resources

Net Cash Provided By (Used In) Operating, Investing, and Financing Activities

The change in cash and cash equivalents was as follows:

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Net Cash Provided by (Used in) Operating Activities	$158.4	$ 65.1	$150.6	$(2.3)
Net Cash Used in Investing Activities	(47.1)	(35.8)	(35.7)	(1.2)
Net Cash Provided by (Used in) Financing Activities	90.5	(84.1)	(46.6)	0.9
Net Increase (Decrease) in Cash and Cash Equivalents	$201.8	$(54.8)	$ 68.3	$(2.6)

Net Cash Provided By Operating Activities

The $158.4 million of cash provided by operating activities in fiscal 2016 was primarily the result of cash provided by income from continuing operations before income taxes adjusted for non-cash items which generated $176.0 million which was primarily offset by cash used to fund working capital (defined as accounts receivables, inventories, other current assets, accounts payable, contract advances, real estate activities, and other current liabilities) of $44.0 million. The cash used to fund working capital was primarily due to (i) a decrease of $37.5 million in other current liabilities primarily due to the timing of payments associated with income taxes and interest expense and (ii) an increase of $28.9 million in inventories primarily due to the timing of milestone billings and deliveries on the Atlas V and Standard Missile programs. The funding of working capital was partially offset by a decrease of $33.1 million in accounts receivable primarily due to the timing of cash receipts.

The $65.1 million of cash provided by operating activities in fiscal 2015 was primarily the result of cash provided by loss from continuing operations before income taxes adjusted for non-cash items which generated

$120.5 million which was offset by cash used to fund the following: (i) a decrease of $17.8 million in other current liabilities primarily related to the CIP, cost reduction initiatives, and the amounts paid to UTC related to Transition Service Agreements; (ii) an increase of $19.5 million in inventories primarily due to the timing of milestone billings and deliveries on the PAC-3 and Standard Missile programs; and (iii) $7.8 million of real estate activities.

The $150.6 million of cash provided by operating activities in fiscal 2014 was primarily the result of loss from continuing operations before income taxes adjusted for non-cash items which generated $127.4 million. In addition, we generated $69.6 million from working capital. The cash generated from working capital was primarily due to an increase of $96.9 million in cash advances on long-term contracts. This amount was partially offset by the cash used for the Rocketdyne Business integration activities. In addition, we paid $4.9 million for income taxes, net in fiscal 2014.

The $2.3 million of cash used in operating activities in December 2015 was primarily due to the result of cash used to fund working capital. The funding of working capital is primarily due to a decrease of $41.0 million in accounts payable related to the timing of payments partially offset by an increase of $27.2 million in cash advances on long-term contracts. Additionally, income from continuing operations before income taxes adjusted for non-cash items generated $16.9 million.

Net Cash Used In Investing Activities

During fiscal 2016, 2015, and 2014 and the one month ended December 31, 2015, we had capital expenditures of $47.6 million, $36.8 million, $43.4 million, and $1.2 million, respectively. The increase in capital expenditures in fiscal 2016 compared to fiscal 2015 is primarily related to construction projects associated with supporting our Competitive Improvement Plan.

Net Cash Provided By (Used In) Financing Activities

During fiscal 2016, we had $700.6 million in debt cash payments and borrowings of $800.0 million (see below). During the one month ended December 31, 2015, we had immaterial financing activities. During fiscal 2015, we had debt cash payments of $81.2 million. During fiscal 2014, we repurchased 3.5 million of our common shares at a cost of $64.5 million. We also issued $189.0 million of debt and had $166.3 million in debt cash payments. In addition, we incurred $4.2 million of debt issuance costs.

Debt Activity and Covenants

Our debt principal activity since December 31, 2015 was as follows:

	December 31, 2015	Borrowings	Cash Payments	Non-cash Activity	December 31, 2016
			(In millions)		
Term loan	$ 92.5	$400.0	$(102.5)	$ —	$390.0
Revolver	—	100.0	(100.0)	—	—
7 $^1/_8$% Notes	460.0	—	(484.6)	24.6	—
4 $^1/_{16}$% Debentures	84.6	—	—	(49.0)	35.6
2 $^1/_4$% Notes	—	300.0	—	—	300.0
2 $^1/_4$% Convertible Subordinated Debentures	0.2	—	(0.2)	—	—
Delayed draw term loan	13.0	—	(13.0)	—	—
Other debt	0.3	—	(0.3)	—	—
Total Debt and Borrowing Activity	$650.6	$800.0	$(700.6)	$(24.4)	$725.6

The Senior Credit Facility contains covenants requiring us 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 leverage ratio (the

"Consolidated Net Leverage Ratio") not to exceed (a) 4.00 to 1.00 for periods ending December 31, 2016 through September 30, 2017; (b) 3.75 to 1.00 for periods ending from December 31, 2017 through September 30, 2018; and (c) 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. We may generally make certain investments, redeem debt subordinated to the Senior Credit Facility and make certain restricted payments (such as stock repurchases) if our Consolidated Net Leverage Ratio does not exceed 3.25 to 1.00 pro forma for such transaction. We are 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, 2016	Required Ratios
Consolidated Interest Coverage Ratio, as defined under the Senior Credit Facility	11.07 to 1.00	Not less than: 3.00 to 1.00
Consolidated Net Leverage Ratio, as defined under the Senior Credit Facility	2.59 to 1.00	Not greater than: 4.00 to 1.00

We were in compliance with our financial and non-financial covenants as of December 31, 2016.

Outlook

Short-term liquidity requirements consist primarily of recurring operating expenses, including but not limited to costs related to our capital and environmental expenditures, company-funded R&D expenditures, debt service requirements, and retirement benefit plans. We believe that our existing cash and cash equivalents and availability under our revolving credit facility will provide sufficient funds to meet our operating plan, which includes our CIP and AR1 engine development costs, for the next twelve months. The operating plan for this period provides for full operation of our businesses, and interest and principal payments on our debt. As of December 31, 2016, we had $304.7 million of available borrowings under our Senior Credit Facility. Based on our existing debt agreements, we were in compliance with our financial and non-financial covenants as of December 31, 2016. Our failure to comply with these covenants could result in an event of default that, if not cured or waived by the lenders, could result in the acceleration of the Senior Credit Facility and 2 ¼% Notes. In addition, our failure to pay principal and interest when due is a default under the Senior Credit Facility, and in certain cases, would cause a cross default on the 2 ¼% Notes.

In December 2016, we notified holders of our 4 $^{1}/_{16}$% Debentures that we 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.

We are committed to a cash management strategy that maintains liquidity to adequately support the operation of the business, our growth strategy and to withstand unanticipated business volatility. We believe that cash generated from operations, together with our current levels of cash and investments as well as availability under our revolving credit facility, should be sufficient to maintain our ongoing operations, support working capital requirements, fund the CIP, make cash contributions of approximately $72.0 million in fiscal 2017 to our tax-qualified defined benefit pension plan, and fund anticipated capital expenditures related to projected business growth. Our cash management strategy includes maintaining the flexibility to pay down debt and/or repurchase shares depending on economic and other conditions. In connection with the implementation of our cash management strategy, our management may seek to retire or purchase our outstanding debt through cash purchases and/or exchanges for equity securities, in open market purchases, privately negotiated transactions or otherwise if we believe that it is in our best interests. Such repurchases or exchanges, if any, will depend on prevailing market conditions, our liquidity requirements, contractual restrictions and other factors. The amounts involved may be material.

Potential future acquisitions depend, in part, on the availability of financial resources at an acceptable cost of capital. We expect to utilize cash on hand and cash generated by operations, as well as cash available under our Senior Credit Facility, which may involve renegotiation of credit limits to finance future acquisitions. Other sources of capital could include the issuance of common and/or preferred stock, and the placement of debt. We periodically evaluate capital markets and may access such markets when circumstances appear favorable. We believe that sufficient capital resources will be available from one or several of these sources to finance future acquisitions. However, no assurances can be made that acceptable financing will be available, or that acceptable acquisition candidates will be identified, or that any such acquisitions will be accretive to earnings.

As disclosed in Notes 7(b) and 7(c) of the notes to consolidated financial statements, we have exposure for certain legal and environmental matters. We believe that it is currently not possible to estimate the impact, if any, that the ultimate resolution of certain of these matters will have on our financial position, results of operations, or cash flows.

Major factors that could adversely impact our forecasted operating cash flows and our financial condition are described in Part I, Item 1A. Risk Factors. In addition, our liquidity and financial condition will continue to be affected by changes in prevailing interest rates on the portion of debt that bears interest at variable interest rates.

Contractual Obligations

We have contractual obligations and commitments in the form of debt obligations, operating leases, certain other liabilities, and purchase commitments. The following table summarizes our contractual obligations as of December 31, 2016:

	Payments due by period				
	Total	**Less than 1 year**	**1-3 years**	**3-5 years**	**After 5 years**
			(In millions)		
Contractual Obligations:					
Long-term debt:					
Senior debt	$ 390.0	$20.0	$ 55.0	$315.0	$ —
Convertible senior notes	300.0	—	—	—	300.0
Convertible subordinated notes (1)	35.6	35.6	—	—	—
Interest on long-term debt (2)	93.9	18.3	34.5	27.9	13.2
Postretirement medical and life insurance benefits (3)	38.0	5.2	9.6	8.2	15.0
Operating leases	111.9	17.4	29.2	25.0	40.3
Conditional asset retirement obligations (4)	30.6	—	—	8.4	22.2
Total	$1,000.0	$96.5	$128.3	$384.5	$390.7

(1) In December 2016, we notified holders of our 4 $^{1}/_{16}$% Debentures that we would redeem, in February 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.

(2) Includes interest on variable debt calculated based on interest rates at December 31, 2016.

(3) The payments presented above are expected payments for the next 10 years. The payments for postretirement medical and life insurance benefits reflect the estimated benefit payments of the plans using the provisions currently in effect. The obligation related to postretirement medical and life insurance benefits is actuarially determined on an annual basis. The estimated payments have been reduced to reflect the provisions of the Medicare Prescription Drug, Improvement and Modernization Act of 2003. A substantial portion of these amounts are recoverable through our contracts with the U.S. government.

(4) The conditional asset retirement obligations presented are related to our Aerospace and Defense segment and are allowable costs under our contracts with the U.S. government.

As of December 31, 2016, the liability for uncertain income tax positions was $32.0 million. Due to the uncertainty regarding the timing of potential future cash flows associated with these liabilities, we are unable to make a reasonably reliable estimate of the amount and period in which these liabilities might be paid.

We may be required to make significant cash contributions in the future to fund our retirement benefit plans, a portion of which we may not be able to immediately recover from our U.S. government contracts. We expect to make cash contributions of approximately $72.0 million to our tax-qualified defined benefit pension plan in fiscal 2017 of which $37.0 million is expected to be recoverable in our U.S. government contracts in fiscal 2017 with the remaining $35.0 million being potentially recoverable in our U.S. government contracts in the future.

We also issue purchase orders and make other commitments 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 was terminated.

Arrangements with Off-Balance Sheet Risk

As of December 31, 2016, arrangements with off-balance sheet risk consisted of:

- $45.3 million in outstanding commercial letters of credit expiring throughout 2017, the majority of which may be renewed, primarily to collateralize obligations for environmental remediation and insurance coverage.
- $44.5 million in outstanding surety bonds to primarily satisfy indemnification obligations for environmental remediation coverage.
- Up to $120.0 million aggregate in guarantees by us of Aerojet Rocketdyne's obligations to U.S. government agencies for environmental remediation activities.
- Guarantees, jointly and severally, by our material domestic subsidiaries of their obligations under our Senior Credit Facility.

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

We provide product warranties in conjunction with certain product sales. The majority of our warranties are one-year standard warranties for parts, workmanship, and compliance with specifications. On occasion, we have made commitments beyond the standard warranty obligation. While we have 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 our revenue recognition methodology as allowed under GAAP for that particular contract.

Critical Accounting Policies

Our financial statements are prepared in accordance with GAAP that offer acceptable alternative methods for accounting for certain items affecting our financial results, such as determining inventory cost, depreciating long-lived assets, and recognizing revenues.

The preparation of financial statements requires the use of estimates, assumptions, judgments, and interpretations that can affect the reported amounts of assets, liabilities, revenues, and expenses, the disclosure of contingent assets and liabilities and other supplemental disclosures. The development of accounting estimates is the responsibility of our management. Management discusses those areas that require significant judgment with the audit committee of our board of directors. All of our financial disclosures in our filings with the SEC have been reviewed with the audit committee. Although we believe that the positions we have taken with regard to uncertainties are reasonable, others might reach different conclusions and our positions can change over time as more information becomes available. If an accounting estimate changes, its effects are accounted for prospectively and, if significant, disclosed in notes of the consolidated financial statements.

The areas most affected by our accounting policies and estimates are revenue recognition, other contract considerations, goodwill, retirement benefit plans, litigation, environmental remediation costs and recoveries, and income taxes. Except for income taxes and litigation matters related to discontinued operations, which are not allocated to our operating segments, these areas affect the financial results of our business segments.

For a discussion of all of our accounting policies, including the accounting policies discussed below, see Note 1 of the consolidated financial statements.

Revenue Recognition

We consider 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, we recognize sales based upon our progress against the contracted performance objectives. Progress is generally measured as costs are incurred (cost-to-cost method) or as units are delivered to customers (units-of-delivery) depending on the contractual terms and scope of work of the each contract. We use 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, we recognize sales as costs are incurred. We use the units-of-delivery measure to recognize sales when contracts require unit deliveries on a frequent and routine basis. Under units-of-delivery, we recognize 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. We recognize 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 our performance against pre-established targets or other criteria. These targets may include factors such as cost, performance, quality, and schedule. We recognize variable consideration over the contract performance period based upon estimates of performance against the established criteria.

The recognition of sales and profit on long-term contracts requires the use of assumptions and estimates related to the contract value or total contract revenue, variable consideration, the total cost at completion and the measurement of progress towards completion. Due to the nature of the programs, developing these estimates requires the use of significant judgment. Estimates are continually evaluated as work progresses and are revised as necessary. Factors considered 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 and inflationary trends, schedule and performance delays, availability of funding from the customer, and the recoverability of costs incurred outside the original contract included in any estimates to complete. We continually evaluate the facts, circumstances, and assumptions supporting these estimates. Any adjustments to net sales resulting from changes in estimates are recognized in the current period for the inception-to-date effect of such changes. Changes in estimates and assumptions related to the status of certain long-term contracts may have a material effect on our operating results.

The following table summarizes the impact from changes in estimates and assumptions on the statement of operations on key contracts, representing 94% of our aerospace and defense segment net sales over the last three fiscal years and one month ended December 31, 2015, accounted for under the percentage-of-completion method of accounting:

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions, except per share amounts)			
Favorable effect of the changes in contract estimates on income (loss) from continuing operations before income taxes	$14.1	$41.2	$ 9.2	$11.7
Favorable effect of the changes in contract estimates on net income (loss)	8.5	24.7	5.5	7.0
Favorable effect of the changes in contract estimates on basic net income (loss) per share	0.13	0.40	0.10	0.11
Favorable effect of the changes in contract estimates on diluted net income (loss) per share	0.11	0.40	0.10	0.09

The fiscal 2016 favorable changes in contract estimates were primarily driven by better than expected 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 better than expected 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 driven by the following (i) better than expected performance on space launch systems and missile defense programs primarily due to affordability initiatives and lower overhead costs and (ii) unexpected favorable contract performance on close-out activities on the J-2X program. The fiscal 2014 favorable changes in contract estimates were primarily driven by better than expected performance on a space launch system program due to favorable contract negotiations and affordability initiatives partially offset by unanticipated inefficiencies and cost growth on the Antares AJ-26 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. We recognize 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 our books, capitalized entitlement costs, and an estimate of our 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.

Other Contract Considerations

Our sales are driven by pricing based on costs incurred to produce products and perform services under contracts with the U.S. government. Cost-based pricing is determined under the FAR and CAS. The FAR and CAS provide guidance on the types of costs that are allowable and allocable in establishing prices for goods and services under U.S. government contracts. For example, costs such as charitable contributions, advertising, interest expense, and public relations are unallowable, and therefore not recoverable through sales. In addition, we may enter into agreements with the U.S. government that address the subjects of allowability and allocability of costs to contracts for specific matters.

We closely monitor compliance with and the consistent application of our critical accounting policies related to contract accounting. We review the status of contracts through periodic contract status and performance reviews. Also, regular and recurring evaluations of contract cost, scheduling and technical matters are performed by management personnel independent from the business segment performing work under the contract. Costs incurred and allocated to contracts with the U.S. government are reviewed for compliance with regulatory standards by our personnel, and are subject to audit by the DCAA. Accordingly, we record an allowance on our unbilled receivables for amounts of potential contract overhead costs which may not be successfully negotiated and collected.

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. 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. All of our recorded goodwill resides in the Aerospace and Defense reporting unit. We evaluated goodwill using a “Step Zero” analysis as of October 1, 2016, September 1, 2016, and September 1, 2015, and determined that goodwill was not impaired.

We evaluate 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 two-step 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, we will need to proceed to the first step (“Step One”) of the two-step goodwill impairment test. In evaluating whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, relevant events and circumstances as discussed below shall be assessed. If, after assessing the totality of events or circumstances, we determine that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then the first and second steps of the impairment test are unnecessary.

