2017 ANNUAL REPORT

LOCKHEED MARTIN CORPORATION

LOCKHEED MARTIN

FINANCIAL HIGHLIGHTS

In millions, except per share data	2017	2016	2015
Net Sales	**$ 51,048**	$ 47,248	$ 40,536
Segment Operating Profit	**5,115**	5,100	4,978
Consolidated Operating Profit	**5,921**	5,549	4,712
Net Earnings From Continuing Operations	**1,929**	3,753	3,126
Net Earnings	**2,002**	5,302	3,605
Diluted Earnings Per Common Share			
Continuing Operations	**6.64**	12.38	9.93
Net Earnings	**6.89**	17.49	11.46
Cash Dividends Per Common Share	**7.46**	6.77	6.15
Average Diluted Common Shares Outstanding	**291**	303	315
Cash and Cash Equivalents	**$ 2,861**	$ 1,837	$ 1,090
Total Assets	**46,521**	47,806	49,304
Total Debt, net	**14,263**	14,282	15,261
Total (Deficit) Equity	**(609)**	1,606	3,097
Common Shares Outstanding at Year-End	**284**	289	303
Net Cash Provided by Operating Activities	**$ 6,476**	$ 5,189	$ 5,101

NOTE: For additional information regarding the amounts presented above see the Form 10-K portion of this Annual Report. A reconciliation of Segment Operating Profit to Consolidated Operating Profit is included on the page preceding the back cover of this Annual Report.

On the Cover: Terminal High Altitude Area Defense

The Terminal High Altitude Area Defense (THAAD) system uses advanced technologies pioneered by Lockheed Martin to defend U.S. troops, allied forces, population centers, and critical infrastructure against short-, medium-, and intermediate-range ballistic missiles.

The U.S. Department of Defense's Missile Defense Agency manages THAAD, the U.S. Army operates it, and Lockheed Martin is the systems integrator.

THAAD works in concert with interceptors like PAC-3, PAC-3 MSE, and Aegis BMD to maximize integrated air and missile defense capabilities and offer the speed, mobility, and flexibility warfighters need to adapt to changing threat situations around the globe.

DEAR FELLOW STOCKHOLDERS:

Throughout 2017, Lockheed Martin demonstrated our leadership as the world's premier aerospace and defense company.

We listened to our customers' evolving geopolitical concerns and adapted to their budgetary needs to provide them with the advanced technologies and affordable solutions they need in the 21st century.

Our performance in meeting these needs and commitments was strong, consistent, and well-focused.

The year was marked by solid financial, operational, and strategic results – performance that drove a strong return on investment for stockholders and lays the groundwork for future Lockheed Martin growth.

The impressive performance of 2017 is even more notable because it came during an immensely challenging and uncertain period in the world. The pace of business change and the magnitude of geopolitical events over the past 12 months – from the United States and Europe to North Korea and the Middle East – made for one of the most dynamic and unpredictable environments our company has seen in our more than 105 years of business.

Marillyn A. Hewson, Chairman, President and Chief Executive Officer

Yet, even in this challenging environment, all four of Lockheed Martin's business areas performed with excellence. As you will see in the pages that follow, we adapted to new realities and market dynamics with speed, agility, and innovation. In fact, some of our greatest successes in 2017 were seen – and felt – around the world.

For example, U.S. customers and partner nations saw the F-35's presence on the global stage – from Japan to Israel, from Australia to Norway. And as the fifth-generation capabilities of the unrivaled fighter made an impact, Lockheed Martin continued to successfully ramp up production to meet rising domestic and international demand.

Our nation and our allies were also strengthened by our missile defense technologies, which included deployments of Terminal High Altitude Area Defense (THAAD), the Aegis Combat System, as well as the Patriot Advanced Capability-3 (PAC-3) and PAC-3 Missile Segment Enhancement (PAC-3 MSE) interceptors.

In 2017, Lockheed Martin pursued and secured new, strategic opportunities in the Kingdom of Saudi Arabia. The historic agreements between the United States government and Saudi Arabia opened up the potential for the sale of $28 billion of Lockheed Martin technologies over the next decade.

In addition to these strategic moves and successes, Lockheed Martin continued our corporate commitment to reach out and effectively engage elected leaders and policymakers. These efforts began before the U.S. presidential election, continued through the transition, and have extended to both Congress and the administration. Reflecting the relevance of our products, the federal budget and congressional spending decisions throughout the year supported the F-35, C-130, PAC-3, THAAD, CH-53K, Aegis, and other key Lockheed Martin programs.

In pressing forward on all these fronts and many more in 2017, Lockheed Martin, once again, strongly contributed to national security, international cooperation, and global progress.

DELIVERED STRONG FINANCIAL RESULTS

Our stockholders saw a total return of 32 percent in 2017 – contributing to a 307 percent total return over the past five years.

This significant return on investment was driven by strong operational performance, robust cash generation, and a far-sighted cash deployment strategy.

In 2017, Lockheed Martin generated $6.5 billion in cash from operations, and we expect to generate another $17 billion in cash over the next three years.

We returned 79 percent of our free cash flow* to stockholders throughout the year.

In 2017, share repurchases totaled $2.0 billion, and we increased the share repurchase authority to provide flexibility for future returns.

We paid out $2.2 billion in dividends in 2017, and increased the quarterly dividend by 10 percent in the third quarter to $8.00 annually.

Other key financial metrics reflect our strong and consistent operational performance in 2017, including:

- Sales of $51.0 billion, up eight percent versus 2016
- Segment operating profit* of $5.1 billion
- Segment margin* of 10.0 percent
- Net earnings from continuing operations of approximately $1.9 billion
- Diluted earnings per share of $6.64 from continuing operations

Our net earnings and earnings per share for 2017 reflect a one-time charge of approximately $1.9 billion, or $6.69 per share, resulting from the enactment of the Tax Cuts and Jobs Act of 2017. Among its provisions, the Tax Cuts and Jobs Act reduced the maximum U.S. federal corporate income tax rate from 35 percent to 21 percent.

AN UNWAVERING FOCUS ON CUSTOMERS

Our performance in 2017 was ultimately driven by our commitment to put the customer at the center of everything we do. We engaged, we listened, and we continued to build a deep understanding of the geopolitical threats, economic pressures, and technological developments that are shaping our customers' needs.

Our business successes flowed directly from these close relationships and ongoing dialogue with our customers.

The breadth and depth of our portfolio was reflected in $54.2 billion of new orders. And we ended 2017 with a very strong backlog of $100 billion.

Across the corporation, many key programs achieved important milestones:

Supporting Air Superiority

Our largest program, the F-35, continued to achieve new milestones – strategically positioning us for years of growth and international sales. To meet rising demand, we expanded our production capabilities and maintained a robust supply chain. Our Aeronautics business area successfully delivered 66 aircraft in 2017. This is a greater than 40 percent increase over 2016. In addition, we reached an agreement with the U.S. Department of Defense (DoD) for 90 additional F-35 aircraft for approximately $8.2 billion. This represents a $728 million savings for taxpayers – an eight percent lower price compared to the previous contract.

To create capacity for increasing F-35 production, we announced that we will move production of the F-16 from Fort Worth, Texas, to Greenville, South Carolina. In this new location, Lockheed Martin will be poised to produce up to 19 new F-16s for Bahrain in a deal worth up to $2.8 billion dollars. This opens a new chapter in the story of the world's most advanced fourth-generation fighter, as we pursue emerging opportunities in other nations.

Overall, Aeronautics performed strongly in 2017 with the delivery of 107 aircraft – including 66 F-35s, eight F-16s, 26 C-130Js, and seven C-5Ms.

Our Leadership Team (from left to right): *Richard F. Ambrose, Executive Vice President, Space; Dale P. Bennett, Executive Vice President, Rotary and Mission Systems; Bruce L. Tanner, Executive Vice President and Chief Financial Officer; Marillyn A. Hewson, Chairman, President and Chief Executive Officer; Orlando P. Carvalho, Executive Vice President, Aeronautics; Richard H. Edwards, Executive Vice President, Lockheed Martin International, as of January 8, 2018 (throughout 2017, he served as an executive officer in his capacity as Executive Vice President, Missiles and Fire Control); and Frank A. St. John, Executive Vice President, Missiles and Fire Control, as of January 8, 2018.*

Providing Workhorse Capabilities

Rotary and Mission Systems (RMS) won a five-year contract for 257 H-60 BLACK HAWK helicopters to be delivered to the U.S. Army and Foreign Military Sales (FMS) customers. The contract value for expected deliveries is approximately $3.8 billion and includes options for an additional 103 aircraft, with the total contract value potentially reaching $5.2 billion. These helicopters are a valuable asset for our military and allied nations and are considered to be the workhorses of the U.S. Army. It was the ninth time that the U.S. government has provided Sikorsky with a multi-year contract for H-60.

Another focus program within the Sikorsky line-of-business, the CH-53K “King Stallion” heavy-lift helicopter, celebrated a major win. The U.S. Marine Corps awarded us a contract for the first lot of production aircraft, which will be assembled at Sikorsky’s headquarters in Stratford, Connecticut. The U.S. DoD’s Program of Record is for 200 CH-53K aircraft. The U.S. Marine Corps expects to stand up eight active duty squadrons, one training squadron, and one reserve squadron to support operational requirements.

In 2017, RMS showed its speed and agility by delivering 180 helicopters and two fixed-wing aircraft, which was consistent with our strategic objectives.

Serving Those on the Leading Edge

Missiles and Fire Control (MFC) won the re-compete for U.S. Special Operations Command’s next-generation logistics and sustainment support program. It is a 10-year, indefinite-delivery and indefinite-quantity contract. This was an especially significant win because of the critical role of Special Operations. This customer is on the frontlines defending our nation, and Special Operations requires innovation and new techniques to improve effectiveness. Our well-established track record and continued focus on the rapidly evolving needs of the customer helped equip us to secure this win.

Enabling Multi-Layered and Integrated Air and Missile Defense

Across our businesses, Lockheed Martin continued to provide a host of cutting-edge technologies for missile defense.

MFC won a new $944 million contract for production and delivery of the PAC-3 and PAC-3 MSE interceptors. The contract is for interceptors and launcher modification kits for the U.S. Army, Romania, and other FMS customers. PAC-3 is a high-velocity interceptor that defends against incoming threats, including tactical ballistic missiles, cruise missiles, and aircraft.

The Aegis Combat System from RMS continued to demonstrate its ability to facilitate international cooperation and effectively protect citizens. In February and August, Aegis was used to successfully intercept a medium-range ballistic missile target in tests off the coast of Hawaii. In October, during a series of NATO exercises with allied nations, the U.S. Navy used Aegis to facilitate a coordinated response with American and allied vessels to track and destroy multiple live targets. And in December, Japan’s cabinet approved a plan to purchase two Aegis Ashore systems.

Our THAAD system also successfully intercepted a target in a missile defense test led by the U.S. Missile Defense Agency. The test was the first intermediate-range ballistic missile intercept, and the 15th successful intercept in 15 attempts for the THAAD system since 2005. With this successful test, the THAAD system continues to prove its ability to intercept and destroy many classes of ballistic missile threats to protect citizens, deployed forces, allies, and international partners around the globe.

Supplying Next-Generation Technologies

All across our broad portfolio, we are improving, advancing, and modernizing critical national security capabilities.

For example, we were proud to win a $900 million contract from the U.S. Air Force to develop and enhance technologies for the Long Range Stand Off (LRSO) missile program. LRSO is a key part of the air-launched portion of our nation’s nuclear triad, which provides a global strategic deterrent. More than 800 team members from 11 U.S. states will contribute to this next-generation missile capable of penetrating and surviving advanced integrated air defense systems.

Advancing the Frontiers of Human Knowledge

Lockheed Martin is the nation’s leading aerospace and defense industry partner and as such, 2017 was a high-profile year for our Space business area.

The revival of the National Space Council placed a renewed emphasis on strengthening U.S. leadership in space. The final frontier will be increasingly critical to our nation’s security and economic future.

Our Space team progressed key programs for our U.S. military customers such as the Space Based Infrared System and the GPS III satellite constellations. We also had our first “power up” of Orion, which is the world’s first human-rated spacecraft designed for long-duration, deep-space exploration.

In 2017, we also began construction of our Gateway Center – the most advanced satellite production facility in Lockheed Martin’s history. This new,

$350 million building will be where we produce next-generation satellites. The Gateway Center will bring rapidly reconfigurable production lines and advanced test capabilities all under one roof. It is designed with the physical space and flexibility to build a spectrum of satellites simultaneously. We have also woven elements of the digital tapestry into the design of the building, including the use of robotics, additive manufacturing, and virtual reality to accelerate the manufacturing process and reduce costs.

It is a prime example of how Lockheed Martin is investing in our facilities to provide our world-class workforce with the advanced capabilities they need to meet our customers' evolving demands.

DRIVING INNOVATION AND GROWTH

Innovation has been – and always will be – the lifeblood of Lockheed Martin.

In 2017, we continued to foster a high-performance workplace and promote a culture of innovation that welcomes, tests, implements, and deploys bold new ideas and transformative new processes.

We focused time, people, and resources on anticipating our customers' future challenges and investing in emerging technologies that will define the next generation of aerospace and defense.

Lockheed Martin is taking bold, enterprise-wide actions to lead in innovative areas such as hypersonics, laser weapons systems, autonomy, and integrated networking for electromagnetic warfare.

In 2017, for instance, we completed the design, development, and demonstration of a world-record 60 kilowatt-class beam combined fiber laser for the U.S. Army; received a contract to develop a high-power fiber laser for testing on a tactical fighter jet by 2021; and demonstrated an array of remotely piloted and autonomous vehicles for military, civil, and commercial applications.

In addition to aligning our investments with the evolving mission needs of our customers, we are embracing the digital transformation by investing in technologies and capabilities that are revolutionizing the way our products are designed, tested, and built. This has positioned the company to improve our sales, profits, and market share in the dynamic and often unpredictable business environment of the 21st century.

LEADERSHIP BUILT ON CORE VALUES

The foundation of our ability to navigate the tremendous complexity and change of 2017 was our commitment to our core values – to do what's right, respect others, and perform with excellence.

These values were the building blocks of every decision we made and every action we took throughout the year.

In doing so, Lockheed Martin became the only U.S. aerospace and defense company to receive the Gold Class distinction in the Corporate Sustainability Assessment by RobecoSAM. The Gold Class distinction identifies companies that are strongly positioned to create long-term shareholder value.

By conducting business in an ethical manner, by giving back to the communities where we live and work, and by performing with excellence, the employees of Lockheed Martin were unwavering and well-focused on maximizing their positive impact on the world.

Across the corporation – in programs large and small, military and commercial, high-profile and classified – we delivered on the commitments we made to our customers and to you, our valued stockholders.

I am excited about Lockheed Martin's bright future. We are on course to apply all that we have learned throughout 2017 to continue to perform strongly, win new business consistently, and drive innovation and growth for years to come.

Marillyn A. Hewson

Marillyn A. Hewson
Chairman, President, and
Chief Executive Officer

**This letter includes references to segment operating profit, segment margin, and free cash flow, which are non-GAAP financial measures. For reconciliations between our non-GAAP measures and the nearest GAAP measures, please refer to the page preceding the back cover of this Annual Report. As non-GAAP financial measures are not intended to be considered in isolation or as a substitute for GAAP financial measures, you should carefully read the Form 10-K included in this Annual Report, which includes our consolidated financial statements prepared in accordance with GAAP. Additionally, this letter includes statements that, to the extent they are not recitations of historical fact, constitute forward-looking statements within the meaning of the federal securities laws, and are based on Lockheed Martin's current expectations and assumptions. For a discussion identifying important factors that could cause actual results to vary materially from those anticipated in the forward-looking statements, see the corporation's filings with the SEC, including "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors" in the Form 10-K portion of this Annual Report.*

CORPORATE DIRECTORY

(As of February 6, 2018)

BOARD OF DIRECTORS

Daniel F. Akerson
Retired Vice Chairman
The Carlyle Group

Nolan D. Archibald
Retired Chairman, President and Chief Executive Officer
The Black & Decker Corporation

David B. Burritt
President and Chief Executive Officer
United States Steel Corporation

Bruce A. Carlson
Retired General
United States Air Force

James O. Ellis, Jr.
Retired President and Chief Executive Officer
Institute of Nuclear Power Operations

Thomas J. Falk
Chairman and Chief Executive Officer
Kimberly-Clark Corporation

Ilene S. Gordon
Executive Chairman of the Board
Ingredion Incorporated

Marillyn A. Hewson
Chairman, President and Chief Executive Officer
Lockheed Martin Corporation

Jeh C. Johnson
Partner
Paul, Weiss, Rifkind, Wharton & Garrison LLP

James M. Loy
Senior Counselor
The Cohen Group

Joseph W. Ralston
Vice Chairman
The Cohen Group

James D. Taiclet, Jr.
Chairman, President and Chief Executive Officer
American Tower Corporation

EXECUTIVE OFFICERS

Richard F. Ambrose
Executive Vice President
Space

Dale P. Bennett
Executive Vice President
Rotary and Mission Systems

Orlando P. Carvalho
Executive Vice President
Aeronautics

Brian P. Colan
Vice President, Controller and Chief Accounting Officer

Marillyn A. Hewson
Chairman, President and Chief Executive Officer

Maryanne R. Lavan
Senior Vice President, General Counsel and Corporate Secretary

John W. Mollard
Vice President and Treasurer

Frank A. St. John
Executive Vice President
Missiles and Fire Control

Bruce L. Tanner
Executive Vice President and Chief Financial Officer

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, 2017

Commission file number 1-11437

LOCKHEED MARTIN CORPORATION
(Exact name of registrant as specified in its charter)

Maryland	**52-1893632**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

6801 Rockledge Drive, Bethesda, Maryland 20817-1877 (301/897-6000)
(Address and telephone number of principal executive offices)

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

Title of each class	Name of each exchange on which registered
Common Stock, $1 par value	New York Stock Exchange

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

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of 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, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

The aggregate market value of voting and non-voting common stock held by non-affiliates of the registrant computed by reference to the last sales price of such stock, as of the last business day of the registrant's most recently completed second fiscal quarter, which was June 23, 2017, was approximately $80.3 billion.

There were 285,570,742 shares of our common stock, $1 par value per share, outstanding as of January 26, 2018.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of Lockheed Martin Corporation's 2018 Definitive Proxy Statement are incorporated by reference into Part III of this Form 10-K.

Lockheed Martin Corporation

Form 10-K
For the Year Ended December 31, 2017

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PART I

ITEM 1. Business

General

We are a global security and aerospace company principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. We also provide a broad range of management, engineering, technical, scientific, logistics, system integration and cybersecurity services. We serve both U.S. and international customers with products and services that have defense, civil and commercial applications, with our principal customers being agencies of the U.S. Government. In 2017, 69% of our $51.0 billion in net sales were from the U.S. Government, either as a prime contractor or as a subcontractor (including 58% from the Department of Defense (DoD)), 30% were from international customers (including foreign military sales (FMS) contracted through the U.S. Government) and 1% were from U.S. commercial and other customers. Our main areas of focus are in defense, space, intelligence, homeland security and information technology, including cybersecurity.

We operate in an environment characterized by both increasing complexity in global security and continuing economic pressures in the U.S. and globally. A significant component of our strategy in this environment is to focus on program execution, improving the quality and predictability of the delivery of our products and services, and placing security capability quickly into the hands of our U.S. and international customers at affordable prices. Recognizing that our customers are resource constrained, we are endeavoring to develop and extend our portfolio domestically in a disciplined manner with a focus on adjacent markets close to our core capabilities, as well as growing our international sales. We continue to focus on affordability initiatives. We also expect to continue to invest in technologies to fulfill new mission requirements for our customers and invest in our people so that we have the technical skills necessary to succeed.

We operate in four business segments: Aeronautics, Missiles and Fire Control (MFC), Rotary and Mission Systems (RMS) and Space, previously known as Space Systems. We organize our business segments based on the nature of the products and services offered.

Aeronautics

In 2017, our Aeronautics business segment generated net sales of $20.1 billion, which represented 39% of our total consolidated net sales. Aeronautics' customers include the military services and various other government agencies of the U.S. and other countries. In 2017, U.S. Government customers accounted for 63%, international customers accounted for 36% and U.S. commercial and other customers accounted for 1% of Aeronautics' net sales. Net sales from Aeronautics' combat aircraft products and services represented 30% of our total consolidated net sales in 2017 and 28% in both 2016 and 2015.

Aeronautics is engaged in the research, design, development, manufacture, integration, sustainment, support and upgrade of advanced military aircraft, including combat and air mobility aircraft, unmanned air vehicles and related technologies. Aeronautics' major programs include:

- F-35 Lightning II Joint Strike Fighter - international multi-role, multi-variant, fifth generation stealth fighter;
- C-130 Hercules - international tactical airlifter;
- F-16 Fighting Falcon - low-cost, combat-proven, international multi-role fighter;
- F-22 Raptor - air dominance and multi-mission fifth generation stealth fighter; and
- C-5M Super Galaxy - strategic airlifter.

The F-35 program is our largest program, generating 25% of our total consolidated net sales, as well as 64% of Aeronautics' net sales in 2017. The F-35 program consists of development contracts, multiple production contracts, and sustainment activities. The development contracts are being performed concurrently with the production contracts. Concurrent performance of development and production contracts is used for complex programs to test aircraft, shorten the time to field systems and achieve overall cost savings. The System Development and Demonstration (SDD) portion of the development contracts was substantially completed in 2017, with over 99% of flight test objectives met through over 9,200 flights. Approximately 70 flights remain and are expected to be completed in early 2018. Additionally, the final logistics and training capability is planned for 2018 and new Third Life structural testing added to the SDD portion in 2013 is scheduled to be completed in 2019. Production of the aircraft is expected to continue for many years given the U.S. Government's current inventory objective of 2,456 aircraft for the Air Force, Marine Corps and Navy; commitments from our eight international partners and three international customers; as well as expressions of interest from other countries. During 2017, we delivered 66 aircraft to our U.S. and international partners, resulting in total deliveries of 266 production aircraft as of December 31, 2017. We have 235 production aircraft in backlog as of December 31, 2017, including orders from our international partners. For additional information on the F-35 program, see "Status of the F-35 Program" in Management's Discussion and Analysis of Financial Condition and Results of Operations.

Aeronautics produces and provides support and sustainment services for the C-130J Super Hercules, as well as upgrades and support services for the legacy C-130 Hercules worldwide fleet. We delivered 26 C-130J aircraft in 2017, including seven to international customers. We have 64 aircraft in our backlog as of December 31, 2017 with advanced funding from customers for additional C-130J aircraft not currently in backlog. Our C-130J backlog extends into 2020.

While production and deliveries of F-16 aircraft were completed in 2017 from our Fort Worth, Texas facilities, Aeronautics continues to provide service-life extension, modernization and other upgrade programs for our customers' F-16 aircraft, with existing contracts continuing for several years. We delivered eight F-16 aircraft in 2017 and continue to seek international opportunities to deliver additional aircraft. In November 2017, the U.S. and Bahrain signed a government-to-government agreement, or a Letter of Offer and Acceptance (LOA), regarding the sale of new production Block 70 aircraft for the Royal Bahraini Air Force. We are transitioning F-16 production to Greenville, South Carolina, to support the Bahrain production program and other emerging F-16 production requirements.

While production and deliveries of F-22 aircraft were completed in 2012, Aeronautics continues to provide modernization and sustainment activities for the U.S. Air Force's F-22 aircraft fleet. The modernization program comprises upgrading existing systems requirements, developing new systems requirements, adding capabilities and enhancing the performance of the weapon systems. The sustainment program consists of sustaining the weapon systems of the F-22 fleet, providing training systems, customer support, integrated support planning, supply chain management, aircraft modifications and heavy maintenance, systems engineering and support products.

Aeronautics provides sustainment services for the existing U.S. Air Force C-5 Galaxy fleet and modernization activities to convert 52 C-5 Galaxy aircraft to the C-5M Super Galaxy configuration. These modernization activities include the installation of new engines, landing gear and systems and other improvements that enable a shorter takeoff, a higher climb rate, an increased cargo load and longer flight range. As of December 31, 2017, we had delivered 48 C-5M aircraft under these modernization activities, including seven C-5M aircraft delivered in 2017. As of December 31, 2017, we have four C-5 aircraft in backlog with all deliveries expected in 2018. Although existing production contracts provide for deliveries of C-5M aircraft through mid-2018, we continue to seek additional modernization opportunities for the C-5 Galaxy fleet beyond 2018. Sustainment activities for our customers' C-5 Galaxy aircraft are expected to continue for several years.

In addition to the aircraft programs discussed above, Aeronautics is involved in advanced development programs incorporating innovative design and rapid prototype applications. Our Advanced Development Programs (ADP) organization, also known as Skunk Works®, is focused on future systems, including unmanned and manned aerial systems and next generation capabilities for advanced strike, intelligence, surveillance, reconnaissance, situational awareness and air mobility. We continue to explore technology advancement and insertion in our existing aircraft. We also are involved in numerous network-enabled activities that allow separate systems to work together to increase effectiveness and we continue to invest in new technologies to maintain and enhance competitiveness in military aircraft design, development and production.

Missiles and Fire Control

In 2017, our MFC business segment generated net sales of $7.2 billion, which represented 14% of our total consolidated net sales. MFC's customers include the military services, principally the U.S. Army, and various government agencies of the U.S. and other countries, as well as commercial and other customers. In 2017, U.S. Government customers accounted for 64%, international customers accounted for 34% and U.S. commercial and other customers accounted for 2% of MFC's net sales.

MFC provides air and missile defense systems; tactical missiles and air-to-ground precision strike weapon systems; logistics; fire control systems; mission operations support, readiness, engineering support and integration services; manned and unmanned ground vehicles; and energy management solutions. MFC's major programs include:

- The Patriot Advanced Capability-3 (PAC-3) and Terminal High Altitude Area Defense (THAAD) air and missile defense programs. PAC-3 is an advanced defensive missile for the U.S. Army and international customers designed to intercept and eliminate incoming airborne threats using kinetic energy. THAAD is a transportable defensive missile system for the U.S. Government and international customers designed to engage targets both within and outside of the Earth's atmosphere.
- The Multiple Launch Rocket System (MLRS), Hellfire, Joint Air-to-Surface Standoff Missile (JASSM) and Javelin tactical missile programs. MLRS is a highly mobile, automatic system that fires surface-to-surface rockets and missiles from the M270 and High Mobility Artillery Rocket System platforms produced for the U.S. Army and international customers. Hellfire is an air-to-ground missile used on rotary and fixed-wing aircraft, which is produced for the U.S. Army, Navy, Marine Corps and international customers. JASSM is an air-to-ground missile launched from fixed-wing aircraft, which is produced for the

U.S. Air Force and international customers. Javelin is a shoulder-fired anti-armor rocket system, which is produced for the U.S. Army, Marine Corps and international customers.
- The Apache, SNIPER® and Low Altitude Navigation and Targeting Infrared for Night (LANTIRN®) fire control systems programs. The Apache fire control system provides weapons targeting capability for the Apache helicopter for the U.S. Army and international customers. Sniper is a targeting system for several fixed-wing aircraft and LANTIRN is a combined navigation and targeting system for several fixed-wing aircraft. Both Sniper and LANTIRN are produced for the U.S. Air Force and international customers.
- The Special Operations Forces Contractor Logistics Support Services (SOF CLSS) program provides logistics support services to the special operations forces of the U.S. military. In August 2017, we were awarded a contract for the Special Operations Forces Global Logistics Support Services (SOF GLSS) program, which is a competitive follow-on contract to SOF CLSS.

Rotary and Mission Systems

In 2017, our RMS business segment generated net sales of $14.2 billion, which represented 28% of our total consolidated net sales. RMS' customers include the military services, principally the U.S. Army and Navy, and various government agencies of the U.S. and other countries, as well as commercial and other customers. In 2017, U.S. Government customers accounted for 69%, international customers accounted for 28% and U.S. commercial and other customers accounted for 3% of RMS' net sales.

RMS provides design, manufacture, service and support for a variety of military and commercial helicopters; ship and submarine mission and combat systems; mission systems and sensors for rotary and fixed-wing aircraft; sea and land-based missile defense systems; radar systems; the Littoral Combat Ship (LCS); simulation and training services; and unmanned systems and technologies. In addition, RMS supports the needs of government customers in cybersecurity and delivers communications and command and control capabilities through complex mission solutions for defense applications. RMS' major programs include:

- The Black Hawk and Seahawk helicopters manufactured for U.S. and foreign governments.
- The Aegis Combat System (Aegis) serves as a fleet ballistic missile defense system for the U.S. Navy and international customers and is also a sea and land-based element of the U.S. missile defense system.
- The LCS, a surface combatant ship for the U.S. Navy designed to operate in shallow waters and the open ocean.
- The CH-53K development helicopter delivering the next generation heavy lift helicopter for the U.S. Marine Corps.
- The VH-92A helicopter manufactured for the U.S. Marine One transport mission.
- The Advanced Hawkeye Radar System, an airborne early warning radar, which RMS provides for the E2-C/E2-D aircraft produced for the U.S. Navy and international customers.
- The Command, Control, Battle Management and Communications (C2BMC) contract, a program to increase the integration of the Ballistic Missile Defense System for the U.S. Government.

Space

In 2017, our Space business segment generated net sales of $9.5 billion, which represented 19% of our total consolidated net sales. Space's customers include various U.S. Government agencies and commercial customers. In 2017, U.S. Government customers accounted for 85%, international customers accounted for 14% and U.S. commercial and other customers accounted for 1% of Space's net sales. Net sales from Space's satellite products and services represented 11%, 13% and 15% of our total consolidated net sales in 2017, 2016 and 2015.

Space is engaged in the research and development, design, engineering and production of satellites, strategic and defensive missile systems and space transportation systems. Space provides network-enabled situational awareness and integrates complex space and ground global systems to help our customers gather, analyze and securely distribute critical intelligence data. Space is also responsible for various classified systems and services in support of vital national security systems. Space's major programs include:

- The Trident II D5 Fleet Ballistic Missile (FBM), a program with the U.S. Navy for the only submarine-launched intercontinental ballistic missile currently in production in the U.S.
- The United Kingdom's nuclear deterrent program operated by the AWE Management Limited (AWE) joint venture.
- The Orion Multi-Purpose Crew Vehicle (Orion), a spacecraft for the National Aeronautics and Space Administration (NASA) utilizing new technology for human exploration missions beyond low earth orbit.
- The Space Based Infrared System (SBIRS), which provides the U.S. Air Force with enhanced worldwide missile launch detection and tracking capabilities.
- Global Positioning System (GPS) III, a program to modernize the GPS satellite system for the U.S. Air Force.
- The Advanced Extremely High Frequency (AEHF) system, the next generation of highly secure communications satellites for the U.S. Air Force.

Financial, Geographic and Other Business Segment Information

For additional information regarding our business segments, including comparative segment net sales, operating profit and related financial information, including geographic, for 2017, 2016, and 2015, see "Business Segment Results of Operations" in Management's Discussion and Analysis of Financial Condition and Results of Operations and "Note 5 – Information on Business Segments" included in our Notes to Consolidated Financial Statements.

Competition

Our broad portfolio of products and services competes both domestically and internationally against products and services of other large aerospace and defense companies, as well as numerous smaller competitors. Changes within the industry we operate in, such as vertical integration by our peers, could negatively impact us. We often form teams with our competitors in efforts to provide our customers with the best mix of capabilities to address specific requirements. In some areas of our business, customer requirements are changing to encourage expanded competition and increasingly what would have previously been competed as a single large procurement is being broken into multiple smaller procurements. Principal factors of competition include the value of our products and services to the customer; technical and management capability; the ability to develop and implement complex, integrated system architectures; total cost of ownership; our demonstrated ability to execute and perform against contract requirements; and our ability to provide timely solutions. Technological advances in such areas as: additive manufacturing, cloud computing, advanced materials, autonomy, robotics, and big data and new business models such as commercial access to space are enabling new factors of competition for both traditional and non-traditional competitors.

The competition for international sales is generally subject to U.S. Government stipulations (e.g., export restrictions, market access, technology transfer, industrial cooperation and contracting practices). We may compete against U.S. and non-U.S. companies (or teams) for contract awards by international governments. International competitions also may be subject to different laws or contracting practices of international governments that may affect how we structure our bid for the procurement. In many international procurements, the purchasing government's relationship with the U.S. and its industrial cooperation programs are also important factors in determining the outcome of a competition. It is common for international customers to require contractors to comply with their industrial cooperation regulations, sometimes referred to as offset requirements, and we have entered into foreign offset agreements as part of securing some international business. For more information concerning offset agreements, see "Contractual Commitments and Off-Balance Sheet Arrangements" in Management's Discussion and Analysis of Financial Condition and Results of Operations.

Intellectual Property

We routinely apply for and own a substantial number of U.S. and foreign patents related to the products and services we provide. In addition to owning a large portfolio of patents, we own other intellectual property, including trademarks, copyrights, trade secrets and know-how. Unpatented research, development and engineering skills also make an important contribution to our business. We also license intellectual property to and from third parties. The Federal Acquisition Regulation (FAR) provides that the U.S. Government has licenses in our intellectual property, including patents, that are developed in performance of government contracts or with government funding, and it may use or authorize others, including competitors, to use such intellectual property, commonly referred to as government use rights. The U.S. Government is taking increasingly aggressive positions under the FAR both as to what intellectual property they believe such rights apply and to acquire broad license rights to use and have others use such intellectual property. If the U.S. Government is successful in these efforts, this could affect our ability to compete and to obtain access to and use certain supplier intellectual property. Foreign governments may also have certain rights in patents and other intellectual property developed in performance of foreign government contracts. Although our intellectual property rights in the aggregate are important to the operation of our business, we do not believe that any existing patent, license or other intellectual property right is of such importance that its loss or termination would have a material adverse effect on our business taken as a whole.

Raw Materials and Seasonality

Some of our products require relatively scarce raw materials. Historically, we have been successful in obtaining the raw materials and other supplies needed in our manufacturing processes. We seek to manage raw materials supply risk through long-term contracts and by maintaining an acceptable level of the key materials in inventories.

Aluminum and titanium are important raw materials used in certain of our Aeronautics and Space programs. Long-term agreements have helped enable a continued supply of aluminum and titanium. Carbon fiber is an important ingredient in composite materials used in our Aeronautics programs, such as the F-35 aircraft. We have been advised by some suppliers that pricing and the timing of availability of materials in some commodities markets can fluctuate widely. These fluctuations may negatively affect the price and availability of certain materials. While we do not anticipate material problems regarding the supply of our raw materials and believe that we have taken appropriate measures to mitigate these variations, if key materials become unavailable or if pricing fluctuates widely in the future, it could result in delay of one or more of our programs, increased costs or reduced operating profits.

No material portion of our business is considered to be seasonal. Various factors can affect the distribution of our sales between accounting periods, including the timing of government awards, the availability of government funding, product deliveries and customer acceptance.

Government Contracts and Regulations

Our business is heavily regulated. We contract with numerous U.S. Government agencies and entities, principally all branches of the U.S. military and NASA. We also contract with similar government authorities in other countries and they regulate our international efforts. Additionally, our commercial aircraft products are required to comply with U.S. and international regulations governing production and quality systems, airworthiness and installation approvals, repair procedures and continuing operational safety.