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. If the carrying amount of the reporting unit’s goodwill exceeds the implied fair value of that goodwill, an impairment loss is recorded.

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

During the year ended December 31, 2016, and in connection with our change in fiscal year end from November 30 to December 31, we changed our 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 our long-range planning cycle, the timing of which has changed consistent with the change in our fiscal year end and which is a significant element in the testing process. In connection with this change, we 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 does not delay, accelerate or avoid an impairment charge.

Retirement Benefit Plans

Our defined benefit pension plan future benefit accrual was discontinued in fiscal 2009. In addition, we provide 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. We also sponsor a defined contribution 401(k) plan and participation in the plan is available to all employees.

Retirement benefits are a significant cost of doing business and represent obligations that will be ultimately settled far in the future and therefore are subject to estimates. We generally are able to recover cash contributions related to our tax-qualified defined benefit pension plan as allowable costs on our U.S. government contracts, but there is a lag between when we contribute cash to our tax-qualified defined benefit pension plan under pension funding rules and recover it under our U.S. government contracts. Our pension and medical and life insurance benefit obligations and related costs are calculated using actuarial concepts in accordance with GAAP. We are required to make assumptions regarding such variables as the expected long-term rate of return on assets and the discount rate applied to determine service cost and interest cost to arrive at income or expense for the year.

We used the following discount rate to determine the benefit obligations for the applicable period:

	Pension Benefits		Medical and Life Insurance Benefits	
	As of December 31,		As of December 31,	
	2016	2015	2016	2015
Discount rate	4.02%	4.36%	3.68%	3.99%

We used the following assumptions to determine the retirement benefit expense for the applicable period:

	Pension Benefits				Medical and Life Insurance Benefits			
	Year Ended			One month ended	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
Discount rate	4.36%	3.96%	4.54%	4.26%	3.99%	3.54%	3.98%	3.87%
Expected long-term rate of return on assets	7.00%	8.00%	8.00%	7.00%	*	*	*	*

* Not applicable

The discount rate represents the current market interest rate used to determine the present value of future cash flows currently expected to be required to settle pension obligations. Based on market conditions, discount rates can experience significant variability. Changes in discount rates can significantly change the liability and, accordingly, the funded status of the pension plan. 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. We evaluated the historical investment performance, current and expected asset allocation, and, with input from our external advisors, developed best estimates of future investment performance. Based on this analysis, we decided to change the long-term expected rate of return on assets from 8.0% to 7.0% effective December 1, 2015.

Market conditions and interest rates significantly affect assets and liabilities of our 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 we utilize 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 benefit costs 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 pension costs, future pension costs are impacted by changes in the market value of assets and changes in interest rates.

In addition, we maintain medical and life insurance benefits other than pensions that are not funded.

A one percentage point change in the key assumptions would have the following effects on the projected benefit obligations as of December 31, 2016 and on retirement benefit expense for fiscal 2016:

	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	$ 22.8	$ 158.3	$ 10.0	$(0.3)	$(1.0)
1% increase	(19.5)	(133.0)	(10.0)	0.4	1.1

Contingencies and Litigation

We are currently involved in certain legal proceedings and, as required, have accrued our estimate of the probable costs and recoveries 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 for any particular quarterly or annual period could be materially affected by changes in assumptions or the effectiveness of strategies related to these proceedings. See Notes 7(b) and 7(c) in notes to consolidated financial statements for more detailed information on litigation exposure.

Reserves for Environmental Remediation and Recoverable from the U.S. Government and Other Third Parties for Environmental Remediation Costs

For a discussion of our accounting for environmental remediation obligations and costs and related legal matters, see "Environmental Matters" above and Notes 7(c) and 7(d) in notes to consolidated financial statements.

We accrue for costs associated with the remediation of environmental contamination when it becomes probable that a liability has been incurred, and when our costs can be reasonably estimated. Management has a well-established process in place to identify and monitor our environmental exposures. In most cases, only a range of reasonably probable costs can be estimated. In establishing the 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 we may be jointly or severally liable.

At the time a liability is recorded for future environmental costs, we record an asset for estimated future recoveries that are estimable and probable. Some of our environmental costs are eligible for future recovery in the pricing of our products and services to the U.S. government and under existing third party agreements. We consider the recovery probable based on the Global Settlement, Northrop Agreement, U.S. government contracting regulations, and our long history of receiving reimbursement for such costs.

Income Taxes

We file a consolidated U.S. federal income tax return for the Company and our 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 our deferred tax assets is dependent upon our 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 our past and future performance, the market environment in which we operate, the utilization of tax attributes in the past, the length of carryback and carryforward periods, and evaluation of potential tax planning strategies.

Despite our belief that our tax return positions are consistent with applicable tax laws, we believe 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. Our 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. We determine 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.

Item 7A. *Quantitative and Qualitative Disclosures about Market Risk*

Policies and Procedures

As an element of our normal business practice, we have established policies and procedures for managing our exposure to changes in interest rates.

The objective in managing exposure to interest rate changes is to limit the impact of interest rate changes on earnings and cash flow and to make overall borrowing costs more predictable. To achieve this objective, we may use interest rate hedge transactions or other interest rate hedge instruments to manage the net exposure to interest rate changes related to our portfolio of borrowings and to balance our fixed rate compared to floating rate debt. We did not enter into any interest rate hedge transactions or instruments during the past three fiscal years.

Interest Rate Risk

We are exposed to market risk principally due to changes in interest rates. Debt with interest rate risk includes borrowings under our Senior Credit Facility. The interest rate risk related to our tax-qualified pension plan assets and liabilities can be found in the "Retirement Benefit Plans" discussion above. As of December 31, 2016, our debt principal amounts totaled \$725.6 million: \$335.6 million, or 46%, was at an average fixed rate of 2.44%; and \$390.0 million, or 54%, was at a variable rate of 3.02%.

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

	Fair Value		Principal Amount	
	December 31, 2016	December 31, 2015	December 31, 2016	December 31, 2015
	(In millions)			
Term loan	\$390.0	\$ 92.5	\$390.0	\$ 92.5
7 $^1/_8$% Notes	—	479.6	—	460.0
2 $^1/_4$% Notes	294.9	—	300.0	—
4 $^1/_{16}$% Debentures (1)	70.8	149.5	35.6	84.6
Delayed draw term loan	—	13.0	—	13.0
Other debt	—	0.6	—	0.5
	\$755.7	\$735.2	\$725.6	\$650.6

(1) In December 2016, we notified holders of our 4 $^1/_{16}$% Debentures that we 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.

The fair values of the 7 $^1/_8$% Notes, 2 $^1/_4$% Notes, and 4 $^1/_{16}$% Debentures were determined using broker quotes that are based on open markets for our debt securities (Level 2 securities). The term loans bore interest at variable rates, which adjusted based on market conditions, and their carrying values approximated fair value.

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.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of comprehensive income (loss), of stockholders' equity (deficit), and of cash flows present fairly, in all material respects, the financial position of Aerojet Rocketdyne Holdings, Inc. and its subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for the year ended December 31, 2016, for the one month ended December 31, 2015, and for each of the two years in the period ended November 30, 2015 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company did not maintain, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control — Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) because a material weakness in internal control over financial reporting related to ineffective controls over the completeness and accuracy of the Company's accounting for income taxes, including the income tax provision and related tax assets and liabilities, existed as of that date. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. The material weakness referred to above is described in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. We considered this material weakness in determining the nature, timing, and extent of audit tests applied in our audit of the 2016 consolidated financial statements, and our opinion regarding the effectiveness of the Company's internal control over financial reporting does not affect our opinion on those consolidated financial statements. The Company's management is responsible for these 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 referred to above. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. 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.

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
Los Angeles, California
March 1, 2017

Aerojet Rocketdyne Holdings, Inc.
Consolidated Statements of Operations

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions, except per share amounts)			
Net sales	$1,761.3	$1,708.3	$1,602.2	$96.3
Operating costs and expenses:				
Cost of sales (exclusive of items shown separately below)	1,527.4	1,459.5	1,406.2	75.4
AR1 research and development (see Note 1(r))	—	32.1	—	—
Selling, general and administrative	53.6	49.0	38.2	2.8
Depreciation and amortization	64.9	65.1	63.7	5.1
Other expense, net:				
Loss on debt	34.5	1.9	60.8	—
Legal settlement	—	50.0	—	—
Other	19.7	17.4	13.7	0.2
Total operating costs and expenses	1,700.1	1,675.0	1,582.6	83.5
Operating income	61.2	33.3	19.6	12.8
Non-operating (income) expense:				
Interest income	(0.6)	(0.3)	(0.1)	—
Interest expense	32.5	50.4	52.7	3.8
Total non-operating expense, net	31.9	50.1	52.6	3.8
Income (loss) from continuing operations before income taxes	29.3	(16.8)	(33.0)	9.0
Income tax provision	11.2	0.3	16.3	2.0
Income (loss) from continuing operations	18.1	(17.1)	(49.3)	7.0
(Loss) income from discontinued operations, net of income taxes	(0.1)	0.9	(0.7)	—
Net income (loss)	$ 18.0	$ (16.2)	$ (50.0)	$ 7.0
Income (loss) per share of common stock				
Basic:				
Income (loss) from continuing operations	$ 0.27	$ (0.28)	$ (0.85)	$0.11
(Loss) income from discontinued operations, net of income taxes	—	0.01	(0.01)	—
Net income (loss) per share	$ 0.27	$ (0.27)	$ (0.86)	$0.11
Diluted:				
Income (loss) from continuing operations	$ 0.27	$ (0.28)	$ (0.85)	$0.10
(Loss) income from discontinued operations, net of income taxes	—	0.01	(0.01)	—
Net income (loss) per share	$ 0.27	$ (0.27)	$ (0.86)	$0.10
Weighted average shares of common stock outstanding, basic	65.6	61.1	57.9	62.9
Weighted average shares of common stock outstanding, diluted	65.7	61.1	57.9	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, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Net income (loss)	$18.0	$(16.2)	$ (50.0)	$ 7.0
Other comprehensive income (loss):				
Amortization of net actuarial losses, net of $23.2 million, $31.3 million, $20.4 million, and $1.7 million of income taxes in fiscal 2016, 2015, 2014, and one month ended December 31, 2015, respectively	37.1	49.4	31.1	3.4
Actuarial gains (losses), net of $4.8 million, $36.9 million, $89.8 million and $4.6 million of income taxes in fiscal 2016, 2015, 2014, and one month ended December 31, 2015, respectively	7.5	(56.6)	(136.0)	(8.6)
Amortization of prior service credits, net of $0.4 million, $0.4 million, $0.4 million, and $0.0 million of income taxes in fiscal 2016, 2015, 2014, and one month ended December 31, 2015, respectively	(0.6)	(0.8)	(0.5)	(0.1)
Comprehensive income (loss)	$62.0	$(24.2)	$(155.4)	$ 1.7

See Notes to Consolidated Financial Statements.

Aerojet Rocketdyne Holdings, Inc.
Consolidated Balance Sheets

	As of December 31,	
	2016	2015
	(In millions, except per share amounts)	
ASSETS		
Current Assets		
Cash and cash equivalents	$ 410.3	$ 208.5
Accounts receivable	136.4	169.5
Inventories	185.1	156.2
Recoverable from the U.S. government and other third parties for environmental remediation costs	25.2	24.0
Receivable from Northrop Grumman Corporation ("Northrop")	6.0	6.0
Other current assets, net	91.7	69.2
Total Current Assets	854.7	633.4
Noncurrent Assets		
Property, plant and equipment, net	366.0	363.3
Real estate held for entitlement and leasing	91.8	86.2
Recoverable from the U.S. government and other third parties for environmental remediation costs	239.8	207.2
Receivable from Northrop	62.0	63.2
Deferred income taxes	292.5	324.8
Goodwill	158.1	158.1
Intangible assets	94.4	107.7
Other noncurrent assets, net	90.2	81.6
Total Noncurrent Assets	1,394.8	1,392.1
Total Assets	$2,249.5	$2,025.5
LIABILITIES, REDEEMABLE COMMON STOCK, AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current Liabilities		
Short-term borrowings and current portion of long-term debt	$ 55.6	$ 5.3
Accounts payable	96.2	64.2
Reserves for environmental remediation costs	37.1	32.6
Postretirement medical and life insurance benefits	5.2	6.0
Advance payments on contracts	221.8	230.9
Other current liabilities	167.8	203.1
Total Current Liabilities	583.7	542.1
Noncurrent Liabilities		
Long-term debt	608.0	633.7
Reserves for environmental remediation costs	312.6	269.7
Pension benefits	548.2	580.6
Postretirement medical and life insurance benefits	37.4	44.8
Other noncurrent liabilities	124.0	95.2
Total Noncurrent Liabilities	1,630.2	1,624.0
Total Liabilities	2,213.9	2,166.1
Commitments and contingencies (Note 7)		
Redeemable common stock, par value of $0.10; 0.1 million shares issued and outstanding as of December 31, 2016 and 2015	1.1	1.6
Stockholders' Equity (Deficit)		
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; 69.2 million shares issued and outstanding as of December 31, 2016; 62.9 million shares issued and outstanding as of December 31, 2015	6.9	6.5
Other capital	456.9	342.6
Treasury stock at cost, 3.5 million shares as of December 31, 2016 and 2015	(64.5)	(64.5)
Accumulated deficit	(61.8)	(79.8)
Accumulated other comprehensive loss, net of income taxes	(303.0)	(347.0)
Total Stockholders' Equity (Deficit)	34.5	(142.2)
Total Liabilities, Redeemable Common Stock and Stockholders' Equity (Deficit)	$2,249.5	$2,025.5

See Notes to Consolidated Financial Statements.

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

	Common Stock Shares	Common Stock Amount	Other Capital	Treasury Stock	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity (Deficit)
					(In millions)		
November 30, 2013	59.9	$ 5.9	$280.3	$ —	$(20.6)	$(228.3)	$ 37.3
Net loss	—	—	—	—	(50.0)	—	(50.0)
Amortization of net actuarial losses, net of income taxes	—	—	—	—	—	31.1	31.1
Actuarial losses arising during the period, net of income taxes	—	—	—	—	—	(136.0)	(136.0)
Amortization of prior service credits, net of income taxes	—	—	—	—	—	(0.5)	(0.5)
Reclassification of redeemable common stock	0.1	—	(1.4)	—	—	—	(1.4)
Tax benefit from shares issued under equity plans	—	—	1.3	—	—	—	1.3
Purchase of treasury stock	(3.5)	—	—	(64.5)	—	—	(64.5)
Stock-based compensation and shares issued under equity plans, net	0.4	—	7.2	—	—	—	7.2
November 30, 2014	56.9	5.9	287.4	(64.5)	(70.6)	(333.7)	(175.5)
Net loss	—	—	—	—	(16.2)	—	(16.2)
Amortization of net actuarial losses, net of income taxes	—	—	—	—	—	49.4	49.4
Actuarial losses and prior service costs arising during the period, net of income taxes	—	—	—	—	—	(56.6)	(56.6)
Amortization of prior service credits, net of income taxes	—	—	—	—	—	(0.8)	(0.8)
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
Actuarial losses, net of income taxes	—	—	—	—	—	(8.6)	(8.6)
Amortization of actuarial losses and prior service credits, net of income taxes	—	—	—	—	—	3.3	3.3
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
Amortization of net actuarial losses, net of income taxes	—	—	—	—	—	37.1	37.1
Actuarial gains arising during the period, net of income taxes	—	—	—	—	—	7.5	7.5
Amortization of prior service credits, net of income taxes	—	—	—	—	—	(0.6)	(0.6)
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

See Notes to Consolidated Financial Statements.

Aerojet Rocketdyne Holdings, Inc.
Consolidated Statements of Cash Flows

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
		(In millions)		
Operating Activities				
Net income (loss)	$ 18.0	$ (16.2)	$ (50.0)	$ 7.0
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:				
Loss (income) from discontinued operations, net of income taxes	0.1	(0.9)	0.7	—
Depreciation and amortization	64.9	65.1	63.7	5.1
Amortization of debt discount and financing costs	2.3	2.7	3.6	0.2
Stock-based compensation	12.9	8.6	5.7	(0.4)
Retirement benefits, net	31.8	62.7	31.2	5.4
Loss on debt repurchased	34.4	1.9	60.6	—
Loss on bank amendment	0.1	—	0.2	—
Loss on disposal of long-lived assets	0.5	0.7	2.8	—
Gain on sale of technology	—	(1.0)	(6.8)	—
Tax benefit on stock-based awards	(0.3)	(2.5)	(1.3)	(2.4)
Changes in assets and liabilities, net of effects from acquisition:				
Accounts receivable	33.1	(1.0)	28.9	2.0
Inventories	(28.9)	(19.5)	(32.0)	1.3
Other current assets, net	(22.6)	(25.7)	(7.1)	(4.8)
Real estate held for entitlement and leasing	(6.0)	(7.8)	(15.0)	(0.1)
Receivable from Northrop	1.2	6.1	(2.8)	(0.5)
Recoverable from the U.S. government and other third parties for environmental remediation costs	(33.8)	(127.8)	8.5	3.2
Other noncurrent assets	(7.8)	11.9	(24.1)	0.5
Accounts payable	27.0	(5.1)	(18.2)	(41.0)
Advance payments on contracts	(9.1)	6.3	96.9	27.2
Other current liabilities	(37.5)	(17.8)	19.8	5.6
Deferred income taxes	4.8	(27.6)	(7.1)	(7.1)
Reserves for environmental remediation costs	47.4	140.1	(5.3)	(3.8)
Other noncurrent liabilities and other	25.9	12.0	(0.2)	0.3
Net cash provided by (used in) continuing operations	158.4	65.2	152.7	(2.3)
Net cash used in discontinued operations	—	(0.1)	(2.1)	—
Net Cash Provided by (Used in) Operating Activities	158.4	65.1	150.6	(2.3)
Investing Activities				
Purchase of Rocketdyne Business	—	—	0.2	—
Proceeds from sale of technology	0.5	1.0	7.5	—
Capital expenditures	(47.6)	(36.8)	(43.4)	(1.2)
Net Cash Used in Investing Activities	(47.1)	(35.8)	(35.7)	(1.2)
Financing Activities				
Proceeds from issuance of debt	800.0	—	189.0	—
Debt issuance costs including equity component of convertible debt	(9.5)	—	(4.2)	—
Debt repayments/repurchases	(700.6)	(81.2)	(166.3)	(1.3)
Proceeds from shares issued under equity plans, net	4.2	1.3	0.2	—
Repurchase of shares for option cost and to satisfy tax withholding obligations	(3.9)	(6.7)	(2.1)	(0.2)
Purchase of treasury stock	—	—	(64.5)	—
Tax benefit on stock-based awards	0.3	2.5	1.3	2.4
Net Cash Provided by (Used in) Financing Activities	90.5	(84.1)	(46.6)	0.9
Net Increase (Decrease) in Cash and Cash Equivalents	201.8	(54.8)	68.3	(2.6)
Cash and Cash Equivalents at Beginning of Period	208.5	265.9	197.6	211.1
Cash and Cash Equivalents at End of Period	$ 410.3	$ 211.1	$ 265.9	$208.5
Supplemental disclosures of cash flow information				
Cash paid for interest	$ 39.0	$ 49.3	$ 46.9	$ 2.7
Cash paid for income taxes, net	31.1	27.9	4.9	—
Conversion of debt to common stock	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"), major aerospace and defense prime contractors as well as portions of the commercial sector.

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. The audited results for the one month ended December 31, 2015 and the unaudited results for the one month ended December 31, 2014 are included in these financial statements (see Note 12). Further, as a result of the 2016 calendar, Aerojet Rocketdyne had 53 weeks of operations in the twelve months ended December 31, 2016 compared to 52 weeks of operations in the twelve months ended November 30, 2015 and 2014. The additional week of operations, which occurred in the fourth quarter of fiscal 2016, accounted for $32.2 million in additional net sales.

In August 2004, the Company completed the sale of its GDX Automotive business. In November 2005, the Company completed the sale of the Fine Chemicals business. The remaining related subsidiaries after the sale of GDX Automotive and the Fine Chemicals business are classified as discontinued operations.

In June 2013, the Company acquired the Pratt & Whitney Rocketdyne division (the "Rocketdyne Business") from United Technologies Corporation ("UTC").

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

The accounting standards use a three-tier 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:

		Fair value measurement at December 31, 2016		
	Total	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	$—	$—

		Fair value measurement at December 31, 2015		
	Total	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	$141.8	$141.8	$—	$—

As of December 31, 2016, a summary of cash and cash equivalents and the grantor trust by investment type was as follows:

	Total	Cash and Cash Equivalents	Money Market Funds
		(In millions)	
Cash and cash equivalents	$410.3	$89.8	$320.5
Grantor trust (included as a component of other current and noncurrent assets)	8.0	—	8.0
	$418.3	$89.8	$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, 2016	December 31, 2015	December 31, 2016	December 31, 2015
	(In millions)			
Term loan	$390.0	$ 92.5	$390.0	$ 92.5
7.125% Second-Priority Senior Secured Notes ("7 $^1/_8$% Notes")	—	479.6	—	460.0
2.25% Convertible Senior Notes ("2 $^1/_4$% Notes")	294.9	—	300.0	—
4 $^1/_{16}$% Convertible Subordinated Debentures ("4 $^1/_{16}$% Debentures") (1)	70.8	149.5	35.6	84.6
Delayed draw term loan	—	13.0	—	13.0
Other debt	—	0.6	—	0.5
	$755.7	$735.2	$725.6	$650.6

(1) 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.

The fair values of the 7 $^1/_8$% Notes, 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 loans bore interest at variable rates, which adjusted based on market conditions, and their carrying values 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 under U.S. government procurement regulations for bid and proposal, research and development, and 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	9 - 40 years
Machinery and equipment	5 - 19 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 are capitalized in accordance with the authoritative guidance on accounting for the costs of computer software developed or obtained for internal use. 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.

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. 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. All of the Company's recorded goodwill resides in the Aerospace and Defense reporting unit. The Company evaluated goodwill using a "Step Zero" analysis as of October 1, 2016, September 1, 2016, and September 1, 2015, and determined that goodwill was not impaired.

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 two-step 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 need to proceed to the first step ("Step One") of the two-step goodwill impairment test. In evaluating whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, relevant events and circumstances as discussed below shall be assessed. If, after assessing the totality of events or circumstances, the Company determines that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then the first and second steps of the impairment test are unnecessary.

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. If the carrying amount of the reporting unit's goodwill exceeds the implied fair value of that goodwill, an impairment loss is recorded.

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 does 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. The Company's 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 Agreement, U.S. government contracting regulations, and its long history of receiving reimbursement for such costs (see Notes 7(c) and (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 6).

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 CAROs that are not expected to be retired in the next 15 years, the Company estimated the retirement date of such asset retirement obligations to be 30 years from the date of adoption of the applicable accounting standard. 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, 2013 were as follows (in millions):

Balance as of November 30, 2013	$22.9
Additions and other, net	(0.2)
Accretion	1.7
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

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, as required, has accrued its estimate of the probable costs and recoveries 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 as allowed under GAAP 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 method) or as units are delivered to customers (units-of-delivery) depending on the contractual terms and scope of work of the 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.

The recognition of sales and profit on long-term contracts requires the use of assumptions and estimates related to the contract value or total contract revenue, variable consideration, the total cost at completion and the measurement of progress towards completion. Due to the nature of the programs, developing these estimates requires the use of significant judgment. Factors considered 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 and inflationary trends, schedule and performance 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 continually evaluates the facts, circumstances, and assumptions supporting these estimates. Any adjustments to net sales resulting from changes in estimates are recognized in the current period for the inception-to-date effect of such changes. 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 from changes in estimates and assumptions on the statements of operations on contracts, representing 94% of the Company's aerospace and defense segment net sales over the last three fiscal years and one month ended December 31, 2015, accounted for under the percentage-of-completion method of accounting:

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions, except per share amounts)			
Favorable effect of the changes in contract estimates on income (loss) from continuing operations before income taxes	$14.1	$41.2	$ 9.2	$11.7
Favorable effect of the changes in contract estimates on net income (loss)	8.5	24.7	5.5	7.0
Favorable effect of the changes in contract estimates on basic net income (loss) per share	0.13	0.40	0.10	0.11
Favorable effect of the changes in contract estimates on diluted net income (loss) per share	0.11	0.40	0.10	0.09

The fiscal 2016 favorable changes in contract estimates were primarily driven by better than expected 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 better than expected 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 driven by the following (i) better than expected performance on space launch systems and missile defense programs primarily due to affordability initiatives and lower overhead costs and (ii) unexpected favorable contract performance on close-out activities on the J-2X program. The fiscal 2014 favorable changes in contract estimates were primarily driven by better than expected performance on a space launch system program due to favorable contract negotiations and affordability initiatives partially offset by unanticipated inefficiencies and cost growth on the Antares AJ-26 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 $43.0 million in fiscal 2016, $74.4 million in fiscal 2015, $51.9 million in fiscal 2014, and $4.6 million in the one month ended December 31, 2015. 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 under U.S. government contracts, totaled $513.0 million in fiscal 2016, $485.8 million in fiscal 2015, $481.2 million in fiscal 2014, and $33.7 million in the one month ended December 31, 2015. 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 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, recorded $39.3 million of such reimbursable costs from inception through December 31, 2016. In February 2016, 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. The U.S. Air Force has obligated $115.3 million with Aerojet Rocketdyne contributing $52.7 million and ULA contributing $5.0 million. The total potential U.S. government investment, including all options, is $536.0 million. The total potential investment by Aerojet Rocketdyne and its partners, including all options, is $268.0 million. Under the terms of the AR1 agreement, 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. Through December 31, 2016, the Company has recorded receivables in the aggregate from the U.S. Air Force and ULA of $97.9 million (of which $87.5 million has been collected) related to AR1 engine development which was recorded as a reduction of the AR1 R&D costs. The AR1 inception to date project costs were as follows (in millions):

AR1 R&D costs incurred	$169.3
Less amounts funded by the U.S. Air Force	(92.9)
Less amounts funded by ULA	(5.0)
AR1 R&D costs net of reimbursements	71.4
AR1 R&D costs expensed and not applied to contracts	(32.1)
Net AR1 R&D costs applied to contracts	$ 39.3

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 utilizes the short-cut method for determining the historical pool of windfall tax benefits and the tax law ordering approach for purposes of determining whether an excess tax benefit has been realized.

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.

u. Foreign Currency Transactions

Foreign currency transaction losses and (gains) were $0.1 million in fiscal 2016, $0.1 million in fiscal 2015, $(0.3) million in fiscal 2014, and $0.1 million in the one month ended December 31, 2015, and are reported as a component of discontinued operations. The Company's foreign currency transactions were primarily associated with the Company's former GDX business which is classified as discontinued operations in these consolidated financial statements and notes to consolidated financial statements.

v. 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 2016	91%
Fiscal 2015	90%
Fiscal 2014	92%
One month ended December 31, 2015	85%

The Standard Missile program, which is included in the U.S. government sales and is comprised of multiple contracts, represented 12%, 14%, 12%, and 12% of net sales for fiscal 2016, fiscal 2015, fiscal 2014, and the one month ended December 31, 2015, respectively. The Terminal High Altitude Area Defense program, which is included in the U.S. government sales and is comprised of multiple contracts, represented 13%, 13%, 12%, and 13% of net sales for fiscal 2016, fiscal 2015, fiscal 2014, and the one month ended December 31, 2015, respectively. 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, 2016	November 30, 2015	November 30, 2014	December 31, 2015
Lockheed Martin Corporation ("Lockheed Martin")	27%	29%	28%	24%
ULA	21	19	25	28
Raytheon Company ("Raytheon")	20	20	17	19
NASA	13	11	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,	
	2016	2015
ULA	20%	14%
Lockheed Martin	17	16
Raytheon	17	19
NASA	14	*
The Boeing Company ("Boeing")	13	24

* Less than 10%

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, 2016, 15% of the Company's employees were covered by collective bargaining agreements.

w. Related Parties

The executive chairman of the Company's board of directors is executive chairman of Steel Partners Holdings L.P. ("Steel Holdings"). Steel Holdings owned 100% of SP Corporate Services LLC ("SP Corporate"), which has merged with and into SPH Services, Inc. ("SPH Services"). Steel Holdings owns 100% of SPH Services. The Company received services of $0.9 million, $1.1 million, and zero in fiscal 2016, fiscal 2015, and the one month ended December 31, 2015, respectively, from SPH Services (formerly SP Corporate) primarily for executive search services and the use of an aircraft for business travel. As of December 31, 2016 and 2015, the Company had a payable due to SPH Services of $0.2 million and $0.7 million, respectively.

GAMCO Investors, Inc. ("GAMCO") owned 12% and 14% of the Company's common stock at December 31, 2016 and 2015, respectively. The Company received services of $1.1 million, $1.1 million, $1.2 million, and $0.1 million in fiscal 2016, fiscal 2015, fiscal 2014, 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 10% and 9% of the Company's common stock at December 31, 2016 and 2015, respectively. The Company invests in money market funds managed by BlackRock.

x. Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In April 2015, the Financial Accounting Standards Board ("FASB") issued an amendment to the accounting guidance related to the presentation of debt issuance costs. The amendment requires that debt issuance costs related to a debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts or premiums. The Company adopted this guidance as of December 31, 2015 (see Note 5). 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 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 will be 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 August 2014, the 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 result of the adoption. 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.

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 is for annual reporting periods beginning after December 15, 2017. Earlier application of this guidance is permitted but not before December 15, 2016. 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. The Company plans to adopt the guidance during the first quarter of 2018, retrospectively with the cumulative effect recognized during that quarter. The Company has developed a comprehensive implementation plan across all segments that includes 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 unit-of-delivery method on certain customer contracts and remeasure performance obligations using the cost-to-cost method. The Company expects the adoption of this new standard will have a material impact on net sales recognized in any given fiscal year and will also result in the reclassification of contract related assets on the consolidated balance sheet. The Company does not expect the new guidance to change the total revenue or operating income on the related customer contracts, only the timing of when those revenues are recognized.

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 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 consolidated financial statements.

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. The guidance is effective for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. Early adoption is permitted, but all of the guidance must be adopted in the same period. The new guidance is not expected to have a significant 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 standard is effective for financial statements issued for fiscal years beginning after December 15, 2017, with early adoption permitted. The Company is evaluating the impact of adopting this new accounting guidance on its consolidated financial statements.

In January 2017, the FASB issued an amendment to the accounting guidance related to goodwill impairment. The update eliminates Step 2 from the goodwill impairment test for public business entities. 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 is evaluating the impact of adopting this new accounting guidance on its consolidated financial statements.

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

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

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions, except per share amounts)			
Numerator:				
Income (loss) from continuing operations	$18.1	$(17.1)	$(49.3)	$ 7.0
(Loss) income from discontinued operations, net of income taxes	(0.1)	0.9	(0.7)	—
Net income (loss)	18.0	(16.2)	(50.0)	7.0
Income allocated to participating securities	(0.4)	—	—	(0.2)
Net income (loss) for basic earnings per share	17.6	(16.2)	(50.0)	6.8
Interest on 4 $^{1}/_{16}$% Debentures	—	—	—	0.3
Net income (loss) for diluted earnings per share	$17.6	$(16.2)	$(50.0)	$ 7.1
Denominator:				
Basic weighted average shares	65.6	61.1	57.9	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	65.7	61.1	57.9	72.5
Basic:				
Income (loss) from continuing operations	$0.27	$(0.28)	$(0.85)	$0.11
(Loss) income from discontinued operations, net of income taxes	—	0.01	(0.01)	—
Net income (loss) per share	$0.27	$(0.27)	$(0.86)	$0.11
Diluted:				
Income (loss) from continuing operations	$0.27	$(0.28)	$(0.85)	$0.10
(Loss) income from discontinued operations, net of income taxes	—	0.01	(0.01)	—
Net income (loss) per share	$0.27	$(0.27)	$(0.86)	$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, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
4 $^{1}/_{16}$% Debentures	7.1	11.0	17.9	—
Employee stock options and stock purchase plan	—	0.2	0.2	—
Unvested restricted shares	—	1.6	1.7	—
Total potentially dilutive securities	7.1	12.8	19.8	—

The Company's 2 $^{1}/_{4}$% Notes were not included in the computation of diluted EPS because the 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. Accounts Receivable

	As of December 31,	
	2016	2015
	(In millions)	
Billed	$ 55.7	$114.1
Unbilled	124.1	91.6
Reserve for overhead rate disallowance	(44.5)	(36.8)
Total receivables under long-term contracts	135.3	168.9
Other receivables	1.1	0.6
Accounts receivable	$136.4	$169.5

The net unbilled receivable amounts as of December 31, 2016 expected to be collected after one year are $31.1 million.

b. Inventories

	As of December 31,	
	2016	2015
	(In millions)	
Long-term contracts at average cost	$ 551.9	$ 543.5
Progress payments	(368.2)	(388.5)
Total long-term contract inventories	183.7	155.0
Total other inventories	1.4	1.2
Inventories	$ 185.1	$ 156.2

Long-term contract inventories included an allocation of general and administrative costs incurred throughout fiscal 2016 and the one month ended December 31, 2015 amounted to $257.4 million and $18.3 million, respectively, and the cumulative amount of general and administrative costs in long-term contract inventories is estimated to be $21.1 million and $17.1 million at December 31, 2016 and 2015, respectively.

c. Other Current Assets, net

	As of December 31,	
	2016	2015
	(In millions)	
Recoverable from the U.S. government for Rocketdyne Business integration costs (see Note 3(f))	$11.9	$11.9
Prepaid expenses	16.5	11.9
Receivables, net	17.8	10.6
Indemnification receivable from UTC, net	5.5	15.7
Recoverable from the U.S. government for competitive improvement program obligations (see Note 10)	7.6	9.1
Income tax receivable	26.8	1.6
Other	5.6	8.4
Other current assets, net	$91.7	$69.2

d. Property, Plant and Equipment, net

	As of December 31,	
	2016	2015
	(In millions)	
Land	$ 71.4	$ 71.4
Buildings and improvements	304.2	290.1
Machinery and equipment	540.8	510.6
Construction-in-progress	30.4	32.5
	946.8	904.6
Less: accumulated depreciation	(580.8)	(541.3)
Property, plant and equipment, net	$ 366.0	$ 363.3

Depreciation expense for fiscal 2016, 2015, 2014, and one month ended December 31, 2015 was $49.6 million, $49.8 million, $48.5 million, and $3.8 million respectively. The Company had $5.0 million of property, plant and equipment additions included in accounts payable as of December 31, 2016.

e. Intangible Assets

	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

	As of December 31, 2015		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
		(In millions)	
Customer related	$ 83.8	$28.3	$ 55.5
Intellectual property\trade secrets	34.2	6.6	27.6
Non-compete agreements	0.5	0.4	0.1
Trade name	20.5	1.7	18.8
Acquired technology	18.3	12.6	5.7
Intangible assets	$157.3	$49.6	$107.7

Amortization expense related to intangible assets was $13.3 million, $13.4 million, $13.5 million, and $1.1 million in fiscal 2016, fiscal 2015, fiscal 2014, and one month ended December 31, 2015, respectively.