We must comply with, and are affected by, laws and regulations relating to the formation, administration and performance of U.S. Government and other governments' contracts. These laws and regulations, among other things:

- require certification and disclosure of all cost or pricing data in connection with certain types of contract negotiations;
- impose specific and unique cost accounting practices that may differ from U.S. GAAP;
- impose acquisition regulations, which may change or be replaced over time, that define allowable and unallowable costs, the allocability of costs, and otherwise govern our right to reimbursement under certain U.S. Government and foreign contracts;
- require specific security controls to protect U.S. Government controlled unclassified information and restrict the use and dissemination of information classified for national security purposes and the export of certain products, services and technical data; and
- require the review and approval of contractor business systems, defined in the regulations as: (i) Accounting System; (ii) Estimating System; (iii) Earned Value Management System, for managing cost and schedule performance on certain complex programs; (iv) Purchasing System; (v) Material Management and Accounting System, for planning, controlling and accounting for the acquisition, use, issuing and disposition of material; and (vi) Property Management System.

The U.S. Government and other governments may terminate any of our government contracts and subcontracts either at its convenience or for default based on our performance. If a contract is terminated for convenience, we generally are protected by provisions covering reimbursement for costs incurred on the contract and profit on those costs. If a contract is terminated for default, we generally are entitled to payments for our work that has been accepted by the U.S. Government or other governments; however, the U.S. Government and other governments could make claims to reduce the contract value or recover its procurement costs and could assess other special penalties. For more information regarding the U.S. Government's and other governments' right to terminate our contracts, see Item 1A - Risk Factors. For more information regarding government contracting laws and regulations, see Item 1A - Risk Factors as well as "Critical Accounting Policies - Contract Accounting / Sales Recognition" in Management's Discussion and Analysis of Financial Condition and Results of Operations. For more information on the risks of doing work internationally, see Item 1A - Risk Factors. Additionally, the U.S. Government may also enter into unilateral contract actions. This can affect our ability to negotiate mutually agreeable contract terms.

A portion of our business is classified by the U.S. Government and cannot be specifically described. The operating results of these classified contracts are included in our consolidated financial statements. The business risks and capital requirements associated with classified contracts historically have not differed materially from those of our other U.S. Government contracts. Our internal controls addressing the financial reporting of classified contracts are consistent with our internal controls for our non-classified contracts.

Our operations are subject to and affected by various federal, state, local and foreign environmental protection laws and regulations regarding the discharge of materials into the environment or otherwise regulating the protection of the environment. While the extent of our financial exposure cannot in all cases be reasonably estimated, the costs of environmental compliance have not had, and we do not expect that these costs will have, a material adverse effect on our earnings, financial position and cash flow, primarily because most of our environmental costs are allowable in establishing the price of our products and services under our contracts with the U.S. Government. For information regarding these matters, including current estimates of the amounts that we believe are required for remediation or cleanup to the extent that they are probable and estimable, see "Critical Accounting Policies - Environmental Matters" in Management's Discussion and Analysis of Financial Condition and Results of Operations and "Note 14 – Legal Proceedings, Commitments and Contingencies" included in our Notes to Consolidated Financial Statements. See also the discussion of environmental matters within Item 1A - Risk Factors.

Backlog

At December 31, 2017, our backlog was $99.9 billion compared with $96.2 billion at December 31, 2016. Backlog is converted into sales in future periods as work is performed or deliveries are made. Under existing revenue recognition guidance, approximately $31 billion, or 31%, of our backlog at December 31, 2017 would have been converted into sales in 2018.

Our backlog includes both funded (firm orders for our products and services for which funding has been both authorized and appropriated by the customer) and unfunded (firm orders for which funding has not been appropriated) amounts. We do not include unexercised options or potential orders under indefinite-delivery, indefinite-quantity agreements in our backlog. If any of our contracts with firm orders were to be terminated, our backlog would be reduced by the expected value of the unfilled orders of such contracts. Funded backlog was $73.6 billion at December 31, 2017, as compared to $66.0 billion at December 31, 2016. For backlog related to each of our business segments, see “Business Segment Results of Operations” in Management’s Discussion and Analysis of Financial Condition and Results of Operations.

Research and Development

We conduct research and development (R&D) activities under customer-sponsored contracts and with our own independent R&D funds. Our independent R&D costs include basic research, applied research, development, systems and other concept formulation studies. Generally, these costs are allocated among contracts and programs in progress. Costs we incur under customer-sponsored R&D programs pursuant to contracts are included in net sales and cost of sales. Under certain arrangements in which a customer shares in product development costs, our portion of the unreimbursed costs is expensed as incurred in cost of sales. Independent R&D costs charged to cost of sales were $1.2 billion in 2017, $988 million in 2016, and $817 million in 2015. See “Note 1 – Significant Accounting Policies” (under the caption “Research and development and similar costs”) included in our Notes to Consolidated Financial Statements.

Employees

At December 31, 2017, we had approximately 100,000 employees, about 93% of whom were located in the U.S. Approximately 21% of our employees are covered by collective bargaining agreements with various unions. A number of our existing collective bargaining agreements expire in any given year. Historically, we have been successful in negotiating renewals to expiring agreements without any material disruption of operating activities. Management considers employee relations to be good.

Available Information

We are a Maryland corporation formed in 1995 by combining the businesses of Lockheed Corporation and Martin Marietta Corporation. Our principal executive offices are located at 6801 Rockledge Drive, Bethesda, Maryland 20817. Our telephone number is (301) 897-6000 and our website home page is at www.lockheedmartin.com. We make our website content available for information purposes only. It should not be relied upon for investment purposes, nor is it incorporated by reference into this Annual Report on Form 10-K (Form 10-K).

Throughout this Form 10-K, we incorporate by reference information from parts of other documents filed with the U.S. Securities and Exchange Commission (SEC). The SEC allows us to disclose important information by referring to it in this manner.

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements for our annual stockholders’ meetings and amendments to those reports are available free of charge on our website, www.lockheedmartin.com/investor, as soon as reasonably practical after we electronically file the material with, or furnish it to, the SEC. In addition, copies of our annual report will be made available, free of charge, upon written request. The SEC also maintains a website at www.sec.gov that contains reports, proxy statements and other information regarding SEC registrants, including Lockheed Martin Corporation.

Forward-Looking Statements

This Form 10-K contains statements that, to the extent they are not recitations of historical fact, constitute forward-looking statements within the meaning of the federal securities laws and are based on our current expectations and assumptions. The words “believe,” “estimate,” “anticipate,” “project,” “intend,” “expect,” “plan,” “outlook,” “scheduled,” “forecast” and similar expressions are intended to identify forward-looking statements. These statements are not guarantees of future performance and are subject to risks and uncertainties.

Statements and assumptions with respect to future sales, income and cash flows, program performance, the outcome of litigation, anticipated pension cost and funding, environmental remediation cost estimates, planned acquisitions or dispositions of assets, or the anticipated consequences are examples of forward-looking statements. Numerous factors, including the risk factors described in the following section, could affect our forward-looking statements and actual performance.

Our actual financial results likely will be different from those projected due to the inherent nature of projections. Given these uncertainties, forward-looking statements should not be relied on in making investment decisions. The forward-looking statements contained in this Form 10-K speak only as of the date of its filing. Except where required by applicable law, we expressly disclaim a duty to provide updates to forward-looking statements after the date of this Form 10-K to reflect subsequent events, changed circumstances, changes in expectations, or the estimates and assumptions associated with them. The forward-looking statements in this Form 10-K are intended to be subject to the safe harbor protection provided by the federal securities laws.

ITEM 1A. Risk Factors

An investment in our common stock or debt securities involves risks and uncertainties. We seek to identify, manage and mitigate risks to our business, but risk and uncertainty cannot be eliminated or necessarily predicted. The outcome of one or more of these risks could have a material effect on our operating results, financial position, or cash flows. You should carefully consider the following factors, in addition to the other information contained in this Annual Report on Form 10-K, before deciding to purchase our common stock or debt securities.

We depend heavily on contracts with the U.S. Government for a substantial portion of our business.

We derived 69% of our total net sales from the U.S. Government in 2017, including 58% from the Department of Defense (DoD). We expect to continue to derive most of our sales from work performed under U.S. Government contracts. Those contracts are conditioned upon the continuing availability of Congressional appropriations. Congress usually appropriates funds on a fiscal-year basis even though contract performance may extend over many years. Consequently, contracts are often partially funded initially and additional funds are committed only as Congress makes further appropriations. If we incur costs in excess of funds obligated on a contract, we may be at risk for reimbursement of those costs unless and until additional funds are obligated to the contract.

The F-35 is our largest program and represented 25% of our total net sales in 2017 and is expected to represent a higher percentage of our sales in future years. A decision to cut spending or reduce planned orders would have an adverse impact on our results of operations. Given the size and complexity of the F-35 program, we anticipate that there will be continual reviews related to aircraft performance, program schedule, cost, and requirements as part of the DoD, Congressional, and international partners' oversight and budgeting processes. Current program challenges include, but are not limited to, increasing manufacturing capabilities to meet higher customer demand for new aircraft and sustainment activities, supplier and partner performance, software development, level of cost associated with life cycle operations and sustainment and warranties, successfully negotiating and receiving funding for production contracts on a timely basis, executing future flight tests and findings resulting from testing and operating the aircraft. Additionally, the U.S. Government may also enter into unilateral contract actions. A unilateral contract action obligates us to perform under terms and conditions imposed by the U.S. Government. Unilateral contract actions could negatively affect profit and cash flows, and establish a precedent for future contracts.

Based upon our diverse range of defense, homeland security and information technology products and services, we believe that this makes it less likely that cuts in any specific contract or program will have a long-term effect on our business. However, termination of multiple or large programs or contracts could adversely affect our business and future financial performance. Potential changes in funding priorities may afford new or additional opportunities for our businesses in terms of existing, follow-on or replacement programs. While we would expect to compete and be well positioned as the incumbent on existing programs, we may not be successful or the replacement programs may be funded at lower levels.

We are subject to a number of procurement laws and regulations. Our business and our reputation could be adversely affected if we fail to comply with these laws.

We must comply with and are affected by laws and regulations relating to the award, administration and performance of U.S. Government contracts. Government contract laws and regulations affect how we do business with our customers and impose certain risks and costs on our business. A violation of specific laws and regulations, by us, our employees, others working on our behalf, a supplier or a venture partner, could harm our reputation and result in the imposition of fines and penalties, the termination of our contracts, suspension or debarment from bidding on or being awarded contracts, loss of our ability to export products or services and civil or criminal investigations or proceedings.

In some instances, these laws and regulations impose terms or rights that are different from those typically found in commercial transactions. For example, the U.S. Government may terminate any of our government contracts and subcontracts either at its convenience or for default based on our performance. Upon termination for convenience of a fixed-price type contract, we normally are entitled to receive the purchase price for delivered items, reimbursement for allowable costs for work-in-process and an allowance for profit on the contract or adjustment for loss if completion of performance would have resulted in a loss.

Upon termination for convenience of a cost-reimbursable contract, we normally are entitled to reimbursement of allowable costs plus a portion of the fee. Allowable costs would include our cost to terminate agreements with our suppliers and subcontractors. The amount of the fee recovered, if any, is related to the portion of the work accomplished prior to termination and is determined by negotiation. We attempt to ensure that adequate funds are available by notifying the customer when its estimated costs, including those associated with a possible termination for convenience, approach levels specified as being allotted to its programs. As funds are typically appropriated on a fiscal year basis and as the costs of a termination for convenience may exceed the costs of continuing a program in a given fiscal year, occasionally programs do not have sufficient funds appropriated to cover the termination costs were the government to terminate them for convenience. Under such circumstances, the U.S. Government could assert that it is not required to appropriate additional funding.

A termination arising out of our default may expose us to liability and have a material adverse effect on our ability to compete for future contracts and orders. In addition, on those contracts for which we are teamed with others and are not the prime contractor, the U.S. Government could terminate a prime contract under which we are a subcontractor, notwithstanding the quality of our services as a subcontractor. In the case of termination for default, the U.S. Government could make claims to reduce the contract value or recover its procurement costs and could assess other special penalties. However, under such circumstances we have rights and remedial actions under laws and the Federal Acquisition Regulation (FAR).

In addition, certain of our U.S. Government contracts span one or more base years and multiple option years. The U.S. Government generally has the right not to exercise option periods and may not exercise an option period for various reasons. However, the U.S. Government may exercise option periods, even for contracts for which it is expected that our costs may exceed the contract price or ceiling.

U.S. Government agencies, including the Defense Contract Audit Agency, the Defense Contract Management Agency and various agency Inspectors General, routinely audit and investigate government contractors. These agencies review a contractor's performance under its contracts, its cost structure, its business systems and compliance with applicable laws, regulations and standards. The U.S. Government has the ability to decrease or withhold certain payments when it deems systems subject to its review to be inadequate. Additionally, any costs found to be misclassified may be subject to repayment. We have unaudited and/or unsettled incurred cost claims related to past years, which places risk on our ability to issue final billings on contracts for which authorized and appropriated funds may be expiring.

If an audit or investigation uncovers improper or illegal activities, we may be subject to civil or criminal penalties and administrative sanctions, including reductions of the value of contracts, contract modifications or terminations, forfeiture of profits, suspension of payments, penalties, 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. Similar government oversight exists in most other countries where we conduct business.

Our profitability and cash flow may vary based on the mix of our contracts and programs, our performance, our ability to control costs and evolving U.S. Government procurement policies.

Our profitability and cash flow may vary materially depending on the types of government contracts undertaken, the nature of products produced or services performed under those contracts, the costs incurred in performing the work, the achievement of other performance objectives and the stage of performance at which the right to receive fees is determined, particularly under award and incentive-fee contracts.

Our backlog includes a variety of contract types that are intended to address changing risk and reward profiles as a program matures. Contract types include cost-reimbursable, fixed-price incentive-fee, fixed-price and time-and-materials contracts. Contracts for development programs with complex design and technical challenges are typically cost-reimbursable. Under cost-reimbursable contracts, we are reimbursed for allowable costs and paid a fee, which may be fixed or performance-based. In these cases, the associated financial risks primarily relate to a reduction in fees and the program could be canceled if cost, schedule or technical performance issues arise.

Other contracts in backlog are for the transition from development to production (e.g., Low Rate Initial Production (LRIP) contracts), which includes the challenge of starting and stabilizing a manufacturing production and test line while the final design is being validated. These generally are cost-reimbursable or fixed-price incentive-fee contracts. Under a fixed-price incentive-fee contract, the allowable costs incurred are eligible for reimbursement but are subject to a cost-share arrangement, which affects profitability. Generally, if our costs exceed the contract target cost or are not allowable under the applicable regulations, we may not be able to obtain reimbursement for all costs and may have our fees reduced or eliminated.

There are also contracts for production, as well as operations and maintenance of the delivered products, that have the challenge of achieving a stable production and delivery rate, while maintaining operability of the product after delivery. These contracts are mainly fixed-price, although some operations and maintenance contracts are time-and-materials type. Under fixed-price contracts, we receive a fixed price regardless of the actual costs we incur. We have to absorb any costs in excess of the fixed price. Under time-and-materials contracts, we are paid for labor at negotiated hourly billing rates and for certain expenses.

The failure to perform to customer expectations and contract requirements may result in reduced fees or losses and affect our financial performance in that period. Under each type of contract, if we are unable to control costs, our operating results could be adversely affected, particularly if we are unable to justify an increase in contract value to our customers. Cost overruns or the failure to perform on existing programs also may adversely affect our ability to retain existing programs and win future contract awards.

The U.S. Government is currently pursuing and implementing policies that could negatively impact our profitability. Changes in procurement policy favoring more incentive-based fee arrangements, different award fee criteria or government contract negotiation offers based upon the customer's view of what our costs should be (as compared to our actual costs) may affect the predictability of our profit rates. Our customers are subject to pressures that may result in a change in contract types referenced above earlier in a program's maturity than is traditional. An example of this is the use of fixed-price incentive-fee contracts for recent LRIP contracts on the F-35 program while the development contract is being performed concurrently. Our customers also may pursue non-traditional contract provisions in negotiation of contracts. For example, changes resulting from the F-35 development contract may need to be implemented on the production contracts (including the LRIP contracts), a concept referred to as concurrency, which may require us to pay for a portion of the concurrency costs. In some circumstances, the U.S. Government is proposing positions that are inconsistent with the FAR and existing practice. For example, the U.S. Government is now requiring that bid and proposal costs be included in general and administrative costs, rather than charged directly to contracts in certain circumstances. Another example is a recent challenge to overhead costs. The U.S. Government's pursuit of policies intended to cause us to absorb cost may become more aggressive if the U.S. Government concludes that our profitability justifies cost shifting without regard to the provisions of the FAR.

Other policies could negatively impact our working capital and cash flow. For example contrary to FAR, the government has expressed a preference for requiring progress payments rather than performance based payments on new fixed-price contracts, which if implemented, delays our ability to recover a significant amount of costs incurred on a contract and thus affects the timing of our cash flows.

Increased competition and bid protests in a budget-constrained environment may make it more difficult to maintain our financial performance and customer relationships.

We are experiencing increased competition while, at the same time, many of our customers are facing budget pressures, trying to do more with less by cutting costs, identifying more affordable solutions, performing certain work internally rather than hiring a contractor, and reducing product development cycles. It is critical we maintain strong customer relationships and seek to understand the priorities of their requirements in this price competitive environment.

In international sales, we face substantial competition from both U.S. manufacturers and international manufacturers whose governments sometimes provide research and development assistance, marketing subsidies and other assistance for their products. Additionally, our competitors are also focusing on increasing their international sales to partially mitigate the effect of reduced U.S. Government budgets. To remain competitive, we consistently must maintain strong customer relationships and provide superior performance, advanced technology solutions and service at an affordable cost and with the agility that our customers require to satisfy their mission objectives.

A substantial portion of our business is awarded through competitive bidding. The U.S. Government increasingly has relied upon competitive contract award types, including indefinite-delivery, indefinite-quantity and other multi-award contracts, which have the potential to create pricing pressure and increase our cost by requiring that we submit multiple bids and proposals. In addition, multi-award contracts require that we make sustained efforts to obtain task orders under the contract. The competitive bidding process entails substantial costs and managerial time to prepare bids and proposals for contracts that may not be awarded to us or may be split among competitors. Additionally, the U.S. Government may fail to award us large competitive contracts in an effort to maintain a broader industrial base. Following award, we may encounter significant expenses, delays, contract modifications or bid protests from unsuccessful bidders on new program awards. Unsuccessful bidders are more frequently protesting in the hope of being awarded a subcontract for a portion of the work in return for withdrawing the protest. Bid protests could result in significant expenses to us, contract modifications or even loss of the contract award. Even where a bid protest does not result in the loss of a contract award, the resolution can extend the time until the contract activity can begin and, as a result, delay our recognizing sales. We also may not be successful in our efforts to protest or challenge any bids for contracts that were not awarded to us and we could incur significant time and expense in such efforts.

We are the prime contractor on most of our contracts and if our subcontractors, suppliers or teaming agreement or venture partners fail to perform their obligations, our performance and our ability to win future business could be harmed.

For most of our contracts we rely on other companies to provide materials, major components and products, and to perform a portion of the services that we provide to our customers. Such arrangements may involve subcontracts, teaming arrangements, ventures or supply agreements with other companies upon which we rely (contracting parties). There is a risk that the contracting party does not perform and we may have disputes with our contracting parties, including disputes regarding the quality and timeliness of work performed, the workshare provided to that party, customer concerns about the other party's performance, our failure to extend existing task orders or issue new task orders, or our hiring the personnel of a subcontractor, teammate or venture partner or vice versa. In addition, changes in the economic environment, including defense budgets and constraints on available financing, may adversely affect the financial stability of our contracting parties and their ability to meet their performance requirements or to provide needed supplies on a timely basis as might their inability to perform profitably in the current highly competitive and budget constrained environment. We could also be adversely affected by reputational issues experienced by our teammates that are outside of our control, which could adversely affect our ability to compete for contract awards. A failure, for whatever reason, by one or more of our contracting parties to provide the agreed-upon supplies or perform the agreed-upon services on a timely basis, according to specifications, or at all may affect our ability to perform our obligations and require that we transition the work to other companies. Contracting party performance deficiencies may result in additional costs or delays in product deliveries and affect our operating results and could result in a customer terminating our contract for default or convenience. A default termination could expose us to liability and affect our ability to compete for future contracts and orders. Additionally, our efforts to increase the efficiency of our operations and improve the affordability of our products and services could negatively impact our ability to attract and retain suppliers.

International sales may pose different risks.

In 2017, 30% of our total net sales were from international customers. This percentage has been increasing and we have a strategy to continue to grow international sales, inclusive of sales of F-35 aircraft to our international partners and other countries. International sales are subject to numerous political and economic factors, regulatory requirements, significant competition, taxation, and other risks associated with doing business in foreign countries. Our exposure to such risks increased as a result of our acquisition of Sikorsky and our increased ownership interest in AWE and may further increase if our international sales grow as we anticipate.

Our international business is conducted through foreign military sales (FMS) contracted through the U.S. Government or by direct commercial sales (DCS) with international customers. In 2017, approximately 63% of our sales to international customers were FMS and about 37% were DCS. These transaction types differ as FMS transactions represent sales by the U.S. Government to international governments and our contract with the U.S. Government is subject to FAR. By contrast, DCS transactions represent sales directly to another international government or commercial customer. All sales to international customers are subject to U.S. and foreign laws and regulations, including, without limitation, import-export control, technology transfer restrictions, taxation, repatriation of earnings, exchange controls, the Foreign Corrupt Practices Act and other anti-corruption laws and regulations, and the anti-boycott provisions of the U.S. Export Administration Act. While we have stringent policies in place to comply with such laws and regulations, failure by us, our employees or others working on our behalf to comply with these laws and regulations could result in administrative, civil, or criminal liabilities, including suspension, debarment from bidding for or performing government contracts, or suspension of our export privileges, which could have a material adverse effect on us. We frequently team with international subcontractors and suppliers who are also exposed to similar risks.

While international sales, whether contracted as FMS or DCS, present risks that are different and potentially greater than those encountered in our U.S. business, DCS with international customers may impose even greater risks. DCS transactions involve commercial relationships with parties with whom we have less familiarity and where there may be significant cultural differences. Additionally, international procurement rules and regulations, contract laws and regulations, and contractual terms differ from those in the U.S. and are less familiar to us. International regulations may be interpreted by foreign courts less bound by precedent and with more discretion; these interpretations frequently have terms less favorable to us than the FAR. Export and import, tax and currency risk also may be increased for DCS with international customers. While these risks are potentially greater than those encountered in our U.S. business, we seek to price our products and services commensurate with the risk profile on DCS with international customers.

Our international business is highly sensitive to changes in regulations, political environments or security risks that may affect our ability to conduct business outside of the U.S., including those regarding investment, procurement, taxation and repatriation of earnings. Our international business also may be impacted by changes in foreign national priorities, foreign government budgets, global economic conditions, and fluctuations in foreign currency exchange rates. Sales of military products are also affected by defense budgets and U.S. foreign policy. Additionally, the timing of orders from our international customers can be less predictable than for our U.S. customers and may lead to fluctuations in the amount reported each year for our international sales.

In conjunction with defense procurements, some international customers require contractors to comply with industrial cooperation regulations, including entering into industrial cooperation agreements, sometimes referred to as offset agreements. Offset agreements may require in-country purchases, technology transfers, local manufacturing support, investments in foreign joint ventures and financial support projects as an incentive or as a condition to a contract award. In some countries, these offset agreements may require the establishment of a venture with a local company, which must control the venture. The costs to satisfy our offset obligations are included in the estimates of our total costs to complete the contract and may impact our profitability and cash flows. The ability to recover investments that we make is generally dependent upon the successful operation of ventures that we do not control and may involve products and services that are dissimilar to our business activities. In these and other situations, we could be liable for violations of law for actions taken by these entities such as laws related to anti-corruption, import and export, taxation, and anti-boycott restrictions. Offset agreements generally extend over several years and may provide for penalties in the event we fail to perform in accordance with the offset requirements which are typically subjective and can be outside our control.

Our efforts to minimize the likelihood and impact of adverse cyber security incidents and to protect data and intellectual property may not be successful and our business could be negatively affected by cyber or other security threats or other disruptions.

We routinely experience various cybersecurity threats, threats to our information technology infrastructure, unauthorized attempts to gain access to our company sensitive information, and denial-of-service attacks as do our customers, suppliers, subcontractors and venture partners. We have a Computer Incident Response Team (CIRT) which has among its responsibilities defending against such attacks. Additionally, we conduct regular periodic training of our employees as to the protection of sensitive information which includes training intended to prevent the success of “phishing” attacks. We experience similar security threats at customer sites that we operate and manage.

The threats we face vary from attacks common to most industries to more advanced and persistent, highly organized adversaries, including nation states, which target us and other defense contractors 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, and depending on the severity of the incident, our customers’ data, our employees’ data, our intellectual property, and other third party data (such as teammates, venture partners, subcontractors, suppliers and vendors) could be compromised. As a consequence of their persistence, sophistication and volume, we may not be successful in defending against all such attacks. Due to the evolving nature of these security threats and the national security aspects of much of the data we protect, the impact of any future incident cannot be predicted.

In addition to cyber threats, we experience threats to the security of our facilities and employees and threats from terrorist acts as do our customers, suppliers, subcontractors, venture partners and entities we acquire with whom we typically work cooperatively to seek to minimize the impact of cyber threats, other security threats or business disruptions. However, we must rely on the safeguards put in place by these entities, as well as other entities, which we do not control, who have access to our information, and may affect the security of our information. These entities have varying levels of cybersecurity expertise and safeguards, and their relationships with government contractors, such as Lockheed Martin, may increase the likelihood that they are targeted by the same cyber threats we face. We have approximately 16,000 direct suppliers and even more indirect suppliers with a wide variety of systems and cyber security capabilities and we may not be successful in preventing adversaries from exploiting possible weak links in our supply chain. We also must rely on this supply chain for detecting and reporting cyber incidents and so we may not be successful in reporting or responding to cyber security incidents in a timely manner.

The costs related to cyber or other security threats or disruptions may not be fully insured or indemnified by other means. Additionally, some cyber technologies we develop under contract for our customers, particularly those related to homeland security, may raise potential liabilities related to intellectual property and civil liberties, including privacy concerns, which may not be fully insured or indemnified by other means or involve reputational risk. Our enterprise risk management program includes threat detection and cyber security mitigation plans, and our disclosure controls and procedures address cyber security and include elements intended to ensure that there is an analysis of potential disclosure obligations arising from security breaches. We also maintain compliance programs to address the potential applicability of restrictions against trading while in possession of material, nonpublic information generally and in connection with a cyber security breach. However, we may not be successful in detecting, reporting or responding to cyber incidents in a timely manner.

If we fail to manage acquisitions, divestitures, equity investments and other transactions successfully or if acquired entities or equity investments fail to perform as expected, our financial results, business and future prospects could be harmed.

In pursuing our business strategy, we routinely conduct discussions, evaluate companies, and enter into agreements regarding possible acquisitions, divestitures, ventures and equity investments. We seek to identify acquisition or investment opportunities that will expand or complement our existing products and services or customer base, at attractive valuations. We often compete with others for the same opportunities. To be successful, we must conduct due diligence to identify valuation issues and potential loss contingencies; negotiate transaction terms; complete and close complex transactions; integrate acquired companies and employees; and realize anticipated operating synergies efficiently and effectively. Acquisition, divestiture, venture and investment transactions often require substantial management resources and have the potential to divert our attention from our existing business. Unidentified or identified but un-indemnified pre-closing liabilities could affect our future financial results, particularly successor liability under procurement laws and regulations such as the False Claims Act or Truth in Negotiations Act, anti-corruption, tax, import-export and technology transfer laws which provide for civil and criminal penalties and the potential for debarment. We also may incur unanticipated costs or expenses, including post-closing asset impairment charges, expenses associated with eliminating duplicate facilities, employee retention, transaction-related or other litigation, and other liabilities. Any of the foregoing could adversely affect our business and results of operations.

Ventures, or noncontrolling equity investments, operate under shared control with other parties. Under the equity method of accounting for nonconsolidated ventures and investments, we recognize our share of the operating profit of these ventures in our results of operations. Our operating results may be affected by the performance of businesses over which we do not exercise control, which includes the inability to influence strategic decisions that may adversely affect our business, financial condition and results of operations. As a result, we may not be successful in achieving the growth or other intended benefits of strategic investments. Our joint ventures face many of the same risks and uncertainties as we do. The most significant impact of our equity investments is in our Space business segment where approximately 21% of its 2017 operating profit was derived from its share of earnings from equity method investees, particularly that in United Launch Alliance (ULA).

There can be no assurance that we will continue to increase our dividend or to repurchase shares of our common stock at current levels.

The payment of cash dividends and share repurchases is subject to limitations under applicable laws and the discretion of our Board of Directors and is determined after considering current conditions, including earnings, other operating results and capital requirements. Our payment of dividends and share repurchases could vary from historical practices or our stated expectations. Decreases in asset values or increases in liabilities, including liabilities associated with benefit plans and assets and liabilities associated with taxes, can reduce net earnings and stockholders' equity. We recorded a net one-time tax charge, substantially all of which was non-cash, resulting from the estimated impact of the Tax Cuts and Jobs Act, which reduced our 2017 net earnings and resulted in a deficit in our total equity as of December 31, 2017. As a Maryland corporation, so long as we are able to pay our indebtedness as it becomes due in the usual course of business, we anticipate that we would be able to pay dividends and make stock repurchases in an amount limited to our net earnings in either the current or the preceding fiscal year or from the net earnings for the preceding eight quarters, notwithstanding the deficit in our total equity. However, our ability to pay dividends and make share repurchases under Maryland law could be limited if our net earnings are less than anticipated. We also have no assurance as to the timing of any increase in our stockholders' equity. In addition, the timing and amount of share repurchases under board approved share repurchase plans is within the discretion of management and will depend on many factors, including results of operations, capital requirements as well as applicable law.

Our business involves significant risks and uncertainties that may not be covered by indemnity or insurance.

A significant portion of our business relates to designing, developing and manufacturing advanced defense and technology products and systems. New technologies may be untested or unproven. Failure of some of these products and services could result in extensive loss of life or property damage. Accordingly, we also may incur liabilities that are unique to our products and services, including combat and air mobility aircraft, missile and space systems, command and control systems, cybersecurity, homeland security and training programs. In some but not all circumstances, we may be entitled to certain legal protections or indemnifications from our customers, either through U.S. Government indemnifications under Public Law 85-804 or the Price-Anderson Act, qualification of our products and services by the Department of Homeland Security under the SAFETY Act provisions of the Homeland Security Act of 2002, contractual provisions or otherwise. We endeavor to obtain insurance coverage from established insurance carriers to cover these risks and liabilities. The amount of insurance coverage that we maintain may not be adequate to cover all claims or liabilities. Existing coverage may be canceled while we remain exposed to the risk, and it is not possible to obtain insurance to protect against all operational risks and liabilities. For example, we are limited in the amount of insurance we can obtain to cover certain natural hazards, such as earthquakes. We have significant operations in geographic areas prone to this risk, such as Sunnyvale, California. Even if insurance coverage is available, we may not be able to obtain it at a price or on terms acceptable to us. Additionally, disputes with insurance carriers over coverage terms or the insolvency of one or more of our insurance carriers may significantly affect the amount or timing of our cash flows.

Substantial costs resulting from an accident; failure of or defect in our products or services; natural catastrophe or other incident; or liability arising from our products and services in excess of any legal protection, indemnity, and our insurance coverage (or for which indemnity or insurance is not available or not obtained) could adversely impact our financial condition, cash flows, or operating results. Any accident, failure of, or defect in our products or services, even if fully indemnified or insured, could negatively affect our reputation among our customers and the public and make it more difficult for us to compete effectively. It also could affect the cost and availability of adequate insurance in the future.

Pension funding and costs are dependent on several economic assumptions which if changed may cause our future earnings and cash flow to fluctuate significantly as well as affect the affordability of our products and services.

Many of our employees are covered by defined benefit pension plans, retiree medical and life insurance plans, and other postemployment plans (collectively, postretirement benefit plans). The impact of these plans on our U.S. generally accepted accounting principles (GAAP) earnings may be volatile in that the amount of expense we record for our postretirement benefit plans may materially change from year to year because the calculations are sensitive to changes in several key economic assumptions including interest rates and rates of return on plan assets, other actuarial assumptions including participant longevity (also known as mortality) and employee turnover, as well as the timing of cash funding. Changes in these factors, including actual returns on plan assets, may also affect our plan funding, cash flow and stockholders' equity. In addition, the funding of our plans and recovery of costs on our contracts, as described below, may also be subject to changes caused by legislative or regulatory actions.

With regard to cash flow, we make substantial cash contributions to our plans as required by the Employee Retirement Income Security Act of 1974 (ERISA), as amended by the Pension Protection Act of 2006 (PPA). We generally are able to recover these contributions related to our plans as allowable costs on our U.S. Government contracts, including FMS, but there is a lag between when we contribute cash to our plans under pension funding rules and recover it under U.S. Government Cost Accounting Standards (CAS). Effective February 2012, the CAS rules were revised to harmonize the measurement and period assignment of the pension cost allocable to government contracts with the PPA (CAS Harmonization). Following the five year transition period, CAS Harmonization was fully phased in during 2017, this better aligns the CAS pension cost and ERISA funding requirements. The enactment of the Highway and Transportation Funding Act of 2014 and Bipartisan Budget Act of 2015 increased the interest rate assumption used to determine our CAS pension costs and ERISA funding requirements. This has the effect of lowering both the recovery of pension contributions, as it decreases our CAS pension costs, and our ERISA funding requirements during the affected periods.

For more information on how these factors could impact earnings, financial position, cash flow and stockholders' equity, see "Critical Accounting Policies - Postretirement Benefit Plans" in Management's Discussion and Analysis of Financial Conditions and Results of Operations and "Note 11 – Postretirement Benefit Plans" included in our Notes to Consolidated Financial Statements.

Environmental costs could affect our future earnings as well as the affordability of our products and services.

Our operations are subject to and affected by a variety of federal, state, local and foreign environmental protection laws and regulations. We are involved in environmental remediation at some of our facilities, some of our former facilities, and at third-party-owned sites where we have been designated a potentially responsible party. In addition, we could be affected by future regulations imposed or claims asserted in response to concerns over climate change, other aspects of the environment or natural resources. We have an ongoing, comprehensive sustainability program to reduce the effects of our operations on the environment.

We manage and have managed various U.S. Government-owned facilities, and portions of U.S. Government-owned facilities, on behalf of the U.S. Government. At such facilities, environmental compliance and remediation costs historically have been the responsibility of the U.S. Government. We have relied, and continue to rely with respect to past practices, upon U.S. Government funding to pay such costs, notwithstanding efforts by some U.S. Government representatives to limit this responsibility. Although the U.S. Government remains responsible for capital and operating costs associated with environmental compliance, responsibility for fines and penalties associated with environmental noncompliance typically is borne by either the U.S. Government or the contractor, depending on the contract and the relevant facts. Some environmental laws include criminal provisions. An environmental law conviction could affect our ability to be awarded future, or perform existing, U.S. Government contracts.