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

Year Ending December 31,	Future Amortization Expense
	(In millions)
2017	$13.1
2018	13.1
2019	13.0
2020	12.8
2021	9.3
	$61.3

f. Other Noncurrent Assets, net

	As of December 31,	
	2016	2015
	(In millions)	
Recoverable from the U.S. government for Rocketdyne Business integration costs	$10.9	$21.2
Deferred financing costs	3.4	2.1
Recoverable from the U.S. government for conditional asset retirement obligations	20.3	17.8
Grantor trust	16.6	10.3
Note receivable, net	9.0	9.0
Recoverable from the U.S. government for competitive improvement program obligations (see Note 10)	1.3	3.2
Recoverable from the U.S. government for restructuring costs	12.8	3.3
Income tax receivable	10.8	7.9
Other	5.1	6.8
Other noncurrent assets, net	$90.2	$81.6

The current and noncurrent Rocketdyne Business integration costs capitalized as of December 31, 2016 and 2015 totaled $22.8 million and $33.1 million, respectively. These integration costs became subject to reimbursement by the U.S. government in the third quarter of fiscal 2016 due to the following: (i) completion of the U.S. government's audit and approval that the Company's planned integration savings will exceed its restructuring costs by a factor of at least two to one; (ii) determination from the Under Secretary of Defense that the audited restructuring savings exceed the costs by a factor of two to one; and (iii) execution on August 16, 2016 of an advance agreement with the Defense Contract Management Agency.

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 $2.0 million, $2.7 million, $3.6 million and $0.2 million in fiscal 2016, fiscal 2015, fiscal 2014 and the one month ended December 31, 2015, respectively.

g. Assets Held for 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. The Hillsborough land was reported as real estate held for entitlement and leasing as of November 30, 2014. For operating segment reporting, the Hillsborough land has been reported as a part of the Real Estate segment.

During the second quarter of fiscal 2015, the Company finalized the sale of the Hillsborough land 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 the second quarter of 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 the second quarter of 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. 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 from continuing operations before income taxes from land sale	30.6
Income tax provision related to land sale	12.7
Net income from land sale	$17.9

In fiscal 2014, the Company classified its energy business (the "Energy Business") as assets held for sale as a result of its plans to sell the business. The Company divested the Energy Business in July 2015 for an insignificant amount of proceeds. The Company incurred approximately $1.8 million of expenses to divest its Energy Business. The assets and liabilities of the Energy Business for all periods presented were insignificant. The plan was a result of management's decision to focus its capital and resources on its Aerospace and Defense and Real Estate operating segments. The net sales associated with the Energy Business totaled $0.6 million in fiscal 2015 and 2014. For operating segment reporting, the Energy Business has been reported as a part of the Aerospace and Defense segment.

In fiscal 2014, the Company entered into an asset purchase agreement associated with the sale of certain intellectual property related to a solar power contract. The related contract was terminated in connection with the sale. The proceeds from the sale were $7.5 million resulting in a gain of $6.8 million which is included in "Other, net" in the consolidated statement of operations.

h. Other Current Liabilities

	As of December 31,	
	2016	2015
	(In millions)	
Accrued compensation and employee benefits	$105.7	$ 90.4
Income taxes	2.1	20.3
Competitive improvement program obligations (see Note 10)	7.6	9.4
Payable to UTC for Transition Service Agreements	1.3	1.9
Interest payable	4.1	12.9
Contract loss provisions	6.8	9.1
Other	40.2	59.1
Other current liabilities	$167.8	$203.1

i. Other Noncurrent Liabilities

	As of December 31, 2016	As of December 31, 2015
	(In millions)	
Conditional asset retirement obligations	$ 30.6	$29.5
Pension benefits, non-qualified	17.5	17.6
Deferred compensation	19.8	11.5
Deferred revenue	13.3	13.8
Competitive improvement program obligations (see Note 10)	1.3	3.2
Uncertain income tax positions	28.4	7.0
Other	13.1	12.6
Other noncurrent liabilities	$124.0	$95.2

j. 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, 2014	$(337.0)	$ 3.3	$(333.7)
Actuarial losses arising during the period, net of income taxes	(55.0)	(1.6)	(56.6)
Amortization of actuarial losses and prior service credits, net of income taxes	49.4	(0.8)	48.6
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)

The estimated amounts that will be amortized from accumulated other comprehensive loss into net periodic benefit expense in fiscal 2017:

	Pension Benefits	Medical and Life Insurance Benefits
	(In millions)	
Actuarial losses (gains), net	$67.8	$(4.1)
Prior service costs (credits), net	0.1	(0.2)
	$67.9	$(4.3)

k. Redeemable Common Stock

The Company inadvertently failed to register with the 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 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. As of December 31, 2016 and 2015, the Company has classified 0.1 million shares as redeemable common stock because the redemption features are not within the control of the Company. The Company may also be subject to civil and other penalties by regulatory authorities as a result of the failure to register these shares. These shares have always been treated as outstanding for financial reporting purposes. 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. During fiscal 2016, fiscal 2015, fiscal 2014, and the one month ended December 31, 2015, the Company recorded less than $0.1 million, ($0.1) million, and $0.9 million, and $0.4 million, respectively, for realized (gains)/losses and interest associated with this matter.

Note 4. 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 from continuing operations:

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Current				
U.S. federal	$ 3.2	$ 33.0	$19.0	$ 7.9
State and local	3.2	3.4	4.1	1.2
	6.4	36.4	23.1	9.1
Deferred				
U.S. federal	2.8	(41.2)	(5.5)	(6.2)
State and local	2.0	5.1	(1.3)	(0.9)
	4.8	(36.1)	(6.8)	(7.1)
Income tax provision	$11.2	$ 0.3	$16.3	$ 2.0

A reconciliation of the U.S. federal statutory income tax rate to the Company's effective income tax rate on earnings from continuing operations was as follows:

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
Statutory U.S. federal income tax rate — provision (benefit)	35.0%	(35.0)%	(35.0)%	35.0%
State and local income taxes, net of U.S. federal income tax effect	(2.3)	16.2	11.4	4.8
Changes in state income tax rates	13.4	19.0	(0.7)	0.1
Reserve adjustments	(1.0)	2.2	(0.8)	(0.3)
Valuation allowance adjustments	—	—	0.3	—
Rescindable common stock interest and realized losses	—	—	0.9	—
Non-deductible convertible subordinated notes interest	2.9	8.0	7.0	1.2

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
Non-deductible premiums on repurchase of convertible subordinated notes	—	—	64.1	—
R&D credits	(14.1)	—	4.0	(2.8)
Retroactive change in federal tax law	—	(11.6)	—	(19.4)
Benefit of manufacturing deductions	1.5	(5.8)	(4.3)	(7.0)
Lobbying costs	2.7	3.6	1.0	0.4
Deferred tax adjustment	(1.3)	—	—	7.8
Other, net	1.4	5.2	1.5	2.4
Effective income tax rate — provision	38.2%	1.8%	49.4%	22.2%

In fiscal 2016, the Company’s effective tax rate was an income tax expense of 38.2% on pre-tax income of $29.3 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 1.8% on a pre-tax loss from continuing operations of $16.8 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 fiscal 2014, the Company’s effective tax rate was an income tax expense of 49.4% on a pre-tax loss from continuing operations of $33.0 million. The Company’s effective tax rate differed from the 35% statutory federal income tax rate due largely to the non-deductible premiums paid upon the redemption of portions of the convertible debt, state income taxes, impacts from the final R&D credit study, benefits allowed by Section 199 of the IRS code allowed to manufacturers, and certain non-deductible interest expense.

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 evaluations as of December 31, 2016 and 2015, management has considered all available evidence, both positive and negative, including but not limited to the following:

Positive evidence

- Positive results from continuing operations before income taxes for the year ended December 31, 2016;
- The Company's recent history of generating taxable income which has allowed for the utilization of tax credit carryforwards;
- Cost Accounting Standards rules that allow the Company to recover certain tax-qualified defined benefit pension plan cash contributions through its U.S. government contracts;
- 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 (see Note 10);
- Increase in the Company's contract backlog;
- Lower interest costs as a result of the Company's fiscal 2016 debt refinancing efforts; and
- Favorable trends with respect to the market value of certain real estate assets.

Negative evidence

- The three year comprehensive cumulative loss position as of December 31, 2016;
- The Company's exposure to environmental remediation obligations and the related uncertainty as to the ultimate exposure upon settlement;
- The significance of the Company's defined benefit pension obligation and related impact it could have in future years; and
- The interest expense arising from additional indebtedness incurred in fiscal 2016.

As of December 31, 2016 and 2015, 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.

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

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Balances at beginning of fiscal year	$ 7.1	$ 6.8	$ 7.9	$ 6.7
Increases based on tax positions in prior years	25.8	1.0	0.6	0.6
Decreases based on tax position in prior years	(1.2)	(1.8)	(1.3)	(0.2)
Increases based on tax positions in current year	0.7	0.7	—	—
Lapse of statute of limitations	(2.9)	—	(0.4)	—
Balances at end of fiscal year	$29.5	$ 6.7	$ 6.8	$ 7.1

As of December 31, 2016, the total amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate was $5.3 million. The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. As of December 31, 2016, the Company's accrued interest and penalties related to uncertain tax positions was $2.4 million. It is reasonably possible that a reduction of up to $29.3 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.

The years ended November 30, 2012 through December 31, 2016 remain open to examination for U.S. federal income tax purposes. In addition, the years ended November 30, 2002 through November 30, 2005 remain open as they relate to selected tax attributes utilized during fiscal years 2010 through 2014. For the Company's other major taxing jurisdictions, the tax years ended November 30, 2003 through December 31, 2016 remain open to examination.

Deferred tax assets and liabilities were as follows:

	As of December 31,	
	2016	2015
	(In millions)	
Deferred Tax Assets		
Accrued estimated costs	$ 89.1	$113.3
Basis difference in assets and liabilities	8.5	6.0
Tax losses and credit carryforwards	6.5	3.8
Net cumulative defined benefit pension plan losses	212.9	227.8
Retiree medical and life insurance benefits	16.2	19.6
Valuation allowance	(1.7)	(1.2)
Total deferred tax assets	331.5	369.3
Deferred Tax Liabilities		
Revenue recognition differences	21.7	30.7
Basis differences in intangible assets	17.3	13.8
Total deferred tax liabilities	39.0	44.5
Total net deferred tax assets	$292.5	$324.8

The deferred tax liabilities considered in the assessment of the realizability of deferred tax assets are of the same character as the temporary differences giving rise to the deferred tax assets. The remaining liabilities will reverse in the same period as the assets, if not sooner.

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 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
Fiscal 2014	2.6	—	—	2.6

The Company's state net operating loss carryforwards of $18.4 million as of December 31, 2016 are set to expire on December 31, 2017.

Approximately $1.2 million of the state net operating loss carryforwards relate to the exercise of stock options, the benefit of which will be credited to equity when realized. The Company has approximately $8.3 million of loss carryover in foreign jurisdictions which have no expiration date.

The Company has Federal and California credit carryovers of $2.8 million and $2.5 million, respectively. The federal credits will expire in 2036 and the state credits have no expiration date.

Note 5. Long-Term Debt

	As of December 31,	
	2016	2015
	(In millions)	
Senior debt	$388.0	$ 91.8
Senior secured notes	—	449.4
Convertible senior notes	240.0	—
Convertible subordinated notes	35.6	84.8
Other debt	—	13.0
Total debt, carrying amount	663.6	639.0
Less: Amounts due within one year	(55.6)	(5.3)
Total long-term debt, carrying amount	$608.0	$633.7

As of December 31, 2016, 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	2017	2018	2019	2020	2021	2023
				(In millions)			
Senior debt	$390.0	$20.0	$25.0	$30.0	$35.0	$280.0	$ —
Convertible senior notes	300.0	—	—	—	—	—	300.0
Convertible subordinated notes (1)	35.6	35.6	—	—	—	—	—
Total debt principal	$725.6	$55.6	$25.0	$30.0	$35.0	$280.0	$300.0

(1) 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.

a. Senior Debt:

	As of December 31,	
	2016	2015
	(In millions)	
Term loan, bearing interest at variable rates (rate of 3.02% as of December 31, 2016), maturing in June 2021	$390.0	$92.5
Unamortized deferred financing costs	(2.0)	(0.7)
Total senior debt	$388.0	$91.8

Senior Credit Facility

On June 17, 2016, the Company entered into a new $750.0 million senior secured Senior Credit Facility (the "Senior Credit Facility") with the lenders named therein and Bank of America Merrill Lynch as joint lead arranger and administrative agent. 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, 2016, the Company had $390.0 million outstanding under the Term Loan and had issued $45.3 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 will be 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 (a) 4.00 to 1.00 for periods ending December 31, 2016 through September 30, 2017; (b) 3.75 to 1.00 for periods ending from December 31, 2017 through September 30, 2018; and (c) 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, 2016	Required Ratios
Consolidated Interest Coverage Ratio, as defined under the Senior Credit Facility	11.07 to 1.00	Not less than: 3.00 to 1.00
Consolidated Net Leverage Ratio, as defined under the Senior Credit Facility	2.59 to 1.00	Not greater than: 4.00 to 1.00

The Company was in compliance with its financial and non-financial covenants as of December 31, 2016.

b. Senior Secured Notes:

	As of December 31,	
	2016	2015
	(In millions)	
Senior secured notes, bearing interest at 7.125% per annum, interest payments due in March and September, maturing in March 2021	$—	$460.0
Unamortized deferred financing costs	—	(10.6)
Total senior secured notes	$—	$449.4

7.125% Second-Priority Senior Secured Notes

On July 18, 2016, the Company fully redeemed the outstanding principal of its 7 1/8% Notes.

c. Convertible Senior Notes:

	As of December 31,	
	2016	2015
	(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	$—
Unamortized discount and deferred financing costs	(60.0)	—
Total convertible senior notes	$240.0	$—

2.25% Convertible Senior Notes

On December 14, 2016, the Company issued $300.0 million aggregate principal amount of 2 1⁄4% 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 2 1⁄4% Notes bear cash interest at a rate of 2.25% per annum on the principal amount of the 2 1⁄4% Notes from December 14, 2016, payable semi-annually in arrears on June 15 and December 15 of each year, beginning June 15, 2017. The 2 1⁄4% Notes will mature on December 15, 2023, subject to earlier repurchase, redemption or conversion in certain circumstances described below.

The 2 1⁄4% 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 2 1⁄4% 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 2 1⁄4% 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 2 1⁄4% 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 2 1⁄4% Notes. Holders may convert their 2 1⁄4% 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 2 1⁄4% Notes elect to convert their 2 1⁄4% Notes in connection with the occurrence of a make-whole fundamental change, as defined in the indenture governing the 2 1⁄4% 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 2 1⁄4% 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 2 1⁄4% 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 2 1⁄4% Notes, occurs prior to maturity, subject to certain conditions, holders of the 2 1⁄4% Notes will have the right to require the Company to repurchase all or part of their 2 1⁄4% 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 2 1⁄4% 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 2 1⁄4% 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 2 1⁄4% Notes. The initial liability component of the 2 1⁄4% 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 2 1⁄4% Notes, less the present value of the future cash flows using an estimated borrowing rate at the date of the issuance for similar debt instruments without a conversion feature, which equated to the initial debt discount. 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 2 1⁄4% 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.

As of December 31, 2016, the 2 1⁄4% Notes consisted of the following (in millions, except years, percentages, conversion rate, and conversion price):

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

The following table presents the interest expense components for the 2 1⁄4% Notes for fiscal 2016 (in millions):

Interest expense-contractual interest	$ 0.3
Interest expense-amortization of debt discount	0.3
Interest expense-amortization of deferred financing costs (1)	—

(1) Less than $0.1 million.

d. Convertible Subordinated Notes:

	As of December 31, 2016	As of December 31, 2015
	(In millions)	
Convertible subordinated debentures, bearing interest at 2.25% per annum, interest payments due in May and November, maturing in November 2024	$ —	$ 0.2
Convertible subordinated debentures, bearing interest at 4.0625% per annum, interest payments due in June and December, maturing in December 2039	35.6	84.6
Total convertible subordinated notes	$35.6	$84.8

2.25% Convertible Subordinated Debentures (“2 $^1/_4$% Debentures”)

As of December 31, 2016, the Company fully redeemed the outstanding principal amount of its 2 $^1/_4$% Debentures.

4.0625% Convertible Subordinated Debentures

As of December 31, 2016, the Company had $35.6 million outstanding principal of its 4 $^1/_{16}$% Debentures, convertible into 3.9 million of shares of common stock. 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.

In December 2009, the Company issued $200.0 million in aggregate principal amount of 4 $^1/_{16}$% Debentures in a private placement to qualified institutional buyers pursuant to Rule 144A under the Securities Act. The 4 $^1/_{16}$% Debentures mature on December 31, 2039, subject to earlier redemption, repurchase, or conversion. Interest on the 4 $^1/_{16}$% Debentures accrues at 4.0625% per annum and is payable semiannually in arrears on June 30 and December 31 of each year, beginning June 30, 2010 (or if any such day is not a business day, payable on the following business day), and the Company may elect to pay interest in cash or, generally on any interest payment that is at least one year after the original issuance date of the 4 $^1/_{16}$% Debentures, in shares of the Company’s common stock or a combination of cash and shares of the Company’s common stock, at the Company’s option, subject to certain conditions.

The 4 $^1/_{16}$% Debentures are general unsecured obligations of the Company and rank equal in right of payment to all of the Company’s other existing and future unsecured subordinated indebtedness. The 4 $^1/_{16}$% Debentures rank junior in right of payment to all of the Company’s existing and future senior indebtedness, including all of its obligations under its Senior Credit Facility and all of its existing and future senior subordinated indebtedness. In addition, the 4 $^1/_{16}$% Debentures are effectively subordinated to any of the Company’s collateralized debt, to the extent of such collateral, and to any and all debt and liabilities including trade debt of its subsidiaries.

Each holder of the 4 $^1/_{16}$% Debentures may convert its 4 $^1/_{16}$% Debentures into shares of the Company’s common stock at a conversion rate of 111.0926 shares per $1,000 principal amount, representing a conversion price of approximately $9.00 per share, subject to adjustment. In addition, if the holders elect to convert their 4 $^1/_{16}$% Debentures in connection with the occurrence of certain fundamental changes to the Company as described in the indenture, the holders will be entitled to receive additional shares of common stock upon conversion in some circumstances. Upon any conversion of the 4 $^{1}/_{16}$% Debentures, subject to certain exceptions, the holders will not receive any cash payment representing accrued and unpaid interest.

The Company may at any time redeem any 4 $^{1}/_{16}$% Debentures for cash (except as described below with respect to any make-whole premium that may be payable) if the last reported sales price of the Company's common stock has been at least 150% of the conversion price then in effect for at least twenty (20) trading days during any thirty (30) consecutive trading day period ending within five (5) trading days prior to the date on which the Company provides the notice of redemption.

Each holder may require the Company to repurchase all or part of its 4 $^{1}/_{16}$% Debentures on December 31, 2019, 2024, 2029 and 2034 (each, an "optional repurchase date") at an optional repurchase price equal to (1) 100% of their principal amount, plus (2) accrued and unpaid interest, if any, up to, but excluding, the date of repurchase. The Company may elect to pay the optional repurchase price in cash, shares of the Company's common stock, or a combination of cash and shares of the Company's common stock, at the Company's option, subject to certain conditions.

If a fundamental change to the Company, as described in the indenture governing the 4 $^{1}/_{16}$% Debentures, occurs prior to maturity, each holder will have the right to require the Company to purchase all or part of its 4 $^{1}/_{16}$% Debentures for cash at a repurchase price equal to 100% of their principal amount, plus accrued and unpaid interest, if any, up to, but excluding, the repurchase date.

If the Company elects to deliver shares of its common stock as all or part of any interest payment, any make-whole premium or any optional repurchase price, such shares will be valued at the product of (x) the price per share of the Company's common stock determined during: (i) in the case of any interest payment, the twenty (20) consecutive trading days ending on the second trading day immediately preceding the record date for such interest payment; (ii) in the case of any make-whole premium payable as part of the redemption price, the twenty (20) consecutive trading days ending on the second trading day immediately preceding the redemption date; and (iii) in the case of any optional repurchase price, the forty (40) consecutive trading days ending on the second trading day immediately preceding the optional repurchase date; (in each case, the "averaging period" with respect to such date) using the sum of the daily price fractions (where "daily price fraction" means, for each trading day during the relevant averaging period, 5% in the case of any interest payment or any make-whole premium or 2.5% in the case of any optional repurchase, multiplied by the daily volume weighted average price per share of the Company's common stock for such day), multiplied by (y) 97.5%. The Company will notify holders at least five (5) business days prior to the start of the relevant averaging period of the extent to which the Company will pay any portion of the related payment using shares of common stock.

Effective December 21, 2010, in accordance with the terms of the indenture, the restrictive legend on the 4 $^{1}/_{16}$% Debentures was removed and the 4 $^{1}/_{16}$% Debentures are freely tradable pursuant to Rule 144 under the Securities Act of 1933 without volume restrictions by any holder that is not an affiliate of the Company at the time of sale and has not been an affiliate during the preceding three months.

Issuance of the 4 $^{1}/_{16}$% Debentures generated net proceeds of $194.1 million, which were used to repurchase long-term debt and other debt related costs.

During fiscal 2014, the Company repurchased $59.6 million principal amount of its 4 $^{1}/_{16}$% Debentures at various prices ranging from 195% of par to 212% of par. During fiscal 2015, $49.0 million of 4 $^{1}/_{16}$% Debentures were converted to 5.5 million shares of common stock. During fiscal 2016, $49.0 million of 4 $^{1}/_{16}$% Debentures were converted to 5.4 million shares of common stock.

e. Other Debt:

	As of December 31,	
	2016	2015
	(In millions)	
Delayed draw term loan	$—	$13.0
Capital lease	—	0.3
Unamortized deferred financing costs	—	(0.3)
Total other debt	$—	$13.0

Delayed Draw Term Loan

During fiscal 2016, the Company retired the remaining principal amount of its delayed draw term loan.

Note 6. 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, 2016, the assets, projected benefit obligations, and unfunded pension obligation for the tax-qualified pension plans were approximately $925.1 million, $1,492.1 million, and $548.2 million, respectively.

The Company expects to make cash contributions of approximately $72.0 million to its tax-qualified defined benefit pension plan in fiscal 2017. 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 2016, the Company made cash contributions of $32.8 million to its tax-qualified defined benefit pension plan of which $27.5 million was recoverable in the Company's U.S. government contracts in fiscal 2016 with the remaining $5.3 million being potentially recoverable in 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 Company's 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 under 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 $20.7 million, $24.9 million, $24.4 million, and $1.3 million in fiscal 2016, fiscal 2015, fiscal 2014, 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, 2016 and 2015.

	Pension Benefits		Medical and Life Insurance Benefits	
	As of December 31,			
	2016	2015 (3)	2016	2015 (3)
	(In millions)			
Change in fair value of assets:				
Fair value — beginning of period	$ 931.4	$ 964.1	$ —	$ —
Gain (loss) on assets	93.7	(22.2)	—	—
Employer contributions	34.1	0.1	4.3	0.2
Benefits paid (1)	(134.1)	(10.6)	(4.3)	(0.2)
Fair value — end of period	$ 925.1	$ 931.4	$ —	$ —
Change in benefit obligation:				
Benefit obligation — beginning of period	$1,531.0	$1,549.5	$ 50.8	$ 51.5
Service cost	14.0	1.1	—	—
Interest cost	64.1	5.3	1.9	0.2
Actuarial losses (gains)	17.1	(14.3)	(5.8)	(0.7)
Benefits paid	(134.1)	(10.6)	(4.3)	(0.2)
Benefit obligation — end of period (2)	$1,492.1	$1,531.0	$ 42.6	$ 50.8
Funded status of the plans	$ (567.0)	$ (599.6)	$(42.6)	$(50.8)
Amounts recognized in the consolidated balance sheets:				
Postretirement medical and life insurance benefits, current	$ —	$ —	$ (5.2)	$ (6.0)
Postretirement medical and life insurance benefits, noncurrent	—	—	(37.4)	(44.8)
Pension liability, non-qualified current (component of other current liabilities)	(1.3)	(1.4)	—	—
Pension liability, non-qualified (component of other noncurrent liabilities)	(17.5)	(17.6)	—	—
Pension benefits, noncurrent	(548.2)	(580.6)	—	—
Net liability recognized in the consolidated balance sheets	$ (567.0)	$ (599.6)	$(42.6)	$(50.8)

(1) Benefits paid for medical and life insurance benefits are net of the Medicare Part D Subsidy of $0.1 million and zero received in fiscal 2016 and the one month ended December 31, 2015, respectively.

(2) Pension benefit obligation includes $18.8 million and $19.0 million as of December 31, 2016 and 2015, respectively, for the non-qualified plan.
(3) Reflects activity for the one month ended December 31, 2015.

The accumulated benefit obligation for the defined benefit pension plans was $1,492.1 million and $1,530.9 million as of the December 31, 2016 and 2015 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, 2016	November 30, 2015	November 30, 2014	December 31, 2015	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)							
Service cost	$ 14.0	$ 10.8	$ 8.8	$ 1.1	$—	$—	$ 0.1	$—
Interest cost on benefit obligation	64.1	63.6	67.1	5.3	1.9	1.9	2.5	0.2
Assumed return on assets (1)	(70.1)	(88.1)	(92.6)	(6.0)	—	—	—	—
Amortization of prior service costs (credits)	0.1	—	—	—	(1.2)	(1.1)	(0.9)	(0.1)
Amortization of net losses (gains)	63.7	84.0	54.4	5.4	(3.6)	(3.5)	(2.9)	(0.3)
	$ 71.8	$ 70.3	$ 37.7	$ 5.8	$(2.9)	$(2.7)	$(1.2)	$(0.2)

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

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions, except rate of return)			
Actual gain (loss) on assets	$93.7	$(64.2)	$63.5	$(22.2)
Actual rate of return on assets	10.8%	(6.1)%	5.1%	(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 benefit costs 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,	
	2016	2015	2016	2015
Discount rate	4.02%	4.36%	3.68%	3.99%
Discount rate (non-qualified plan)	4.07%	4.41%	*	*
Ultimate healthcare trend rate	*	*	5.00%	5.00%
Initial healthcare trend rate (pre 65/post 65)	*	*	7.00%	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, 2016	November 30, 2015	November 30, 2014	December 31, 2015	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
Discount rate	4.36%	3.96%	4.54%	4.26%	3.99%	3.54%	3.98%	3.87%
Discount rate (non-qualified plan)	4.41%	4.01%	4.65%	4.32%	*	*	*	*
Expected long-term rate of return on assets	7.00%	8.00%	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%	8.50%	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 decided to change the long-term expected rate of return on assets from 8.0% to 7.0% effective December 1, 2015.

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 2016 medical benefit obligations, the

Company assumed a 7.0% annual rate of increase for pre and post 65 participants in the per capita cost of covered healthcare claims with the rate decreasing over four 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, 2016 and on retirement benefit expense for fiscal 2016:

	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	$ 22.8	$ 158.3	$ 10.0	$(0.3)	$(1.0)
1% increase	(19.5)	(133.0)	(10.0)	0.4	1.1

d. Plan Assets and Investment Policy

The Company's investment policy is to maximize the total rate of return with a view toward long-term funding objectives to ensure that funds are available to meet benefit obligations when due. The assets are diversified to the extent necessary to minimize risk and to achieve an optimal balance between risk and return. This return seeking strategy focuses on higher return seeking investments in actively managed investment vehicles and allows for diversification as to the type of assets, tactical trades, and number of investment managers used to carry out this strategy. This strategy is achieved using diversified asset types, which may include cash, equities, fixed income, real estate, private equity holdings, and derivatives. Allocations between these asset types may change as a result of changing market conditions and tactical investment opportunities.

While the Company does not target specific investment allocations, the Company monitors asset allocations to provide diversification by investment type and investment managers to meet the Company's objective of maximizing the total rate of return while ensuring sufficient liquidity to meet required benefit payments. The Company's asset allocations by asset category were as follows:

	As of December 31,	
	2016	2015
Cash and cash equivalents	26%	36%
Equity securities	43	34
Fixed income	15	13
Private assets	8	6
Hedge funds	8	11
Total	100%	100%

The fair value by asset category and by level were 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, 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 Net Asset Value ("NAV")				
Private assets	70.7			
Hedge funds	79.3			
Common/collective trusts ("CCTs")	219.4			
Total investments measured at NAV	369.4			
Receivables	1.8			
Payables	(2.5)			
Total assets	$925.1			

	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, 2015				
Cash and cash equivalents	$101.6	$101.6	$ —	$—
Equity securities:				
Domestic equity securities	340.2	332.7	7.0	0.5
International equity securities	32.4	31.3	1.1	—
Short sales	(58.1)	(58.1)	—	—
Fixed income:				
Corporate debt securities	29.2	—	29.2	—
Asset-backed securities	93.9	—	93.9	—
Short sales	(3.7)	(2.5)	(1.2)	—
Real estate investments	0.7	—	—	0.7
Total	536.2	$405.0	$130.0	$ 1.2
Investment measured at NAV				
Private assets	53.5			
Hedge funds	98.2			
CCTs	246.7			
Total investments measured at NAV	398.4			
Receivables	7.3			
Payables	(10.5)			
Total assets	$931.4			

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, 2016 and 2015.

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 of private companies are priced using unobservable inputs and 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, 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. 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 and commercial 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 at total market value or NAV, which are estimated 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 $11.3 million for fiscal 2016 and a decrease of $8.6 million for fiscal 2015 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.

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

	November 30, and December 31, 2015	Unrealized Gains (Losses)	Purchases, Issuances, and Settlements	December 31, 2016
	(In millions)			
Equity securities:				
Domestic equity securities	$ 0.5	$ 0.1	$ 1.6	$2.2
Fixed income:				
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	Medical and Life Insurance Benefits: Medicare D Subsidy	Medical and Life Insurance Benefits: Net Benefit Payments
	(In millions)			
2017	$121.0	$ 5.4	$0.2	$ 5.2
2018	118.5	5.2	0.2	5.0
2019	115.6	4.8	0.2	4.6
2020	112.5	4.5	0.2	4.3
2021	109.3	4.1	0.2	3.9
Years 2022 - 2026	495.0	15.6	0.6	15.0

Note 7. Commitments and Contingencies

a. 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 $21.2 million in fiscal 2016, $18.5 million in fiscal 2015, $23.7 million in fiscal 2014, 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 $6.5 million in fiscal 2016, $6.3 million in fiscal 2015, $6.2 million in fiscal 2014, 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, 2016 were as follows:

Year Ending December 31,	Future Minimum Rental Commitments	Future Minimum Rental Income
	(In millions)	
2017	$ 17.4	$ 4.4
2018	15.2	4.0
2019	14.0	1.8
2020	12.6	—
2021	12.4	—
Thereafter	40.3	—
	$111.9	$10.2

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 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. For legal settlements where the cash payments are fixed and determinable, the Company will estimate an interest factor and discount the liability accordingly.

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 64 asbestos cases pending as of December 31, 2016.

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, 2016, the estimated range of the Company's loss on a pending claim was $0.2 million to $0.6 million and the accrued amount was $0.2 million.

Inflective, Inc. ("Inflective") Litigation

On December 18, 2014, Inflective filed a complaint against Aerojet Rocketdyne and Kathleen E. Redd, individually, in the Superior Court of the State of California, Sacramento County, *Inflective, Inc. v Aerojet Rocketdyne, Inc., Kathleen E. Redd, et al, Case No. 34-2014-00173068.* Inflective asserted in the complaint causes for breach of contract, breach of implied contract, false promise, inducing breach of contract, intentional interference with contractual relations, negligent interference with prospective economic relations, and intentional interference with prospective economic relations and is seeking compensatory damages in excess of $3.0 million, punitive damages, interest and attorney's costs. The complaint arose out of the Company's implementation of ProjectOne, a company-wide enterprise resource planning ("ERP") system, for which Inflective had been a consultant to the Company. On February 6, 2015, Aerojet Rocketdyne and Ms. Redd filed a demurrer to the complaint. On June 9, 2015, the Court sustained the demurrer in part and overruled the demurrer in part, with leave to amend. On June 18, 2015, Inflective filed an amended complaint in which it reiterated all the causes of action dismissed by the Court. On June 30, 2015, Aerojet Rocketdyne and Ms. Redd filed a demurrer and motion to strike seeking to have (a) all claims and references to a purported "finder's fee" stricken from the case and (b) the causes of action against Ms. Redd for intentional and negligent interference with prospective business relations dismissed with prejudice. On October 16, 2015, the Court sustained Aerojet Rocketdyne's demurrer and motion to strike with respect to the "finder's fee" claims, dismissing those claims with prejudice, but overruled Ms. Redd's demurrer. On October 26, 2015, Aerojet Rocketdyne and Ms. Redd answered the amended complaint and filed a Cross-Complaint against Plaintiff and its principal for breach of contract, intentional misrepresentation, negligent misrepresentation and negligence. Inflective filed a demurrer to the intentional misrepresentation, negligent misrepresentation and negligence causes of action, leaving the breach of contract cause of action unchallenged. After a hearing on the demurrer on February 18, 2016, the court granted the plaintiffs' request to strike the claim for punitive damages on the negligence count, but denied the plaintiffs' demurrer and allowed the Company's claims for intentional misrepresentation, negligent misrepresentation, and negligence causes of action to remain along with the breach of contract claim. On August 10, 2016, Aerojet Rocketdyne filed a Motion for Summary Judgment on the claims brought against Ms. Redd individually, arguing that as an agent for Aerojet Rocketdyne, Ms. Redd cannot be held personally liable for any alleged interference of economic advantage between Inflective and Aerojet Rocketdyne. On December 2, 2016, the Court granted Aerojet Rocketdyne's Motion for Summary Judgment on the claims brought against Ms. Redd.