We have incurred and will continue to incur liabilities under various federal, state, local and foreign statutes for environmental protection and remediation. The extent of our financial exposure cannot in all cases be reasonably estimated at this time. Among the variables management must assess in evaluating costs associated with these cases and remediation sites generally are the status of site assessment, extent of the contamination, impacts on natural resources, changing cost estimates, evolution of technologies used to remediate the site, continually evolving environmental standards and cost allowability issues, including varying efforts by the U.S. Government to limit allowability of our costs in resolving liability at third party-owned sites. For information regarding these matters, including current estimates of the amounts that we believe are required for remediation or cleanup to the extent probable and estimable, see "Critical Accounting Policies - Environmental Matters" in Management's Discussion and Analysis of Financial Condition and Results of Operations and "Note 14 – Legal Proceedings, Commitments and Contingencies" included in our Notes to Consolidated Financial Statements.

We are involved in a number of legal proceedings. We cannot predict the outcome of litigation and other contingencies with certainty.

Our business may be adversely affected by the outcome of legal proceedings and other contingencies that cannot be predicted with certainty. As required by GAAP, we estimate loss contingencies and establish reserves based on our assessment of contingencies where liability is deemed probable and reasonably estimable in light of the facts and circumstances known to us at a particular point in time. Subsequent developments in legal proceedings may affect our assessment and estimates of the loss contingency recorded as a liability or as a reserve against assets in our financial statements. For a description of our current legal proceedings, see Item 3 - Legal Proceedings along with "Note 3 – Acquisitions and Divestitures" and "Note 14 – Legal Proceedings, Commitments and Contingencies" included in our Notes to Consolidated Financial Statements.

Our success depends, in part, on our ability to develop new products and technologies and maintain a qualified workforce.

Many of the products and services we provide are highly engineered and involve sophisticated technologies, with related complex manufacturing and system integration processes. Our customers' requirements change and evolve regularly. Accordingly, our future performance depends, in part, on our ability to adapt to changing customer needs rapidly, identify emerging technological trends, develop and manufacture innovative products and services and bring those offerings to market quickly at cost-effective prices. Due to the complex nature of the products and services we offer, we may experience technical difficulties during the development of new products or technologies. These technical difficulties could result in delays and higher costs, which may negatively impact our financial results, until such products or technologies are fully developed. Additionally, there can be no assurance that our developmental projects will be successful or meet the needs of our customer.

Additionally, the possibility exists that our competitors may develop new technology or offerings that could cause our existing offerings to become obsolete. If we fail in our development projects or if our new products or technologies fail to achieve customer acceptance, our ability to procure new contracts could be unsuccessful and this could negatively impact our financial results.

Due to the specialized nature of our business, our future performance is highly dependent upon our ability to maintain a workforce with the requisite skills in multiple areas including: engineering, science, manufacturing, information technology, cybersecurity, business development and strategy and management. Our operating performance is also dependent upon personnel who hold security clearances and receive substantial training in order to work on certain programs or tasks. Additionally, as we expand our operations internationally, it is increasingly important to hire and retain personnel with relevant experience in local laws, regulations, customs, traditions and business practices.

We face a number of challenges that may affect personnel retention such as our endeavors to increase the efficiency of our operations and improve the affordability of our products and services such as workforce reductions and consolidating and relocating certain operations. Additionally a substantial portion of our workforce are retirement-eligible or nearing retirement. We previously amended certain of our defined benefit pension plans for non-union employees to freeze future retirement benefits. The freeze, which will be completed January 1, 2020, may encourage retirement-eligible personnel (generally age 55) to elect to retire earlier than anticipated.

To the extent that we lose experienced personnel, it is critical that we develop other employees, hire new qualified personnel, and successfully manage the transfer of critical knowledge. Competition for personnel is intense, and we may not be successful in hiring or retaining personnel with the requisite skills or clearances. We increasingly compete with commercial technology companies outside of the aerospace and defense industry for qualified technical, cyber and scientific positions as the number of qualified domestic engineers is decreasing and the number of cyber professionals is not keeping up with demand. To the extent that these companies grow at a faster rate or face fewer cost and product pricing constraints, they may be able to offer more attractive compensation and other benefits to candidates or our existing employees. To the extent that the demand for skilled personnel exceeds supply, we could experience higher labor, recruiting or training costs in order to attract and retain such employees; we could experience difficulty in performing our contracts if we were unable to do so. We also must manage leadership development and succession planning throughout our business. While we have processes in place for management transition and the transfer of knowledge, the loss of key personnel, coupled with an inability to adequately train other personnel, hire new personnel or transfer knowledge, could significantly impact our ability to perform under our contracts.

Approximately 21% of our employees are covered by collective bargaining agreements with various unions. Historically, where employees are covered by collective bargaining agreements with various unions, we have been successful in negotiating renewals to expiring agreements without any material disruption of operating activities. This does not assure, however, that we will be successful in our efforts to negotiate renewals of our existing collective bargaining agreements in the future. If we encounter difficulties with renegotiations or renewals of collective bargaining arrangements or are unsuccessful in those efforts, we could incur additional costs and experience work stoppages. Union actions at suppliers can also affect us. Any delays or work stoppages could adversely affect our ability to perform under our contracts, which could negatively impact our results of operations, cash flows, and financial condition.

Our estimates and projections may prove to be inaccurate.

The accounting for some of our most significant activities is based on judgments and estimates, which are complex and subject to many variables. For example, accounting for sales using the percentage-of-completion method requires that we assess risks and make assumptions regarding schedule, cost, technical and performance issues for each of our thousands of contracts, many of which are long-term in nature. Additionally, we initially allocate the purchase price of acquired businesses based on a preliminary assessment of the fair value of identifiable assets acquired and liabilities assumed. For significant acquisitions we may use a one-year measurement period to analyze and assess a number of factors used in establishing the asset and liability fair values as of the acquisition date and could result in adjustments to asset and liability balances.

Another example is the $10.8 billion of goodwill assets recorded on our consolidated balance sheet as of December 31, 2017 from previous acquisitions, which represents approximately 23% of our total assets. These goodwill assets are subject to annual impairment testing and more frequent testing upon the occurrence of certain events or significant changes in circumstances that indicate goodwill may be impaired. If we experience changes or factors arise that negatively affect the expected cash flows of a reporting unit, we may be required to write off all or a portion of the reporting unit's related goodwill assets. We acquired Sikorsky in November 2015 and recorded the assets acquired and liabilities assumed at fair value. As a result, the carrying value and fair value of our Sikorsky reporting unit continue to be closely aligned. Therefore, any business deterioration, contract cancellations or terminations, or market pressures could cause our sales, earnings and cash flows to decline below current projections and could cause goodwill and intangible assets to be impaired. Additionally, Sikorsky may not perform as expected, or demand for its products may be adversely affected by global economic conditions, including oil and gas trends that are outside of our control.

Future changes in U.S. or foreign tax laws, including those with retroactive effect, and audits by tax authorities could result in unanticipated increases in our tax expense and affect profitability and cash flows. The amount of net deferred tax assets will change periodically based on several factors, including the measurement of our postretirement benefit plan obligations, actual cash contributions to our postretirement benefit plans, and future changes in tax laws.

Actual financial results could differ from our judgments and estimates. See "Critical Accounting Policies" in Management's Discussion and Analysis of Financial Condition and Results of Operations and "Note 1 – Significant Accounting Policies" included in our Notes to Consolidated Financial Statements for a complete discussion of our significant accounting policies and use of estimates.

ITEM 1B. Unresolved Staff Comments

None.

ITEM 2. Properties

At December 31, 2017, we owned or leased building space (including offices, manufacturing plants, warehouses, service centers, laboratories and other facilities) at approximately 375 locations primarily in the U.S. Additionally, we manage or occupy approximately 15 government-owned facilities under lease and other arrangements. At December 31, 2017, we had significant operations in the following locations:

- **Aeronautics** - Palmdale, California; Marietta, Georgia; Greenville, South Carolina; and Fort Worth, Texas.
- **Missiles and Fire Control** - Camden, Arkansas; Ocala and Orlando, Florida; Lexington, Kentucky; and Grand Prairie, Texas.
- **Rotary and Mission Systems** - Colorado Springs, Colorado; Shelton and Stratford, Connecticut; Orlando and Jupiter, Florida; Moorestown/Mt. Laurel, New Jersey; Owego and Syracuse, New York; Manassas, Virginia; and Mielec, Poland.
- **Space** - Sunnyvale, California; Denver, Colorado; Valley Forge, Pennsylvania; and Reading, England.
- **Corporate activities** - Bethesda, Maryland.

The following is a summary of our square feet of floor space by business segment at December 31, 2017 (in millions):

	Owned	Leased	Government-Owned	Total
Aeronautics	5.0	2.1	14.4	21.5
Missiles and Fire Control	6.3	2.8	1.8	10.9
Rotary and Mission Systems	11.2	6.6	0.4	18.2
Space	8.6	1.9	6.7	17.2
Corporate activities	2.7	0.9	—	3.6
Total	33.8	14.3	23.3	71.4

We believe our facilities are in good condition and adequate for their current use. We may improve, replace or reduce facilities as considered appropriate to meet the needs of our operations.

ITEM 3. Legal Proceedings

We are a party to or have property subject to litigation and other proceedings that arise in the ordinary course of our business, including matters arising under provisions relating to the protection of the environment and are subject to contingencies related to certain businesses we previously owned. These types of matters could result in fines, penalties, compensatory or treble damages or non-monetary sanctions or relief. We believe the probability is remote that the outcome of each of these matters will have a material adverse effect on the corporation as a whole, notwithstanding that the unfavorable resolution of any matter may have a material effect on our net earnings in any particular interim reporting period. We cannot predict the outcome of legal or other proceedings with certainty. These matters include the proceedings summarized in “Note 14 – Legal Proceedings, Commitments and Contingencies” included in our Notes to Consolidated Financial Statements.

We are subject to federal, state, local and foreign requirements for protection of the environment, including those for discharge of hazardous materials and remediation of contaminated sites. Due in part to the complexity and pervasiveness of these requirements, we are a party to or have property subject to various lawsuits, proceedings and remediation obligations. The extent of our financial exposure cannot in all cases be reasonably estimated at this time. For information regarding these matters, including current estimates of the amounts that we believe are required for remediation or clean-up to the extent estimable, see “Critical Accounting Policies - Environmental Matters” in Management’s Discussion and Analysis of Financial Condition and Results of Operations and “Note 14 – Legal Proceedings, Commitments and Contingencies” included in our Notes to Consolidated Financial Statements.

As a U.S. Government contractor, we are subject to various audits and investigations by the U.S. Government to determine whether our operations are being conducted in accordance with applicable regulatory requirements. U.S. Government investigations of us, whether relating to government contracts or conducted for other reasons, could result in administrative, civil, or criminal liabilities, including repayments, fines or penalties being imposed upon us, suspension, proposed debarment, debarment from eligibility for future U.S. Government contracting, or suspension of export privileges. Suspension or debarment could have a material adverse effect on us because of our dependence on contracts with the U.S. Government. U.S. Government investigations often take years to complete and many result in no adverse action against us. We also provide products and services to customers outside of the U.S., which are subject to U.S. and foreign laws and regulations and foreign procurement policies and practices. Our compliance with local regulations or applicable U.S. Government regulations also may be audited or investigated.

ITEM 4. Mine Safety Disclosures

Not applicable.

ITEM 4(a). Executive Officers of the Registrant

Our executive officers as of February 6, 2018 are listed below, with their ages on that date, positions and offices currently held, and principal occupation and business experience during at least the last five years. There were no family relationships among any of our executive officers and directors. All officers serve at the discretion of the Board of Directors.

Richard F. Ambrose (age 59), Executive Vice President - Space

Mr. Ambrose has served as Executive Vice President of Space since April 2013. He previously served as Vice President and Deputy, Space from July 2012 to March 2013.

Dale P. Bennett (age 61), Executive Vice President - Rotary and Mission Systems

Mr. Bennett has served as Executive Vice President of Rotary and Mission Systems since December 2012.

Orlando P. Carvalho (age 59), Executive Vice President - Aeronautics

Mr. Carvalho has served as Executive Vice President of Aeronautics since March 2013. He previously served as Executive Vice President and General Manager, F-35 Program from March 2012 to March 2013.

Brian P. Colan (age 57), Vice President, Controller, and Chief Accounting Officer

Mr. Colan has served as Vice President, Controller, and Chief Accounting Officer since August 2014. He previously served as Vice President and Controller, Missiles and Fire Control from January 2013 to August 2014.

Marillyn A. Hewson (age 64), Chairman, President and Chief Executive Officer

Ms. Hewson has served as Chairman, President and Chief Executive Officer of Lockheed Martin since January 2014 and as Chief Executive Officer and President from January 2013 to December 2013. Prior to that, she has served over 30 years at Lockheed Martin in roles of increasing responsibility.

Maryanne R. Lavan (age 58), Senior Vice President, General Counsel and Corporate Secretary

Ms. Lavan has served as Senior Vice President and General Counsel since June 2010 and Corporate Secretary since September 2010.

John W. Mollard (age 60), Vice President and Treasurer

Mr. Mollard has served as Vice President and Treasurer since April 2016. He previously served as Vice President, Corporate Financial Planning and Analysis from 2003 to April 2016.

Frank St. John (age 51), Executive Vice President - Missiles and Fire Control

Mr. St. John has served as Executive Vice President of Missiles and Fire Control since January 2018. He previously served as Executive Vice President and Deputy, Programs, Missiles and Fire Control from June 2017 to January 2018. Prior to that, he served as Vice President, Orlando Operations and Tactical Missiles/Combat Maneuver Systems from 2011 to May 2017.

Bruce L. Tanner (age 58), Executive Vice President and Chief Financial Officer

Mr. Tanner has served as Executive Vice President and Chief Financial Officer since September 2007.

PART II

ITEM 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

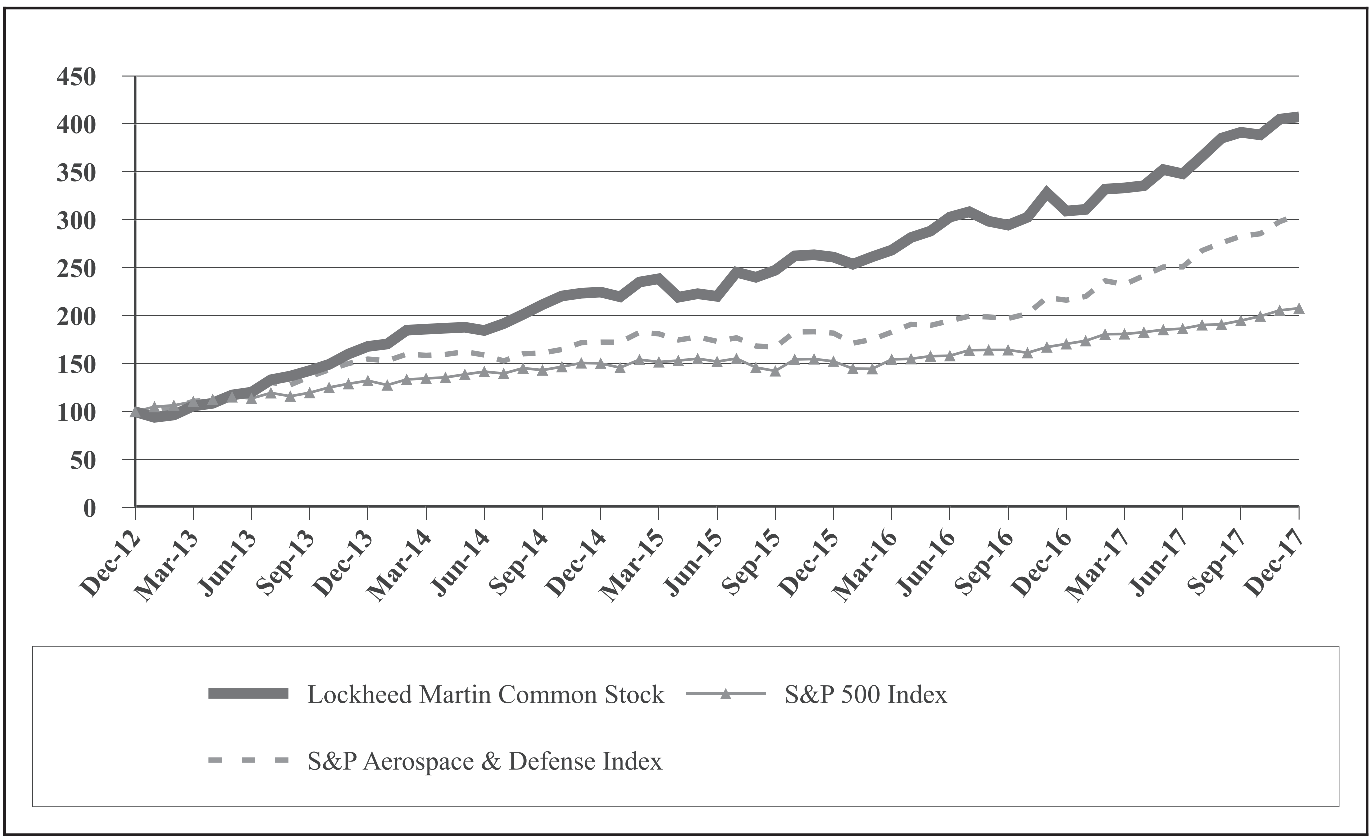
At January 26, 2018, we had 27,731 holders of record of our common stock, par value $1 per share. Our common stock is traded on the New York Stock Exchange (NYSE) under the symbol LMT. Information concerning the high and low reported sales prices of Lockheed Martin common stock and dividends paid during the past two years is as follows:

Common Stock - Dividends Paid Per Share and Market Prices

	Dividends Paid Per Share		Stock Prices (High-Low)	
Quarter	**2017**	**2016**	**2017**	**2016**
First	**$ 1.82**	$ 1.65	**$ 274.57 - $ 248.00**	$ 223.19 - $ 200.47
Second	**1.82**	1.65	**284.98 - 264.04**	245.37 - 218.34
Third	**1.82**	1.65	**311.36 - 274.69**	266.93 - 235.28
Fourth	**2.00**	1.82	**323.94 - 303.31**	269.90 - 228.50
Year	**$ 7.46**	$ 6.77	**$ 323.94 - $ 248.00**	$ 269.90 - $ 200.47

Stockholder Return Performance Graph

The following graph compares the total return on a cumulative basis of $100 invested in Lockheed Martin common stock on December 31, 2012 to the Standard and Poor's (S&P) 500 Index and the S&P Aerospace & Defense Index.



The S&P Aerospace & Defense Index comprises Arconic Inc., General Dynamics Corporation, Harris Corporation, L3 Technologies, Inc., Lockheed Martin Corporation, Northrop Grumman Corporation, Raytheon Company, Rockwell Collins, Inc., Textron Inc., The Boeing Company, Transdigm Group Inc., and United Technologies Corporation. The stockholder return performance indicated on the graph is not a guarantee of future performance.

This graph is not deemed to be "filed" with the U.S. Securities and Exchange Commission or subject to the liabilities of Section 18 of the Securities Exchange Act of 1934 (the Exchange Act), and should not be deemed to be incorporated by reference into any of our prior or subsequent filings under the Securities Act of 1933 or the Exchange Act.

Purchases of Equity Securities

There were no sales of unregistered equity securities during the quarter ended December 31, 2017.

The following table provides information about our repurchases of our common stock registered pursuant to Section 12 of the Exchange Act during the quarter ended December 31, 2017.

Period [a]	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs [b]	Amount Available for Future Share Repurchases Under the Plans or Programs [b]
				(in millions)
September 25, 2017 – October 29, 2017	666,380	$ 314.86	666,275	$ 3,794
October 30, 2017 – November 26, 2017	524,021	$ 311.03	524,010	$ 3,631
November 27, 2017 – December 31, 2017	418,796	$ 314.71	408,049	$ 3,503
Total	1,609,197 [c]	$ 313.57	1,598,334	

[a] We close our books and records on the last Sunday of each month to align our financial closing with our business processes, except for the month of December, as our fiscal year ends on December 31. As a result, our fiscal months often differ from the calendar months. For example, September 25, 2017 was the first day of our October 2017 fiscal month.

[b] In October 2010, our Board of Directors approved a share repurchase program pursuant to which we are authorized to repurchase our common stock in privately negotiated transactions or in the open market at prices per share not exceeding the then-current market prices. From time to time, our Board of Directors authorizes increases to our share repurchase program. On September 28, 2017, our Board of Directors authorized a $2.0 billion increase to the program. The total remaining authorization for future common share repurchases under our share repurchase program was $3.5 billion as of December 31, 2017. Under the program, management has discretion to determine the dollar amount of shares to be repurchased and the timing of any repurchases in compliance with applicable law and regulation. This includes purchases pursuant to Rule 10b5-1 plans. The program does not have an expiration date.

[c] During the quarter ended December 31, 2017, the total number of shares purchased included 10,863 shares that were transferred to us by employees in satisfaction of tax withholding obligations associated with the vesting of restricted stock units. These purchases were made pursuant to a separate authorization by our Board of Directors and are not included within the program.

ITEM 6. Selected Financial Data

(In millions, except per share data)	2017	2016	2015	2014	2013
Operating results					
Net sales	**$ 51,048**	$ 47,248	$ 40,536	$ 39,946	$ 39,243
Operating profit [(a)(b)(c)]	**5,921**	5,549	4,712	5,012	4,066
Net earnings from continuing operations [(a)(b)(c)(d)]	**1,929**	3,753	3,126	3,253	2,701
Net earnings from discontinued operations [(e)]	**73**	1,549	479	361	280
Net earnings [(b)(c)(d)]	**2,002**	5,302	3,605	3,614	2,981
Earnings from continuing operations per common share					
Basic [(a)(b)(c)(d)]	**6.70**	12.54	10.07	10.27	8.42
Diluted [(a)(b)(c)(d)]	**6.64**	12.38	9.93	10.09	8.27
Earnings from discontinued operations per common share					
Basic	**0.26**	5.17	1.55	1.14	0.87
Diluted	**0.25**	5.11	1.53	1.12	0.86
Earnings per common share					
Basic [(b)(c)(d)]	**6.96**	17.71	11.62	11.41	9.29
Diluted [(b)(c)(d)]	**6.89**	17.49	11.46	11.21	9.13
Cash dividends declared per common share	**$ 7.46**	$ 6.77	$ 6.15	$ 5.49	$ 4.78
Balance sheet [(f)]					
Cash, cash equivalents and short-term investments [(b)]	**$ 2,861**	$ 1,837	$ 1,090	$ 1,446	$ 2,617
Total current assets [(g)]	**17,461**	15,108	14,573	10,684	12,081
Goodwill [(h)]	**10,807**	10,764	10,695	7,964	7,698
Total assets [(b)(g)(h)]	**46,521**	47,806	49,304	37,190	36,352
Total current liabilities [(g)]	**12,637**	12,542	13,918	10,954	10,983
Total debt, net [(i)]	**14,263**	14,282	15,261	6,142	6,127
Total liabilities [(b)(g)(i)]	**47,130**	46,200	46,207	33,790	31,434
Total (deficit) equity [(b)(d)]	**(609)**	1,606	3,097	3,400	4,918
Common shares in stockholders' equity at year-end	**284**	289	303	314	319
Cash flow information					
Net cash provided by operating activities [(b)(j)]	**$ 6,476**	$ 5,189	$ 5,101	$ 3,866	$ 4,546
Net cash used for investing activities [(k)]	**(1,147)**	(985)	(9,734)	(1,723)	(1,121)
Net cash (used for) provided by financing activities [(l)]	**(4,305)**	(3,457)	4,277	(3,314)	(2,706)
Backlog [(m)]	**$ 99,936**	$ 96,158	$ 94,756	$ 74,500	$ 76,300

(a) Our operating profit and net earnings from continuing operations and earnings per share from continuing operations were affected by severance charges of $80 million ($52 million or $0.17 per share, after tax) in 2016; severance charges of $82 million ($53 million or $0.17 per share, after tax) in 2015; severance charges of $156 million ($101 million or $0.31 per share, after tax) in 2013. See "Note 15 – Restructuring Charges" included in our Notes to Consolidated Financial Statements for a discussion of 2016 and 2015 restructuring charges.

(b) The impact of our postretirement benefit plans can cause our operating profit, net earnings, cash flows and certain amounts recorded on our consolidated balance sheets to fluctuate. Accordingly, our earnings were affected by a FAS/CAS pension adjustment of $876 million in 2017, $902 million in 2016, $400 million in 2015, $317 million in 2014, and $(500) million in 2013. We made $46 million in 2017, $23 million in 2016, and $5 million in 2015 of pension contributions (for our Sikorsky plan) and $2.0 billion in 2014, and $2.25 billion in 2013 (for our legacy plans), and these contributions caused fluctuations in our operating cash flows and cash balance between each of those years. Fluctuations in our total assets, total liabilities and equity between years 2013 to 2014 primarily were due to the annual measurement of the funded status of our postretirement benefit plans. See "Critical Accounting Policies - Postretirement Benefit Plans" in Management's Discussion and Analysis of Financial Condition and Results of Operations for more information.

(c) In the fourth quarter of 2017, we recorded a previously deferred non-cash gain of $198 million related to properties sold in 2015 as a result of completing our remaining obligations, which increased net earnings from continuing operations by $122 million ($0.42 per share).

(d) In the fourth quarter of 2017, we recorded a net one-time tax charge of $1.9 billion ($6.69 per share), substantially all of which was non-cash, primarily related to the estimated impact of the Tax Cuts and Jobs Act (see "Note 9 – Income Taxes" included in our Notes to Consolidated Financial Statements). This charge along with our annual re-measurement adjustment related to our postretirement benefit plans of $1.4 billion resulted in a deficit in our total equity as of December 31, 2017.

(e) Our net earnings from discontinued operations includes a $1.2 billion net gain in 2016 related to the divestiture of our IS&GS business.

(f) Certain prior period amounts have been reclassified to conform to current year presentation.

(g) Included in total current assets are assets of discontinued operations of $1.0 billion in 2015, $900 million in 2014, and $1.0 billion in 2013. Included in total current liabilities are liabilities of discontinued operations of $900 million in each of the years 2015, 2014 and 2013. Included in total assets are assets of discontinued operations of $4.1 billion in 2015, $4.2 billion in 2014, and $3.9 billion in 2013. Included in total liabilities are liabilities of discontinued operations of $1.2 billion in each of the years 2015, 2014, and 2013.

(h) The increase in our goodwill and total assets from 2014 to 2015 was primarily attributable to the Sikorsky acquisition, which resulted in an increase in goodwill and total assets as of December 31, 2015 of $2.8 billion and $11.7 billion, respectively.

(i) The increase in our total debt and total liabilities from 2014 to 2015 was primarily a result of the debt incurred to fund the Sikorsky acquisition, as well as the issuance of debt in February of 2015 for general corporate purposes (see "Note 3 – Acquisitions and Divestitures" and "Note 10 – Debt" included in our Notes to Consolidated Financial Statements).

(j) The fluctuations in our net cash provided by operating activities between years 2013 to 2017 were due to changes in pension contributions, working capital and tax payments made. See "Liquidity and Cash Flows" in Management's Discussion and Analysis of Financial Condition and Results of Operations for more information.

(k) The increase in our cash used for investing activities in 2015 was attributable to acquisitions of businesses, including the $9.0 billion acquisition of Sikorsky in 2015, net of cash acquired (see "Note 3 – Acquisitions and Divestitures" included in our Notes to Consolidated Financial Statements).

(l) The increase in our cash provided by financing activities in 2015 was primarily a result of the debt incurred to fund the Sikorsky acquisition (see "Note 10 – Debt" included in our Notes to Consolidated Financial Statements). The increase in our cash used for financing activities in 2014 was due to decreased proceeds from stock option exercises; higher dividends paid and increased payments for repurchases of common stock. See "Liquidity and Cash Flows" in Management's Discussion and Analysis of Financial Condition and Results of Operations for more information.

(m) Backlog at December 31, 2015 includes approximately $15.6 billion related to Sikorsky and excludes backlog at December 31, 2015, 2014, and 2013 of $4.8 billion, $6.0 billion, and $6.3 billion related to our IS&GS business, which we divested in 2016.

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

Business Overview

We are a global security and aerospace company principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. We also provide a broad range of management, engineering, technical, scientific, logistics, system integration and cybersecurity services. We serve both U.S. and international customers with products and services that have defense, civil and commercial applications, with our principal customers being agencies of the U.S. Government. In 2017, 69% of our $51.0 billion in net sales were from the U.S. Government, either as a prime contractor or as a subcontractor (including 58% from the Department of Defense (DoD)), 30% were from international customers (including foreign military sales (FMS) contracted through the U.S. Government) and 1% were from U.S. commercial and other customers. Our main areas of focus are in defense, space, intelligence, homeland security and information technology, including cybersecurity.

We operate in four business segments: Aeronautics, Missiles and Fire Control (MFC), Rotary and Mission Systems (RMS) and Space, previously known as Space Systems. We organize our business segments based on the nature of the products and services offered.

We operate in an environment characterized by both increasing complexity in global security and continuing economic pressures in the U.S. and globally. A significant component of our strategy in this environment is to focus on program execution, improving the quality and predictability of the delivery of our products and services, and placing security capability quickly into the hands of our U.S. and international customers at affordable prices. Recognizing that our customers are resource constrained, we are endeavoring to develop and extend our portfolio domestically in a disciplined manner with a focus on adjacent markets close to our core capabilities, as well as growing our international sales. We continue to focus on affordability initiatives. We also expect to continue to invest in technologies to fulfill new mission requirements for our customers and invest in our people so that we have the technical skills necessary to succeed without limiting our ability to return a substantial portion of our free cash flow to our investors in the form of dividends and share repurchases. We define free cash flow as cash from operations as determined under U.S. generally accepted accounting principles (GAAP), less capital expenditures as presented on our consolidated statements of cash flows.

2018 Financial Trends

Effective January 1, 2018, we adopted two new accounting standards. Accounting Standard Update (ASU) No. 2014-09, *Revenue from Contracts with Customers*, as amended (*Topic 606*) (commonly referred to as ASC 606) changes the way we recognize revenue from contracts with customers. ASU No. 2017-07, *Compensation-Retirement Benefits* (*Topic 715*) changes the income statement presentation of certain components of net periodic benefit cost related to defined benefit pension and other postretirement benefit plans. See "Note 1 – Significant Accounting Policies" (under the caption "Recent Accounting Pronouncements") included in our Notes to Consolidated Financial Statements for further discussion on the adoption of these standards.

The following table presents selected 2017 recast, unaudited financial data updated for the adoption of ASC 606 and ASU 2017-07 (in millions). We are providing this information to assist in understanding our 2018 trend information in the following paragraphs, which includes the impacts of adopting these standards.

	Year Ended December 31, 2017			
	Historical	Adjustments for ASC 606	Adjustments for ASU 2017-07	Adjusted
Net sales		(unaudited)	(unaudited)	(unaudited)
Aeronautics	$ 20,148	$ (738)	$ —	$ 19,410
Missiles and Fire Control	7,212	82	—	7,294
Rotary and Mission Systems	14,215	(552)	—	13,663
Space	9,473	136	—	9,609
Total net sales	$ 51,048	$ (1,072)	$ —	$ 49,976
Operating profit				
Aeronautics	$ 2,164	$ 12	$ —	$ 2,176
Missiles and Fire Control	1,053	(4)	—	1,049
Rotary and Mission Systems	905	(3)	—	902
Space	993	(13)	—	980
Total business segment operating profit	5,115	(8)	—	5,107
Total unallocated, net [(a)]	806	—	846	1,652
Total consolidated operating profit [(a)]	$ 5,921	$ (8)	$ 846	$ 6,759

(a) Total unallocated, net and consolidated operating profit includes an increase of $846 million in 2017, with a corresponding increase in other non-operating expense, net for the expected impact of adopting ASU No. 2017-07, *Compensation-Retirement Benefits (Topic 715)* on January 1, 2018. See "Note 1 – Significant Accounting Policies" (under the caption "Recent Accounting Pronouncements") included in our Notes to Consolidated Financial Statements for further discussion.

We expect 2018 net sales will increase in the low-single digit range from 2017 levels. The projected growth is driven by increased production and sustainment volume on the F-35 program at Aeronautics as well as increased volume in tactical missiles programs at MFC, partially offset by decreased volume at RMS and Space. Segment operating profit is expected to increase in the mid-single digit range from 2017 levels primarily driven by improved performance at RMS. Accordingly, we expect that 2018 segment operating profit margin will slightly increase over our 2017 margin of 10.2%. Our outlook for 2018 assumes the U.S. Government continues to support and fund our key programs, consistent with the government fiscal year (GFY) 2018 budget. Changes in circumstances may require us to revise our assumptions, which could materially change our current estimate of 2018 net sales and operating profit margin. For additional information related to trends in net sales and operating profit at our business segments, see the "Business Segment Results of Operations" discussion below.

We expect the net 2018 FAS/CAS pension benefit to be approximately $1.0 billion assuming a 3.625% discount rate (a 50 basis point decrease from the end of 2016), an approximately 13.00% return on plan assets in 2017 (a 550 basis point increase from the expected rate of return at the end of 2016), and a 7.50% expected long-term rate of return on plan assets in future years, and the revised longevity assumptions released on October 20, 2017 by the Society of Actuaries. We will make contributions of $5.0 billion to our qualified defined benefit pension plans in 2018, including required and discretionary contributions. As a result of these contributions, we do not expect any material qualified defined benefit cash funding will be required until 2021. We plan to fund these contributions using a mix of cash on hand and commercial paper. While we do not anticipate a need to do so, our capital structure and resources would allow us to issue new debt if circumstances change (see "Capital Structure, Resources and Other" discussion below). As a result of adopting ASU No. 2017-07, we expect to present a reclassification of non-service FAS net periodic benefit costs for all postretirement benefit plans (including the qualified defined benefit pension plans) of approximately $870 million for the fiscal year 2018 from consolidated operating profit to other non-operating income, net on our consolidated statements of earnings. This reclassification has no impact on our total business segment operating profit or consolidated net earnings.

Business Segment 2018 Financial Trends

Aeronautics

We expect Aeronautics' 2018 net sales to increase in the mid-single digit percentage range as compared to 2017 driven by increased production and sustainment volume on the F-35 program. Operating profit is expected to increase in the low-single digit percentage range, resulting in slightly lower operating profit margins.

Missiles and Fire Control

We expect MFC's net sales to increase in the mid-single digit percentage range in 2018 as compared to 2017 driven primarily by key contract awards and volume in tactical missile programs. Operating profit is expected to increase in the low-single digit percentage range in 2018 as compared to 2017 due primarily to new development volume associated with recent key contract awards. Accordingly, operating profit margin is expected to slightly decrease from 2017 levels.