Separately, Satish Rachaiah, a former consultant on ProjectOne (working for Inflective), attempted to intervene in the action and assert claims against Aerojet Rocketdyne arising out of Aerojet Rocketdyne's alleged interference with his employment with Inflective. Aerojet Rocketdyne opposed intervention, and the Court ultimately denied Mr. Rachaiah's motion to intervene. On December 30, 2015, Rachaiah filed a separate lawsuit in the Superior Court of the State of California, Sacramento County, *Satish Rachaiah v. Aerojet Rocketdyne, Inc.*, *Case No. 34-2015-00188516*. The Company received the complaint on April 7, 2016 and an amended complaint was served on June 17, 2016. Rachaiah asserted the same claims in the complaint as attempted when he tried to intervene. On June 3, 2016, the court granted Rachaiah's motion to consolidate the case with the Inflective litigation, finding that two cases involve common parties, witnesses, legal issues and facts. Aerojet Rocketdyne filed a demurrer to Rachaiah's first amended complaint on July 22, 2016. On September 26, 2016, the Court granted the demurrer in part and overruled it in part, dismissing the plaintiff's claims for intentional and negligent interference with prospective economic relations with leave to amend. On October 6, 2016, Rachaiah filed a second amended complaint, once again asserting claims for intentional and negligent interference with prospective economic relations. Aerojet Rocketdyne filed its Answer to the second amended complaint on November 11, 2016.

Now that the issues to be tried have been set, discovery has commenced. No trial date for either case has been established. The Company has not recorded any liability for either of these matters as of December 31, 2016.

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. The Company has filed its answer and discovery has commenced. The Company has alerted its insurance carriers of this action and on September 23, 2015, the Company tendered the defense of the case to Aerotek pursuant to Aerotek's contract for services with Aerojet Rocketdyne. Aerotek has not yet provided its response. Trial is scheduled for January 2018. No liability for this matter has been recorded by the Company as of December 31, 2016.

Occupational Safety

On January 16, 2015, the Company received a notice that the State of California, Division of Occupational Safety & Health ("Cal\OSHA"), Bureau of Investigation ("BOI") is conducting an investigation into an accident that occurred at the Rancho Cordova facility in November 2013. The accident involved the deflagration of solid rocket propellant following a remote cutting operation and resulted in injuries to two employees, one of whom ultimately died from his injuries. Cal\OSHA issued nine citations relating to the accident with penalties of approximately $0.1 million, all of which the Company has appealed. The BOI is the criminal investigatory arm of Cal\OSHA and is required by law to investigate any occupational fatality to determine if criminal charges will be recommended. In August 2016, the BOI advised that it had completed its investigation and the criminal aspect of the case was closed. A pre-hearing conference on the Company's appeal of the citations was originally scheduled for January 9, 2017, but was postponed and will be rescheduled.

c. Environmental Matters

The Company is involved in over 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, 2016, the aggregate range of these anticipated environmental costs was $349.7 million to $525.0 million and the accrued amount was $349.7 million. See Note 7(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 relates 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 PCD has been revised several times, most recently in 2002. 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, and remedy construction associated with the operable units. In 2002, the EPA issued a Unilateral Administrative Order ("UAO") requiring Aerojet Rocketdyne to implement the EPA-approved remedial action in the Western Groundwater Operable Unit. An identical order was issued by the California Regional Water Quality Control Board, Central Valley ("Central Valley RWQCB"). On July 7, 2011, the EPA issued Aerojet Rocketdyne its Approval of Remedial Action Construction Completion Report for Western Groundwater Operable Unit and its Determination of Remedy as Operational and Functional. On September 20, 2011, the EPA issued two UAOs to Aerojet Rocketdyne to complete a remedial design and implement remedial action for the Perimeter Groundwater Operable Unit. One UAO addresses groundwater and the other addresses soils within the Perimeter Groundwater Operable Unit. Issuance of the UAOs is the next step in the superfund process for the Perimeter Groundwater Operable Unit. Aerojet Rocketdyne submitted a final Remedial Investigation Report for the Boundary Operable Unit in 2010 and a revised Feasibility Study for the Boundary Operable Unit in 2012. A Record of Decision was issued by the EPA on August 4, 2015. Aerojet Rocketdyne anticipates the EPA will issue a UAO or negotiate a consent decree for implementation of the remedy. A draft Remedial Investigation Report for the Island Operable Unit was submitted in January 2013 and the Final Remedial Investigation Report was issued on September 3, 2015. A portion of the Island Operable Unit, Area 40, which is related to the Hillsborough sale, is being handled separately and Aerojet Rocketdyne submitted a draft Feasibility Study to the agencies on June 23, 2016. The remaining operable units are under various stages of investigation. 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 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 the Department of Toxic Substances Control ("DTSC") to investigate and remediate environmental contamination in the soils and the Central Valley RWQCB to investigate and remediate groundwater environmental contamination. On March 14, 2008, the DTSC released all but approximately 400 acres of the Rio Del Oro property from DTSC's environmental orders regarding soil contamination. Aerojet Rocketdyne expects the approximately 400 acres of Rio Del Oro property that remain subject to the DTSC orders to be released once the soil remediation has been completed. The Rio Del Oro property remains subject to the Central Valley RWQCB's orders to investigate and remediate groundwater environmental contamination emanating offsite from such property. Pursuant to a settlement agreement entered into in 2009, Aerojet Rocketdyne and Boeing have defined responsibilities with respect to future costs and environmental projects relating to this property.

As of December 31, 2016, the estimated range of anticipated costs discussed above for the Sacramento, California site was \$210.1 million to \$326.0 million and the accrued amount was \$210.1 million included as a component of the Company's environmental reserves. Expenditures associated with this matter are partially recoverable. See Note 7(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. Between 1995 and 1997, the EPA issued Special Notice Letters to Aerojet Rocketdyne and eighteen other companies requesting that they implement a groundwater remedy. On June 30, 2000, the EPA issued a UAO ordering the PRPs to implement a remedy consistent with the 1994 record of decision. 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 project agreement, which has a term of fifteen years, became effective May 9, 2002 and will terminate in May 2017. In November 2014, the EPA met with representatives from the Cooperating Respondents regarding the end of the project agreement and plans for discussions with the Water Entities. The EPA, the Water Entities and Aerojet Rocketdyne and the other Cooperating Respondents have participated in settlement discussions regarding the expiration of the project agreement in 2017 and the path forward. Discussions have occurred over the summer of 2015 and on September 10, 2015, the parties, including the EPA, met to discuss progress including a new project agreement to commence in 2017. At this meeting, Aerojet Rocketdyne and the other

Cooperating Respondents proposed a new project agreement term limit of five years. That proposal was rejected by the EPA and the Water Entities which want a longer term. The parties continue to work cooperatively and have exchanged counter proposals. Negotiations are ongoing with mediation sessions conducted in the fourth quarter of fiscal 2016 and additional sessions planned for the first quarter of fiscal 2017. Pursuant to the project agreement, the Cooperating Respondents fund through an escrow account the capital, operation, maintenance, and administrative costs of certain treatment and water distribution facilities to be owned and operated by the water companies. There are also provisions in the project agreement for maintaining financial assurance.

Aerojet Rocketdyne and the other Cooperating Respondents entered into an interim allocation agreement, which was renewed effective March 28, 2014, that establishes the interim payment obligations, subject to final reallocation, of the Cooperating Respondents for the costs incurred pursuant to the project agreement. Under the interim allocation, Aerojet Rocketdyne is responsible for approximately 70% (increased from approximately 68%) of all project costs. Since entering into the project agreement, two of the Cooperating Respondents, Huffy Corporation, and Fairchild Corporation ("Fairchild"), have filed for bankruptcy and are no longer participating in the project agreement. The interim allocation accounted for their shares. On September 30, 2014, another of the Cooperating Respondents, Reichhold, Inc. ("Reichhold"), filed for bankruptcy under Chapter 11. Reichhold has stopped paying and Aerojet Rocketdyne increased its contribution for its portion of Reichhold's share of the financial assurance. Aerojet Rocketdyne and the remaining Cooperating Respondents are completing a final allocation agreement under which Aerojet Rocketdyne's share of the costs will be approximately 74% provided that Aerojet Rocketdyne assumes the Reichhold share and all currently funding parties participate in the allocation beyond the expiration of the current agreement.

As part of Aerojet Rocketdyne's sale of its Electronics and Information Systems ("EIS") business to Northrop in October 2001, the EPA approved a Prospective Purchaser Agreement with Northrop to absolve it of pre-closing liability for contamination caused by the Azusa, California operations, which liability remains with Aerojet Rocketdyne. As part of that agreement, the Company agreed to provide a $25 million guarantee of Aerojet Rocketdyne's obligations under the project agreement.

As of December 31, 2016, the estimated range of anticipated costs was $126.8 million to $178.3 million and the accrued amount was $126.8 million included as a component of the Company's environmental reserves. The primary reason for the increase in the reserve in fiscal 2015 related to BPOU is to reflect the anticipated costs through the term of a new project agreement, and the amount accrued is based on an estimate of the anticipated length of a new project agreement. There can be no assurance that the term of the new project agreement will not be longer than proposed by the Company and/or broader in scope and, if so, the Company may be required to make an additional accrual to reflect the longer time period and/or broader scope. Expenditures associated with this matter are partially recoverable. See Note 7(d) below for further discussion on recoverability.

Wabash, Indiana Site

As part of the Company's automotive business that was divested in 2004, the Company owned and operated a former rubber processing plant in Wabash, Indiana from 1937 to 2004. Pursuant to a request from the Indiana Department of Environmental Management ("IDEM"), the Company conducted an initial site investigation of the soil and groundwater at the site and a report was submitted to IDEM. By letter of June 11, 2014, IDEM directed the Company to conduct additional investigation of the site, including a vapor intrusion investigation in areas in and around the site where trichloroethene levels in groundwater were found to exceed screening levels for vapor intrusion. Vapor mitigation systems were installed in one residence and one business where indoor air screening levels were exceeded. The Company acquired a separate residence in August 2016 where indoor air screening levels were exceeded and a mitigation system was not economically feasible. The Company anticipates donating the property to the City of Wabash for use in connection with a city park. The Company conducted further investigations of the site in accordance with the IDEM request and approved work plan. The Company met with

IDEM on May 24, 2016 to present the results of the further investigation and IDEM requested the Company to submit a remedial action plan. The remedial action plan was submitted in January 2017 with implementation anticipated late 2017. The Company sent demands to other former owners/operators of the site to participate in the site work, but no party has agreed to participate as of yet. As of December 31, 2016, the estimated range of the Company's share of anticipated costs for the Wabash, Indiana site was $0.2 million to $0.7 million and the accrued amount was $0.2 million. None of the expenditures related to this matter are recoverable from the U.S. government.

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 a new project agreement as proposed by Aerojet Rocketdyne, which the Water Entities and the EPA have rejected. There can be no assurance that the term of the new project agreement will not be longer than the term the Company estimated and/or broader in scope and, if so, the Company may be required to make an additional accrual to reflect the longer term and/or broader scope. 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 to design, construct, and implement 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 (1)	Total Environmental Reserve
			(In millions)			
November 30, 2013	$128.0	$ 26.9	$ 8.2	$163.1	$ 8.2	$171.3
Additions	24.0	4.5	3.3	31.8	1.9	33.7
Expenditures	(21.6)	(9.7)	(3.4)	(34.7)	(4.3)	(39.0)
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

(1) Related to the Company's legacy business operations that are primarily non-recoverable environmental remediation expenses from the U.S. government.

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. A summary of the Pre-Close Environmental Costs (in millions):

Pre-Close Environmental Costs	$ 20.0
Amount spent through December 31, 2016	(19.9)
Remaining Pre-Close Environmental Costs	$ 0.1

The Company expects that the cumulative clean-up costs will exceed $20 million in fiscal 2017 after which ARC will be responsible for such costs 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 is disputing certain costs that Aerojet Rocketdyne is attributing to the $20 million Pre-Close Environmental Costs. Aerojet Rocketdyne is evaluating the claim.

Estimated Recoveries

On January 12, 1999, Aerojet Rocketdyne and the U.S. government implemented the October 1997 Agreement in Principle ("Global Settlement") resolving certain prior environmental and facility disagreements, with retroactive effect to December 1, 1998. Under the Global Settlement, Aerojet Rocketdyne and the U.S. government resolved disagreements about an appropriate cost-sharing ratio with respect to the clean-up costs of the environmental contamination. The Global Settlement cost-sharing ratio does not have a defined term over which costs will be recovered. 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 and a cumulative limitation. The current annual billing limitation to Northrop is $6.0 million.

Most of the environmental costs are incurred by the Company's Aerospace and Defense segment, and certain of these future costs are allowable to be included in the Company's contracts with the U.S. government and allocable to Northrop until the cumulative expenditure limitation is reached. Excluding the receivable from Northrop of $68.0 million discussed below, the Company currently estimates approximately 24% of its future Aerospace and Defense segment environmental costs will not likely be reimbursable.

Allowable environmental 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 under U.S. government contracts and programs.

Pursuant to the Northrop Agreement, environmental expenditures to be reimbursed are subject to annual limitations and the total reimbursements are limited to cumulative expenditure limitation of $189.7 million. A summary of the Northrop Agreement activity (in millions):

Total reimbursable costs under the Northrop Agreement	$ 189.7
Amount reimbursed through December 31, 2016	(119.2)
Potential future cost reimbursements available	70.5
Receivable from Northrop in excess of the annual limitation included in the consolidated balance sheet as of December 31, 2016	(68.0)
Potential future recoverable amounts available under the Northrop Agreement	$ 2.5

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, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Estimated recoverable amounts under U.S. government contracts and Northrop	$69.1	$159.3	$22.9	$ 0.6
Expense (benefit) to consolidated statement of operations	18.3	17.3	10.8	(0.1)
Total environmental reserve adjustments	$87.4	$176.6	$33.7	$ 0.5

e. Arrangements with Off-Balance Sheet Risk

As of December 31, 2016, arrangements with off-balance sheet risk consisted of:

- $45.3 million in outstanding commercial letters of credit expiring throughout 2017, the majority of which may be renewed, primarily to collateralize obligations for environmental remediation and insurance coverage.
- $44.5 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.
- 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 8. Stockholders' Deficit

a. Preference Stock

As of December 31, 2016 and 2015, 15.0 million shares of preferred stock were authorized and none were issued or outstanding.

b. Common Stock

As of December 31, 2016, the Company had 150.0 million authorized shares of common stock, par value $0.10 per share, of which 69.2 million shares were issued and outstanding, and 32.1 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. See Note 3(k) for information about the Company's redeemable common stock.

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, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Stock Appreciation Rights ("SAR")	$ 2.2	$1.8	$(3.2)	$(1.4)
Restricted stock, service based	3.6	5.6	4.3	0.3
Restricted stock, performance based	5.7	0.1	4.3	0.6
Employee stock purchase plan ("ESPP")	0.5	0.3	—	—
Stock options	0.9	0.8	0.3	0.1
Total stock-based compensation expense (benefit)	$12.9	$8.6	$ 5.7	$(0.4)

Stock Appreciation Rights: As of December 31, 2016, 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. Stock-based compensation expense recognized is based on SARS ultimately expected to vest, and therefore it has been reduced for estimated forfeitures.

A summary of the status of the Company's SARS as of December 31, 2016 and changes during fiscal 2016 and the one month ended December 31, 2015:

	SARS (In millions)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (years)	Aggregate Intrinsic Value (In millions)
Outstanding at November 30, 2015	0.8	$ 8.70		
Outstanding at December 31, 2015	0.8	8.64		
Granted	0.5	15.97		
Exercised	(0.2)	8.50		
Canceled	(0.1)	16.80		
Outstanding at December 31, 2016	1.0	$11.52	3.8	$6.3
Exercisable at December 31, 2016	0.5	$ 7.40	1.5	$5.4

The weighted average grant date fair value for SARS granted in fiscal 2016 was $7.66. No SARS were granted in fiscal 2015, 2014 and the one month ended December 31, 2015. The total intrinsic value for SARS liabilities paid in fiscal 2016, 2015, and 2014 was $2.3 million, $3.3 million, and $1.0 million, respectively. As of December 31, 2016, there was $2.6 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 25 months.

Restricted Stock, service-based: As of December 31, 2016, a total of 0.6 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. Stock-based compensation expense recognized is based on service-based restricted stock ultimately expected to vest, and therefore it has been reduced for estimated forfeitures.

A summary of the status of the Company's service-based restricted stock as of December 31, 2016 and changes during fiscal 2016 and the one month ended December 31, 2015:

	Service Based Restricted Stock (In millions)	Weighted Average Grant Date Fair Value
Outstanding at November 30, 2015 and December 31, 2015	0.5	$18.22
Granted	0.4	17.65
Exercised	(0.2)	17.30
Canceled	(0.1)	17.97
Outstanding at December 31, 2016	0.6	$18.06
Expected to vest at December 31, 2016	0.6	$18.28

As of December 31, 2016, there was $6.4 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 20 months. At December 31, 2016, the intrinsic value of the service-based restricted stock outstanding was $10.6 million and the intrinsic value of service-based restricted stock expected to vest was $10.2 million. The weighted average grant date fair values for service-based restricted stock granted in fiscal 2015 and 2014 was $20.70 and $17.22, respectively.

Restricted Stock, performance-based Company metrics: As of December 31, 2016, a total of 1.1 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. 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. Stock-based compensation expense recognized for all years presented is based on performance-based restricted stock ultimately expected to vest, and therefore it has been reduced for estimated forfeitures.

A summary of the status of the Company's performance-based restricted stock as of December 31, 2016 and changes during fiscal 2016 and the one month ended December 31, 2015:

	Performance Based Restricted Stock (In millions)	Weighted Average Grant Date Fair Value
Outstanding at November 30, 2015	1.0	$18.89
Outstanding at December 31, 2015	1.0	18.94
Granted	0.5	15.97
Exercised	(0.1)	16.71
Canceled	(0.3)	18.78
Outstanding at December 31, 2016	1.1	$17.85
Expected to vest at December 31, 2016	1.1	$17.90

As of December 31, 2016, there was $5.6 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 14 months. At December 31, 2016, the intrinsic value of the performance-based restricted stock outstanding was $19.9 million and the intrinsic value of the performance-based restricted stock expected to vest was $11.6 million. The weighted average grant date fair values for performance-based restricted stock granted in fiscal 2015 and 2014 was $21.33 and $17.25, respectively.

Employee Stock Purchase Plan: The ESPP initially offered in fiscal 2015 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 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, 2016, a total of 0.6 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, 2016 and changes during fiscal 2016:

	Stock Options (In millions)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (years)	Intrinsic Value (In millions)
Outstanding at November 30, 2015 and December 31, 2015	0.6	$12.29		
Granted	0.2	18.01		
Exercised	(0.2)	6.45		
Outstanding at December 31, 2016	0.6	$15.48	4.5	$ 2.3
Exercisable at December 31, 2016	0.2	$ 8.38	2.3	$ 2.3
Expected to vest at December 31, 2016	0.4	$20.19	6.0	$—

The total intrinsic value for options exercised in fiscal 2016, fiscal 2015, and fiscal 2014 was $2.1 million, $3.9 million, and $0.5 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 2015 and 2014 was $23.04 and $10.33.

The following table summarizes the range of exercise prices and weighted-average exercise prices for options outstanding as of December 31, 2016 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)
2009	$4.54	0.1	$ 4.54	2.5
2010	$4.91	0.1	$ 4.91	0.9
2014	$16.59 - $17.27	0.1	$17.03	4.2
2015	$20.48 - $23.06	0.1	$23.04	5.2
2016	$18.01	0.2	$18.01	6.6
		0.6		

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 recognizes the grant-date fair value of these awards, less estimated forfeitures, as stock-based compensation expense ratably over the estimated vesting period based on the number of awards expected to vest at each reporting date. As of December 31, 2016, there was $1.6 million of total stock-based compensation related to nonvested performance-based common shares. That cost is expected to be recognized over an estimated weighted-average amortization period of 7 months. The intrinsic value of the performance-based restricted stock outstanding and expected to vest at December 31, 2016 was $3.6 million. The Company used the following weighted average assumptions to value the awards:

	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	**November 30, 2014**
Expected life (in years)	7.0	7.0
Volatility	58.06%	58.92%
Risk-free interest rate	1.94%	2.27%

The Company did not grant any stock options during the one month ended December 31, 2015.

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, 2016	**November 30, 2015**	**November 30, 2014**	**December 31, 2015**
Expected life (in years)	4.0	2.1	2.6	2.0
Volatility	36.00%	34.00%	28.00%	34.00%
Risk-free interest rate	1.65%	0.94%	0.75%	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% to 45% as of December 31, 2016.

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 0.66% to 2.24% as of December 31, 2016.

Estimated Pre-vesting Forfeitures: When estimating forfeitures, the Company considers historical terminations as well as anticipated retirements.

Note 9. 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. 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 from continuing operations less applicable costs, expenses and unusual items relating to the segment operations. Segment performance excludes corporate income and expenses, legacy income or 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, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Net Sales:				
Aerospace and Defense	$1,753.9	$1,660.0	$1,596.0	$95.8
Real Estate	7.4	48.3	6.2	0.5
Total Net Sales	$1,761.3	$1,708.3	$1,602.2	$96.3
Segment Performance:				
Aerospace and Defense	$ 184.1	$ 165.7	$ 148.6	$19.6
Environmental remediation provision adjustments	(18.3)	(16.6)	(8.8)	0.1
Retirement benefit expense, net (1)	(22.5)	(50.2)	(25.2)	(4.1)
Unusual items	—	(50.0)	(0.9)	(0.4)
Aerospace and Defense Total	143.3	48.9	113.7	15.2
Real Estate	4.3	34.4	4.2	0.2
Total Segment Performance	$ 147.6	$ 83.3	$ 117.9	$15.4
Reconciliation of segment performance to income (loss) from continuing operations before income taxes:				
Segment performance	$ 147.6	$ 83.3	$ 117.9	$15.4
Interest expense	(32.5)	(50.4)	(52.7)	(3.8)
Interest income	0.6	0.3	0.1	—
Stock-based compensation expense	(12.9)	(8.6)	(5.7)	0.4
Corporate retirement benefit expense	(18.9)	(17.4)	(11.3)	(1.5)
Corporate and other	(20.1)	(22.1)	(20.5)	(1.5)
Unusual items	(34.5)	(1.9)	(60.8)	—
Income (loss) from continuing operations before income taxes	$ 29.3	$ (16.8)	$ (33.0)	$ 9.0
Aerospace and Defense	$ 46.4	$ 36.8	$ 43.1	$ 1.2
Real Estate	—	—	—	—
Corporate	1.2	—	0.3	—
Capital Expenditures	$ 47.6	$ 36.8	$ 43.4	$ 1.2
Aerospace and Defense	$ 64.2	$ 64.4	$ 63.0	$ 5.0
Real Estate	0.6	0.7	0.7	0.1
Corporate	0.1	—	—	—
Depreciation and Amortization	$ 64.9	$ 65.1	$ 63.7	$ 5.1

(1) Retirement benefit plan expense is net of cash funding to the Company's tax-qualified defined benefit pension plan which are recoverable costs under the Company's U.S. government contracts. The Company funded $27.5 million to its tax-qualified defined benefit pension plan in fiscal 2016 that was recoverable in the Company's fiscal 2016 U.S. government contracts.

	As of December 31,	
	2016	2015
	(In millions)	
Assets:		
Aerospace and Defense (1)	$1,571.3	$1,591.3
Real Estate	128.7	124.5
Operating segment assets	1,700.0	1,715.8
Corporate	549.5	309.7
Total Assets	$2,249.5	$2,025.5

(1) The Aerospace and Defense operating segment had $158.1 million of goodwill as of December 31, 2016 and 2015. In addition, as of December 31, 2016 and 2015 intangible assets balances (other than goodwill) were $94.4 million and $107.7 million, respectively, in the Aerospace and Defense operating segment.

Note 10. Cost Reduction Plan

During fiscal 2015, the Company initiated a competitive improvement program (the "CIP") comprised of activities and initiatives aimed at reducing costs in order for the Company to continue to compete successfully. The CIP is composed of three major components: (i) facilities optimization and footprint reduction; (ii) product affordability; and (iii) reduced administrative and overhead costs. Under the CIP, the Company expects an estimated 500 headcount reduction. The Company currently estimates that it will incur restructuring and related costs over the four-year CIP program of approximately $82 million (excluding approximately $31 million of capital expenditures). The Company has incurred $18.4 million related to the CIP program through December 31, 2016 and additionally the Company has incurred $28.9 million in capital expenditures to support the CIP. A summary of the Company's CIP reserve activity:

	Severance	Retention	Total
		(In millions)	
February 28, 2015	$ —	$—	$ —
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

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 $0.7 million and $0.8 million in fiscal 2016 and 2015, respectively, associated with changes in the estimated useful life of long-lived assets impacted by the CIP.

In addition to the CIP, as part of the Company's ongoing effort to optimize business resources and achieve headcount reduction, the Company offered a Voluntary Reduction in Force ("VRIF") in July 2015 to substantially all employees. In connection with the VRIF, the Company recorded a liability of $2.6 million in the third quarter of fiscal 2015, consisting of costs for severance, employee-related benefits and other associated expenses. In addition, in December 2015, the Company offered a VRIF to certain employees at its Redmond, Washington location resulting in additional severance costs of $2.4 million consisting of costs for severance, employee-related benefits and other associated expenses. In June 2016, the Company announced an organizational restructuring which was part of the on-going integration of Aerojet Rocketdyne to enhance the efficiency of Aerojet Rocketdyne and improve its competitive posture. In connection with the organizational restructuring, the Company recorded a liability of $1.1 million in the second quarter of fiscal 2016, consisting of costs for severance, employee-related benefits and other associated expenses. These costs 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.

Note 11. Quarterly Financial Data (Unaudited)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(In millions, except per share amounts)			
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) from continuing operations before income taxes	8.7	11.5	(25.2)	34.3
Income (loss) from continuing operations	5.2	5.9	(11.0)	18.0
(Loss) income from discontinued operations, net of income taxes	(0.1)	—	(0.1)	0.1
Net income (loss)	5.1	5.9	(11.1)	18.1
Basic income (loss) per share from continuing operations	0.08	0.09	(0.17)	0.26
Basic (loss) income per share from discontinued operations, net of income taxes	—	—	—	—
Basic net income (loss) per share	0.08	0.09	(0.17)	0.26
Diluted income (loss) per share from continuing operations	0.08	0.09	(0.17)	0.25
Diluted (loss) income per share from discontinued operations, net of income taxes	—	—	—	—
Diluted net income (loss) per share	0.08	0.09	(0.17)	0.25

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(In millions, except per share amounts)			
2015				
Net sales	$323.0	$457.8	$441.0	$486.5
Cost of sales (exclusive of items shown separately on Statement of Operations)	285.4	372.7	373.1	428.3
(Loss) income from continuing operations before income taxes	(9.3)	37.2	(60.2)	15.5
(Loss) income from continuing operations	(3.5)	17.3	(38.5)	7.6
Income from discontinued operations, net of income taxes	0.2	—	0.6	0.1
Net (loss) income	(3.3)	17.3	(37.9)	7.7
Basic (loss) income per share from continuing operations	(0.06)	0.28	(0.62)	0.12
Basic income per share from discontinued operations, net of income taxes	—	—	0.01	—
Basic net (loss) income per share	(0.06)	0.28	(0.61)	0.12
Diluted (loss) income per share from continuing operations	(0.06)	0.25	(0.62)	0.12
Diluted income per share from discontinued operations, net of income taxes	—	—	0.01	—
Diluted net (loss) income per share	(0.06)	0.25	(0.61)	0.12

Note 12. Transition Period Financial Information

The following table presents selected financial data for the one month ended December 31, 2015 and 2014:

	One month ended December 31,	
	2015	2014
		(Unaudited)
	(In millions, except per share amounts)	
Net sales	$96.3	$ 78.2
Cost of sales (exclusive of items shown separately on Statement of Operations)	75.4	71.9
Operating income (loss)	12.8	(4.7)
Income (loss) from continuing operations before income taxes	9.0	(9.6)
Income tax provision (benefit)	2.0	(3.4)
Net income (loss)	7.0	(6.2)
Basic income (loss) per share from continuing operations	0.11	(0.11)
Basic net income (loss) per share	0.11	(0.11)
Diluted income (loss) per share from continuing operations	0.10	(0.11)
Diluted net income (loss) per share	0.10	(0.11)

Note 13. Unusual Items

Total unusual items expense, a component of other expense, net in the consolidated statements of operations:

	Year Ended			One month ended
	December 31, 2016	November 30, 2015	November 30, 2014	December 31, 2015
	(In millions)			
Aerospace and Defense:				
Loss on legal matters and settlements	$ —	$50.0	$ 0.9	$ 0.4
Aerospace and defense unusual items	—	50.0	0.9	0.4
Corporate:				
Loss on debt repurchased\redeemed	34.4	1.9	60.6	—
Loss on bank amendment	0.1	—	0.2	—
Corporate unusual items	34.5	1.9	60.8	—
Total unusual items	$34.5	$51.9	$61.7	$ 0.4

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 (see Note 5).

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.

Fiscal 2014 Activity:

The Company recorded $0.9 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.

A summary of the Company's loss on the 4 $^{1}/_{16}$% Debentures repurchased (in millions):

Principal amount repurchased	$ 59.6
Cash repurchase price	(119.9)
Write-off of deferred financing costs	(0.3)
Loss on 4 $^{1}/_{16}$% Debentures repurchased	$ (60.6)

The Company recorded a charge of $0.2 million related to an amendment to the Senior Credit Facility.

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.

Note 14. Subsequent Event

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.

On February 22, 2017, the Company announced that it signed a definitive agreement to purchase Coleman Aerospace from L3 Technologies, Inc. for $15 million in cash, subject to customary adjustments. The transaction closed on February 24, 2017. Coleman Aerospace will operate as a subsidiary of Aerojet Rocketdyne, Inc. and will be renamed Aerojet Rocketdyne Coleman Aerospace, Inc.

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, 2016, 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 have concluded that the Company's disclosure controls and procedures were not effective as of December 31, 2016 because of the material weakness in our internal control over financial reporting described below. In light of the material weakness discussed below, the Company performed additional analysis and other post-closing procedures to ensure our consolidated financial statements are prepared in accordance with generally accepted accounting principles. Accordingly, management has concluded that the Company's consolidated financial statements included in this Annual Report on Form 10-K fairly present, in all material respects, our financial condition, results of operations and cash flows for the periods presented therein.

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").

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. We previously identified and disclosed, a material weakness in our internal control over financial reporting. 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. Specifically, we did not design effective controls related to the preparation and review of the financial information used in the calculation of our annual and quarterly income tax provision.

This material weakness resulted in errors to deferred tax assets, income taxes payable, uncertain tax positions and income tax expense accounts in the consolidated financial statements for the year ended December 31, 2016, the one month period ended December 31, 2015 and the year ended November 30, 2015. This material weakness did not result in a material misstatement of the Company's consolidated financial statements for the year ended December 31, 2016, the one month period ended December 31, 2015 or the year ended November 30, 2015.

Additionally, this material weakness could result in a misstatement of the aforementioned account balances or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected.

Because of this material weakness, management concluded that the Company did not maintain effective internal control over financial reporting as of December 31, 2016, based on criteria in *Internal Control—Integrated Framework* (2013) issued by the COSO.

The effectiveness of our internal control over financial reporting as of December 31, 2016 has been audited by PricewaterhouseCoopers LLP, our independent registered public accounting firm. Their report appears in Item 8 of this Form 10-K.

Remediation Efforts to Address Material Weakness

We continue to evaluate the composition of the internal controls in place for our income tax accounting and have begun or intend to perform the following:

- Hire additional tax resources (either internal or external) with the requisite skillset to supplement the current complement of tax professionals in place; and
- Develop and implement controls that will be executed consistently to validate the completeness and accuracy of the financial information utilized in our accounting for income taxes.

During the fourth quarter of fiscal 2016, we designed and implemented a control to evaluate significant and/or unusual transactions entered into during quarterly periods for income tax provision implications. This is accomplished through a review of the Company's quarterly significant transaction listing, discussions with management, and subsequent consultation with the Company's third party tax service provider as necessary.

In addition, during the fourth quarter of fiscal 2016, a third party tax service provider performed an assessment of the completeness and accuracy of our population of deferred tax balances at December 31, 2016, which we intend to leverage going forward in the performance of our annual deferred tax balance reconciliation efforts.

As part of our ongoing monitoring effort of our internal control over financial reporting, we will report progress and status of the above remediation efforts to the Audit Committee on a periodic basis throughout the year.

Changes in Internal Control Over Financial Reporting

As described in the "Remediation Efforts to Address Material Weakness" section above, there have been changes in internal control over financial reporting that occurred during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the effectiveness of our internal control over financial reporting.

Item 9B. *Other Information*

None.

PART III

Item 10. *Directors, Executive Officers and Corporate Governance*

Directors of the Registrant

Information with respect to directors of the Company who will stand for election at the 2017 Annual Meeting of Stockholders is set forth under the heading "PROPOSAL 1 — ELECTION OF DIRECTORS" in our 2017 Proxy Statement for our 2017 Annual Meeting of Stockholders ("2017 Proxy Statement"), which will be filed with the SEC within 120 days after the close of our fiscal year. Such information is incorporated herein by reference.

The information in our 2017 Proxy Statement set forth under the caption "Section 16(a) Beneficial Ownership Reporting Compliance" is incorporated herein by reference. Information regarding stockholder communications with our Board of Directors may be found under the caption "Communications with Directors" in our 2017 Proxy Statement and is incorporated herein by reference.