Rotary and Mission Systems

We expect RMS' net sales to decrease in the low-single digit percentage range as compared to 2017 driven primarily by lower volume in our Sikorsky business partially offset by higher volume in our training and logistics services and integrated warfare systems and sensors (IWSS) lines of business. Operating profit is expected to increase in the low double digit percentage range driven by performance improvements in the IWSS and C4ISR and Undersea Systems and Sensors (C4USS) lines of business. Operating profit margins are also expected to improve from 2017 levels.

Space

We expect Space's 2018 net sales to decrease in the mid-single digit percentage range compared to 2017, driven by lower volume resulting from program lifecycles on government satellite programs and lower cost on follow-on contracts. Operating profit in 2018 is expected to be comparable to 2017. As a result operating profit margin is expected to increase slightly from 2017 levels.

Portfolio Shaping Activities

We continuously strive to strengthen our portfolio of products and services to meet the current and future needs of our customers. We accomplish this in part by our independent research and development activities and through acquisition, divestiture and internal realignment activities.

We selectively pursue the acquisition of businesses and investments at attractive valuations that will expand or complement our current portfolio and allow access to new customers or technologies. We also may explore the divestiture of businesses that no longer meet our needs or strategy or that could perform better outside of our organization. In pursuing our business strategy, we routinely conduct discussions, evaluate targets and enter into agreements regarding possible acquisitions, divestitures, ventures and equity investments.

Divestiture of the Information Systems & Global Solutions Business

On August 16, 2016, we divested our former Information Systems & Global Solutions (IS&GS) business, which merged with Leidos Holdings, Inc. (Leidos), in a Reverse Morris Trust transaction (the "Transaction"). The Transaction was completed in a multi-step process pursuant to which we initially contributed the IS&GS business to Abacus Innovations Corporation (Abacus), a wholly owned subsidiary of Lockheed Martin created to facilitate the Transaction, and the common stock of Abacus was distributed to participating Lockheed Martin stockholders through an exchange offer. Under the terms of the exchange offer, Lockheed Martin stockholders had the option to exchange shares of Lockheed Martin common stock for shares of Abacus common stock. At the conclusion of the exchange offer, all shares of Abacus common stock were exchanged for 9,369,694 shares of Lockheed Martin common stock held by Lockheed Martin stockholders that elected to participate in the exchange. The shares of Lockheed Martin common stock that were exchanged and accepted were retired, reducing the number of shares of our common stock outstanding by approximately 3%. Following the exchange offer, Abacus merged with a subsidiary of Leidos, with Abacus continuing as the surviving corporation and a wholly-owned subsidiary of Leidos. As part of the merger, each share of Abacus common stock was automatically converted into one share of Leidos common stock. We did not receive any shares of Leidos common stock as part of the Transaction and do not hold any shares of Leidos or Abacus common stock following the Transaction. Based on an opinion of outside tax counsel, subject to customary qualifications and based on factual representations, the exchange offer and merger will qualify as tax-free transactions to Lockheed Martin and its stockholders, except to the extent that cash was paid to Lockheed Martin stockholders in lieu of fractional shares.

In connection with the Transaction, Abacus borrowed an aggregate principal amount of approximately $1.84 billion under term loan facilities with third party financial institutions, the proceeds of which were used to make a one-time special cash payment of $1.80 billion to Lockheed Martin and to pay associated borrowing fees and expenses. The entire special cash payment was used to repay debt, pay dividends and repurchase stock during the third and fourth quarters of 2016. The obligations under the Abacus term loan facilities were guaranteed by Leidos as part of the Transaction.

As a result of the Transaction, we recognized a net gain of approximately $1.3 billion, including $1.2 billion recognized in 2016. The net gain represents the $2.5 billion fair value of the shares of Lockheed Martin common stock exchanged and retired as part of the exchange offer, plus the $1.8 billion one-time special cash payment, less the net book value of the IS&GS business of about $3.0 billion at August 16, 2016 and other adjustments of about $100 million. During the fourth quarter of 2017, we recognized an additional gain of $73 million, which reflects certain post-closing adjustments, including certain tax adjustments and the final determination of net working capital.

We classified the operating results of our former IS&GS business as discontinued operations in our consolidated financial statements in accordance with U.S. GAAP, as the divestiture of this business represented a strategic shift that had a major effect on our operations and financial results. However, the cash flows generated by the IS&GS business have not been reclassified in our consolidated statements of cash flows as we retained this cash as part of the Transaction.

Acquisition of Sikorsky Aircraft Corporation

On November 6, 2015, pursuant to a Stock Purchase Agreement, dated as of July 19, 2015 by and between us and United Technologies Corporation (UTC) and certain wholly-owned subsidiaries of UTC, we completed the acquisition of Sikorsky Aircraft Corporation and certain affiliated companies (collectively “Sikorsky”) for $9.0 billion, net of cash acquired. Sikorsky, a global company primarily engaged in the design, manufacture, service and support of military and commercial helicopters, has become a wholly-owned subsidiary of ours, aligned under the RMS business segment. We funded the acquisition with new debt issuances, commercial paper and cash on hand. We and UTC made a joint election under Section 338(h)(10) of the Internal Revenue Code, which treats the transaction as an asset purchase for tax purposes. This election generates a cash tax benefit for us and our stockholders. The 2015 financial results of the acquired Sikorsky business have been included in our consolidated results of operations from the November 6, 2015 acquisition date through December 31, 2015. Accordingly, the consolidated financial results for the year ended December 31, 2015 do not reflect a full year of Sikorsky’s operations. See “Capital Structure, Resources and Other” included within “Liquidity and Cash Flows” discussion below and “Note 10 – Debt” included in our Notes to Consolidated Financial Statements for a discussion of the debt we incurred in connection with the Sikorsky acquisition.

Other

On August 24, 2016, we increased our ownership interest in the AWE Management Limited (AWE) joint venture, which operates the United Kingdom’s nuclear deterrent program, from 33% to 51%. At which time, we began consolidating AWE. Consequently, our operating results include 100% of AWE’s sales and 51% of its operating profit. Prior to increasing our ownership interest, we accounted for our investment in AWE using the equity method of accounting. Under the equity method, we recognized only 33% of AWE’s earnings or losses and no sales. Accordingly, prior to August 24, 2016, the date we obtained control, we recorded 33% of AWE’s net earnings in our operating results and subsequent to August 24, 2016, we recognized 100% of AWE’s sales and 51% of its operating profit.

For additional information, see “Note 3 – Acquisitions and Divestitures” included in our Notes to Consolidated Financial Statements.

Industry Considerations

U.S. Government Funding

The U.S. Government has not yet passed an appropriations bill for fiscal year 2018 (the U.S. Government’s fiscal year begins on October 1 and ends on September 30). However, on December 22, 2017, the U.S. Government passed a continuing resolution funding measure to finance all U.S. Government activities through January 19, 2018. Congress was unable to reach an agreement to continue to fund the government prior to midnight on January 19, 2018, and the U.S. Government was forced to shut down for three days. On January 22, 2018, the U.S. Government passed a continuing resolution funding measure to finance all U.S. Government activities through February 8, 2018. Under this continuing resolution, partial-year funding at amounts consistent with appropriated levels for fiscal year 2017 are available, subject to certain restrictions, but new spending initiatives are not authorized. Our key programs continue to be supported and funded despite the continuing resolution financing mechanism. However, during periods covered by continuing resolutions or until the regular appropriation bills are passed, we may experience delays in procurement of products and services due to lack of funding, and those delays may affect our results of operations.

In May 2017, the President submitted a budget proposal for GFY 2018 to Congress, which includes a base budget for the DoD of $575 billion, approximately $52 billion above the spending limits established under the Budget Control Act of 2011 (the Budget Control Act) (described below) and an increase of $32 billion over the fiscal year 2017 funding level. The President’s budget requests also includes funding of $65 billion for Overseas Contingency Operations (OCO) / Global War on Terror (GWOT), which is not subject to the Budget Control Act spending limits. Congress must approve or revise the President’s GFY 2018 budget proposals through enactment of appropriations bills and other policy legislation, which would then require final Presidential approval.

In December, the President signed the GFY 2018 National Defense Authorization Act (NDAA) into law. The NDAA authorizes funding levels for the agencies responsible for defense and sets forth how the funds will be used. The NDAA authorizes $626 billion in base defense spending ($606 billion for DoD) and $66 billion in OCO funds, exceeding the Budget Control Act limits for base defense spending by $85 billion. The OCO account is exempt from the Budget Control Act. It remains uncertain when an appropriations bill for fiscal year 2018 will be enacted or at what levels.

Currently, U.S. defense spending through fiscal year 2021 remains subject to statutory spending limits established by the Budget Control Act. The spending limits were modified for fiscal years 2013 through 2017 by the American Taxpayer Relief Act of 2012, the Bipartisan Budget Act of 2013 and the Bipartisan Budget Act of 2015. However, these acts did not provide relief to the spending limits beyond fiscal year 2017. If Congress approves the President's budget proposal or other appropriation legislation with funding levels that exceed the spending limits, automatic across-the-board spending reductions, known as sequestration, would be triggered to reduce funding back to the spending limits. As currently enacted, the Budget Control Act limits defense spending to $549 billion (approximately $522 billion for DoD) for fiscal year 2018 with modest increases of about 2.5% per year through 2021. The President's budget proposal as well as defense budget estimates for fiscal year 2018 and beyond exceed the spending limits established by the Budget Control Act. As a result, continued budget uncertainty and the risk of future sequestration cuts remain unless the Budget Control Act is repealed or significantly modified. The investments and acquisitions we have made in recent years have sought to align our businesses with what we believe are the most critical national priorities and mission areas. However, the possibility remains that our programs could be materially reduced, extended, or terminated as a result of the U.S. Government's continuing assessment of priorities, changes in government priorities, the implementation of sequestration (particularly in those circumstances where sequestration is implemented across-the-board without regard to national priorities), or other budget cuts in lieu of sequestration.

On September 8, 2017, Congress passed legislation suspending the debt ceiling through December 8, 2017. On December 9, 2017, the debt limit was increased to the amount of debt the U.S. Government held outstanding on that date. However, despite using cash on hand and measures employed by the Department of Treasury, the debt ceiling is expected to be reached again in early 2018. Congress will need to raise the debt limit for the U.S. Government to continue borrowing money before these measures are exhausted. If the debt ceiling is not raised, the U.S. Government may not be able to pay for expenditures or fulfill its funding obligations and there could be significant disruption to all discretionary programs.

We anticipate there will continue to be a significant amount of debate and negotiations within the U.S. Government over defense spending and the debt ceiling. In the context of these negotiations, it is possible that existing cuts to government programs could be kept in place, replaced with different spending cuts, and/or replaced with a package of broader reforms to reduce the federal deficit. However, we continue to believe that our portfolio of products and services will continue to be well supported in a strategically focused allocation of budget resources.

International Business

A key component of our strategic plan is to grow our international sales. To accomplish this growth, we continue to focus on strengthening our relationships internationally through partnerships and joint technology efforts. We conduct business with international customers through each of our business segments through either FMS or direct sales to international customers.

International customers accounted for 36% of Aeronautics' 2017 net sales. There continues to be strong international interest in the F-35 program, which includes commitments from the U.S. Government and eight international partner countries and three international customers, as well as expressions of interest from other countries. The U.S. Government and the eight partner countries continue to work together on the design, testing, production, and sustainment of the F-35 program. The international commitment to the program continues to grow. Through 2017, $8.2 billion of funding was awarded for the F-35 program under Low Rate Initial Production (LRIP) 11 contract for aircraft currently in production. This award is for international F-35 partners and FMS customers. Additionally in 2017, F-35 aircraft deliveries continued from the Final Assembly and Check-Out (FACO) facility in Italy and were initiated at the Japan FACO facility. Other areas of international expansion at our Aeronautics business segment include the C-130J and F-16 programs. During 2017, six C-130J aircraft were delivered to India. In November 2017, the U.S. and Bahrain signed a government-to-government agreement, or a Letter of Offer and Acceptance (LOA), regarding the sale of new production Block 70 aircraft for the Royal Bahraini Air Force. We are transitioning F-16 production to Greenville, South Carolina, to support the Bahrain production program and other emerging F-16 production requirements.

In 2017, international customers accounted for 34% of MFC's net sales. Our MFC business segment continues to generate significant international interest, most notably in the air and missile defense product line, which produces the Patriot Advanced Capability-3 (PAC-3) and Terminal High Altitude Area Defense (THAAD) systems. The PAC-3 is an advanced missile defense system designed to intercept incoming airborne threats. We have ongoing PAC-3 programs for sustainment activities in the Kingdom of Saudi Arabia, UAE, Qatar, the Republic of Korea and Taiwan. Additionally during 2017, we received an order for PAC-3 systems from Japan. THAAD is an integrated system designed to protect against high altitude ballistic missile threats. UAE is an international customer for THAAD, and other countries in the Middle East, Europe and the Asia-Pacific region have also expressed interest in our air and missile defense systems, including the Kingdom of Saudi Arabia, who took formal steps in October 2017 to begin the purchase of THAAD. Additionally, we continue to see international demand for our tactical missile and fire control products, including in Poland, where we will be submitting a proposal for a Multiple Launch Rocket System (MLRS). Other MFC international customers include the United Kingdom, Germany, India, Kuwait, and Bahrain.

In 2017, international customers accounted for 28% of RMS' net sales. Our RMS business segment continues to experience international interest in the Aegis Ballistic Missile Defense System. We perform activities in the development, production, modernization, ship integration, test and lifetime support for ships of international customers such as Japan, Spain, Republic of Korea, and Australia. We have ongoing programs in Canada and Chile for combat systems equipment upgrades on Halifax-class and Type 23 frigates. In our training and logistics solutions portfolio, we have active programs and pursuits in the United Kingdom, the Kingdom of Saudi Arabia, Canada, Singapore, and Australia. In addition, Sikorsky adds a significant international component to the RMS business segment with an installed base of over 1,000 aircraft internationally. We have active development, production, and sustainment support of the S-70i Black Hawk and MH-60 Seahawk aircraft to foreign military customers, including Chile, Australia, Denmark, Taiwan, the Kingdom of Saudi Arabia and Colombia. Commercial aircraft are sold to customers in the oil and gas industry, emergency medical evacuation, search and rescue fleets, and VIP customers in over 30 countries.

International customers accounted for 14% of Space's 2017 net sales. Our Space business segment includes the operations of AWE, which operates the United Kingdom's nuclear deterrent program. The work at AWE covers the entire life cycle, from initial concept, assessment and design, through component manufacture and assembly, in-service support and decommissioning and disposal. In addition, Space has international contracts with the Kingdom of Saudi Arabia and Japan to design and manufacture geostationary communication satellites using the A2100 satellite platform.

Status of the F-35 Program

The F-35 program consists of development contracts, production contracts and sustainment activities. The development contracts are being performed concurrent with the production contracts. Concurrent performance of development and production contracts is used for complex programs to test aircraft, shorten the time to field systems, and achieve overall cost savings. The System Development and Demonstration (SDD) portion of the development contracts was substantially completed in 2017, with over 99% of flight test objectives met through over 9,200 flights. Approximately 70 flights remain and are expected to be completed in early 2018. Additionally, the final logistics and training capability is planned for 2018 and new Third Life structural testing added to the SDD portion in 2013 is scheduled to be completed in 2019. Production of the aircraft is expected to continue for many years given the U.S. Government's current inventory objective of 2,456 aircraft for the U.S. Air Force, U.S. Marine Corps, and U.S. Navy; commitments from our eight international partners and three international customers; as well as expressions of interest from other countries.

Operationally, the U.S. Government continues to complete various tests, including ship trials, mission system evaluations and weapons testing, and the F-35 aircraft fleet recently surpassed 118,000 flight hours. Progress also continues on the production of aircraft. In January 2017, the program achieved a major milestone when the U.S. Navy received its first F-35C carrier variant at NAS Lemoore, California, as we continue to advance towards the U.S. Navy declaring the F-35C carrier variant ready for combat. The U.S. Marine Corps completed the deployment of 16 F-35B variants now permanently assigned to Marine Corps Air Station Iwakuni, Japan. In June 2017, the first Japanese assembled F-35A variant was unveiled at the FACO facility in Nagoya, Japan. This aircraft, delivered in September 2017, marks the first of nearly 40 jets that will be produced for the Japanese Ministry of Defense at this location. Similarly, in May 2017, the first F-35B variant to be assembled outside the U.S. was rolled out at the Italian FACO facility, which has already delivered multiple F-35A variants and is slated to produce over 100 aircraft in total. As of December 31, 2017, we have delivered 266 production aircraft to our U.S. and international partners, and we have 235 production aircraft in backlog, including orders from our international partners.

Given the size and complexity of the F-35 program, we anticipate that there will be continual reviews related to aircraft performance, program schedule, cost, and requirements as part of the DoD, Congressional, and international partners' oversight and budgeting processes. Current program challenges include, but are not limited to, supplier and partner performance, software development, level of cost associated with life cycle operations and sustainment and warranties, receiving funding for production contracts on a timely basis, executing future flight tests, findings resulting from testing, and operating the aircraft.

Consolidated Results of Operations

Since our operating cycle is primarily long term and involves many types of contracts for the design, development and manufacture of products and related activities with varying delivery schedules, the results of operations of a particular year, or year-to-year comparisons of sales and profits, may not be indicative of future operating results. The following discussions of comparative results among years should be reviewed in this context. All per share amounts cited in these discussions are presented on a "per diluted share" basis, unless otherwise noted. Our consolidated results of operations were as follows (in millions, except per share data):

	2017	2016	2015
Net sales	**$ 51,048**	$ 47,248	$ 40,536
Cost of sales	**(45,500)**	(42,186)	(36,044)
Gross profit	**5,548**	5,062	4,492
Other income, net	**373**	487	220
Operating profit [(a)]	**5,921**	5,549	4,712
Interest expense	**(651)**	(663)	(443)
Other non-operating (expense) income, net	**(1)**	—	30
Earnings from continuing operations before income taxes	**5,269**	4,886	4,299
Income tax expense [(b)]	**(3,340)**	(1,133)	(1,173)
Net earnings from continuing operations	**1,929**	3,753	3,126
Net earnings from discontinued operations	**73**	1,549	479
Net earnings	**$ 2,002**	$ 5,302	$ 3,605
Diluted earnings per common share			
Continuing operations	**$ 6.64**	$ 12.38	$ 9.93
Discontinued operations	**0.25**	5.11	1.53
Total diluted earnings per common share	**$ 6.89**	$ 17.49	$ 11.46

(a) For the year ended December 31, 2017, operating profit includes a previously deferred non-cash gain of approximately $198 million related to properties sold in 2015 (see "Note 8 – Property, Plant and Equipment, net" included in our Notes to Consolidated Financial Statements for more information) and a $64 million charge, which represents our portion of a non-cash asset impairment charge recorded by our equity method investee, Advanced Military Maintenance, Repair and Overhaul Center LLC venture (see "Note 1 – Significant Accounting Policies" included in our Notes to Consolidated Financial Statements for more information). For the year ended December 31, 2016, operating profit includes a non-cash gain on the step acquisition of AWE of approximately $104 million (see "Note 3 – Acquisitions and Divestitures" included in our Notes to Consolidated Financial Statements for more information). For the year ended December 31, 2015, operating profit includes $45 million of operating loss at Sikorsky, which is less than 1% of consolidated operating profit in 2015. Sikorsky's operating loss is net of intangible amortization and adjustments required to account for the acquisition of this business in the fourth quarter of 2015 (see "Note 3 – Acquisitions and Divestitures" included in our Notes to Consolidated Financial Statements for more information).

(b) In the fourth quarter of 2017, we recorded a net one-time tax charge of $1.9 billion ($6.69 per share), substantially all of which was non-cash, primarily related to the estimated impact of the Tax Cuts and Jobs Act. See "Income Tax Expense" section below and "Note 9 – Income Taxes" included in our Notes to Consolidated Financial Statements for additional information.

Certain amounts reported in other income, net, primarily our share of earnings or losses from equity method investees, are included in the operating profit of our business segments. Accordingly, such amounts are included in our discussion of our business segment results of operations.

Net Sales

We generate sales from the delivery of products and services to our customers. Our consolidated net sales were as follows (in millions):

	2017	2016	2015
Products	**$ 43,875**	$ 40,365	$ 34,868
% of total net sales	**85.9 %**	85.4 %	86.0 %
Services	**7,173**	6,883	5,668
% of total net sales	**14.1 %**	14.6 %	14.0 %
Total net sales	**$ 51,048**	$ 47,248	$ 40,536

Substantially all of our contracts are accounted for using the percentage-of-completion method. Under the percentage-of-completion method, we record net sales on contracts based upon our progress towards completion on a particular contract, as well as our estimate of the profit to be earned at completion. The following discussion of material changes in our consolidated net sales should be read in tandem with the subsequent discussion of changes in our consolidated cost of sales and our business segment results of operations because changes in our sales are typically accompanied by a corresponding change in our cost of sales due to the nature of the percentage-of-completion method.

Product Sales

Product sales increased $3.5 billion, or 9%, in 2017 as compared to 2016. The increase was primarily due to higher product sales of about $2.1 billion at Aeronautics, $680 million at RMS and $425 million at MFC. The increase in product sales at Aeronautics was primarily attributable to higher sales for the F-35 program due to increased production volume, higher sales for the C-130 program due to increased deliveries and aircraft configuration mix and higher volume on aircraft modernization for the F-16 program, partially offset by lower sales for the C-5 program due to fewer aircraft deliveries. The increase in product sales at RMS was primarily due to certain adjustments recorded in 2016 required to account for the acquisition of Sikorsky and higher volume on training and logistics services programs. Higher product sales at MFC were primarily due to higher sales for tactical missile programs due to product configuration mix and increased deliveries (primarily Joint Air-to-Surface Standoff Missile (JASSM)), higher sales for air and missile defense systems due to contract mix (primarily PAC-3), higher volume on certain programs (primarily THAAD), and increased deliveries for fire control programs (primarily Low Altitude Navigation and Targeting Infrared for Night (LANTIRN®) and SNIPER®).

Product sales increased $5.5 billion, or 16%, in 2016 as compared to 2015. The increase was primarily due to higher product sales of about $3.7 billion at RMS and approximately $1.8 billion at Aeronautics. The increase in product sales at RMS was primarily attributable to sales from Sikorsky, which was acquired in the fourth quarter of 2015. This increase was partially offset by lower net sales for training and logistics programs due to the divestiture of our Lockheed Martin Commercial Flight Training (LMCFT) business, which reported sales through the May 2, 2016 divestiture date. The increase at Aeronautics was primarily attributable to the F-35 program due to increased volume on aircraft production and the C-130 program due to increased aircraft deliveries.

Service Sales

Service sales increased $290 million, or 4%, in 2017 as compared to 2016, primarily due to an increase in service sales of about $245 million at Aeronautics and $180 million at MFC, partially offset by lower service sales of about $210 million at Space. The increase in service sales at Aeronautics was primarily due to higher sustainment activities (primarily the F-35 and F-16 programs). Higher service sales at MFC were primarily attributable to increased volume on sustainment activities (primarily PAC-3 and Hellfire). The decrease in service sales at Space was primarily due to lower space transportation programs due to a reduction in launch-related events, partially offset by increased volume on government satellite services.

Service sales increased $1.2 billion, or 21%, in 2016 as compared to 2015, primarily due to an increase in service sales of about $700 million at RMS and approximately $360 million at Aeronautics. The increase in service sales at RMS was primarily attributable to sales from Sikorsky, which was acquired in the fourth quarter of 2015. The increase in service sales at Aeronautics was primarily attributable to increased sustainment activities (primarily the F-35 and F-16 programs).

Cost of Sales

Cost of sales, for both products and services, consist of materials, labor, subcontracting costs, an allocation of indirect costs (overhead and general and administrative), as well as the costs to fulfill our industrial cooperation agreements, sometimes referred to as offset agreements, required under certain contracts with international customers. For each of our contracts, we monitor the nature and amount of costs at the contract level, which form the basis for estimating our total costs to complete the contract. Our consolidated cost of sales were as follows (in millions):

	2017	2016	2015
Cost of sales – products	**$ (39,750)**	$ (36,616)	$ (31,091)
% of product sales	**90.6 %**	90.7 %	89.2 %
Cost of sales – services	**(6,405)**	(6,040)	(4,824)
% of service sales	**89.3 %**	87.8 %	85.1 %
Severance charges	**—**	(80)	(82)
Other unallocated, net	**655**	550	(47)
Total cost of sales	**$ (45,500)**	$ (42,186)	$ (36,044)

Due to the nature of percentage-of-completion accounting, changes in our cost of sales for both products and services are typically accompanied by changes in our net sales. The following discussion of material changes in our consolidated cost of sales for products and services should be read in tandem with the preceding discussion of changes in our consolidated net sales and our business segment results of operations. We have not identified any developing trends in cost of sales for products and services that would have a material impact on our future operations.

Product Costs

Product costs increased approximately $3.1 billion, or 9%, in 2017 as compared to 2016. The increase was primarily due to increased product costs of about $1.8 billion at Aeronautics, $665 million at RMS and $420 million at MFC. The increase in product costs at Aeronautics was primarily due to increased volume on aircraft production for the F-35 program and higher cost for the C-130 program due to increased deliveries and aircraft configuration mix and higher cost on aircraft modernization for the F-16 program, partially offset by lower cost for the C-5 program due to fewer aircraft deliveries. Higher product costs at RMS were primarily due to higher volume on certain helicopter programs, a net increase in charges for C4USS programs for performance matters on the EADGE-T contract and higher cost for training and logistics services programs due to higher volume. The increase in product costs at MFC was primarily attributable to higher cost for air and missile defense systems due to higher volume (primarily THAAD) and contract mix (primarily PAC-3), higher cost for tactical missile programs due to product configuration mix (primarily JASSM) and increased deliveries for fire control programs (primarily LANTIRN® and SNIPER®).

Product costs increased approximately $5.5 billion, or 18%, in 2016 as compared to 2015. The increase was primarily due to increased product costs of about $3.6 billion at RMS and about $1.6 billion at Aeronautics. The increase at RMS was primarily attributable to product costs generated by Sikorsky, which was acquired in the fourth quarter of 2015. The increase at Aeronautics was primarily attributable to increased volume on aircraft production for the F-35 program and increased aircraft deliveries on the C-130 program.

Service Costs

Service costs increased approximately $365 million, or 6%, in 2017 compared to 2016, primarily due to increased service costs of about $265 million at Aeronautics, $150 million at MFC and $110 million at RMS. This increase was partially offset by lower service costs of about $160 million at Space. Higher service cost at Aeronautics were primarily due to increased sustainment activities (primarily the F-35 and F-16 programs) and higher cost for the C-130 program due to timing of expenses for sustainment programs. Higher service costs at MFC were primarily attributable to higher sustainment activities (primarily PAC-3 and Hellfire). The increase in service costs at RMS was primarily attributable to higher Sikorsky sustainment activities for international programs. Lower service costs at Space were primarily due to lower space transportation programs due to a reduction in launch-related events, partially offset by increased volume on government satellite services.

Service costs increased approximately $1.2 billion, or 25%, in 2016 compared to 2015, primarily due to increased service costs of about $670 million at RMS and approximately $400 million at Aeronautics. The increase at RMS was primarily attributable to service costs generated by Sikorsky, which was acquired in the fourth quarter of 2015. The increase at Aeronautics was primarily attributable to increased sustainment activities (primarily the F-35 and the F-22 programs).

Restructuring Charges

2016 Actions

During 2016, we recorded severance charges totaling approximately $80 million related to our Aeronautics business segment. The charges consisted of severance costs associated with the planned elimination of certain positions through either voluntary or involuntary actions. Upon separation, terminated employees receive lump-sum severance payments primarily based on years of service, the majority of which are expected to be paid over the next several quarters. As of the end of the first quarter of 2017, we had substantially paid the severance costs associated with these actions.

2015 Actions

During 2015, we recorded severance charges totaling $82 million, of which $67 million related to our RMS business segment and $15 million related to businesses that were reported in our former IS&GS business prior to our fourth quarter 2015 program realignment. The charges consisted of severance costs associated with the planned elimination of certain positions through either voluntary or involuntary actions. Upon separation, terminated employees receive lump-sum severance payments primarily based on years of service. As of December 31, 2016, we substantially paid the severance costs associated with these actions.

In connection with the Sikorsky acquisition, we assumed obligations related to certain restructuring actions committed to by Sikorsky in June 2015. Net of amounts we anticipate to recover through the pricing of our products and services to our customers, we incurred and paid $40 million of costs in 2016 related to these actions.

We have recovered a substantial amount of the restructuring charges through the pricing of our products and services to the U.S. Government and other customers in future periods, with the impact included in the respective business segment's results of operations.

Other Unallocated, Net

Other unallocated, net primarily includes the FAS/CAS pension adjustment as described in the "Business Segment Results of Operations" section below, stock-based compensation and other corporate costs. These items are not allocated to the business segments and, therefore, are excluded from the cost of sales for products and services. Other unallocated, net was a net reduction to expense of $655 million and $550 million in 2017 and 2016, compared to a net increase to expense of $47 million in 2015.

The increase in net reduction to expense in 2017 as compared to 2016 was primarily attributable to corporate overhead costs reclassified during 2016 from the former IS&GS business to other unallocated, net, partially offset by fluctuations in other costs associated with various corporate items, none of which were individually significant. See "Note 3 – Acquisitions and Divestitures" included in our Notes to Consolidated Financial Statements for additional information about costs reclassified to other unallocated, net.

Additionally, the fluctuation between each respective period was also impacted by the change in the FAS/CAS pension adjustment of $876 million in 2017, $902 million in 2016 and $400 million in 2015, partially offset by fluctuations in other costs associated with various corporate items, none of which were individually significant. The decrease in the FAS/CAS pension adjustment from 2016 to 2017 was primarily attributable to an increase in FAS pension expense related to a lower discount rate and lower expected long-term rate of return on plan assets; mostly offset by the increase in U.S. Government Cost Accounting Standards (CAS) pension cost due to the impact of phasing in CAS Harmonization. The increase in the FAS/CAS pension adjustment from 2015 to 2016 was primarily attributable to the increase in U.S. Government CAS pension cost due to the impact of phasing in CAS Harmonization. See "Critical Accounting Policies - Postretirement Benefit Plans" discussion below for more information on our CAS pension cost.

Other Income, Net

Other income, net primarily includes our share of earnings or losses from equity method investees and gains or losses for acquisitions and divestitures. Other income, net in 2017 was $373 million, compared to $487 million in 2016 and $220 million in 2015. The decrease in 2017 compared to 2016 was primarily attributable to decreased earnings generated by equity method investees and recognition in the first quarter of 2017 of our portion of a non-cash asset impairment charge recorded by our equity method investee, Advanced Military Maintenance, Repair and Overhaul Center LLC (AAMROC). These decreases were partially offset by the recognition in the fourth quarter of 2017 of a previously deferred non-cash gain of approximately $198 million related to properties sold in 2015, which was greater than the net gain of $104 million recognized in the third quarter of 2016 on the step acquisition of AWE.

The increase in 2016, compared to 2015, was primarily attributable to the non-cash net gain of $104 million associated with obtaining a controlling interest in AWE and approximately $120 million of increased earnings generated by equity method investees as discussed in the "Business Segment Results of Operations" section below. Additionally, in 2015 we incurred a $90 million non-cash impairment charge related to our decision in 2015 to divest our LMCFT business.

Interest Expense

Interest expense in 2017 was $651 million, compared to $663 million in 2016 and $443 million in 2015. The decrease in interest expense in 2017 resulted primarily from our scheduled repayment of $952 million of debt during 2016. The increase in interest expense in 2016 resulted from the debt we incurred to fund the acquisition of Sikorsky, and the issuance of notes in February of 2015 for general corporate purposes. See "Capital Structure, Resources and Other" included within "Liquidity and Cash Flows" discussion below and "Note 10 – Debt" included in our Notes to Consolidated Financial Statements for a discussion of our debt.

Other Non-Operating (Expense) Income, Net

Other non-operating (expense) income, net in 2017 was comparable to 2016. Other non-operating income, net decreased $30 million from 2015 to 2016 primarily due to a gain from the sale of an investment in 2015, which did not recur in 2016.

Income Tax Expense

On December 22, 2017, the President signed the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act, among other things, lowered the U.S. corporate income tax rate from 35% to 21% effective January 1, 2018. Consequently, we wrote down our net deferred tax assets as of December 31, 2017 by $1.9 billion to reflect the estimated impact of the Tax Act. We recorded a corresponding net one-time charge of $1.9 billion ($6.69 per share), substantially all of which was non-cash, primarily related to enactment of the Tax Act, the re-measurement of certain net deferred tax assets using the lower U.S. corporate income tax rate (approximately $1.8 billion), a deemed repatriation tax (approximately $43 million), and a reduction in the U.S. manufacturing benefit (approximately $81 million) as a result of our decision to accelerate contributions to our pension fund in 2018 in order to receive a tax deduction in 2017.

While we have substantially completed our provisional analysis of the income tax effects of the Tax Act and recorded a reasonable estimate of such effects, the net one-time charge related to the Tax Act may differ, possibly materially, due to, among other things, further refinement of our calculations, changes in interpretations and assumptions that we have made, additional guidance that may be issued by the U.S. Government, and actions and related accounting policy decisions we may take as a result of the Tax Act. We will complete our analysis over a one-year measurement period ending December 22, 2018, and any adjustments during this measurement period will be included in net earnings from continuing operations as an adjustment to income tax expense in the reporting period when such adjustments are determined.

Our effective income tax rate from continuing operations was 63.4% for 2017, 23.2% for 2016, and 27.3% for 2015. The net one-time charge related to the Tax Act increased our 2017 effective income tax rate by 36.9 percentage points. Our effective income tax rate and cash tax payments in years after 2017 are expected to benefit materially from the enactment of the Tax Act.

The rates for all periods benefited from tax deductions for dividends paid to our defined contribution plans with an employee stock ownership plan feature, and the U.S. research and development (R&D) tax credit. The U.S. manufacturing benefit was insignificant for 2017, compared to a reduction of our effective tax rate by 2.4 percentage points for 2016 and 2.9 percentage points for 2015. The 2017 benefit was reduced by $81 million because of our 2017 decision after enactment of the Tax Act to make accelerated contributions of cash in 2018 to our defined benefit pension plans. The R&D tax credit reduced our effective tax rate by 2.2 percentage points in both 2017 and 2016, and 1.6 percentage points in 2015. The rate for 2016 also benefited from the nontaxable gain recorded in connection with the consolidation of AWE.

In addition, the rate for 2017 and 2016 benefited from tax benefits related to employee share-based payment awards, which are now recorded in earnings as income tax benefit or expense, effective with the adoption of an accounting standard update during 2016. Accordingly, we recognized additional income tax benefits of $106 million and $152 million during the years ended December 31, 2017 and 2016, which reduced our effective income tax rate by 2.0 percentage points and 3.1 percentage points.

As a result of a decision in 2015 to divest our LMCFT business in 2016, we recorded an asset impairment charge of approximately $90 million. This charge was partially offset by a net deferred tax benefit of about $80 million. The net impact of the resulting tax benefit reduced our effective income tax rate by 1.2 percentage points in 2015.

Future changes in tax laws could significantly impact our provision for income taxes, the amount of taxes payable, our deferred tax asset and liability balances, and stockholders' equity. The amount of net deferred tax assets will change periodically based on several factors, including the measurement of our postretirement benefit plan obligations, actual cash contributions to our postretirement benefit plans, and future changes in tax laws.

Net Earnings from Continuing Operations

We reported net earnings from continuing operations of $1.9 billion ($6.64 per share) in 2017, $3.8 billion ($12.38 per share) in 2016 and $3.1 billion ($9.93 per share) in 2015. Both net earnings and earnings per share from continuing operations were affected by the factors mentioned above. Earnings per share also benefited from a net decrease of approximately five million common shares outstanding from December 31, 2016 to December 31, 2017 as a result of share repurchases, partially offset by share issuance under our stock-based awards and certain defined contribution plans. From December 31, 2015 to December 31, 2016 earnings per share benefited from a decrease of approximately 14 million common shares outstanding as a result of share repurchases and the completion of the exchange offer, partially offset by share issuance under our stock-based awards and certain defined contribution plans.

Net Earnings from Discontinued Operations

We reported net earnings from discontinued operations related to the 2016 divestiture of the IS&GS business of $73 million ($0.25 per share) in 2017, $1.5 billion ($5.11 per share) in 2016 and $479 million ($1.53 per share) in 2015. Net earnings from discontinued operations in 2017 reflects certain post-closing adjustments, including final working capital and tax adjustments. Net earnings from discontinued operations in 2016 included an initial net gain of approximately $1.2 billion recognized as a result of the divestiture of the IS&GS business.

Net Earnings

We reported net earnings of $2.0 billion ($6.89 per share) in 2017, $5.3 billion ($17.49 per share) in 2016 and $3.6 billion ($11.46 per share) in 2015.

Business Segment Results of Operations

We operate in four business segments: Aeronautics, MFC, RMS and Space. We organize our business segments based on the nature of the products and services offered. The financial information in the following tables includes the results of businesses we have acquired from their respective dates of acquisition and excludes businesses included in discontinued operations (see "Note 3 – Acquisitions and Divestitures" included in our Notes to Consolidated Financial Statements) for all years presented. Net sales of our business segments exclude intersegment sales as these activities are eliminated in consolidation.

Operating profit of our business segments includes our share of earnings or losses from equity method investees because the operating activities of the equity method investees are closely aligned with the operations of our business segments. United Launch Alliance (ULA), results of which are included in our Space business segment, is one of our largest equity method investees. Operating profit of our business segments excludes the FAS/CAS pension adjustment described below; expense for stock-based compensation; the effects of items not considered part of management's evaluation of segment operating performance, such as charges related to goodwill impairments (see "Note 1 – Significant Accounting Policies" included in our Notes to Consolidated Financial Statements) and significant severance actions (see "Note 15 – Restructuring Charges" included in our Notes to Consolidated Financial Statements); gains or losses from significant divestitures (see "Note 3 – Acquisitions and Divestitures" included in our Notes to Consolidated Financial Statements); the effects of certain legal settlements; corporate costs not allocated to our business segments; and other miscellaneous corporate activities. These items are included in the reconciling item "Unallocated items" between operating profit from our business segments and our consolidated operating profit.

Our business segments' results of operations include pension expense only as calculated under U.S. Government Cost Accounting Standards, which we refer to as CAS pension cost. We recover CAS pension cost through the pricing of our products and services on U.S. Government contracts and, therefore, the CAS pension cost is recognized in each of our business segments' net sales and cost of sales. Since our consolidated financial statements must present pension expense calculated in accordance with FAS requirements under U.S. GAAP, which we refer to as FAS pension expense, the FAS/CAS pension adjustment increases or decreases the CAS pension cost recorded in our business segments' results of operations to equal the FAS pension expense. As a result, to the extent that CAS pension cost exceeds FAS pension expense, which occurred for 2017, 2016 and 2015, we have a favorable FAS/CAS pension adjustment.

Summary operating results for each of our business segments were as follows (in millions):

	2017	2016	2015
Net sales			
Aeronautics	**$ 20,148**	$ 17,769	$ 15,570
Missiles and Fire Control	**7,212**	6,608	6,770
Rotary and Mission Systems	**14,215**	13,462	9,091
Space	**9,473**	9,409	9,105
Total net sales	**$ 51,048**	$ 47,248	$ 40,536
Operating profit			
Aeronautics	**$ 2,164**	$ 1,887	$ 1,681
Missiles and Fire Control	**1,053**	1,018	1,282
Rotary and Mission Systems	**905**	906	844
Space [(a)]	**993**	1,289	1,171
Total business segment operating profit	**5,115**	5,100	4,978
Unallocated items			
FAS/CAS pension adjustment			
FAS pension expense [(b)(c)]	**(1,372)**	(1,019)	(1,127)
Less: CAS pension cost [(b)(c)]	**2,248**	1,921	1,527
FAS/CAS pension adjustment [(d)]	**876**	902	400
Severance charges [(b)(e)]	**—**	(80)	(82)
Stock-based compensation	**(158)**	(149)	(133)
Other, net [(f)(g)]	**88**	(224)	(451)
Total unallocated, net	**806**	449	(266)
Total consolidated operating profit	**$ 5,921**	$ 5,549	$ 4,712

(a) On August 24, 2016, our ownership interest in the AWE joint venture increased from 33% to 51% and we were required to change our accounting for this investment from the equity method to consolidation. As a result of the increased ownership interest, we recognized a non-cash gain of $127 million at our Space business segment, which increased net earnings from continuing operations by $104 million ($0.34 per share) in 2016. See "Note 3 – Acquisitions and Divestitures" included in our Notes to Consolidated Financial Statements for more information).

(b) FAS pension expense, CAS pension costs and severance charges reflect the reclassification for discontinued operations presentation of benefits related to former IS&GS salaried employees (see "Note 11 – Postretirement Benefit Plans" included in our Notes to Consolidated Financial Statements).

(c) The higher FAS expense in 2017 is primarily due to a lower discount rate and lower expected long-term rate of return on plan assets in 2017 versus 2016. The higher CAS pension cost primarily reflects the impact of phasing in CAS Harmonization (see "Note 11 – Postretirement Benefit Plans" included in our Notes to Consolidated Financial Statements).

(d) We expect a FAS/CAS pension adjustment in 2018 of about $1.0 billion (see "Critical Accounting Policies – Postretirement Benefit Plans" discussion below).

(e) See "Consolidated Results of Operations – Restructuring Charges" discussion above for information on charges related to certain severance actions at our business segments. Severance charges for initiatives that are not significant are included in business segment operating profit.

(f) Other, net in 2017 includes a previously deferred non-cash gain of $198 million related to properties sold in 2015 as a result of completing our remaining obligations (see "Note 8 – Property, Plant and Equipment, net" included in our Notes to Consolidated Financial Statements for more information) and a $64 million charge, which represents our portion of a non-cash asset impairment charge recorded by our equity method investee, AMMROC (see "Note 1 – Significant Accounting Policies" included in our Notes to Consolidated Financial Statements for more information).

(g) Other, net in 2015 includes a non-cash asset impairment charge of approximately $90 million related to our decision in 2015 to divest our LMCFT business (see "Note 3 – Acquisitions and Divestitures" included in our Notes to Consolidated Financial Statements). This charge was partially offset by a net deferred tax benefit of about $80 million, which is recorded in income tax expense. The net impact reduced net earnings by about $10 million. Additionally other, net in 2015 includes approximately $38 million of non-recoverable transaction costs associated with the acquisition of Sikorsky.

The following segment discussions also include information relating to backlog for each segment. Backlog was approximately $99.9 billion, $96.2 billion and $94.8 billion at December 31, 2017, 2016 and 2015. These amounts included both funded backlog (firm orders for which funding has been both authorized and appropriated by the customer) and unfunded backlog (firm orders for which funding has not yet been appropriated). Backlog does not include unexercised options or task orders to be issued under indefinite-delivery, indefinite-quantity contracts. Funded backlog was approximately $73.6 billion at December 31, 2017.

Management evaluates performance on our contracts by focusing on net sales and operating profit and not by type or amount of operating expense. Consequently, our discussion of business segment performance focuses on net sales and operating profit, consistent with our approach for managing the business. This approach is consistent throughout the life cycle of our contracts, as management assesses the bidding of each contract by focusing on net sales and operating profit and monitors performance on our contracts in a similar manner through their completion.

We regularly provide customers with reports of our costs as the contract progresses. The cost information in the reports is accumulated in a manner specified by the requirements of each contract. For example, cost data provided to a customer for a product would typically align to the subcomponents of that product (such as a wing-box on an aircraft) and for services would align to the type of work being performed (such as aircraft sustainment). Our contracts generally allow for the recovery of costs in the pricing of our products and services. Most of our contracts are bid and negotiated with our customers under circumstances in which we are required to disclose our estimated total costs to provide the product or service. This approach for negotiating contracts with our U.S. Government customers generally allows for the recovery of our costs. We also may enter into long-term supply contracts for certain materials or components to coincide with the production schedule of certain products and to ensure their availability at known unit prices.

Many of our contracts span several years and include highly complex technical requirements. At the outset of a contract, we identify and monitor risks to the achievement of the technical, schedule and cost aspects of the contract and assess the effects of those risks on our estimates of total costs to complete the contract. The estimates consider the technical requirements (e.g., a newly-developed product versus a mature product), the schedule and associated tasks (e.g., the number and type of milestone events) and costs (e.g., material, labor, subcontractor, overhead and the estimated costs to fulfill our industrial cooperation agreements required under certain contracts with international customers). The initial profit booking rate of each contract considers risks surrounding the ability to achieve the technical requirements, schedule and costs in the initial estimated total costs to complete the contract. Profit booking rates may increase during the performance of the contract if we successfully retire risks surrounding the technical, schedule and cost aspects of the contract which decreases the estimated total costs to complete the contract. Conversely, our profit booking rates may decrease if the estimated total costs to complete the contract increase. All of the estimates are subject to change during the performance of the contract and may affect the profit booking rate.

We have a number of programs that are designated as classified by the U.S. Government which cannot be specifically described. The operating results of these classified programs are included in our consolidated and business segment results and are subjected to the same oversight and internal controls as our other programs.

Our net sales are primarily derived from long-term contracts for products and services provided to the U.S. Government as well as FMS contracted through the U.S. Government. We account for these contracts, as well as product contracts with non-U.S. Government customers, using the percentage-of-completion method of accounting, which represent substantially all of our net sales. We derive our remaining net sales from contracts to provide services to non-U.S. Government customers, which we account for under the services method of accounting.

Under the percentage-of-completion method of accounting, we record sales on contracts based upon our progress towards completion on a particular contract as well as our estimate of the profit to be earned at completion. Cost-reimbursable contracts provide for the payment of allowable costs plus a fee. For fixed-priced contracts, net sales and cost of sales are recognized as products are delivered or as costs are incurred. Due to the nature of the percentage-of-completion method of accounting, changes in our cost of sales are typically accompanied by a related change in our net sales.

Changes in net sales and operating profit generally are expressed in terms of volume. Changes in volume refer to increases or decreases in sales or operating profit resulting from varying production activity levels, deliveries or service levels on individual contracts. Volume changes in segment operating profit are typically based on the current profit booking rate for a particular contract.

In addition, comparability of our segment sales, operating profit and operating margins may be impacted favorably or unfavorably by changes in profit booking rates on our contracts accounted for using the percentage-of-completion method of accounting. Increases in the profit booking rates, typically referred to as risk retirements, usually relate to revisions in the estimated total costs that reflect improved conditions on a particular contract. Conversely, conditions on a particular contract may deteriorate, resulting in an increase in the estimated total costs to complete and a reduction in the profit booking rate. Increases or decreases in profit booking rates are recognized in the current period and reflect the inception-to-date effect of such changes. Segment operating profit and margins may also be impacted favorably or unfavorably by other items. Favorable items may include the positive resolution of contractual matters, cost recoveries on restructuring charges, insurance recoveries and gains on sales of assets. Unfavorable items may include the adverse resolution of contractual matters; restructuring charges, except for significant severance actions, which are excluded from segment operating results; reserves for disputes; asset impairments; and losses on sales of certain assets. Segment operating profit and items such as risk retirements, reductions of profit booking rates or other matters are presented net of state income taxes.

As previously disclosed, we have a program to design, integrate, and install an air missile defense C4I systems for an international customer that has experienced performance issues and for which we have periodically accrued reserves. In 2017, we revised our estimated costs to complete the program, EADGE-T, as a consequence of ongoing performance matters and recorded an additional charge of $120 million ($74 million or $0.25 per share, after tax) at our RMS business segment. As of December 31, 2017, cumulative losses, including reserves, remained at approximately $260 million on this program. We are continuing to monitor the viability of the program and the available options and could record additional charges in future periods. However, based on the reserves already accrued and our current estimate of the costs to complete the program, at this time we do not anticipate that additional charges, if any, would be material.

We have two commercial satellite programs at our Space business segment, for which we have experienced performance issues related to the development and integration of a modernized LM 2100 satellite platform. These commercial programs require the development of new satellite technology to enhance the LM 2100's power, propulsion and electronics, among other items. The enhanced satellite is expected to benefit other commercial and government satellite programs. We have periodically revised our estimated costs to complete these developmental commercial programs. We have recorded cumulative losses of approximately $305 million as of December 31, 2017, including approximately $135 million ($83 million or $0.29 per share, after tax) recorded during the year ended December 31, 2017. While these losses reflect our estimated total losses on the programs, we will continue to incur unrecovered costs each period until we complete these programs and may have to record additional loss reserves in future periods, which could be material to our operating results. While we do not currently anticipate recording additional loss reserves, the programs remain developmental and further challenges in the delivery and integration of new satellite technology, anomalies discovered during system testing requiring repair or rework, further schedule delays and potential penalties could require that we record additional reserves. We do not currently expect to be able to meet the delivery schedule under the contracts and have informed the customers. The customers could seek to exercise a termination right under the contracts, in which case we would have to refund the payments we have received and pay certain penalties. However, we think the probability that the customers will seek to exercise any termination right is remote as the delay beyond the termination date is modest and the customers have an immediate need for the satellites.

Our consolidated net adjustments not related to volume, including net profit booking rate adjustments and other matters, net of state income taxes, increased segment operating profit by approximately $1.5 billion in both 2017 and 2016 and $1.7 billion in 2015. The consolidated net adjustments in 2017 were comparable to 2016, with increases in profit booking rate adjustments at our Aeronautics and Space business segments, offset by decreases at our MFC and RMS business segments. The decrease in our consolidated net adjustments in 2016 compared to 2015 was primarily due to a decrease in profit booking rate adjustments at our MFC and Space business segments, partially offset by an increase at our RMS business segment. The consolidated net adjustments for 2017 are inclusive of approximately $790 million in unfavorable items, which include reserves for performance matters on the EADGE-T contract, Vertical Launching System (VLS) program and other programs at RMS and on commercial satellite programs at Space. The consolidated net adjustments for 2016 are inclusive of approximately $530 million in unfavorable items, which include reserves for performance matters on an international program at RMS and on commercial satellite programs at Space. The consolidated net adjustments for 2015 are inclusive of approximately $550 million in unfavorable items, which include reserves for performance matters on the EADGE-T contract at RMS and on commercial satellite programs at Space.

Aeronautics

Our Aeronautics business segment is engaged in the research, design, development, manufacture, integration, sustainment, support and upgrade of advanced military aircraft, including combat and air mobility aircraft, unmanned air vehicles and related technologies. Aeronautics' major programs include the F-35 Lightning II Joint Strike Fighter, C-130 Hercules, F-16 Fighting Falcon, F-22 Raptor and C-5M Super Galaxy. Aeronautics' operating results included the following (in millions):

	2017	2016	2015
Net sales	**$ 20,148**	$ 17,769	$ 15,570
Operating profit	**2,164**	1,887	1,681
Operating margin	**10.7 %**	10.6 %	10.8 %
Backlog at year-end	**$ 35,832**	$ 34,182	$ 31,842

2017 compared to 2016

Aeronautics' net sales in 2017 increased $2.4 billion, or 13%, compared to 2016. The increase was primarily attributable to higher net sales of approximately $2.0 billion for the F-35 program due to increased volume on production and sustainment; about $260 million for the C-130 program due to increased deliveries (26 aircraft delivered in 2017 compared to 24 in 2016) and due to aircraft configuration mix, partially offset by lower volume for sustainment programs; and about $55 million for the F-16 program due to higher volume on aircraft modernization programs, partially offset by lower deliveries (eight aircraft delivered in 2017 compared to 12 in 2016). These increases were partially offset by a decrease of approximately $155 million for the C-5 program due to lower deliveries (seven aircraft delivered in 2017 compared to nine in 2016).

Aeronautics' operating profit in 2017 increased $277 million, or 15%, compared to 2016. Operating profit increased approximately $290 million for the F-35 program due to increased volume on aircraft production and sustainment activities and higher risk retirements and about $85 million for the F-16 program due to higher risk retirements and higher volume on aircraft modernization programs, partially offset by lower deliveries. These increases were partially offset by a decrease of about $30 million due to lower equity earnings from an investee; about $25 million for the C-130 program primarily due to lower volume and the timing of expenses for sustainment programs; and approximately $45 million for other aeronautics programs primarily due to lower risk retirements and the establishment of a reserve recorded in the first quarter of 2017. Adjustments not related to volume, including net profit booking rate adjustments, were about $175 million higher in 2017 compared to 2016.

2016 compared to 2015

Aeronautics' net sales in 2016 increased $2.2 billion, or 14%, compared to 2015. The increase was attributable to higher net sales of approximately $1.7 billion for the F-35 program due to increased volume on aircraft production and sustainment activities, partially offset by lower volume on development activities; and approximately $290 million for the C-130 program due to increased deliveries (24 aircraft delivered in 2016 compared to 21 in 2015) and increased sustainment activities; and approximately $250 million for the F-16 program primarily due to higher volume on aircraft modernization programs. The increases were partially offset by lower net sales of approximately $55 million for the C-5 program due to decreased sustainment activities.

Aeronautics' operating profit in 2016 increased $206 million, or 12%, compared to 2015. Operating profit increased approximately $195 million for the F-35 program due to increased volume on aircraft production and sustainment activities and higher risk retirements; and by approximately $60 million for aircraft support and maintenance programs due to higher risk retirements and increased volume. These increases were partially offset by lower operating profit of approximately $65 million for the C-130 program due to contract mix and lower risk retirements. Adjustments not related to volume, including net profit booking rate adjustments, were approximately $20 million higher in 2016 compared to 2015.

Backlog

Backlog increased in 2017 compared to 2016 primarily due to higher orders on F-35 production and sustainment programs. Backlog increased in 2016 compared to 2015 primarily due to higher orders on F-35 production and sustainment programs.

Missiles and Fire Control

Our MFC business segment provides air and missile defense systems; tactical missiles and air-to-ground precision strike weapon systems; logistics; fire control systems; mission operations support, readiness, engineering support and integration services; manned and unmanned ground vehicles; and energy management solutions. MFC's major programs include PAC-3, THAAD, MLRS, Hellfire, JASSM, Javelin, Apache, SNIPER®, LANTIRN® and Special Operations Forces Contractor Logistics Support Services (SOF CLSS). In August 2017, we were awarded a contract for the Special Operations Forces Global Logistics Support Services (SOF GLSS) program, which is a competitive follow-on contract to SOF CLSS. MFC's operating results included the following (in millions):

	2017	2016	2015
Net sales	**$ 7,212**	$ 6,608	$ 6,770
Operating profit	**1,053**	1,018	1,282
Operating margin	**14.6 %**	15.4 %	18.9 %
Backlog at year-end	**$ 17,863**	$ 14,704	$ 15,463

2017 compared to 2016

MFC's net sales in 2017 increased $604 million, or 9%, compared to the same period in 2016. The increase was attributable to higher net sales of approximately $250 million for tactical missile programs due to product configuration mix and increased deliveries (JASSM) and due to increased deliveries for various other programs; about $210 million for air and missile defense programs due to contract mix on certain programs (primarily PAC-3) and increased volume on certain programs (primarily THAAD); and about $110 million for fire control programs due to increased deliveries (primarily LANTIRN® and SNIPER®).

MFC's operating profit in 2017 increased $35 million, or 3%, compared to 2016. Operating profit increased about $70 million for air and missile defense programs due to increased volume (primarily THAAD), contract mix (primarily PAC-3), a reserve recorded in fiscal year 2016 for a contractual matter that did not recur in 2017, partially offset by lower risk retirements; and about

$30 million for fire control programs due to increased deliveries (primarily LANTIRN® and SNIPER®). These increases were partially offset by a decrease of approximately $65 million for tactical missile programs due to lower risk retirements (primarily JASSM and Hellfire) and the establishment of a reserve on a program. Adjustments not related to volume, including net profit booking rate adjustments, were about $80 million lower in 2017 compared to 2016.

2016 compared to 2015

MFC's net sales in 2016 decreased $162 million, or 2%, compared to 2015. The decrease was attributable to lower net sales of approximately $205 million for air and missile defense programs due to decreased volume (primarily THAAD); and lower net sales of approximately $95 million due to lower volume on various programs. These decreases were partially offset by a $75 million increase for tactical missiles programs due to increased deliveries (primarily Hellfire); and approximately $70 million for fire control programs due to increased volume (SOF CLSS).

MFC's operating profit in 2016 decreased $264 million, or 21%, compared to 2015. Operating profit decreased approximately $145 million for air and missile defense programs due to lower risk retirements (PAC-3 and THAAD) and a reserve for a contractual matter; approximately $45 million for tactical missiles programs due to lower risk retirements (Javelin); and approximately $45 million for fire control programs due to lower risk retirements (Apache) and program mix. Adjustments not related to volume, including net profit booking rate adjustments and reserves, were about $225 million lower in 2016 compared to 2015.

Backlog

Backlog increased in 2017 compared to 2016 primarily due to higher orders on Hellfire, Precision Fires and PAC-3. Backlog decreased in 2016 compared to 2015 primarily due to lower orders on PAC-3, Hellfire, and JASSM.

Rotary and Mission Systems

As previously described, on November 6, 2015, we acquired Sikorsky and aligned the Sikorsky business under our RMS business segment. The 2015 results of the acquired Sikorsky business have been included in our financial results from the November 6, 2015 acquisition date through December 31, 2015. As a result, our consolidated operating results and RMS business segment operating results for the year ended December 31, 2015 do not reflect a full year of Sikorsky operations.

Our RMS business segment provides design, manufacture, service and support for a variety of military and commercial helicopters, ship and submarine mission and combat systems; mission systems and sensors for rotary and fixed-wing aircraft; sea and land-based missile defense systems; radar systems; the Littoral Combat Ship (LCS); simulation and training services; and unmanned systems and technologies. In addition, RMS supports the needs of government customers in cybersecurity and delivers communication and command and control capabilities through complex mission solutions for defense applications. RMS' major programs include Black Hawk and Seahawk helicopters, Aegis Combat System (Aegis), LCS, CH-53K development helicopter, VH-92A helicopter program, Advanced Hawkeye Radar System, and The Command, Control, Battle Management and Communications (C2BMC) contract. During the fourth quarter of 2017, we realigned certain programs within the RMS business segment to align with changes in management structure. RMS' operating results included the following (in millions):

	2017	**2016**	**2015**
Net sales	**$ 14,215**	$ 13,462	$ 9,091
Operating profit	**905**	906	844
Operating margin	**6.4 %**	6.7 %	9.3 %
Backlog at year-end	**$ 28,974**	$ 28,430	$ 30,076

2017 compared to 2016

RMS' net sales in 2017 increased $753 million, or 6%, compared to 2016. The increase was primarily attributable to approximately $680 million for Sikorsky helicopter programs due to certain adjustments recorded in 2016 required to account for the acquisition and higher volume on certain helicopter programs; and about $160 million for training and logistics services programs due to higher volume. These increases were partially offset by a decrease of about $50 million for IWSS programs due to lower volume.

RMS' operating profit in 2017 was comparable with 2016. Operating profit increased about $105 million for Sikorsky helicopter programs due to certain adjustments recorded in 2016 required to account for the acquisition. This increase was offset by a decrease of $100 million for C4USS programs due to a net $95 million increase for charges for performance matters on the EADGE-T contract and $20 million for IWSS programs primarily due to a performance matter on the VLS program, partially offset by higher risk retirements (primarily LCS). Adjustments not related to volume, including net profit booking rate adjustments, were about $55 million lower in 2017 compared to 2016.

2016 compared to 2015

RMS' net sales in 2016 increased $4.4 billion, or 48%, compared to 2015. The increase was primarily attributable to higher net sales of approximately $4.6 billion from Sikorsky helicopter programs, which was acquired on November 6, 2015. Net sales for 2015 include Sikorsky's results subsequent to the acquisition date, net of certain revenue adjustments required to account for the acquisition of this business. This increase was partially offset by lower net sales of approximately $115 million for IWSS programs due to decreased volume on various programs; and approximately $70 million for training and logistics programs due to the divestiture of our LMCFT business, which reported sales through the May 2, 2016 divestiture date.

RMS' operating profit in 2016 increased $62 million, or 7%, compared to 2015. Operating profit increased approximately $85 million for training and logistics programs due primarily to the divestiture of our LMCFT business which generated operating losses through its May 2, 2016 divestiture date; about $30 million for our IWSS programs due to investments made in connection with a next generation radar technology program awarded during 2015; and approximately $55 million for C4USS programs due primarily to higher reserves for performance matters on an international program in 2015. These increases were partially offset by a decrease of $70 million as a result of a higher operating loss from Sikorsky, inclusive of the unfavorable impacts of intangible asset amortization and other adjustments required to account for the acquisition of this business; and about $25 million for other matters. Adjustments not related to volume, including net profit booking rate adjustments and reserves, were about $155 million higher in 2016 compared to 2015.

Backlog

Backlog increased in 2017 compared to 2016 primarily due to a new multi-year award at Sikorsky. Backlog decreased in 2016 compared to 2015 primarily due to sales being recognized on several multi-year programs (primarily in Sikorsky) related to prior year awards.

Space

Our Space business segment, previously known as Space Systems, is engaged in the research and development, design, engineering and production of satellites, strategic and defensive missile systems and space transportation systems. Space provides network-enabled situational awareness and integrates complex space and ground-based global systems to help our customers gather, analyze, and securely distribute critical intelligence data. Space is also responsible for various classified systems and services in support of vital national security systems. Space's major programs include the Trident II D5 Fleet Ballistic Missile (FBM), AWE, Orion Multi-Purpose Crew Vehicle (Orion), Space Based Infrared System (SBIRS), Global Positioning System (GPS) III, Advanced Extremely High Frequency (AEHF), and The Mobile User Objective System (MUOS). Operating profit for our Space business segment includes our share of earnings for our investment in ULA, which provides expendable launch services to the U.S. Government. Space's operating results included the following (in millions):

	2017	2016	2015
Net sales	**$ 9,473**	$ 9,409	$ 9,105
Operating profit	**993**	1,289	1,171
Operating margin	**10.5 %**	13.7 %	12.9 %
Backlog at year-end	**$ 17,267**	$ 18,842	$ 17,375

2017 compared to 2016

Space's net sales in 2017 increased $64 million, or 1%, compared to 2016. The increase was attributable to approximately $810 million due to a full year of net sales from AWE in 2017 compared to four months of sales in 2016, which we began consolidating during the third quarter of 2016. This increase was partially offset by a decrease of approximately $300 million for space transportation programs due to a reduction in launch-related events; about $255 million for government satellite programs (primarily AEHF and SBIRS) due to lower volume; and approximately $190 million across other programs (including the Orion program) due to lower volume.

Space's operating profit in 2017 decreased $296 million, or 23%, compared to 2016. Operating profit decreased about $127 million due to the pre-tax gain recorded in 2016 related to the consolidation of AWE; about $95 million for lower equity earnings from ULA; about $30 million for space transportation programs due to a reduction in launch-related events; a net decrease of about $25 million related to charges recorded in 2017 for performance matters on certain commercial satellite programs; and about $25 million for government satellite programs (primarily SBIRS and AEHF) due to a charge for performance matters and lower volume. Adjustments not related to volume, including net profit booking rate adjustments and changes in reserves, were about $20 million higher in 2017 compared to 2016.

2016 compared to 2015

Space's net sales in 2016 increased $304 million, or 3%, compared to 2015. The increase was attributable to net sales of approximately $410 million from AWE following the consolidation of this business in the third quarter of 2016; and approximately $150 million for commercial space transportation programs due to increased launch-related activities; and approximately $70 million of higher net sales for various programs (primarily FBM) due to increased volume. These increases were partially offset by a decrease in net sales of approximately $340 million for government satellite programs due to decreased volume (primarily SBIRS and MUOS) and the wind-down or completion of mission solutions programs.

Space's operating profit in 2016 increased $118 million, or 10%, compared to 2015. The increase was primarily attributable to a non-cash, pre-tax gain of approximately $127 million related to the consolidation of AWE; and approximately $80 million of increased equity earnings from joint ventures (primarily ULA). These increases were partially offset by a decrease of approximately $105 million for government satellite programs due to lower risk retirements (primarily SBIRS, MUOS and mission solutions programs) and decreased volume. Adjustments not related to volume, including net profit booking rate adjustments, were approximately $185 million lower in 2016 compared to 2015.

Equity earnings

Total equity earnings recognized by Space (primarily ULA) represented approximately $205 million, $325 million and $245 million, or 21%, 25% and 21% of this business segment's operating profit during 2017, 2016 and 2015.

Backlog

Backlog decreased in 2017 compared to 2016 primarily due to lower orders for government satellite programs, partially offset by higher orders on the Orion program. Backlog increased in 2016 compared to 2015 primarily due to the addition of AWE's backlog.

Liquidity and Cash Flows

We have a balanced cash deployment strategy to enhance stockholder value and position ourselves to take advantage of new business opportunities when they arise. Consistent with that strategy, we have continued to invest in our business, including capital expenditures, independent research and development and made selective business acquisitions, while returning cash to stockholders through dividends and share repurchases, and managing our debt levels, maturities and interest rates.

We have generated strong operating cash flows, which have been the primary source of funding for our operations, capital expenditures, debt service and repayments, dividends, share repurchases and postretirement benefit plan contributions. Our strong operating cash flows enabled our Board of Directors to approve two key cash deployment initiatives in September 2017. First, we increased our fourth quarter dividend rate by 10% to $2.00 per share. Second, the Board of Directors approved a $2.0 billion increase to our share repurchase program. Inclusive of this increase, the total remaining authorization for future common share repurchases under our program was $3.5 billion as of December 31, 2017.

During 2016, we received a one-time, tax-free special cash payment of approximately $1.8 billion as a result of the divestiture of the IS&GS business in the third quarter of 2016. We used the proceeds to repay $500 million of long-term notes at their scheduled maturity and paid $484 million in dividends with a portion of this cash. The remainder was used for share repurchases.

We have accessed the capital markets opportunistically as we did in February 2015 when we issued $2.25 billion of long-term debt and as needed as we did in November 2015 when we issued $7.0 billion of long-term debt in connection with our acquisition of Sikorsky. We also used a combination of short-term debt financing, commercial paper and available cash to fund the Sikorsky acquisition, as discussed below in "Capital Structure, Resources and Other" and "Note 10 – Debt" included in our Notes to Consolidated Financial Statements. We expect our cash from operations will continue to be sufficient to support our operations and anticipated capital expenditures for the foreseeable future. We also have access to credit markets, if needed, for liquidity or general corporate purposes, including, but not limited to, our revolving credit facility or the ability to issue commercial paper and letters of credit to support customer advance payments and for other trade finance purposes such as guaranteeing our performance on particular contracts. See our "Capital Structure, Resources and Other" section below for a discussion on financial resources available to us.

We will make contributions of $5.0 billion to our qualified defined benefit pension plans in 2018, including required and discretionary contributions. As a result of these contributions, we do not expect any material qualified defined benefit cash funding will be required until 2021. We plan to fund these contributions and manage the timing of cash flows in 2018 using a mix of cash on hand and commercial paper. While we do not anticipate a need to do so, our capital structure and resources would allow us to issue new debt if circumstances change.

Cash received from customers, either from the payment of invoices for work performed or for advances in excess of costs incurred, is our primary source of cash. We generally do not begin work on contracts until funding is appropriated by the customer. However, we may determine to fund customer programs ourselves pending government appropriations and are doing so with increased frequency. If we incur costs in excess of funds obligated on the contract, we may be at risk for reimbursement of the excess costs.

Billing timetables and payment terms on our contracts vary based on a number of factors, including the contract type. We generally bill and collect cash more frequently under cost-reimbursable and time-and-materials contracts, which together represents approximately 37% of the sales we recorded in 2017, as we are authorized to bill as the costs are incurred or work is performed. A number of our fixed-price contracts may provide for performance-based payments, which allow us to bill and collect cash as we perform on the contract. The amount of performance-based payments and the related milestones are encompassed in the negotiation of each contract. The timing of such payments may differ from our incurrence of costs related to our contract performance, thereby affecting our cash flows.

The U.S. Government has indicated that it would consider progress payments as the baseline for negotiating payment terms on fixed-price contracts, rather than performance-based payments. In contrast to negotiated performance-based payment terms, progress payment provisions correspond to a percentage of the amount of costs incurred during the performance of the contract. While the total amount of cash collected on a contract is the same, performance-based payments have had a more favorable impact on the timing of our cash flows. In addition, our cash flows may be affected if the U.S. Government decides to withhold payments on our billings. While the impact of withholding payments delays the receipt of cash, the cumulative amount of cash collected during the life of the contract will not vary.

The majority of our capital expenditures for 2017 and those planned for 2018 are for equipment, facilities infrastructure and information technology. Expenditures for equipment and facilities infrastructure are generally incurred to support new and existing programs across all of our business segments. For example, we have projects underway in our Aeronautics business segment for facilities and equipment to support higher production of the F-35 combat aircraft, and we have projects underway to modernize certain of our facilities. We also incur capital expenditures for information technology to support programs and general enterprise information technology infrastructure, inclusive of costs for the development or purchase of internal-use software.

The following table provides a summary of our cash flow information followed by a discussion of the key elements (in millions):

	2017	2016	2015
Cash and cash equivalents at beginning of year	**$ 1,837**	$ 1,090	$ 1,446
Operating activities			
Net earnings	**2,002**	5,302	3,605
Non-cash adjustments	**4,514**	(35)	821
Changes in working capital	**(431)**	(1,042)	(846)
Other, net	**391**	964	1,521
Net cash provided by operating activities	**6,476**	5,189	5,101
Net cash used for investing activities	**(1,147)**	(985)	(9,734)
Net cash (used for) provided by financing activities	**(4,305)**	(3,457)	4,277
Net change in cash and cash equivalents	**1,024**	747	(356)
Cash and cash equivalents at end of year	**$ 2,861**	$ 1,837	$ 1,090

Operating Activities

2017 compared to 2016

Net cash provided by operating activities increased $1.3 billion in 2017 compared to 2016 primarily due to a decrease in cash used for working capital, a reduction in cash paid for income taxes and a reduction in cash paid for severance. The change in working capital is defined as receivables and inventories less accounts payable and customer advances and amounts in excess of costs incurred. The change in working capital was largely driven by timing of cash receipts for accounts receivable (primarily PAC-3, THAAD, LANTIRN® and SNIPER®, and Sikorsky helicopter programs) and lower inventory. We made net income tax payments of $1.1 billion and $1.3 billion during the years ended December 31, 2017 and 2016. Our effective income tax rate and cash tax payments in years after 2017 are expected to benefit materially from the enactment of the Tax Act. We made interest payments of approximately $610 million and approximately $600 million during the years ended December 31, 2017 and 2016. In addition, cash provided by operating activities during the year ended December 31, 2016 included cash generated by IS&GS of approximately $310 million as we retained this cash as part of the divestiture. We will make contributions of $5.0 billion to our qualified defined benefit pension plans in 2018. For discussion of future postretirement benefit plan funding, see "Critical Accounting Policies - Postretirement Benefit Plans" (under the caption "Funding Considerations").