Executive Officers of the Registrant

The following is as of December 31, 2016:

Name	Title	Other Business Experience	Age
Warren G. Lichtenstein	Executive Chairman (since June 2016)	Chairman, March 2013 — June 2016 (director since 2008); Executive Chairman of Steel Partners Holdings GP Inc., the general partner of Steel Partners Holdings L.P. February 2013 — Present; Chairman and CEO of general partner of Steel Partners Holdings L.P. July 2009 — February 2013; Chairman Handy & Harman Ltd. (formerly known as WHX Corporation) July 2005 — Present; Executive Chairman ModusLink Global Solutions, Inc ("ModusLink") June 2016 — Present; Interim CEO ModusLink March 2016 — June 2016; Chairman ModusLink March 2013 — June 2016; Chairman Steel Excel May 2011 — Present (director since 2010); Director SL Industries, Inc. October 2010 — Present; Director (formerly Chairman) SL Industries January 2002 — May 2008; CEO SL Industries February 2002 — August 2005.	51
Eileen P. Drake	Chief Executive Officer and President (since June 2015)	Chief Operating Officer, March 2015 — June 2015; Director, Woodward, Inc. February 2017—present; President of Pratt & Whitney AeroPower's auxiliary power unit and small turbojet propulsion business, UTC 2012 — 2015; Vice President of Operations, UTC 2009 — 2012; Vice President of Quality, Environmental Health & Safety, and	50

Name	Title	Other Business Experience	Age
		Achieving Competitive Excellence, UTC 2003 — 2009; Product Line Manager and Plant Manager, Ford Motor Company 1996 — 2003; United States Army 1989 — 1996.	
Mark A. Tucker	Chief Operating Officer (since June 2015)	Senior Vice President, Enterprise Operations and Engineering, Aerojet Rocketdyne, Inc. October 2013 — June 2015; Vice President Special Programs, Aerospace Systems Sector, Northrop Grumman 1983 — 2013.	58
Paul R. Lundstrom	Vice President, Chief Financial Officer (since November 2016)	Vice President, Investor Relations, UTC 2014 — 2016; Vice President, Chief Financial Officer, Building & Industrial systems — North Asia (a UTC division) 2013 — 2014; Vice President, Chief Financial Officer, Climate/Controls/ Security — Asia (a UTC division) 2011 — 2013; Vice President, Chief Financial Officer, Carrier Building Systems and Services, Carrier Corporation (a UTC division) 2009 — 2011.	41
Arjun L. Kampani	Vice President, General Counsel and Secretary (since April 2016)	Vice President, General Counsel and Corporate Secretary, General Dynamics Land Systems, Inc. 2010 — 2016; Director & Assistant General Counsel, General Dynamics Corporation 2006 — 2009; Assistant General Counsel and Assistant Corporate Secretary, Anteon International Corporation 2004 — 2006; Attorney, Business and Finance Department, Thelen Reid & Priest, LLP 1999 — 2004.	45
Kathleen E. Redd	Vice President, Chief Financial Officer (since January 2009), and Assistant Secretary (since March 2012), Retired March 2017	Secretary, February 2009 — March 2012; Vice President, Controller and Acting Chief Financial Officer September 2008 — January 2009; Vice President, Finance 2006 — 2008; Assistant Corporate Controller, 2002 — 2006; Acting Vice President Controller GDX Automotive, 2003 — 2004 (concurrent with Assistant Corporate Controller position during divestiture activities); Vice President, Finance, for Grass Valley Group, 2001 — 2002; Vice President, Finance for JOMED, Inc., 2000 — 2001; Controller for EndoSonics Corporation, 1996 — 2000.	55

The Company's executive officers generally hold terms of office of one year and/or until their successors are elected and serve at the discretion of the Board.

Code of Ethics and Corporate Governance Guidelines

The Company has adopted a code of ethics known as the Code of Business Conduct that applies to the Company's employees including the principal executive officer and principal financial officer. Amendments to the Code of Business Conduct and any grant of a waiver from a provision of the Code of Business Conduct requiring disclosure under applicable SEC rules will be disclosed on the Company's website at *www.AerojetRocketdyne.com.* Copies of the Code of Business Conduct and the Company's Corporate Governance Guidelines are available on the Company's web site at *www.AerojetRocketdyne.com* (copies are available in print to any stockholder or other interested person who requests them by writing to Secretary, Aerojet Rocketdyne Holdings, Inc., 222 N. Sepulveda Blvd, Suite 500, El Segundo, California 90245).

Audit Committee and Audit Committee Financial Expert

Information regarding the Audit Committee and the Audit Committee's Financial Expert is set forth under the heading "Board Committees" in our 2017 Proxy Statement and is incorporated herein by reference.

Item 11. *Executive Compensation*

Information concerning executive compensation may be found under the captions "Executive Compensation," "2016 Director Compensation Table," "Compensation Discussion and Analysis," "Summary Compensation Table," "2016 Grants of Plan-Based Awards," "Outstanding Equity Awards at 2016 Fiscal Year End," "2016 Option/SAR Exercises and Stock Vested," "2016 Pension Benefits," "2016 Non-Qualified Deferred Compensation," "Potential Payments upon Termination of Employment or Change in Control," "Employment Agreement and Indemnity Agreements," "Director Compensation," "Organization & Compensation Committee Report" and "Compensation Committee Interlocks and Insider Participation" of our 2017 Proxy Statement. Such information is incorporated herein by reference.

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

The information under the headings "Security Ownership of Certain Beneficial Owners" and "Security Ownership of Officers and Directors" in our 2017 Proxy Statement is incorporated herein by reference.

Equity Compensation Plan Information

The table below sets forth certain information regarding the following equity compensation plans of the Company, pursuant to which we have made equity compensation available to eligible persons, as of December 31, 2016: (i) 1999 Equity and Performance Incentive Plan; and (ii) 2009 Equity and Performance Incentive Plan. Both plans have been approved by our stockholders.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options,Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
	(a)	(b)	(c)
Equity compensation plans approved by stockholders			
Stock options	601,585	$15.48	
Restricted shares (2)	—		
Performance shares (3)	—		
Total	601,585	$15.48	2,946,979(1)
Equity compensation plans not approved by stockholders (4)	—	N/A	—
Total	601,585	$15.48	2,946,979

(1) As of December 31, 2016, there are no more shares available to be issued under any type of incentive award under the 1999 Equity and Performance Incentive Plan. The maximum number of shares available for issuance to participants under the 2009 Equity and Performance Incentive Plan is 7,450,000 shares, all of which may be awarded as incentive stock options. Subject to the total shares available to be issued under the plan, the following specific limits apply: (A) no more than 300,000 shares may be issued to nonemployee directors and no nonemployee director may receive more than 150,000 shares in any fiscal year; (B) no more than 200,000 shares subject to stock options, including incentive stock options, may be granted to any participant in any fiscal year; (C) no more than 200,000 shares subject to stock appreciation rights may be granted to any participant in any fiscal year; (D) no more than 200,000 shares may be granted to any participant in any fiscal year pursuant to an award of restricted stock or restricted stock units; (E) no more than 200,000 shares may be granted to any participant in any fiscal year pursuant to an award of performance shares or performance units; and (F) no more than 100,000 shares may be granted to any participant in any fiscal year pursuant to a stock-based award other than described above.

(2) As of December 31, 2016, 1,697,929 shares had been granted as restricted shares that had not yet vested.

(3) As of December 31, 2016, 200,000 shares had been granted as performance shares that had not yet vested.

(4) The Company also maintains the Aerojet Rocketdyne Holdings, Inc. and Participating Subsidiaries Deferred Bonus Plan. Prior to 2016, this plan allowed participating employees to defer a portion of their compensation for future distribution. All or a portion of such deferrals made prior to November 30, 2009 could be allocated to an account based on the Company's common stock and does permit limited distributions in the form of Company common shares. However, distributions in the form of common shares are permitted only at the election of the Organization & Compensation Committee of the Board of Directors and, according to the terms of the plan, individuals serving as officers or directors of the Company are not permitted to receive distributions in the form of Company common shares until at least six months after such individual ceases to be an officer or director of the Company. The table does not include information about this plan because no options, warrants or rights are available under this plan and no specific number of shares is set aside under this plan as available for future issuance. Based upon the price of Company common shares on December 31, 2016, the maximum number of shares that could be distributed to employees not subject to the restrictions on officers and directors (if permitted by the Organization & Compensation Committee) would be 4,224. This plan was amended effective November 30, 2009 to prevent the application of future deferrals to the Company common stock investment program.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence***

Information regarding certain transactions and employment agreements with management is set under the headings "Employment Agreement and Indemnity Agreements," "Related Person Transaction Policy" and "Potential Payments upon Termination of Employment or Change in Control" in our 2017 Proxy Statement and is incorporated herein by reference. Information regarding director independence is set forth under the heading "Determination of Independence of Directors" in our 2017 Proxy Statement and is incorporated herein by reference.

Item 14. ***Principal Accountant Fees and Services***

The information in our 2017 Proxy Statement set forth under the captions "Proposal 4 - Ratification of the Appointment of Independent Auditors," "Audit Fees," "Audit-Related Fees," "Tax Fees," "All Other Fees," and "Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of the Company's Independent Auditors" is incorporated herein by reference.

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

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.

Table Item No.	Exhibit Description
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	Indenture, dated as of December 21, 2009, between GenCorp Inc. and The Bank of New York Mellon Trust Company, N.A., as trustee, relating to GenCorp's 4.0625% Convertible Subordinated Debentures due 2039 was filed as Exhibit 4.1 to GenCorp Inc.'s Current Report on Form 8-K filed on December 21, 2009 (File 1-01520) and is incorporated herein by reference.
4.3	Form of 4.0625% Convertible Subordinated Debenture due 2039 was filed as Exhibit 4.2 to GenCorp Inc.'s Current Report on Form 8-K dated December 21, 2009 (File No. 1-01520), as amended, and incorporated herein by reference.
4.4	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.
4.5	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.
4.6	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.
4.7	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.

Table Item No.	Exhibit Description
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

Table Item No.	Exhibit Description
	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†	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.
10.28†	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.

Table Item No.	Exhibit Description
10.29	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.
10.30	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.
10.31†	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.
10.32†	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 10.4 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.
10.33†	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.
10.34†	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.
10.35†	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.
10.36†	Separation and General Release Agreement between Aerojet Rocketdyne, Inc. and Warren M. Boley, Jr. dated March 5, 2015 was filed as Exhibit 10.1 to GenCorp Inc.'s Current Report on Form 8-K dated March 5, 2015 (File No. 1-01520), and is incorporated herein by reference.
10.37†	Transition and General Release Agreement between Aerojet Rocketdyne Holdings, Inc. and Scott J. Seymour dated July 7, 2015 was filed as Exhibit 10.1 to Aerojet Rocketdyne Holdings, Inc.'s Current Report on Form 8-K dated July 7, 2015 (File No. 1-01520), and is incorporated herein by reference.
10.38†	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.
10.39†	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.
10.40	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

Table Item No.	Exhibit Description
	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.
10.41†	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.
10.42†	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.
10.43†	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.
18.1	Letter of PricewaterhouseCoopers LLP, dated November 1, 2016, related to change in accounting principle was filed as Exhibit 18.1 to Aerojet Rocketdyne Holdings, Inc.'s Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2016 (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 Accounting 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.

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 1, 2017

Aerojet Rocketdyne Holdings, Inc.

By: /s/ EILEEN P. DRAKE
Eileen P. Drake
President and Chief Executive Officer

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	President, Chief Executive Officer and Director (Principal Executive Officer)	March 1, 2017
/s/ PAUL R. LUNDSTROM Paul R. Lundstrom	Vice President, Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 1, 2017
* Warren G. Lichtenstein	Executive Chairman	March 1, 2017
* Thomas A. Corcoran	Director	March 1, 2017
* James R. Henderson	Director	March 1, 2017
* Lance W. Lord	Director	March 1, 2017
* Merrill A. McPeak	Director	March 1, 2017
* James H. Perry	Director	March 1, 2017
* Martin Turchin	Director	March 1, 2017
* By: /s/ PAUL R. LUNDSTROM Paul R. Lundstrom	Attorney-in-Fact pursuant to Power of Attorney	March 1, 2017

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

I, Eileen P. Drake, certify that:

1. I have reviewed this 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 1, 2017

/s/ Eileen P. Drake

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

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

I, Paul R. Lundstrom, certify that:

1. I have reviewed this 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 1, 2017

/s/ Paul R. Lundstrom

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

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 the Annual Report on Form 10-K of Aerojet Rocketdyne Holdings, Inc. (the "Company") for the fiscal year ended December 31, 2016, 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
President and Chief Executive Officer
(Principal Executive Officer)

Date: March 1, 2017

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 the Annual Report on Form 10-K of Aerojet Rocketdyne Holdings, Inc (the "Company") for the fiscal year ended December 31, 2016, 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 and Principal
Accounting Officer)

Date: March 1, 2017

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Board of Directors

Thomas A. Corcoran
Senior Advisor of The Carlyle Group
President of Corcoran Enterprises, LLC
Director since 2008

Eileen P. Drake
Chief Executive Officer and President
Aerojet Rocketdyne Holdings, Inc.
Director since 2015

James R. Henderson
CEO of ModusLink Corporation
President, JRH and Associates
Director since 2008

Warren G. Lichtenstein[1]
Executive Chairman and Chief Executive Officer
Steel Partners Holdings, L. P.
Director since 2008

General Lance W. Lord
USAF (Ret.)
Director since 2015

General Merrill A. McPeak
USAF (Ret.)
President, McPeak and Associates
Director since 2013

James H. Perry
Retired Chief Financial Officer
United Industrial Corporation
Director since 2008

Martin Turchin
Vice Chairman
CB Richard Ellis
Director since 2008

Officers

Warren G. Lichtenstein
Executive Chairman of the Board

Eileen P. Drake
Chief Executive Officer and President

Mark A. Tucker
Chief Operating Officer

Paul R. Lundstrom
Vice President, Chief Financial Officer

James S. Simpson
Senior Vice President, Strategy and Business Development

John D. Schumacher
Vice President, Washington Operations

Arjun L. Kampani
Vice President, General Counsel and Secretary

Addresses

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El Segundo, California 90245
310-252-8100

Aerojet Rocketdyne, Inc.
P.O. Box 13222
Sacramento, California 95813-6000
916-355-4000

Easton Development Company, LLC
1180 Iron Point Road
Suite 350
Folsom, California 95630

[1]Executive Chairman of the Board, Aerojet Rocketdyne Holdings, Inc.

Shareholder Information

Common Stock
Exchange Listings:
New York Stock Exchange
Chicago Stock Exchange
Ticker Symbol: AJRD

Transfer Agent and Registrar
Computershare
Toll Free – Domestic Callers: 877-889-2023
International Callers: 201-680-6578

Address for Regular Mail
Computershare
P. O. Box 30170
College Station, TX 77842

Address for Overnight Carriers
Computershare
211 Quality Circle, Suite 210
College Station, TX 77845

Website
www.computershare.com/investor

Shareholder Online Inquiries
https://www-us.computershare.com/investor/contact

BuyDIRECT

A direct purchase and sale plan, BuyDIRECT, is available to shareholders and interested first-time investors, offering a convenient method of increasing investment in Aerojet Rocketdyne Holdings, Inc. The Company pays all brokerage commissions and bank service fees incurred on behalf of the participant in connection with stock purchases. Subject to terms and conditions of the plan, investments of up to $120,000 per year are used to buy more shares of the Company's Common Stock.

For additional information, or to participate, contact:
Computershare Trust Company, N.A.
P.O. Box 30170
College Station, TX 77842
877-889-2023

Independent Auditors

PricewaterhouseCoopers LLP
Los Angeles, California

Investor Information

Security analysts and investors seeking additional information about Aerojet Rocketdyne Holdings, Inc. should contact:

Peter Knudsen
Director, Investor Relations
916-355-2252

Board of Directors Communications

Correspondence to members of the Aerojet Rocketdyne Holdings, Inc. Board of Directors should be addressed to:

Chair, Corporate Governance & Nominating Committee
Aerojet Rocketdyne Holdings, Inc.
Arjun L. Kampani
Vice President, General Counsel and Secretary
222 N. Sepulveda Boulevard
Suite 500
El Segundo, California 90245

Corporate Communications

For inquiries about Aerojet Rocketdyne Holdings, Inc., contact:

Glenn Mahone
Vice President, Communications
202-302-9941

Additional information about Aerojet Rocketdyne Holdings, Inc. including recent news, can be found at http://www.aerojetrocketdyne.com

A copy of the Company's Form 10-K as filed with the Securities and Exchange Commission (SEC) for 2016, which includes as Exhibits the Chief Executive Officer and Chief Financial Officer Certifications required to be filed with the SEC pursuant to Section 302 of the Sarbanes-Oxley Act, is included in this annual report and may also be obtained by shareholders without charge upon written request to Aerojet Rocketdyne Holdings, Inc., P.O. Box 537012, Sacramento, CA 95853-7012. Attn: Investor Relations. The Form 10-K is also available on the Company's web site at http://www.Aerojet Rocketdyne.com. During the Company's year ended December 31, 2016, the Company filed with the New York Stock Exchange (NYSE) the Certification of its Chief Executive Officer confirming that the Chief Executive Officer was not aware of any violations by the Company of the NYSE's corporate governance listing standards.

AEROJET ROCKETDYNE Holdings, Inc.

WWW.AEROJETROCKETDYNE.COM

Corporate Headquarters
222 N. Sepulveda Blvd., Suite 500
El Segundo, CA 90245