2016 compared to 2015

Net cash provided by operating activities increased $88 million in 2016 compared to 2015 primarily due to a reduction in cash paid for income taxes, partially offset by an increase in cash paid for interest expense and an increase in cash used for working capital. The $196 million increase in cash flows used for working capital (defined as receivables and inventories less accounts payable and customer advances and amounts in excess of costs incurred) was attributable to timing of cash receipts for receivables (primarily F-35 program), partially offset by timing of production and billing cycles affecting customer advances and progress payments applied to inventories (primarily C-130 program). We made net income tax payments of $1.3 billion and $1.8 billion during the years ended December 31, 2016 and 2015, respectively. We made interest payments of approximately $600 million and $375 million during the years ended December 31, 2016 and 2015, respectively. In addition, cash provided by operating activities during the year ended December 31, 2016 and 2015 included cash generated by IS&GS of approximately $310 million and approximately $500 million as we retained this cash as part of the divestiture.

Investing Activities

Net cash used for investing activities increased $162 million in 2017 compared to 2016, primarily due to higher capital expenditures and cash proceeds received in the prior year related to properties sold. Net cash used for investing activities decreased $8.7 billion in 2016 compared to 2015, primarily due to $9.0 billion of cash used for acquisition activities in 2015 that did not recur in 2016. Acquisition activities include both the acquisition of businesses and investments in affiliates. We had no significant cash acquisitions in 2017 and 2016. In 2015, we paid $9.0 billion for the Sikorsky acquisition, net of cash acquired (see "Note 3 – Acquisitions and Divestitures" included in our Notes to Consolidated Financial Statements).

Capital expenditures amounted to $1.2 billion in 2017, $1.1 billion in 2016 and $939 million in 2015. The majority of our capital expenditures were for equipment and facilities infrastructure that generally are incurred to support new and existing programs across all of our business segments. We also incur capital expenditures for information technology to support programs and general enterprise information technology infrastructure, inclusive of costs for the development or purchase of internal-use-software.

Additionally, in 2015, we received cash proceeds of approximately $165 million related to three properties sold in California.

Financing Activities

Net cash used for financing activities increased $848 million in 2017 compared to 2016 primarily due to the receipt of a one-time special cash payment in 2016 from the divestiture of the IS&GS business and higher dividend payments in 2017, partially offset by the repayment of long-term debt in 2016 and a reduction in cash used for repurchases of common stock.

Net cash used for financing activities increased $7.7 billion in 2016 compared to 2015 primarily due to proceeds from the issuance of long-term debt in 2015 which did not recur in 2016, the repayments of long-term debt in 2016, and higher dividend payments, partially offset by the proceeds from the one-time special cash payment of $1.8 billion from the divestiture of the IS&GS business and a reduction in cash used for repurchases of common stock.

In May 2016, we repaid $452 million of long-term notes with a fixed interest rate of 7.65% according to their scheduled maturities. In September 2016, we repaid $500 million of long-term notes with a fixed interest rate of 2.13% according to their scheduled maturities.

In February 2015, we received net proceeds of $2.21 billion for the issuance of $2.25 billion of fixed interest-rate long-term notes. In November 2015, we borrowed $7.0 billion of fixed interest-rate long-term notes and received net proceeds of $6.9 billion (the November 2015 Notes). These proceeds were used to repay $6.0 billion of outstanding borrowings under a 364-day revolving credit facility that was used to finance a portion of the purchase price for the Sikorsky acquisition. Additionally, in the fourth quarter of 2015, to partially finance the Sikorsky acquisition we borrowed and repaid approximately $1.0 billion under our commercial paper program.

For additional information about our debt financing activities see the "Capital Structure, Resources and Other" discussion below and "Note 10 – Debt" included in our Notes to Consolidated Financial Statements.

We paid dividends totaling $2.2 billion ($7.46 per share) in 2017, $2.0 billion ($6.77 per share) in 2016 and $1.9 billion ($6.15 per share) in 2015. We paid quarterly dividends of $1.82 per share during each of the first three quarters of 2017 and $2.00 per share during the fourth quarter of 2017; $1.65 per share during each of the first three quarters of 2016 and $1.82 per share during the fourth quarter of 2016; and $1.50 per share during each of the first three quarters of 2015 and $1.65 per share during the fourth quarter of 2015.

We paid $2.0 billion, $2.1 billion and $3.1 billion to repurchase 7.1 million, 8.9 million and 15.2 million shares of our common stock during 2017, 2016 and 2015.

Cash received from the issuance of our common stock in connection with employee stock option exercises during 2017, 2016 and 2015 totaled $71 million, $106 million and $174 million. The exercises resulted in the issuance of 0.8 million, 1.2 million and 2.2 million shares of our common stock.

Capital Structure, Resources and Other

At December 31, 2017, we held cash and cash equivalents of $2.9 billion. As of December 31, 2017, approximately $580 million of our cash and cash equivalents was held outside of the U.S. by foreign subsidiaries. Those balances are generally available to fund ordinary business operations without legal or other restrictions and a significant portion could be immediately available to fund U.S. operations upon repatriation. While our investment in our foreign subsidiaries continues to be permanent in duration, in light of our decision to accelerate contributions to our defined benefit pension plans, earnings from certain foreign subsidiaries may be repatriated.

Our outstanding debt, net of unamortized discounts and issuance costs, amounted to $14.3 billion at December 31, 2017 and mainly is in the form of publicly-issued notes that bear interest at fixed rates. As of December 31, 2017, we were in compliance with all covenants contained in our debt and credit agreements.

We actively seek to finance our business in a manner that preserves financial flexibility while minimizing borrowing costs to the extent practicable. We review changes in financial market and economic conditions to manage the types, amounts and maturities of our indebtedness. We may at times refinance existing indebtedness, vary our mix of variable-rate and fixed-rate debt or seek alternative financing sources for our cash and operational needs.

On occasion, our customers may seek deferred payment terms to purchase our products. In connection with these transactions, we may, at our customer's request, enter into arrangements for the non-recourse sale of customer receivables to unrelated third–party financial institutions. For accounting purposes, these transactions are not discounted and are treated as a sale of receivables as we have no continuing involvement. The sale proceeds from the financial institutions are reflected in our operating cash flows on the statement of cash flows. During 2017, we sold approximately $698 million of customer receivables. There were no gains or losses related to sales of these receivables.

Revolving Credit Facilities

On October 9, 2015, we entered into a $2.5 billion revolving credit facility (the 5-year Facility) with various banks. The 5-year Facility was amended in October 2017 to extend its expiration date by one year from October 9, 2021 to October 9, 2022. The 5-year Facility is available for general corporate purposes. The undrawn portion of the 5-year Facility is also available to serve as a backup facility for the issuance of commercial paper. We may request and the banks may grant, at their discretion, an increase in the borrowing capacity under the 5-year Facility of up to an additional $500 million. There were no borrowings outstanding under the 5-year Facility as of December 31, 2017 and 2016.

Borrowings under the 5-year Facility are unsecured and bear interest at rates based, at our option, on a Eurodollar Rate or a Base Rate, as defined in the 5-year Facility's agreement. Each bank's obligation to make loans under the 5-year Facility is subject to, among other things, our compliance with various representations, warranties, and covenants, including covenants limiting our ability and certain of our subsidiaries' ability to encumber assets and a covenant not to exceed a maximum leverage ratio, as defined in the 5-year Facility agreement.

Long-Term Debt

In September 2017, we issued notes totaling approximately $1.6 billion with a fixed interest rate of 4.09% maturing in September 2052 (the New Notes) in exchange for outstanding notes totaling approximately $1.4 billion with fixed interest rates ranging from 4.70% to 8.50% maturing 2029 to 2046 (the Old Notes). In connection with the exchange of principal, we paid a premium of $237 million, substantially all of which was in the form of New Notes. This premium will be amortized as additional interest expense over the term of the New Notes using the effective interest method. We may, at our option, redeem some or all of the New Notes at any time by paying the principal amount of notes being redeemed plus a make-whole premium and accrued and unpaid interest. Interest on the New Notes is payable on March 15 and September 15 of each year, beginning on March 15, 2018. The New Notes are unsecured senior obligations and rank equally in right of payment with all of our existing and future unsecured and unsubordinated indebtedness.

In September 2016, we repaid $500 million of long-term notes with a fixed interest rate of 2.13% according to their scheduled maturities. In May 2016, we repaid $452 million of long-term notes with a fixed interest rate of 7.65% according to their scheduled maturities. We also had related variable interest rate swaps with a notional amount of $450 million mature, which did not have a significant impact on net earnings or comprehensive income.

In November 2015, we issued $7.0 billion of notes (the November 2015 Notes) in a registered public offering with fixed rates ranging from 1.85% to 4.70% and maturing 2018 to 2046. We received net proceeds of $6.9 billion from the offering, after deducting discounts and debt issuance costs, which are being amortized as interest expense over the life of the debt. The proceeds of the November 2015 Notes were used to repay $6.0 billion of borrowings under our 364-day Facility and for general corporate purposes.

In February 2015, we issued $2.25 billion of notes (the February 2015 Notes) in a registered public offering with fixed rates ranging from 2.90% to 3.80% and maturing 2025 to 2045. We received net proceeds of $2.21 billion from the offering, after deducting discounts and debt issuance costs, which are being amortized as interest expense over the life of the debt. The proceeds of the February 2015 Notes were used for general corporate purposes.

We have an effective shelf registration statement on Form S-3 on file with the U.S. Securities and Exchange Commission to provide for the issuance of an indeterminate amount of debt securities.

Commercial Paper

We have agreements in place with financial institutions to provide for the issuance of commercial paper backed by our $2.5 billion 5-year Facility. During 2017, we borrowed and fully repaid amounts under our commercial paper programs. There were no commercial paper borrowings outstanding as of December 31, 2017. However, we may as conditions warrant issue commercial paper backed by our credit facility to manage the timing of cash flows and to fund a portion of our defined benefit pension contributions of approximately $5.0 billion in 2018.

Total Equity

Our total deficit was $609 million at December 31, 2017 compared to equity of $1.6 billion at December 31, 2016. The decrease in equity was primarily due to the estimated impact of the Tax Act, which resulted in a net one-time tax charge of $1.9 billion, the annual December 31 re-measurement adjustment related to our postretirement benefit plans of $1.4 billion, the repurchase of 7.1 million common shares for $2.0 billion; and dividends declared of $2.2 billion during the year. These decreases were partially offset by net earnings of $2.0 billion, which includes the $1.9 billion net tax charge, recognition of previously deferred postretirement benefit plan amounts of $802 million, and employee stock activity of $400 million (including the impacts of stock option exercises, ESOP activity and stock-based compensation).

As we repurchase our common shares, we reduce common stock for the $1 of par value of the shares repurchased, with the excess purchase price over par value recorded as a reduction of additional paid-in capital. If additional paid-in capital is reduced to zero, we record the remainder of the excess purchase price over par value as a reduction of retained earnings. Due to the volume of repurchases made under our share repurchase program, additional paid-in capital was reduced to zero, with the remainder of the excess purchase price over par value of $1.6 billion recorded as a reduction of retained earnings in 2017.

Contractual Commitments and Off-Balance Sheet Arrangements

At December 31, 2017, we had contractual commitments to repay debt, make payments under operating leases, settle obligations related to agreements to purchase goods and services and settle tax and other liabilities. Capital lease obligations were not material. Payments due under these obligations and commitments are as follows (in millions):

	Payments Due By Period				
	Total	Less Than 1 Year	Years 2 and 3	Years 4 and 5	After 5 Years
Long-term debt [(a)]	$ 15,488	$ 750	$ 2,150	$ 906	$ 11,682
Interest payments	10,510	624	1,180	1,048	7,658
Other liabilities	2,883	256	561	412	1,654
Operating lease obligations	623	162	270	136	55
Purchase obligations:					
Operating activities	42,542	23,751	15,011	2,477	1,303
Capital expenditures	522	398	105	19	—
Total contractual cash obligations	$ 72,568	$ 25,941	$ 19,277	$ 4,998	$ 22,352

(a) Long-term debt includes scheduled principal payments only and excludes approximately $10 million of debt issued by a consolidated joint venture, for which the debt is not guaranteed by us.

The table above excludes estimated minimum funding requirements for our qualified defined benefit pension plans. For additional information about our future minimum contributions for these plans, see "Note 11 – Postretirement Benefit Plans" included in our Notes to Consolidated Financial Statements. Amounts related to other liabilities represent the contractual obligations for certain long-term liabilities recorded as of December 31, 2017. Such amounts mainly include expected payments under non-qualified pension plans, environmental liabilities and deferred compensation plans.

Purchase obligations related to operating activities include agreements and contracts that give the supplier recourse to us for cancellation or nonperformance under the contract or contain terms that would subject us to liquidated damages. Such agreements and contracts may, for example, be related to direct materials, obligations to subcontractors and outsourcing arrangements. Total purchase obligations for operating activities in the preceding table include approximately $37.3 billion related to contractual commitments entered into as a result of contracts we have with our U.S. Government customers. The U.S. Government generally would be required to pay us for any costs we incur relative to these commitments if they were to terminate the related contracts "for convenience" under the Federal Acquisition Regulation (FAR), subject to available funding. This also would be true in cases where we perform subcontract work for a prime contractor under a U.S. Government contract. The termination for convenience language also may be included in contracts with foreign, state and local governments. We also have contracts with customers that do not include termination for convenience provisions, including contracts with commercial customers.

Purchase obligations in the preceding table for capital expenditures generally include facilities infrastructure, equipment and information technology.

We also may enter into industrial cooperation agreements, sometimes referred to as offset agreements, as a condition to obtaining orders for our products and services from certain customers in foreign countries. These agreements are designed to enhance the social and economic environment of the foreign country by requiring the contractor to promote investment in the country. Offset agreements may be satisfied through activities that do not require us to use cash, including transferring technology, providing manufacturing and other consulting support to in-country projects and the purchase by third parties (e.g., our vendors) of supplies from in-country vendors. These agreements also may be satisfied through our use of cash for such activities as purchasing supplies from in-country vendors, providing financial support for in-country projects, establishment of ventures with local companies and building or leasing facilities for in-country operations. We typically do not commit to offset agreements until orders for our products or services are definitive. The amounts ultimately applied against our offset agreements are based on negotiations with the customer and typically require cash outlays that represent only a fraction of the original amount in the offset agreement. Satisfaction of our offset obligations are included in the estimates of our total costs to complete the contract and may impact our sales, profitability and cash flows. Our ability to recover investments on our consolidated balance sheet that we make to satisfy offset obligations is generally dependent upon the successful operation of ventures that we do not control and may involve products and services that are dissimilar to our business activities. At December 31, 2017, the notional value of remaining obligations under our outstanding offset agreements totaled approximately $13.4 billion, which primarily relate to our Aeronautics, MFC and RMS business segments, most of which extend through 2044. To the extent we have entered into purchase or other obligations at December 31, 2017 that also satisfy offset agreements, those amounts are included in the preceding table. Offset programs usually extend over several years and may provide for penalties, estimated at approximately $1.6 billion at December 31, 2017, in the event we fail to perform in accordance with offset requirements. While historically we have not been required to pay material penalties, resolution of offset requirements are often the result of negotiations and subjective judgments.

In connection with our 50% ownership interest of ULA, we and The Boeing Company (Boeing) are required to provide ULA an additional capital contribution if ULA is unable to make required payments under its inventory supply agreement with Boeing. As of December 31, 2017, ULA's total remaining obligation to Boeing under the inventory supply agreement was $120 million. The parties have agreed to defer the remaining payment obligation, as it is more than offset by other commitments to ULA. Accordingly, we do not expect to be required to make a capital contribution to ULA under this agreement.

In addition, both we and Boeing have cross-indemnified each other for guarantees by us and Boeing of the performance and financial obligations of ULA under certain launch service contracts. We believe ULA will be able to fully perform its obligations, as it has done through December 31, 2017, and that it will not be necessary to make payments under the cross-indemnities or guarantees.

We have entered into standby letters of credit and surety bonds issued on our behalf by financial institutions and other directly issued guarantees to third parties primarily relating to advances received from customers and the guarantee of future performance on certain contracts. Letters of credit and surety bonds generally are available for draw down in the event we do not perform. In some cases, we may guarantee the contractual performance of third parties such as venture partners. At December 31, 2017, we had the following outstanding letters of credit, surety bonds and third-party guarantees (in millions):

	Commitment Expiration By Period				
	Total Commitment	Less Than 1 Year	Years 2 and 3	Years 4 and 5	After 5 Years
Standby letters of credit [a]	$ 2,187	$ 959	$ 733	$ 454	$ 41
Surety bonds	368	357	2	9	—
Third-party Guarantees	750	17	338	—	395
Total commitments	$ 3,305	$ 1,333	$ 1,073	$ 463	$ 436

(a) Approximately $640 million of standby letters of credit in the "Less Than 1 Year" category, $473 million in the "Years 2 and 3" category and $277 million in the "Years 4 and 5" category are expected to renew for additional periods until completion of the contractual obligation.

At December 31, 2017, third-party guarantees totaled $750 million, of which approximately 62% related to guarantees of contractual performance of ventures to which we currently are or previously were a party. This amount represents our estimate of the maximum amount we would expect to incur upon the contractual non-performance of the venture, venture partners or divested businesses. Generally, we also have cross-indemnities in place that may enable us to recover amounts that may be paid on behalf of a venture partner.

In determining our exposures, we evaluate the reputation, performance on contractual obligations, technical capabilities and credit quality of our current and former venture partners and the transferee under novation agreements all of which include a guarantee as required by the FAR. There were no material amounts recorded in our financial statements related to third-party guarantees or novation agreements.

Critical Accounting Policies

Contract Accounting / Sales Recognition

Substantially all of our net sales are accounted for using the percentage-of-completion method, which requires that significant estimates and assumptions be made in accounting for the contracts. Our remaining net sales are derived from contracts to provide services to non-U.S. Government customers, which we account for under a services accounting model.

We evaluate new or significantly modified contracts with customers other than the U.S. Government, to the extent the contracts include multiple elements, to determine if the individual deliverables should be accounted for as separate units of accounting. When we determine that accounting for the deliverables as separate units is appropriate, we allocate the contract value to the deliverables based on their relative estimated selling prices. The contracts or contract modifications we evaluate for multiple elements typically are long-term in nature and include the provision of both products and services. Based on the nature of our business, we generally account for components of such contracts using the percentage-of-completion accounting model or the services accounting model, as appropriate.

We classify net sales as products or services on our consolidated statements of earnings based on the predominant attributes of the underlying contract. Most of our long-term contracts are denominated in U.S. dollars, including contracts for sales of military products and services to international governments contracted through the U.S. Government.

Contract Types

Our contracts generally record sales for both products and services under fixed-price, cost-reimbursable and time-and-materials contracts.

Fixed-price contracts

Under fixed-price contracts, which accounted for about 63%, 61%, and 57% of our total net sales in 2017, 2016, and 2015, we agree to perform the specified work for a pre-determined price. To the extent our actual costs vary from the estimates upon which the price was negotiated, we will generate more or less profit or could incur a loss. Some fixed-price contracts have a performance-based component under which we may earn incentive payments or incur financial penalties based on our performance.

Cost-reimbursable contracts

Cost-reimbursable contracts, which accounted for about 37%, 38%, and 42% of our total net sales in 2017, 2016, and 2015, provide for the payment of allowable costs incurred during performance of the contract plus a fee, up to a ceiling based on the amount that has been funded. We generate revenue under two general types of cost-reimbursable contracts: cost-plus-award-fee/incentive-fee contracts, which represent a substantial majority of our cost-reimbursable contracts; and cost-plus-fixed-fee contracts.

Cost-plus-award-fee contracts provide for an award fee that varies within specified limits based on the customer's assessment of our performance against a predetermined set of criteria, such as targets based on cost, quality, technical and schedule criteria. Cost-plus-incentive-fee contracts provide for reimbursement of costs plus a fee which is adjusted by a formula based on the relationship of total allowable costs to total target costs (incentive based on cost) or reimbursement of costs plus an incentive to exceed stated performance targets (incentive based on performance). The fixed fee in a cost-plus-fixed-fee contract is negotiated at the inception of the contract and that fixed fee does not vary with actual costs.

Percentage-of-Completion Method

We record net sales and estimated profits for substantially all of our contracts using the percentage-of-completion method for fixed-price and cost-reimbursable contracts for products and services with the U.S. Government.

The percentage-of-completion method for product contracts depends on the nature of the products provided under the contract. For example, for contracts that require us to perform a significant level of development effort in comparison to the total value of the contract and/or to deliver minimal quantities, sales are recorded using the cost-to-cost method to measure progress toward completion. Under the cost-to-cost method of accounting, we recognize sales and an estimated profit as costs are incurred based on the proportion that the incurred costs bear to total estimated costs. For contracts that require us to provide a substantial number of similar items without a significant level of development, we record sales and an estimated profit on a percentage-of-completion basis using units-of-delivery as the basis to measure progress toward completing the contract. For contracts to provide services to the U.S. Government, sales are generally recorded using the cost-to-cost method.

Award and incentive fees, as well as penalties related to contract performance, are considered in estimating sales and profit rates on contracts accounted for under the percentage-of-completion method. Estimates of award fees are based on past experience and anticipated performance. We record incentives or penalties when there is sufficient information to assess anticipated contract performance. Incentive provisions that increase or decrease earnings based solely on a single significant event are not recognized until the event occurs.

Accounting for contracts using the percentage-of-completion method requires judgment relative to assessing risks, estimating contract sales and costs (including estimating award and incentive fees and penalties related to performance) and making assumptions for schedule and technical issues. Due to the number of years it may take to complete many of our contracts and the scope and nature of the work required to be performed on those contracts, the estimation of total sales and costs at completion is complicated and subject to many variables and, accordingly, is subject to change. When adjustments in estimated total contract sales or estimated total costs are required, any changes from prior estimates are recognized in the current period for the inception-to-date effect of such changes.

Our estimates of costs at completion of the contract are based on assumptions we make for variables such as labor productivity and availability, the complexity of the work to be performed, the availability of materials, the length of time to complete the contract (to estimate increases in wages and prices for materials), performance by our subcontractors and the availability and timing of funding from our customer, among other variables. When estimates of total costs to be incurred on a contract exceed estimates of total sales to be earned, a provision for the entire loss on the contract is recorded in the period in which the loss is determined.

Many of our contracts span several years and include highly complex technical requirements. At the outset of a contract, we identify and monitor risks to the achievement of the technical, schedule and cost aspects of the contract and assess the effects of those risks on our estimates of total costs to complete the contract. The estimates consider the technical requirements (e.g., a newly-developed product versus a mature product), the schedule and associated tasks (e.g., the number and type of milestone events) and costs (e.g., material, labor, subcontractor, overhead and the estimated costs to fulfill our industrial cooperation agreements, sometimes referred to as offset agreements, required under certain contracts with international customers). The initial profit booking rate of each contract considers risks surrounding the ability to achieve the technical requirements, schedule and costs in the initial estimated total costs to complete the contract. Profit booking rates may increase during the performance of the contract if we successfully retire risks surrounding the technical, schedule and cost aspects of the contract which decreases the estimated total costs to complete the contract. Conversely, our profit booking rates may decrease if the estimated total costs to complete the contract increase. All of the estimates are subject to change during the performance of the contract and may affect the profit booking rate.

In addition, comparability of our business segment sales, operating profit and operating margins may be impacted by changes in profit booking rates on our contracts accounted for using the percentage-of-completion method of accounting. Increases in the profit booking rates, typically referred to as risk retirements, usually relate to revisions in the estimated total costs that reflect improved conditions on a particular contract. Conversely, conditions on a particular contract may deteriorate, resulting in an increase in the estimated total costs to complete and a reduction in the profit booking rate. Increases or decreases in profit booking rates are recognized in the current period and reflect the inception-to-date effect of such changes. Segment operating profit and margins may also be impacted favorably or unfavorably by other items. Favorable items may include the positive resolution of contractual matters, cost recoveries on restructuring charges, insurance recoveries and gains on sales of assets. Unfavorable items may include the adverse resolution of contractual matters; restructuring charges, except for significant severance actions (such as those mentioned in "Note 15 – Restructuring Charges" included in our Notes to Consolidated Financial Statements), which are excluded from segment operating results; reserves for disputes; asset impairments; and losses on sales of certain assets. Segment operating profit and items such as risk retirements, reductions of profit booking rates or other matters are presented net of state income taxes.

Services Method

Under fixed-price service contracts, we are paid a predetermined fixed amount for a specified scope of work and generally have full responsibility for the costs associated with the contract and the resulting profit or loss. We record net sales under fixed-price service contracts with non-U.S. Government customers on a straight-line basis over the period of contract performance, unless evidence suggests that net sales are earned or the obligations are fulfilled in a different pattern. For cost-reimbursable contracts for services to non-U.S. Government customers, we record net sales as services are performed, except for award and incentive fees. Award and incentive fees are recorded when they are fixed or determinable, generally at the date the amount is communicated to us by the customer. This approach results in the recognition of such fees at contractual intervals (typically every six months) throughout the contract and is dependent on the customer's processes for notification of awards and issuance of formal notifications. Costs for all service contracts are expensed as incurred.

Other Contract Accounting Considerations

The majority of our sales are driven by pricing based on costs incurred to produce products or perform services under contracts with the U.S. Government. Cost-based pricing is determined under the FAR. The FAR provides guidance on the types of costs that are allowable in establishing prices for goods and services under U.S. Government contracts. For example, costs such as those related to charitable contributions, interest expense and certain advertising and public relations activities are unallowable and, therefore, not recoverable through sales. In addition, we may enter into advance agreements with the U.S. Government that address the subjects of allowability and allocability of costs to contracts for specific matters. For example, most of the environmental costs we incur for environmental remediation related to sites operated in prior years are allocated to our current operations as general and administrative costs under FAR provisions and supporting advance agreements reached with the U.S. Government.

We closely monitor compliance with and the consistent application of our critical accounting policies related to contract accounting. Costs incurred and allocated to contracts are reviewed for compliance with U.S. Government regulations by our personnel and are subject to audit by the Defense Contract Audit Agency.

New Accounting Pronouncement

On January 1, 2018, we adopted ASU No. 2014-09, *Revenue from Contracts with Customers,* as amended *(Topic 606)* (commonly referred to as ASC 606), which will change the way we recognize revenue and significantly expand the disclosure requirements for revenue arrangements. We adopted the requirements of the new standard on the effective date of January 1, 2018 using the full retrospective transition method, whereby ASC 606 will be applied to each prior year presented and the cumulative effect of applying ASC 606 will be recognized at January 1, 2016, the beginning of the earliest year presented. For additional information regarding our adoption of ASC 606, see "Note 1 – Significant Accounting Policies" included in our Notes to Consolidated Financial Statements (under the caption "Recent Accounting Pronouncements").

Postretirement Benefit Plans

Overview

Many of our employees participate in qualified and nonqualified defined benefit pension plans, retiree medical and life insurance plans and other postemployment plans (collectively, postretirement benefit plans - see "Note 11 – Postretirement Benefit Plans" included in our Notes to Consolidated Financial Statements). The majority of our accrued benefit obligations relate to our qualified defined benefit pension plans and retiree medical and life insurance plans. We recognize on a plan-by-plan basis the net funded status of these postretirement benefit plans under GAAP as either an asset or a liability on our consolidated balance sheets. The GAAP funded status represents the difference between the fair value of each plan's assets and the benefit obligation of the plan. The GAAP benefit obligation represents the present value of the estimated future benefits we currently expect to pay to plan participants based on past service.

In June 2014, we amended certain of our qualified and nonqualified defined benefit pension plans for non-union employees; comprising the majority of our benefit obligations; to freeze future retirement benefits. The calculation of retirement benefits under the affected defined benefit pension plans is determined by a formula that takes into account the participants' years of credited service and average compensation. The freeze will take effect in two stages. On January 1, 2016, the pay-based component of the formula used to determine retirement benefits was frozen so that future pay increases, annual incentive bonuses or other amounts earned for or related to periods after December 31, 2015 are not used to calculate retirement benefits. On January 1, 2020, the service-based component of the formula used to determine retirement benefits will also be frozen so that participants will no longer earn further credited service for any period after December 31, 2019. When the freeze is complete, the majority of our salaried employees will have transitioned to an enhanced defined contribution retirement savings plan.

Notwithstanding these actions, the impact of these plans and benefits on our earnings may be volatile in that the amount of expense we record and the funded status for our postretirement benefit plans may materially change from year to year because those calculations are sensitive to funding levels as well as changes in several key economic assumptions, including interest rates, actual rates of return on plan assets and other actuarial assumptions including participant longevity and employee turnover, as well as the timing of cash funding.

Actuarial Assumptions

The plan assets and benefit obligations are measured at the end of each year or more frequently, upon the occurrence of certain events such as a significant plan amendment, settlement or curtailment. The amounts we record are measured using actuarial valuations, which are dependent upon key assumptions such as discount rates, the expected long-term rate of return on plan assets, participant longevity, employee turnover and the health care cost trend rates for our retiree medical plans. The assumptions we make affect both the calculation of the benefit obligations as of the measurement date and the calculation of net periodic benefit cost in subsequent periods. When reassessing these assumptions we consider past and current market conditions and make judgments about future market trends. We also consider factors such as the timing and amounts of expected contributions to the plans and benefit payments to plan participants.

We continue to use a single weighted average discount rate approach when calculating our consolidated benefit obligations related to our defined benefit pension plans resulting in 3.625% at December 31, 2017, compared to 4.125% at December 31, 2016 and 4.375% at December 31, 2015. We utilized a single weighted average discount rate of 3.625% when calculating our benefit obligations related to our retiree medical and life insurance plans at December 31, 2017, compared to 4.00% at December 31, 2016 and 4.25% at December 31, 2015. We evaluate several data points in order to arrive at an appropriate single weighted average discount rate, including results from cash flow models, quoted rates from long-term bond indices and changes in long-term bond rates over the past year. As part of our evaluation, we calculate the approximate average yields on corporate bonds rated AA or better selected to match our projected postretirement benefit plan cash flows.

We utilized an expected long-term rate of return on plan assets of 7.50% at both December 31, 2017 and December 31, 2016 as compared to 8.00% at December 31, 2015. We reduced our expected long-term rate of return assumption in 2016 due to downward pressure on the equity and fixed income asset classes in our trust. An increasingly aging population and debt burden place downward pressure on already low interest rates and economic growth; suggesting the future return for our fixed-income may be lower than historical norms. Surges in equities since 2009 have led to a high valuation of the equity markets, suggesting the forward return may also be lower than historical norms. The long-term rate of return assumption represents the expected long-term rate of return on the funds invested or to be invested, to provide for the benefits included in the benefit obligations. This assumption is based on several factors including historical market index returns, the anticipated long-term allocation of plan assets, the historical return data for the trust funds, plan expenses and the potential to outperform market index returns. The difference between the long-term rate of return on plan assets assumption we select and the actual return on plan assets in any given year affects both the funded status of our benefit plans and the calculation of FAS pension expense in subsequent periods. Although the actual return in any specific year likely will differ from the assumption, the average expected return over a long-term future horizon should be approximately equal to the assumption. Any variance in a given year should not, by itself, suggest that the assumption should be changed. Patterns of variances are reviewed over time, and then combined with expectations for the future. As a result, changes in this assumption are less frequent than changes in the discount rate.

In both October 2017 and 2016, the Society of Actuaries published revised longevity assumptions that refined its prior studies. We used the revised assumptions indicating a shortened longevity in our December 31, 2017 and December 31, 2016 re-measurements of benefit obligation. The publications were a refinement to assumptions the Society of Actuaries published in previous years, beginning in 2014.

Our stockholders' equity has been reduced cumulatively by $12.6 billion from the annual year-end measurements of the funded status of postretirement benefit plans. The cumulative non-cash, after-tax reduction primarily represents net actuarial losses resulting from declines in discount rates, investment losses and updated longevity. A market-related value of our plan assets, determined using actual asset gains or losses over the prior three year period, is used to calculate the amount of deferred asset gains or losses to be amortized. These cumulative actuarial losses will be amortized to expense using the corridor method, where gains and losses are recognized to the extent they exceed 10% of the greater of plan assets or benefit obligations, over the average future service period of employees expected to receive benefits under the plans of approximately nine years as of December 31, 2017. This amortization period is expected to extend (approximately double) in 2020 when our non-union pension plans are completely frozen to use the average remaining life expectancy of the participants instead of average future service. During 2017, $802 million of these amounts was recognized as a component of postretirement benefit plans expense and about $1.2 billion is expected to be recognized as expense in 2018.

The discount rate and long-term rate of return on plan assets assumptions we select at the end of each year are based on our best estimates and judgment. A change of plus or minus 25 basis points in the 3.625% discount rate assumption at December 31, 2017, with all other assumptions held constant, would have decreased or increased the amount of the qualified pension benefit obligation we recorded at the end of 2017 by approximately $1.5 billion, which would result in an after-tax increase or decrease in stockholders' equity at the end of the year of approximately $1.2 billion. If the 3.625% discount rate at December 31, 2017 that was used to compute the expected 2018 FAS pension expense for our qualified defined benefit pension plans had been 25 basis points higher or lower, with all other assumptions held constant, the amount of FAS pension expense projected for 2018 would be lower or higher by approximately $115 million. If the 7.50% expected long-term rate of return on plan assets assumption at December 31, 2017 that was used to compute the expected 2018 FAS pension expense for our qualified defined benefit pension plans had been 25 basis points higher or lower, with all other assumptions held constant, the amount of FAS pension expense projected for 2018 would be lower or higher by approximately $85 million. Each year, differences between the actual plan asset return and the expected long-term rate of return on plan assets impacts the measurement of the following year's FAS expense. Every 100 basis points difference in return during 2017 between our actual rate of return of approximately 13.00% and our expected long-term rate of return of 7.50% impacted 2018 expected FAS pension expense by approximately $20 million.

Funding Considerations

There were no material contributions to our qualified defined benefit pension plans in 2017, 2016 and 2015. Funding of our qualified defined benefit pension plans is determined in a manner consistent with CAS and in accordance with the Employee Retirement Income Security Act of 1974 (ERISA), as amended by the Pension Protection Act of 2006 (PPA). Our goal has been to fund the pension plans to a level of at least 80%, as determined under the PPA. The ERISA funded status is calculated on a different basis than under GAAP. As a result of the Moving Ahead for Progress in the 21st Century Act of 2012 (MAP-21), which included a provision that changed the methodology for calculating the interest rate assumption used in determining the minimum funding requirements under the PPA, there was an increase in the interest rate assumption, which in turn lowered the minimum funding requirements. On August 8, 2014, the Highway and Transportation Funding Act of 2014 (HATFA) was enacted; and on November 2, 2015, the Bipartisan Budget Act of 2015; which extend the methodology put in place by MAP-21 to calculate the interest rate assumption so that the impact will begin to decrease in 2021 and phase out by 2024. This has the effect of lowering our minimum funding requirements during the affected periods from what they otherwise would have been. The ERISA funded status of our qualified defined benefit pension plans was about 83% and 86% as of December 31, 2017 and 2016. The GAAP funded status of our qualified defined benefit pension plans was about 68% and 70% at December 31, 2017 and 2016.

Contributions to our defined benefit pension plans are recovered over time through the pricing of our products and services on U.S. Government contracts, including FMS, and are recognized in our cost of sales and net sales. CAS govern the extent to which our pension costs are allocable to and recoverable under contracts with the U.S. Government, including FMS. We recovered $2.2 billion in 2017, $2.0 billion in 2016, and $1.6 billion in 2015 as CAS pension costs. Effective February 27, 2012, CAS rules were revised to better align the recovery of pension costs, including prepayment credits, on U.S. Government contracts with the minimum funding requirements of the PPA (referred to as CAS Harmonization). Specifically, CAS Harmonization shortened the amortization period for allocating gains and losses to U.S. Government contracts from 15 to 10 years and requires the use of an interest rate to determine CAS pension cost consistent with the interest rate used to determine minimum pension funding requirements under the PPA. While the change in the amortization period was applicable beginning in 2013, there was a transition period for the impact of the change in the CAS liability measurement due to the revised interest rate that was phased in with the full impact occurring in 2017. The incremental impact of CAS Harmonization increased successively through 2017, primarily due to the liability measurement transition period included in the amended rule. The enactment of the HATFA and Bipartisan Budget Act of 2015 also increased the interest rate assumption used to determine our CAS pension costs, which has the effect of lowering the recovery of pension contributions during the affected periods as it decreases our CAS pension costs.

Pension cost recoveries under CAS occur in different periods from when pension contributions are made under the PPA. Amounts contributed in excess of the CAS pension costs recovered under U.S. Government contracts are considered to be prepayment credits under the CAS rules. As of December 31, 2017, our prepayment credits were approximately $6.3 billion as compared to $7.7 billion at December 31, 2016. The recovery of CAS pension costs under U.S. Government contracts in excess of our contributions reduces the prepayment credit balance. The prepayment credit balance will also increase or decrease based on our actual investment return on plan assets.

Trends

We will make contributions of $5.0 billion to our qualified defined benefit pension plans in 2018, including required and discretionary contributions. As a result of these contributions, we do not expect any material qualified defined benefit cash funding will be required until 2021. We plan to fund these contributions using a mix of cash on hand and commercial paper. While we do not anticipate a need to do so, our capital structure and resources would allow us to issue new debt if circumstances change (see our "Capital Structure, Resources and Other" discussion above). We anticipate recovering approximately $2.4 billion of CAS pension cost in 2018.

We expect our 2018 FAS pension expense to be $1.4 billion; comparable to our 2017 FAS pension expense of $1.4 billion. The impact of the lower FAS discount rate of 3.625% for 2018 versus 4.125% for 2017 was mostly offset by our actual rate of investment return in 2017 of approximately 13.00% versus our expected long-term rate of return of 7.50%, shortened longevity assumptions, and 2018 cash contributions of $5.0 billion versus immaterial cash contributions in 2017. We expect a FAS/CAS pension adjustment in 2018 of about $1.0 billion, as compared to $876 million in 2017, due to higher 2018 CAS pension costs as compared to 2017.

Environmental Matters

We are a party to various agreements, proceedings and potential proceedings for environmental cleanup issues, including matters at various sites where we have been designated a potentially responsible party (PRP). At December 31, 2017 and 2016, the total amount of liabilities recorded on our consolidated balance sheet for environmental matters was $920 million and $1.0 billion. We have recorded receivables totaling $799 million and $870 million at December 31, 2017 and 2016 for the portion of environmental costs that are probable of future recovery in pricing of our products and services for agencies of the U.S. Government, as discussed below. The amount that is expected to be allocated to our non-U.S. Government contracts or that is determined to not be recoverable under U.S. Government contracts has been expensed through cost of sales. We project costs and recovery of costs over approximately 20 years.

We enter into agreements (e.g., administrative consent orders, consent decrees) that document the extent and timing of some of our environmental remediation obligations. We also are involved in environmental remediation activities at sites where formal agreements either do not exist or do not quantify the extent and timing of our obligations. Environmental cleanup activities usually span many years, which makes estimating the costs more judgmental due to, for example, changing remediation technologies. To determine the costs related to clean up sites, we have to assess the extent of contamination, effects on natural resources, the appropriate technology to be used to accomplish the remediation, and evolving environmental standards.

We perform quarterly reviews of environmental remediation sites and record liabilities and receivables in the period it becomes probable that a liability has been incurred and the amounts can be reasonably estimated (see the discussion under "Environmental Matters" in "Note 1 – Significant Accounting Policies" and "Note 14 – Legal Proceedings, Commitments and Contingencies" included in our Notes to Consolidated Financial Statements). We consider the above factors in our quarterly estimates of the timing and amount of any future costs that may be required for remediation activities, which results in the calculation of a range of estimates for a particular environmental site. We do not discount the recorded liabilities, as the amount and timing of future cash payments are not fixed or cannot be reliably determined. Given the required level of judgment and estimation, it is likely that materially different amounts could be recorded if different assumptions were used or if circumstances were to change (e.g., a change in environmental standards or a change in our estimate of the extent of contamination).

Under agreements reached with the U.S. Government, most of the amounts we spend for environmental remediation are allocated to our operations as general and administrative costs. Under existing U.S. Government regulations, these and other environmental expenditures relating to our U.S. Government business, after deducting any recoveries received from insurance or other PRPs, are allowable in establishing prices of our products and services. As a result, most of the expenditures we incur are included in our net sales and cost of sales according to U.S. Government agreement or regulation, regardless of the contract form (e.g. cost-reimbursable, fixed-price). We continually evaluate the recoverability of our environmental receivables by assessing, among other factors, U.S. Government regulations, our U.S. Government business base and contract mix, our history of receiving reimbursement of such costs, and recent efforts by some U.S. Government representatives to limit such reimbursement.

In addition to the proceedings and potential proceedings discussed above, California previously established a maximum level of the contaminant hexavalent chromium in drinking water of 10 parts per billion (ppb). Recently, this standard was successfully challenged by the California Manufacturers and Technology Association (CMTA) for failure to conduct the required economic feasibility analysis. In response to the court's ruling, the State Water Resources Control Board (State Board), a branch of the California Environmental Protection Agency, withdrew the hexavalent chromium standard from the published regulations, leaving only the 50 ppb standard for total chromium. The State Board has indicated it will work to re-establish a hexavalent chromium standard. If the standard for hexavalent chromium is re-established at 10 ppb or above, it will not have a material impact on our existing remediation costs in California. Further, the U.S. Environmental Protection Agency (U.S. EPA) is considering whether to regulate hexavalent chromium.

California is also reevaluating its existing drinking water standard of 6 ppb for perchlorate, and the U.S. EPA is taking steps to regulate perchlorate in drinking water. If substantially lower standards are adopted, in either California or at the federal level for perchlorate or for hexavalent chromium, we expect a material increase in our estimates for environmental liabilities and the related assets for the portion of the increased costs that are probable of future recovery in the pricing of our products and services for the U.S. Government. The amount that would be allocable to our non-U.S. Government contracts or that is determined not to be recoverable under U.S. Government contracts would be expensed, which may have a material effect on our earnings in any particular interim reporting period.

As disclosed above, we may record changes in the amount of environmental remediation liabilities as a result of our quarterly reviews of the status of our environmental remediation sites, which would result in a change to the corresponding environmental receivable and a charge to earnings. For example, if we were to determine that the liabilities should be increased by $100 million, the corresponding receivables would be increased by approximately $87 million, with the remainder recorded as a charge to earnings. This allocation is determined annually, based upon our existing and projected business activities with the U.S. Government.

We cannot reasonably determine the extent of our financial exposure at all environmental sites with which we are involved. There are a number of former operating facilities we are monitoring or investigating for potential future remediation. In some cases, although a loss may be probable, it is not possible at this time to reasonably estimate the amount of any obligation for remediation activities because of uncertainties (e.g., assessing the extent of the contamination). During any particular quarter, such uncertainties may be resolved, allowing us to estimate and recognize the initial liability to remediate a particular former operating site. The amount of the liability could be material. Upon recognition of the liability, a portion will be recognized as a receivable with the remainder charged to earnings, which may have a material effect in any particular interim reporting period.

If we are ultimately found to have liability at those sites where we have been designated a PRP, we expect that the actual costs of remediation will be shared with other liable PRPs. Generally, PRPs that are ultimately determined to be responsible parties are strictly liable for site cleanup and usually agree among themselves to share, on an allocated basis, the costs and expenses for investigation and remediation. Under existing environmental laws, responsible parties are jointly and severally liable and, therefore, we are potentially liable for the full cost of funding such remediation. In the unlikely event that we were required to fund the entire cost of such remediation, the statutory framework provides that we may pursue rights of cost recovery or contribution from the other PRPs. The amounts we record do not reflect the fact that we may recover some of the environmental costs we have incurred through insurance or from other PRPs, which we are required to pursue by agreement and U.S. Government regulation.

Goodwill

As disclosed in "Note 1 – Significant Accounting Policies" in our Notes to Consolidated Financial Statements (under the caption "Recent Accounting Pronouncements"), at the beginning of the quarter ended September 24, 2017, we adopted the amendments in ASU No. 2017-04, *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment,* which eliminates the requirement to compare the implied fair value of reporting unit goodwill with the carrying amount of that goodwill (commonly referred to as Step 2) from the goodwill impairment test and requires entities to only compare the fair value of the reporting unit to the reporting units' carrying amount to determine goodwill impairment. We elected to adopt the new standard at the beginning of the third quarter of 2017 because it significantly simplifies the evaluation of goodwill for impairment and we have updated our critical accounting policy for goodwill to reflect the adoption of the new standard.

The assets and liabilities of acquired businesses are recorded under the acquisition method of accounting at their estimated fair values at the date of acquisition. Goodwill represents costs in excess of fair values assigned to the underlying identifiable net assets of acquired businesses.

Our goodwill balance was $10.8 billion at both December 31, 2017 and 2016. We perform an impairment test of our goodwill at least annually in the fourth quarter or more frequently whenever events or changes in circumstances indicate the carrying value of goodwill may be impaired. Such events or changes in circumstances may include a significant deterioration in overall economic conditions, changes in the business climate of our industry, a decline in our market capitalization, operating performance indicators, competition, reorganizations of our business, U.S. Government budget restrictions or the disposal of all or a portion of a reporting unit. Our goodwill has been allocated to and is tested for impairment at a level referred to as the reporting unit, which is our business segment level or a level below the business segment. The level at which we test goodwill for impairment requires us to determine whether the operations below the business segment constitute a self-sustaining business for which discrete financial information is available and segment management regularly reviews the operating results.

We may use both qualitative and quantitative approaches when testing goodwill for impairment. For selected reporting units where we use the qualitative approach, we perform a qualitative evaluation of events and circumstances impacting the reporting unit to determine the likelihood of goodwill impairment. Based on that qualitative evaluation, if we determine it is more likely than not that the fair value of a reporting unit exceeds its carrying amount, no further evaluation is necessary. Otherwise we perform a quantitative impairment test. We perform quantitative tests for most reporting units at least once every three years. However, for certain reporting units we may perform a quantitative impairment test every year.

To perform the quantitative impairment test, we compare the fair value of a reporting unit to its carrying value, including goodwill. If the fair value of a reporting unit exceeds its carrying value, goodwill of the reporting unit is not impaired. If the carrying value of the reporting unit, including goodwill, exceeds its fair value, a goodwill impairment loss is recognized in an amount equal to that excess. We generally estimate the fair value of each reporting unit using a combination of a discounted cash flow (DCF) analysis and market-based valuation methodologies such as comparable public company trading values and values observed in recent business acquisitions. Determining fair value requires the exercise of significant judgments, including the amount and timing of expected future cash flows, long-term growth rates, discount rates and relevant comparable public company earnings multiples and relevant transaction multiples. The cash flows employed in the DCF analysis are based on our best estimate of future sales, earnings and cash flows after considering factors such as general market conditions, U.S. Government budgets, existing firm orders, expected future orders, contracts with suppliers, labor agreements, changes in working capital, long term business plans and recent operating performance. The discount rates utilized in the DCF analysis are based on the respective reporting unit's weighted average cost of capital, which takes into account the relative weights of each component of capital structure (equity and debt) and represents the expected cost of new capital, adjusted as appropriate to consider the risk inherent in future cash flows of the respective reporting unit. The carrying value of each reporting unit includes the assets and liabilities employed in its operations, goodwill and allocations of amounts held at the business segment and corporate levels.

In the fourth quarter of 2017, we performed our annual goodwill impairment test for each of our reporting units utilizing the statutory tax rate in effect at the time of the test. The results of that test indicated that for each of our reporting units, including Sikorsky, no impairment existed. As of December 31, 2017, the carrying value of our Sikorsky reporting unit includes goodwill of $2.7 billion and exceeds its fair value by a margin of approximately 25%, after adjusting for the positive impact of lower statutory tax rates due to the passage of the Tax Act on December 22, 2017. We acquired Sikorsky in November 2015 and recorded the assets acquired and liabilities assumed at fair value. As a result, the carrying value and fair value of our Sikorsky reporting unit continue to be closely aligned. Therefore, any business deterioration, changes in timing of orders, contract cancellations or terminations, or negative changes in market factors could cause our sales, earnings and cash flows to decline below current projections. Similarly, market factors utilized in the impairment analysis, including long-term growth rates, discount rates and relevant comparable public company earnings multiples and transaction multiples, could negatively impact the fair value of our reporting units. Based on our assessment of these circumstances, we have determined that goodwill at our Sikorsky reporting unit is at risk for impairment should there be deterioration of projected cash flows, negative changes in market factors or a significant increase in the carrying value of the reporting unit.

During the fourth quarter of 2017, we realigned certain programs within the RMS business segment to align with changes in management structure. We performed goodwill impairment tests prior and subsequent to the realignment, and there was no indication of goodwill impairment.

Impairment assessments inherently involve management judgments regarding a number of assumptions such as those described above. Due to the many variables inherent in the estimation of a reporting unit's fair value and the relative size of our recorded goodwill, differences in assumptions could have a material effect on the estimated fair value of one or more of our reporting units and could result in a goodwill impairment charge in a future period.

Intangible Assets

Intangible assets from acquired businesses are recognized at their estimated fair values at the date of acquisition and consist of customer programs, trademarks, customer relationships, technology and other intangible assets. Customer programs include values assigned to major programs of acquired businesses and represent the aggregate value associated with the customer relationships, contracts, technology and trademarks underlying the associated program and are amortized on a straight-line basis over a period of expected cash flows used to measure the fair value, which ranges from nine to 20 years. Acquired intangibles deemed to have indefinite lives are not amortized, but are subject to annual impairment testing. This testing compares carrying value to fair value and, when appropriate, the carrying value of these assets is reduced to fair value. Finite-lived intangibles are amortized to expense over the applicable useful lives, ranging from three to 20 years, based on the nature of the asset and the underlying pattern of economic benefit as reflected by future net cash inflows. We perform an impairment test of finite-lived intangibles whenever events or changes in circumstances indicate their carrying value may be impaired. Should events or changes in circumstances indicate the carrying value of a finite-lived intangible may be impaired, the sum of the undiscounted future cash flows expected to result from the use of the asset group would be compared to the asset group's carrying value. Should the asset group's carrying amount exceed the sum of the undiscounted future cash flows, we would determine the fair value of the asset group and record an impairment loss in net earnings.

The carrying value of our Sikorsky business includes an indefinite-lived trademark intangible asset of $887 million as of December 31, 2017. In the fourth quarter of 2017, we performed the annual impairment test for the Sikorsky indefinite-lived trademark intangible asset utilizing the statutory tax rate in effect at the time of the test and the results indicated that no impairment existed. At December 31, 2017, the Sikorsky trademark exceeded its carrying value by a margin of approximately 20%, after adjusting for the positive impact of lower statutory tax rates due to the passage of the Tax Act on December 22, 2017. Additionally, our Sikorsky business has finite-lived customer program intangible assets with carrying values of $2.7 billion as of December 31, 2017. As discussed above in the Goodwill section, the carrying value and fair value of Sikorsky's intangible assets continue to be closely aligned due to the November 2015 acquisition of Sikorsky. Therefore, any business deterioration, contract cancellations or terminations, or negative changes in market factors could cause our sales to decline below current projections. Based on our assessment of these circumstances, we have determined that our Sikorsky intangible assets are at risk for impairment should there be any business deterioration, contract cancellations or terminations, or negative changes in market factors.

Recent Accounting Pronouncements

See "Note 1 – Significant Accounting Policies" included in our Notes to Consolidated Financial Statements (under the caption "Recent Accounting Pronouncements").

ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk

We maintain active relationships with a broad and diverse group of U.S. and international financial institutions. We believe that they provide us with sufficient access to the general and trade credit we require to conduct our business. We continue to closely monitor the financial market environment and actively manage counterparty exposure to minimize the potential impact from adverse developments with any single credit provider while ensuring availability of, and access to, sufficient credit resources.

Our main exposure to market risk relates to interest rates, foreign currency exchange rates and market prices on certain equity securities. Our financial instruments that are subject to interest rate risk principally include fixed-rate long-term debt. The estimated fair value of our outstanding debt was $16.8 billion at December 31, 2017 and the outstanding principal amount was $15.5 billion, excluding unamortized discounts and issuance costs of $1.2 billion. A 10% change in the level of interest rates would not have a material impact on the fair value of our outstanding debt at December 31, 2017.

We use derivative instruments principally to reduce our exposure to market risks from changes in foreign currency exchange rates and interest rates. We do not enter into or hold derivative instruments for speculative trading purposes. We transact business globally and are subject to risks associated with changing foreign currency exchange rates. We enter into foreign currency hedges such as forward and option contracts that change in value as foreign currency exchange rates change. Our most significant foreign currency exposures relate to the British Pound Sterling, the Euro, the Canadian dollar and the Australian dollar. These contracts hedge forecasted foreign currency transactions in order to mitigate fluctuations in our earnings and cash flows associated with changes in foreign currency exchange rates. We designate foreign currency hedges as cash flow hedges. We also are exposed to the impact of interest rate changes primarily through our borrowing activities. For fixed rate borrowings, we may use variable interest rate swaps, effectively converting fixed rate borrowings to variable rate borrowings indexed to LIBOR in order to reduce the amount of interest paid. These swaps are designated as fair value hedges. For variable rate borrowings, we may use fixed interest rate swaps, effectively converting variable rate borrowings to fixed rate borrowings in order to mitigate the impact of interest rate changes on earnings. These swaps are designated as cash flow hedges. We also may enter into derivative instruments that are not designated as hedges and do not qualify for hedge accounting, which are intended to mitigate certain economic exposures.

The classification of gains and losses resulting from changes in the fair values of derivatives is dependent on our intended use of the derivative and its resulting designation. Adjustments to reflect changes in fair values of derivatives attributable to the effective portion of hedges are either reflected in earnings and largely offset by corresponding adjustments to the hedged items or reflected net of income taxes in accumulated other comprehensive loss until the hedged transaction is recognized in earnings. Changes in the fair value of the derivatives that are attributable to the ineffective portion of the hedges, or of derivatives that are not considered to be highly effective hedges, if any, are immediately recognized in earnings. The aggregate notional amount of our outstanding interest rate swaps at both December 31, 2017 and 2016 was $1.2 billion. The aggregate notional amount of our outstanding foreign currency hedges at December 31, 2017 and 2016 was $4.1 billion and $4.0 billion. At December 31, 2017 and 2016, the net fair value of our derivative instruments was not material (see "Note 16 – Fair Value Measurements" included in our Notes to Consolidated Financial Statements). A 10% unfavorable exchange rate movement of our foreign currency contracts would not have a material impact on the aggregate net fair value of such contracts or our consolidated financial statements. Additionally, as we enter into foreign currency contract to hedge foreign currency exposure on underlying transactions we believe that any movement on our foreign currency contracts would be offset by movement on the underlying transactions and, therefore, when taken together do not create material risk.

We evaluate the credit quality of potential counterparties to derivative transactions and only enter into agreements with those deemed to have acceptable credit risk at the time the agreements are executed. Our foreign currency exchange hedge portfolio is diversified across several banks. We periodically monitor changes to counterparty credit quality as well as our concentration of credit exposure to individual counterparties. We do not hold or issue derivative financial instruments for trading or speculative purposes.

We maintain a separate trust that includes investments to fund certain of our non-qualified deferred compensation plans. As of December 31, 2017, investments in the trust totaled $1.4 billion and are reflected at fair value on our consolidated balance sheet in other noncurrent assets. The trust holds investments in marketable equity securities and fixed-income securities that are exposed to price changes and changes in interest rates. A portion of the liabilities associated with the deferred compensation plans supported by the trust is also impacted by changes in the market price of our common stock and certain market indices. Changes in the value of the liabilities have the effect of partially offsetting the impact of changes in the value of the trust. Both the change in the fair value of the trust and the change in the value of the liabilities are recognized on our consolidated statements of earnings in other unallocated, net and were not material for the year ended December 31, 2017.

ITEM 8. Financial Statements and Supplementary Data

Report of Ernst & Young LLP,
Independent Registered Public Accounting Firm,
on the Audited Consolidated Financial Statements*

Board of Directors and Stockholders
Lockheed Martin Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Lockheed Martin Corporation (the "Corporation") as of December 31, 2017 and 2016, and the related consolidated statements of earnings, comprehensive income, equity, and cash flows, for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the Corporation as of December 31, 2017 and 2016, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Corporation's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 6, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on the Corporation's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Corporation in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Ernst + Young LLP

We have served as the Corporation's auditor since 1994.

Tysons, Virginia
February 6, 2018

* This is the report included in the Form 10-K/A filed with the Securities and Exchange Commission on February 16, 2018.

Lockheed Martin Corporation
Consolidated Statements of Earnings
(in millions, except per share data)

	Years Ended December 31, 2017	2016	2015
Net sales			
Products	**$ 43,875**	$ 40,365	$ 34,868
Services	**7,173**	6,883	5,668
Total net sales	**51,048**	47,248	40,536
Cost of sales			
Products	**(39,750)**	(36,616)	(31,091)
Services	**(6,405)**	(6,040)	(4,824)
Severance charges	**—**	(80)	(82)
Other unallocated, net	**655**	550	(47)
Total cost of sales	**(45,500)**	(42,186)	(36,044)
Gross profit	**5,548**	5,062	4,492
Other income, net	**373**	487	220
Operating profit	**5,921**	5,549	4,712
Interest expense	**(651)**	(663)	(443)
Other non-operating (expense) income, net	**(1)**	—	30
Earnings from continuing operations before income taxes	**5,269**	4,886	4,299
Income tax expense	**(3,340)**	(1,133)	(1,173)
Net earnings from continuing operations	**1,929**	3,753	3,126
Net earnings from discontinued operations	**73**	1,549	479
Net earnings	**$ 2,002**	$ 5,302	$ 3,605
Earnings per common share			
Basic			
Continuing operations	**$ 6.70**	$ 12.54	$ 10.07
Discontinued operations	**0.26**	5.17	1.55
Basic earnings per common share	**$ 6.96**	$ 17.71	$ 11.62
Diluted			
Continuing operations	**$ 6.64**	$ 12.38	$ 9.93
Discontinued operations	**0.25**	5.11	1.53
Diluted earnings per common share	**$ 6.89**	$ 17.49	$ 11.46

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

Lockheed Martin Corporation
Consolidated Statements of Comprehensive Income
(in millions)

	Years Ended December 31,		
	2017	**2016**	**2015**
Net earnings	**$ 2,002**	$ 5,302	$ 3,605
Other comprehensive (loss) income, net of tax			
Postretirement benefit plans			
Net other comprehensive loss recognized during the period, net of tax benefit of $375 million in 2017, $668 million in 2016 and $192 million in 2015	**(1,380)**	(1,232)	(351)
Amounts reclassified from accumulated other comprehensive loss, net of tax expense of $437 million in 2017, $382 million in 2016 and $464 million in 2015	**802**	699	850
Reclassifications from divestiture of IS&GS business	**—**	(134)	—
Other, net	**140**	9	(73)
Other comprehensive (loss) income, net of tax	**(438)**	(658)	426
Comprehensive income	**$ 1,564**	$ 4,644	$ 4,031

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

Lockheed Martin Corporation
Consolidated Balance Sheets
(in millions, except par value)

	December 31,	
	2017	**2016**
Assets		
Current assets		
Cash and cash equivalents	**$ 2,861**	$ 1,837
Receivables, net	**8,603**	8,202
Inventories, net	**4,487**	4,670
Other current assets	**1,510**	399
Total current assets	**17,461**	15,108
Property, plant and equipment, net	**5,775**	5,549
Goodwill	**10,807**	10,764
Intangible assets, net	**3,797**	4,093
Deferred income taxes	**3,111**	6,625
Other noncurrent assets	**5,570**	5,667
Total assets	**$ 46,521**	$ 47,806
Liabilities and equity		
Current liabilities		
Accounts payable	**$ 1,467**	$ 1,653
Customer advances and amounts in excess of costs incurred	**6,752**	6,776
Salaries, benefits and payroll taxes	**1,785**	1,764
Current maturities of long-term debt	**750**	—
Other current liabilities	**1,883**	2,349
Total current liabilities	**12,637**	12,542
Long-term debt, net	**13,513**	14,282
Accrued pension liabilities	**15,703**	13,855
Other postretirement benefit liabilities	**719**	862
Other noncurrent liabilities	**4,558**	4,659
Total liabilities	**47,130**	46,200
Stockholders’ equity		
Common stock, $1 par value per share	**284**	289
Additional paid-in capital	**—**	—
Retained earnings	**11,573**	13,324
Accumulated other comprehensive loss	**(12,540)**	(12,102)
Total stockholders’ (deficit) equity	**(683)**	1,511
Noncontrolling interests in subsidiary	**74**	95
Total (deficit) equity	**(609)**	1,606
Total liabilities and equity	**$ 46,521**	$ 47,806

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

Lockheed Martin Corporation
Consolidated Statements of Cash Flows
(in millions)

	Years Ended December 31,		
	2017	**2016**	**2015**
Operating activities			
Net earnings	**$ 2,002**	$ 5,302	$ 3,605
Adjustments to reconcile net earnings to net cash provided by operating activities			
Depreciation and amortization	**1,195**	1,215	1,026
Stock-based compensation	**158**	149	138
Deferred income taxes	**3,432**	(152)	(445)
Severance charges	**—**	99	102
Gain on property sale	**(198)**	—	—
Gain on divestiture of IS&GS business	**(73)**	(1,242)	—
Gain on step acquisition of AWE	**—**	(104)	—
Changes in assets and liabilities			
Receivables, net	**(401)**	(811)	(256)
Inventories, net	**183**	(46)	(398)
Accounts payable	**(189)**	(188)	(160)
Customer advances and amounts in excess of costs incurred	**(24)**	3	(32)
Postretirement benefit plans	**1,316**	1,028	1,068
Income taxes	**(1,210)**	146	(48)
Other, net	**285**	(210)	501
Net cash provided by operating activities	**6,476**	5,189	5,101
Investing activities			
Capital expenditures	**(1,177)**	(1,063)	(939)
Acquisitions of businesses and investments in affiliates	**—**	—	(9,003)
Other, net	**30**	78	208
Net cash used for investing activities	**(1,147)**	(985)	(9,734)
Financing activities			
Repurchases of common stock	**(2,001)**	(2,096)	(3,071)
Dividends paid	**(2,163)**	(2,048)	(1,932)
Special cash payment from divestiture of IS&GS business	**—**	1,800	—
Proceeds from stock option exercises	**71**	106	174
Repayments of long-term debt	**—**	(952)	—
Proceeds from the issuance of long-term debt	**—**	—	9,101
Proceeds from borrowings under revolving credit facilities	**—**	—	6,000
Repayments of borrowings under revolving credit facilities	**—**	—	(6,000)
Other, net	**(212)**	(267)	5
Net cash (used for) provided by financing activities	**(4,305)**	(3,457)	4,277
Net change in cash and cash equivalents	**1,024**	747	(356)
Cash and cash equivalents at beginning of year	**1,837**	1,090	1,446
Cash and cash equivalents at end of year	**$ 2,861**	$ 1,837	$ 1,090

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

Lockheed Martin Corporation
Consolidated Statements of Equity
(in millions, except per share data)

	Common Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Stockholders' (Deficit) Equity	Noncontrolling Interests in Subsidiary	Total (Deficit) Equity
Balance at December 31, 2014	$ 314	$ —	$ 14,956	$ (11,870)	$ 3,400	$ —	$ 3,400
Net earnings	—	—	3,605	—	3,605	—	3,605
Other comprehensive income, net of tax	—	—	—	426	426	—	426
Repurchases of common stock	(15)	(656)	(2,400)	—	(3,071)	—	(3,071)
Dividends declared ($6.15 per share)	—	—	(1,923)	—	(1,923)	—	(1,923)
Stock-based awards, ESOP activity and other	4	656	—	—	660	—	660
Balance at December 31, 2015	303	—	14,238	(11,444)	3,097	—	3,097
Net earnings	—	—	5,302	—	5,302	—	5,302
Other comprehensive loss, net of tax	—	—	—	(658)	(658)	—	(658)
Shares exchanged and retired in connection with divestiture of IS&GS business	(9)	—	(2,488)	—	(2,497)	—	(2,497)
Repurchases of common stock	(9)	(395)	(1,692)	—	(2,096)	—	(2,096)
Dividends declared ($6.77 per share)	—	—	(2,036)	—	(2,036)	—	(2,036)
Stock-based awards, ESOP activity and other	4	395	—	—	399	—	399
Net increase in noncontrolling interests in subsidiary	—	—	—	—	—	95	95
Balance at December 31, 2016	289	—	13,324	(12,102)	1,511	95	1,606
Net earnings	**—**	**—**	**2,002**	**—**	**2,002**	**—**	**2,002**
Other comprehensive loss, net of tax	**—**	**—**	**—**	**(438)**	**(438)**	**—**	**(438)**
Repurchases of common stock	**(7)**	**(398)**	**(1,596)**	**—**	**(2,001)**	**—**	**(2,001)**
Dividends declared ($7.46 per share)	**—**	**—**	**(2,157)**	**—**	**(2,157)**	**—**	**(2,157)**
Stock-based awards, ESOP activity and other	**2**	**398**	**—**	**—**	**400**	**—**	**400**
Net decrease in noncontrolling interests in subsidiary	**—**	**—**	**—**	**—**	**—**	**(21)**	**(21)**
Balance at December 31, 2017	**$ 284**	**$ —**	**$ 11,573**	**$ (12,540)**	**$ (683)**	**$ 74**	**$ (609)**

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

Lockheed Martin Corporation
Notes to Consolidated Financial Statements

Note 1 – Significant Accounting Policies

Organization – We are a global security and aerospace company principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. We also provide a broad range of management, engineering, technical, scientific, logistics, system integration and cybersecurity services. We serve both U.S. and international customers with products and services that have defense, civil and commercial applications, with our principal customers being agencies of the U.S. Government.

Basis of presentation – Our consolidated financial statements include the accounts of subsidiaries we control and variable interest entities if we are the primary beneficiary. We eliminate intercompany balances and transactions in consolidation. Our receivables, inventories, customer advances and amounts in excess of costs incurred and certain amounts in other current liabilities primarily are attributable to long-term contracts or programs in progress for which the related operating cycles are longer than one year. In accordance with industry practice, we include these items in current assets and current liabilities. Unless otherwise noted, we present all per share amounts cited in these consolidated financial statements on a "per diluted share" basis. Certain prior period amounts have been reclassified to conform with current year presentation.

The discussion and presentation of the operating results of our business segments have been impacted by the following recent events.

During the fourth quarter of 2017, the business segment formally known as Space Systems was renamed Space. There was no change to the composition of the portfolio in connection with the name change. The information for this segment for all periods included in these consolidated financial statements has been labeled using the new name.

On August 16, 2016, we completed the divestiture of the Information Systems & Global Solutions (IS&GS) business, which merged with a subsidiary of Leidos Holdings, Inc. (Leidos) in a Reverse Morris Trust transaction. Accordingly, the operating results of the IS&GS business have been classified as discontinued operations on our consolidated statements of earnings for all prior periods presented. However, the cash flows of the IS&GS business have not been reclassified in our consolidated statements of cash flows as we retained the cash as part of the Transaction. See "Note 3 – Acquisitions and Divestitures" for additional information about the divestiture of the IS&GS business.

On August 24, 2016, we increased our ownership interest in the AWE Management Limited (AWE) joint venture, which operates the United Kingdom's nuclear deterrent program, from 33% to 51%. At which time, we began consolidating AWE. Consequently, our operating results include 100% of AWE's sales and 51% of its operating profit. Prior to increasing our ownership interest, we accounted for our investment in AWE using the equity method of accounting. Under the equity method, we recognized only 33% of AWE's earnings or losses and no sales. Accordingly, prior to August 24, 2016, the date we obtained control, we recorded 33% of AWE's net earnings in our operating results and subsequent to August 24, 2016, we recognized 100% of AWE's sales and 51% of its operating profit. See "Note 3 – Acquisitions and Divestitures" for additional information about the change in ownership of AWE.

On November 6, 2015, we completed the acquisition of Sikorsky Aircraft Corporation and certain affiliated companies (collectively "Sikorsky") for $9.0 billion, net of cash acquired, and aligned Sikorsky under our Rotary and Mission Systems (RMS) business segment. The operating results and cash flows of Sikorsky have been included on our consolidated statements of earnings and consolidated statements of cash flows since the November 6, 2015 acquisition date. Additionally, the assets and liabilities of Sikorsky are included in our consolidated balance sheets as of December 31, 2017 and December 31, 2016. See "Note 3 – Acquisitions and Divestitures" for additional information about the acquisition of Sikorsky and related final purchase accounting.

During the fourth quarter of 2015, we realigned certain programs among our business segments. The amounts, discussion and presentation of our business segments for all periods presented in these consolidated financial statements reflect the program realignment.

Use of estimates – We prepare our consolidated financial statements in conformity with U.S. generally accepted accounting principles (GAAP). In doing so, we are required to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base these estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying amounts of assets and liabilities that are not readily apparent from other sources. Our actual results may differ materially from these estimates. Significant estimates inherent in the preparation of our consolidated financial statements include, but are not limited to, accounting for sales and cost recognition, postretirement benefit plans, environmental receivables and liabilities, evaluation of goodwill and other assets for impairment, income taxes including deferred tax assets, fair value measurements and contingencies.

Sales and earnings – We record net sales and estimated profits for substantially all of our contracts using the percentage-of-completion method for fixed-price and cost-reimbursable contracts for products and services with the U.S. Government. Sales are recorded on all time-and-materials contracts as the work is performed based on agreed-upon hourly rates and allowable costs. We account for our services contracts with non-U.S. Government customers using the services method of accounting. We classify net sales as products or services on our consolidated statements of earnings based on the attributes of the underlying contracts.

Percentage-of-Completion Method – The percentage-of-completion method for product contracts depends on the nature of the products provided under the contract. For example, for contracts that require us to perform a significant level of development effort in comparison to the total value of the contract and/or to deliver minimal quantities, sales are recorded using the cost-to-cost method to measure progress toward completion. Under the cost-to-cost method of accounting, we recognize sales and an estimated profit as costs are incurred based on the proportion that the incurred costs bear to total estimated costs. For contracts that require us to provide a substantial number of similar items without a significant level of development, we record sales and an estimated profit on a percentage-of-completion basis using units-of-delivery as the basis to measure progress toward completing the contract. For contracts to provide services to the U.S. Government, sales are generally recorded using the cost-to-cost method.

Award and incentive fees, as well as penalties related to contract performance, are considered in estimating sales and profit rates on contracts accounted for under the percentage-of-completion method. Estimates of award fees are based on past experience and anticipated performance. We record incentives or penalties when there is sufficient information to assess anticipated contract performance. Incentive provisions that increase or decrease earnings based solely on a single significant event are not recognized until the event occurs.

Accounting for contracts using the percentage-of-completion method requires judgment relative to assessing risks, estimating contract sales and costs (including estimating award and incentive fees and penalties related to performance) and making assumptions for schedule and technical issues. Due to the number of years it may take to complete many of our contracts and the scope and nature of the work required to be performed on those contracts, the estimation of total sales and costs at completion is complicated and subject to many variables and, accordingly, is subject to change. When adjustments in estimated total contract sales or estimated total costs are required, any changes from prior estimates are recognized in the current period for the inception-to-date effect of such changes. When estimates of total costs to be incurred on a contract exceed estimates of total sales to be earned, a provision for the entire loss on the contract is recorded in the period in which the loss is determined.

Many of our contracts span several years and include highly complex technical requirements. At the outset of a contract, we identify and monitor risks to the achievement of the technical, schedule and cost aspects of the contract and assess the effects of those risks on our estimates of total costs to complete the contract. The estimates consider the technical requirements (e.g., a newly-developed product versus a mature product), the schedule and associated tasks (e.g., the number and type of milestone events) and costs (e.g., material, labor, subcontractor, overhead and the estimated costs to fulfill our industrial cooperation agreements, sometimes referred to as offset agreements, required under certain contracts with international customers). The initial profit booking rate of each contract considers risks surrounding the ability to achieve the technical requirements, schedule and costs in the initial estimated total costs to complete the contract. Profit booking rates may increase during the performance of the contract if we successfully retire risks surrounding the technical, schedule and cost aspects of the contract which decreases the estimated total costs to complete the contract. Conversely, our profit booking rates may decrease if the estimated total costs to complete the contract increase. All of the estimates are subject to change during the performance of the contract and may affect the profit booking rate.

In addition, comparability of our business segment sales, operating profit and operating margins may be impacted by changes in profit booking rates on our contracts accounted for using the percentage-of-completion method of accounting. Increases in the profit booking rates, typically referred to as risk retirements, usually relate to revisions in the estimated total costs that reflect improved conditions on a particular contract. Conversely, conditions on a particular contract may deteriorate, resulting in an increase in the estimated total costs to complete and a reduction in the profit booking rate. Increases or decreases in profit booking rates are recognized in the current period and reflect the inception-to-date effect of such changes. Segment operating profit and margins may also be impacted favorably or unfavorably by other items. Favorable items may include the positive resolution of contractual matters, cost recoveries on restructuring charges, insurance recoveries and gains on sales of assets. Unfavorable items may include the adverse resolution of contractual matters; restructuring charges, except for significant severance actions (such as those mentioned below in "Note 15 – Restructuring Charges"), which are excluded from segment operating results; reserves for disputes; asset impairments; and losses on sales of certain assets. Segment operating profit and items such as risk retirements, reductions of profit booking rates or other matters are presented net of state income taxes.

Changes in Estimates – As previously disclosed, we have a program to design, integrate, and install an air missile defense C4I systems for an international customer that has experienced performance issues and for which we have periodically accrued reserves. In 2017, we revised our estimated costs to complete the program, EADGE-T, as a consequence of ongoing performance matters and recorded an additional charge of $120 million ($74 million or $0.25 per share, after tax) at our RMS business segment. As of December 31, 2017, cumulative losses, including reserves, remained at approximately $260 million on this program. We are continuing to monitor the viability of the program and the available options and could record additional charges in future periods. However, based on the reserves already accrued and our current estimate of the costs to complete the program, at this time we do not anticipate that additional charges, if any, would be material.

We have two commercial satellite programs at our Space business segment, for which we have experienced performance issues related to the development and integration of a modernized LM 2100 satellite platform. These commercial programs require the development of new satellite technology to enhance the LM 2100's power, propulsion and electronics, among other items. The enhanced satellite is expected to benefit other commercial and government satellite programs. We have periodically revised our estimated costs to complete these developmental commercial programs. We have recorded cumulative losses of approximately $305 million as of December 31, 2017, including approximately $135 million ($83 million or $0.29 per share, after tax) recorded during the year ended December 31, 2017. While these losses reflect our estimated total losses on the programs, we will continue to incur unrecovered costs each period until we complete these programs and may have to record additional loss reserves in future periods, which could be material to our operating results. While we do not currently anticipate recording additional loss reserves, the programs remain developmental and further challenges in the delivery and integration of new satellite technology, anomalies discovered during system testing requiring repair or rework, further schedule delays and potential penalties could require that we record additional reserves. We do not currently expect to be able to meet the delivery schedule under the contracts and have informed the customers. The customers could seek to exercise a termination right under the contracts, in which case we would have to refund the payments we have received and pay certain penalties. However, we think the probability that the customers will seek to exercise any termination right is remote as the delay beyond the termination date is modest and the customers have an immediate need for the satellites.

Our consolidated net adjustments not related to volume, including net profit booking rate adjustments and other matters, net of state income taxes, increased segment operating profit by approximately $1.5 billion in both 2017 and 2016 and $1.7 billion in 2015. These adjustments increased net earnings by approximately $980 million ($3.37 per share) in 2017, $950 million ($3.13 per share) in 2016 and $1.1 billion ($3.50 per share) in 2015.

Services Method – Under fixed-price service contracts, we are paid a predetermined fixed amount for a specified scope of work and generally have full responsibility for the costs associated with the contract and the resulting profit or loss. We record net sales under fixed-price service contracts with non-U.S. Government customers on a straight-line basis over the period of contract performance, unless evidence suggests that net sales are earned or the obligations are fulfilled in a different pattern. For cost-reimbursable contracts for services to non-U.S. Government customers, we record net sales as services are performed, except for award and incentive fees. Award and incentive fees are recorded when they are fixed or determinable, generally at the date the amount is communicated to us by the customer. This approach results in the recognition of such fees at contractual intervals (typically every six months) throughout the contract and is dependent on the customer's processes for notification of awards and issuance of formal notifications. Costs for all service contracts are expensed as incurred.

Research and development and similar costs – Except for certain arrangements described below, we account for independent research and development costs as part of the general and administrative costs that are allocated among all of our contracts and programs in progress under U.S. Government contractual arrangements and charged to cost of sales. Under certain arrangements in which a customer shares in product development costs, our portion of unreimbursed costs is expensed as incurred in cost of sales. Independent research and development costs charged to cost of sales totaled $1.2 billion in 2017, $988 million in 2016 and $817 million in 2015. Costs we incur under customer-sponsored research and development programs pursuant to contracts are included in net sales and cost of sales.

Stock-based compensation – Compensation cost related to all share-based payments is measured at the grant date based on the estimated fair value of the award. We generally recognize the compensation cost ratably over a three-year vesting period, net of estimated forfeitures. At each reporting date, the number of shares is adjusted to the number ultimately expected to vest.

Income taxes – We calculate our provision for income taxes using the asset and liability method, under which deferred tax assets and liabilities are recognized based on the future tax consequences attributable to temporary differences that exist between the financial statement carrying amount of assets and liabilities and their respective tax bases, as well as from operating loss and tax credit carry-forwards. We measure deferred tax assets and liabilities using enacted tax rates that will apply in the years in which we expect the temporary differences to be recovered or paid.

We periodically assess our tax exposures related to periods that are open to examination. Based on the latest available information, we evaluate our tax positions to determine whether the position will more likely than not be sustained upon examination by the Internal Revenue Service (IRS) or other taxing authorities. If we cannot reach a more-likely-than-not determination, no benefit is recorded. If we determine that the tax position is more likely than not to be sustained, we record the largest amount of benefit that is more likely than not to be realized when the tax position is settled. We record interest and penalties related to income taxes as a component of income tax expense on our consolidated statements of earnings. Interest and penalties were not material.

Cash and cash equivalents – Cash equivalents include highly liquid instruments with original maturities of 90 days or less.

Receivables – Receivables include amounts billed and currently due from customers and unbilled costs and accrued profits primarily related to sales on long-term contracts that have been recognized but not yet billed to customers. Pursuant to contract provisions, agencies of the U.S. Government and certain other customers have title to, or a security interest in, assets related to such contracts as a result of advances, performance-based payments and progress payments. We reflect those advances and payments as an offset to the related receivables balance for contracts that we account for on a percentage-of-completion basis using the cost-to-cost method to measure progress towards completion.

On occasion, our customers may seek deferred payment terms to purchase our products. In connection with these transactions, we may, at our customer's request, enter into arrangements for the non-recourse sale of customer receivables to unrelated third–party financial institutions. For accounting purposes, these transactions are not discounted and are treated as a sale of receivables as we have no continuing involvement. The sale proceeds from the financial institutions are reflected in our operating cash flows on the statement of cash flows. During 2017, we sold approximately $698 million of customer receivables. There were no gains or losses related to sales of these receivables.

Inventories – We record inventories at the lower of cost or estimated net realizable value. Costs on long-term contracts and programs in progress represent recoverable costs incurred for production or contract-specific facilities and equipment, allocable operating overhead, advances to suppliers and, in the case of contracts with the U.S. Government and substantially all other governments, research and development and general and administrative expenses. 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 advances, performance-based payments and progress payments. We reflect those advances and payments as an offset against the related inventory balances for contracts that we account for on a percentage-of-completion basis using units-of-delivery as the basis to measure progress toward completing the contract. We determine the costs of other product and supply inventories by the first-in first-out or average cost methods.

Property, plant and equipment – We record property, plant and equipment at cost. We provide for depreciation and amortization on plant and equipment generally using accelerated methods during the first half of the estimated useful lives of the assets and the straight-line method thereafter. The estimated useful lives of our plant and equipment generally range from 10 to 40 years for buildings and five to 15 years for machinery and equipment. No depreciation expense is recorded on construction in progress until such assets are placed into operation. Depreciation expense related to plant and equipment was $760 million in 2017, $747 million in 2016, and $716 million in 2015.

We review the carrying amounts of long-lived assets for impairment if events or changes in the facts and circumstances indicate that their carrying amounts may not be recoverable. We assess impairment by comparing the estimated undiscounted future cash flows of the related asset grouping to its carrying amount. If an asset is determined to be impaired, we recognize an impairment charge in the current period for the difference between the fair value of the asset and its carrying amount.

Capitalized software – We capitalize certain costs associated with the development or purchase of internal-use software. The amounts capitalized are included in other noncurrent assets on our consolidated balance sheets and are amortized on a straight-line basis over the estimated useful life of the resulting software, which ranges from two to six years. As of December 31, 2017 and 2016, capitalized software totaled $424 million and $427 million, net of accumulated amortization of $2.0 billion and $1.9 billion. No amortization expense is recorded until the software is ready for its intended use. Amortization expense related to capitalized software was $123 million in 2017, $136 million in 2016 and $161 million in 2015.

Goodwill – The assets and liabilities of acquired businesses are recorded under the acquisition method of accounting at their estimated fair values at the date of acquisition. Goodwill represents costs in excess of fair values assigned to the underlying identifiable net assets of acquired businesses.

Our goodwill balance was $10.8 billion at both December 31, 2017 and 2016. We perform an impairment test of our goodwill at least annually in the fourth quarter or more frequently whenever events or changes in circumstances indicate the carrying value of goodwill may be impaired. Such events or changes in circumstances may include a significant deterioration in overall economic conditions, changes in the business climate of our industry, a decline in our market capitalization, operating performance indicators, competition, reorganizations of our business, U.S. Government budget restrictions or the disposal of all or a portion of a reporting unit. Our goodwill has been allocated to and is tested for impairment at a level referred to as the reporting unit, which is our business segment level or a level below the business segment. The level at which we test goodwill for impairment requires us to determine whether the operations below the business segment constitute a self-sustaining business for which discrete financial information is available and segment management regularly reviews the operating results.

We may use either a qualitative or quantitative approach when testing a reporting unit's goodwill for impairment. For selected reporting units where we use the qualitative approach, we perform a qualitative evaluation of events and circumstances impacting the reporting unit to determine the likelihood of goodwill impairment. Based on that qualitative evaluation, if we determine it is more likely than not that the fair value of a reporting unit exceeds its carrying amount, no further evaluation is necessary. Otherwise we perform a quantitative impairment test. We perform quantitative tests for most reporting units at least once every three years. However, for certain reporting units we may perform a quantitative impairment test every year.

For the quantitative impairment test we compare the fair value of a reporting unit to its carrying value, including goodwill. If the fair value of a reporting unit exceeds its carrying value, goodwill of the reporting unit is not impaired. If the carrying value of the reporting unit, including goodwill, exceeds its fair value, a goodwill impairment loss is recognized in an amount equal to that excess. We generally estimate the fair value of each reporting unit using a combination of a discounted cash flow (DCF) analysis and market-based valuation methodologies such as comparable public company trading values and values observed in recent business acquisitions. Determining fair value requires the exercise of significant judgments, including the amount and timing of expected future cash flows, long-term growth rates, discount rates and relevant comparable public company earnings multiples and relevant transaction multiples. The cash flows employed in the DCF analysis are based on our best estimate of future sales, earnings and cash flows after considering factors such as general market conditions, U.S. Government budgets, existing firm orders, expected future orders, contracts with suppliers, labor agreements, changes in working capital, long term business plans and recent operating performance. The discount rates utilized in the DCF analysis are based on the respective reporting unit's weighted average cost of capital, which takes into account the relative weights of each component of capital structure (equity and debt) and represents the expected cost of new capital, adjusted as appropriate to consider the risk inherent in future cash flows of the respective reporting unit. The carrying value of each reporting unit includes the assets and liabilities employed in its operations, goodwill and allocations of amounts held at the business segment and corporate levels.

During the fourth quarters of 2017 and 2016, we performed our annual goodwill impairment test for each of our reporting units. The results of our annual impairment tests of goodwill indicated that no impairment existed.

During the fourth quarter of 2017, we realigned certain programs within the RMS business segment to align with changes in management structure. We performed goodwill impairment tests prior and subsequent to the realignment, and there was no indication of goodwill impairment.

During the fourth quarter of 2015, we performed our annual goodwill impairment test for each of our reporting units. During the fourth quarter of 2015, we realigned certain programs between our business segments in connection with our strategic review of our government IT and technical services businesses. As part of the realignment, goodwill was reallocated between affected reporting units on a relative fair value basis. We performed goodwill impairment tests prior and subsequent to the realignment. The results of our 2015 annual impairment tests of goodwill indicated that no impairment existed.

Intangible assets – Intangible assets from acquired businesses are recognized at their estimated fair values at the date of acquisition and consist of customer programs, trademarks, customer relationships, technology and other intangible assets. Customer programs include values assigned to major programs of acquired businesses and represent the aggregate value associated with the customer relationships, contracts, technology and trademarks underlying the associated program and are amortized on a straight-line basis over a period of expected cash flows used to measure the fair value, which ranges from nine to 20 years. Acquired intangibles deemed to have indefinite lives are not amortized, but are subject to annual impairment testing. This testing compares carrying value to fair value and, when appropriate, the carrying value of these assets is reduced to fair value. Finite-lived intangibles are amortized to expense over the applicable useful lives, ranging from three to 20 years, based on the nature of the asset and the underlying pattern of economic benefit as reflected by future net cash inflows. We perform an impairment test of finite-lived intangibles whenever events or changes in circumstances indicate their carrying value may be impaired.

Customer advances and amounts in excess of cost incurred – We receive advances, performance-based payments and progress payments from customers that may exceed costs incurred on certain contracts, including contracts with agencies of the U.S. Government. We classify such advances, other than those reflected as a reduction of receivables or inventories as discussed above, as current liabilities.

Postretirement benefit plans – Many of our employees are covered by defined benefit pension plans and we provide certain health care and life insurance benefits to eligible retirees (collectively, postretirement benefit plans). GAAP requires that the amounts we record related to our postretirement benefit plans be computed, based on service to date, using actuarial valuations that are based in part on certain key economic assumptions we make, including the discount rate, the expected long-term rate of return on plan assets and other actuarial assumptions including participant longevity (also known as mortality), health care cost trend rates and employee turnover, each as appropriate based on the nature of the plans.

A market-related value of our plan assets, determined using actual asset gains or losses over the prior three year period, is used to calculate the amount of deferred asset gains or losses to be amortized. These asset gains or losses, along with those resulting from adjustments to our benefit obligation, will be amortized to expense using the corridor method, where gains and losses are recognized to the extent they exceed 10% of the greater of plan assets or benefit obligations, over the average future service period of employees expected to receive benefits under the plans of approximately nine years as of December 31, 2017. This amortization period is expected to extend (approximately double) in 2020 when our non-union pension plan is frozen to use the average remaining life expectancy of the participants instead of average future service.

We recognize on a plan-by-plan basis the funded status of our postretirement benefit plans under GAAP as either an asset recorded within other noncurrent assets or a liability recorded within noncurrent liabilities on our consolidated balance sheets. The GAAP funded status is measured as the difference between the fair value of the plan's assets and the benefit obligation of the plan. The funded status under the Employee Retirement Income Security Act of 1974 (ERISA), as amended by the Pension Protection Act of 2006 (PPA), is calculated on a different basis than under GAAP.

Environmental matters – We record a liability for environmental matters when it is probable that a liability has been incurred and the amount can be reasonably estimated. The amount of liability recorded is based on our estimate of the costs to be incurred for remediation at a particular site. We do not discount the recorded liabilities, as the amount and timing of future cash payments are not fixed or cannot be reliably determined. Our environmental liabilities are recorded on our consolidated balance sheets within other liabilities, both current and noncurrent. We expect to include a substantial portion of environmental costs in our net sales and cost of sales in future periods pursuant to U.S. Government agreement or regulation. At the time a liability is recorded for future environmental costs, we record a receivable for estimated future recovery considered probable through the pricing of products and services to agencies of the U.S. Government, regardless of the contract form (e.g., cost-reimbursable, fixed-price). We continuously evaluate the recoverability of our environmental receivables by assessing, among other factors, U.S. Government regulations, our U.S. Government business base and contract mix, our history of receiving reimbursement of such costs, and recent efforts by some U.S. Government representatives to limit such reimbursement. We include the portion of those environmental costs expected to be allocated to our non-U.S. Government contracts, or that is determined to not be recoverable under U.S. Government contracts, in our cost of sales at the time the liability is established. Our environmental receivables are recorded on our consolidated balance sheets within other assets, both current and noncurrent. We project costs and recovery of costs over approximately 20 years.

Investments in marketable securities – Investments in marketable securities consist of debt and equity securities and are classified as trading securities. As of December 31, 2017 and 2016, the fair value of our trading securities totaled $1.4 billion and $1.2 billion and was included in other noncurrent assets on our consolidated balance sheets. Our trading securities are held in a separate trust, which includes investments to fund our deferred compensation plan liabilities. Net gains on trading securities in 2017 and 2016 were $150 million and $66 million. Net losses on trading securities in 2015 were $11 million. Gains and losses on these investments are included in other unallocated, net within cost of sales on our consolidated statements of earnings in order to align the classification of changes in the market value of investments held for the plan with changes in the value of the corresponding plan liabilities.

Equity method investments – Investments where we have the ability to exercise significant influence, but do not control, are accounted for under the equity method of accounting and are included in other noncurrent assets on our consolidated balance sheets. Significant influence typically exists if we have a 20% to 50% ownership interest in the investee. Under this method of accounting, our share of the net earnings or losses of the investee is included in operating profit in other income, net on our consolidated statements of earnings since the activities of the investee are closely aligned with the operations of the business segment holding the investment. We evaluate our equity method investments for impairment whenever events or changes in circumstances indicate that the carrying amounts of such investments may be impaired. If a decline in the value of an equity method investment is determined to be other than temporary, a loss is recorded in earnings in the current period. As of both December 31, 2017 and 2016, our equity method investments totaled $1.4 billion, which primarily are composed of our Space business segment's investment in United Launch Alliance (ULA), see "Note 14 – Legal Proceedings, Commitments and Contingencies", and our Aeronautics and RMS business segments' investments in the Advanced Military Maintenance, Repair and Overhaul Center (AMMROC) venture. Our share of net earnings related to our equity method investees was $207 million in 2017, $443 million in 2016 and $320 million in 2015, of which approximately $205 million, $325 million and $245 million related to our Space business segment.

During the year ended December 31, 2017, equity earnings included a charge recorded in the first quarter of approximately $64 million ($40 million or $0.14 per share, after tax), which represented our portion of a non-cash asset impairment related to certain long-lived assets held by our equity method investee, AMMROC. We are continuing to monitor this investment. It is possible that we may have to record our portion of additional charges should their business continue to experience performance issues, which could adversely affect our business, financial condition and results of operations.

Derivative financial instruments – We use derivative instruments principally to reduce our exposure to market risks from changes in foreign currency exchange rates and interest rates. We do not enter into or hold derivative instruments for speculative trading purposes. We transact business globally and are subject to risks associated with changing foreign currency exchange rates. We enter into foreign currency hedges such as forward and option contracts that change in value as foreign currency exchange rates change. These contracts hedge forecasted foreign currency transactions in order to mitigate fluctuations in our earnings and cash flows associated with changes in foreign currency exchange rates. We designate foreign currency hedges as cash flow hedges. We also are exposed to the impact of interest rate changes primarily through our borrowing activities. For fixed rate borrowings, we may use variable interest rate swaps, effectively converting fixed rate borrowings to variable rate borrowings in order to reduce the amount of interest paid. These swaps are designated as fair value hedges. For variable rate borrowings, we may use fixed interest rate swaps, effectively converting variable rate borrowings to fixed rate borrowings in order to mitigate the impact of interest rate changes on earnings. These swaps are designated as cash flow hedges. We also may enter into derivative instruments that are not designated as hedges and do not qualify for hedge accounting, which are intended to mitigate certain economic exposures.

We record derivatives at their fair value. The classification of gains and losses resulting from changes in the fair values of derivatives is dependent on our intended use of the derivative and its resulting designation. Adjustments to reflect changes in fair values of derivatives attributable to the effective portion of hedges are either reflected in earnings and largely offset by corresponding adjustments to the hedged items or reflected net of income taxes in accumulated other comprehensive loss until the hedged transaction is recognized in earnings. Changes in the fair value of the derivatives that are attributable to the ineffective portion of the hedges or of derivatives that are not considered to be highly effective hedges, if any, are immediately recognized in earnings. The aggregate notional amount of our outstanding interest rate swaps at both December 31, 2017 and 2016 was $1.2 billion and the fair value was not significant. The aggregate notional amount of our outstanding foreign currency hedges at December 31, 2017 and 2016 was $4.1 billion and $4.0 billion and the fair value was not significant. Derivative instruments did not have a material impact on net earnings and comprehensive income during the years ended December 31, 2017, 2016 and 2015. Substantially all of our derivatives are designated for hedge accounting. See "Note 16 – Fair Value Measurements" for more information on the fair value measurements related to our derivative instruments.

Recent Accounting Pronouncements

Revenue from Contracts with Customers

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2014-09, *Revenue from Contracts with Customers,* as amended *(Topic 606)* (commonly referred to as ASC 606), which will change the way we recognize revenue and significantly expand the disclosure requirements for revenue arrangements. The new standard is effective for annual reporting periods beginning after December 15, 2017.

We adopted the requirements of the new standard on January 1, 2018 using the full retrospective transition method, whereby ASC 606 will be applied to each prior year presented and the cumulative effect of applying ASC 606 will be recognized at January 1, 2016, the beginning of the earliest year presented. As ASC 606 supersedes substantially all existing revenue guidance affecting us under current GAAP, it will impact revenue and cost recognition across all of our business segments, as well as our business processes and our information technology systems.

We commenced our evaluation of the impact of ASC 606 in late 2014, by evaluating its impact on selected contracts at each of our business segments. With this baseline understanding, we developed a project plan to evaluate thousands of contracts across our business segments, develop processes and tools to dual report financial results under both current GAAP and ASC 606 and assess the internal control structure in order to adopt ASC 606 on January 1, 2018. We have periodically briefed our Audit Committee on our progress made towards adoption.

We currently recognize the majority of our revenue using the percentage-of-completion method of accounting, whereby revenue is recognized as we progress on the contract. For contracts with a significant amount of development and/or requiring the delivery of a minimal number of units, revenue and profit are recognized using the percentage-of-completion cost-to-cost method to measure progress. For example, we use this method at our Aeronautics business segment for the F-35 program; at our Missiles and Fire Control (MFC) business segment for the THAAD program; at our RMS business segment for the Littoral Combat Ship and Aegis Combat System programs; and at our Space business segment for government satellite programs. For contracts that require us to produce a substantial number of similar items without a significant level of development, we currently record revenue and profit using the percentage-of-completion units-of-delivery method as the basis for measuring progress on the contract. For example, we use this method in Aeronautics for the C-130J and C-5 programs; in MFC for tactical missile programs (e.g., Hellfire, JASSM), PAC-3 programs and fire control programs (e.g., LANTIRN® and SNIPER®); in RMS for Black Hawk and Seahawk helicopter programs; and in Space for commercial satellite programs. For contracts to provide services to the U.S. Government, revenue is generally recorded using the percentage-of-completion cost-to-cost method.

Under ASC 606, revenue will be recognized as the customer obtains control of the goods and services promised in the contract (i.e., performance obligations). Given the nature of our products and terms and conditions in our contracts, in particular those with the U.S. Government (including foreign military sales (FMS) contracts), the customer obtains control as we perform work under the contract. Therefore, we expect to recognize revenue over time for substantially all of our contracts using a method similar to our current percentage-of-completion cost-to-cost method. Accordingly, adoption of ASC 606 will primarily impact our contracts where revenue is currently recognized using the percentage-of-completion units-of-delivery method. As a result, we anticipate recognizing revenue for these contracts earlier in the performance period as we incur costs, as opposed to when units are delivered. We may also have more performance obligations in our contracts under ASC 606, which may impact the timing of recording sales and operating profit, including those where sales recognition is deferred pending the incurrence of costs.

During the third quarter of 2017, we completed our preliminary assessment of the cumulative effect of adopting ASC 606 on our December 31, 2015 balance sheet using the full retrospective transition method. The adoption resulted in a decrease in inventories, an increase in billed receivables, contract assets (i.e., unbilled receivables) and contract liabilities (i.e., customer advances and amounts in excess of costs incurred) to primarily reflect the impact of converting contracts currently applying the units-of-delivery method to the cost-to-cost method for recognizing revenue and profits. We expect the net impact of these reclassifications to increase both our current assets and current liabilities by approximately 2%.

In addition, we have completed our preliminary assessment of adopting ASC 606 on our 2017 and 2016 operating results, and have presented selected recast, unaudited financial data in the following table (in millions, except per share data). The impact of adopting ASC 606 on our 2017 and 2016 operating results may not be indicative of the adoption impacts in future periods or of our operating performance.

	Years Ended December 31,	
	2017	**2016**
	(unaudited)	
Net sales	**$ 49,976**	$ 47,320
Operating profit [(a)]	**$ 6,759**	$ 5,910
Earnings per common share		
Basic		
Continuing operations	**$ 6.63**	$ 12.28
Discontinued operations	**0.26**	5.05
Basic earnings per common share	**$ 6.89**	$ 17.33
Diluted		
Continuing operations	**$ 6.57**	$ 12.13
Discontinued operations	**0.25**	4.99
Diluted earnings per common share	**$ 6.82**	$ 17.12

(a) Operating profit includes an increase of $846 million in 2017 and $471 million in 2016 for the expected impact of adopting ASU No. 2017-07, *Compensation-Retirement Benefits (Topic 715)* on January 1, 2018 as discussed below.

Total net cash provided by operating activities and net cash used by investing and financing activities on our consolidated statements of cash flows were not impacted by the adoption of ASC 606.

Compensation-Retirement Benefits

In March 2017, the FASB issued ASU No. 2017-07, *Compensation-Retirement Benefits (Topic 715)*, which changes the income statement presentation of certain components of net periodic benefit cost related to defined benefit pension and other postretirement benefit plans. Currently, we record all components of net periodic benefit costs in operating profit as part of cost of sales. Under ASU No. 2017-07, we will be required to record only the service cost component of net periodic benefit cost in operating profit and the non-service cost components of net periodic benefit cost (i.e., interest cost, expected return on plan assets, amortization of prior service cost or credits, and net actuarial gains or losses) as part of non-operating income. We adopted the requirements of ASU No. 2017-07 on January 1, 2018 using the retrospective transition method. We expect the adoption of ASU No. 2017-07 to result in an increase to consolidated operating profit of $471 million and $846 million for 2016 and 2017, respectively, and a corresponding decrease in non-operating income for each year. We do not expect any impact to our business segment operating profit, our consolidated net earnings, or cash flows as a result of adopting ASU No. 2017-07.

Intangibles-Goodwill and Other

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles-Goodwill and Other (Topic 350)*, which eliminates the requirement to compare the implied fair value of reporting unit goodwill with the carrying amount of that goodwill (commonly referred to as Step 2) from the goodwill impairment test. The new standard does not change how a goodwill impairment is identified. We will continue to perform our quantitative and qualitative goodwill impairment test by comparing the fair value of each reporting unit to its carrying amount, but if we are required to recognize a goodwill impairment charge, under the new standard the amount of the charge will be calculated by subtracting the reporting unit's fair value from its carrying amount. Under the prior standard, if we were required to recognize a goodwill impairment charge, Step 2 required us to calculate the implied value of goodwill by assigning the fair value of a reporting unit to all of its assets and liabilities as if that reporting unit had been acquired in a business combination and the amount of the charge was calculated by subtracting the reporting unit's implied fair value of goodwill from its actual goodwill balance. The new standard is effective for interim and annual reporting periods beginning after December 15, 2019, with early adoption permitted, and should be applied prospectively from the date of adoption. We elected to adopt the new standard for future goodwill impairment tests at the beginning of the third quarter of 2017, because it significantly simplifies the evaluation of goodwill for impairment. The impact of the new standard will depend on the outcomes of future goodwill impairment tests.

Derivatives and Hedging

In August 2017, the FASB issued ASU No. 2017-12, *Derivatives and Hedging (Topic 815)*, which eliminates the requirement to separately measure and report hedge ineffectiveness. The guidance is effective for fiscal years beginning after December 15, 2018, with early adoption permitted. We do not expect a significant impact to our consolidated assets and liabilities, net earnings, or cash flows as a result of adopting this new standard. We plan to adopt the new standard January 1, 2019.

Leases

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which requires the recognition of lease assets and lease liabilities on the balance sheet and disclosure of key information about leasing arrangements for both lessees and lessors. The new standard is effective January 1, 2019 for public companies, with early adoption permitted. The new standard currently requires the application of a modified retrospective approach to the beginning of the earliest period presented in the financial statements. We are continuing to evaluate the expected impact to our consolidated financial statements and related disclosures. We plan to adopt the new standard effective January 1, 2019.

Note 2 – Earnings Per Share

The weighted average number of shares outstanding used to compute earnings per common share were as follows (in millions):

	2017	2016	2015
Weighted average common shares outstanding for basic computations	**287.8**	299.3	310.3
Weighted average dilutive effect of equity awards	**2.8**	3.8	4.4
Weighted average common shares outstanding for diluted computations	**290.6**	303.1	314.7

We compute basic and diluted earnings per common share by dividing net earnings by the respective weighted average number of common shares outstanding for the periods presented. Our calculation of diluted earnings per common share also includes the dilutive effects for the assumed vesting of outstanding restricted stock units (RSUs), performance stock units (PSUs) and exercise of outstanding stock options based on the treasury stock method. There were no significant anti-dilutive equity awards for the years ended December 31, 2017, 2016 and 2015.

Note 3 – Acquisitions and Divestitures

Acquisition of Sikorsky Aircraft Corporation

On November 6, 2015, we completed the acquisition of Sikorsky from United Technologies Corporation (UTC) and certain of UTC's subsidiaries. The purchase price of the acquisition was $9.0 billion, net of cash acquired. As a result of the acquisition, Sikorsky became a wholly-owned subsidiary of ours. Sikorsky is a global company primarily engaged in the research, design, development, manufacture and support of military and commercial helicopters. Sikorsky's products include military helicopters such as the Black Hawk, Seahawk, CH-53K, H-92; and commercial helicopters such as the S-76 and S-92. The acquisition enables us to extend our core business into the military and commercial rotary wing markets, allowing us to strengthen our position in the aerospace and defense industry. Further, this acquisition will expand our presence in commercial and international markets. Sikorsky has been aligned under our RMS business segment.

To fund the $9.0 billion acquisition price, we utilized $6.0 billion of proceeds borrowed under a temporary 364-day revolving credit facility (the 364-day Facility), $2.0 billion of cash on hand and $1.0 billion from the issuance of commercial paper. In the fourth quarter of 2015, we repaid all outstanding borrowings under the 364-day Facility with the proceeds from the issuance of $7.0 billion of fixed interest-rate long-term notes in a public offering (the November 2015 Notes). In the fourth quarter of 2015, we also repaid the $1.0 billion in commercial paper borrowings.

Allocation of Purchase Price to Assets Acquired and Liabilities Assumed

We accounted for the acquisition of Sikorsky as a business combination, which requires us to record the assets acquired and liabilities assumed at fair value. The amount by which the purchase price exceeds the fair value of the net assets acquired is recorded as goodwill.

The following table summarizes the fair values of the assets acquired and liabilities assumed at the acquisition date, including the refinements described in the previous paragraph (in millions):

Cash and cash equivalents	$ 75
Receivables, net	1,924
Inventories, net	1,632
Other current assets	46
Property, plant and equipment	649
Goodwill	2,842
Intangible assets:	
Customer programs	3,184
Trademarks	887
Other noncurrent assets	572
Deferred income taxes, noncurrent	256
Total identifiable assets and goodwill	12,067
Accounts payable	(565)
Customer advances and amounts in excess of costs incurred	(1,197)
Salaries, benefits, and payroll taxes	(105)
Other current liabilities	(430)
Customer contractual obligations [(a)]	(507)
Other noncurrent liabilities	(185)
Total liabilities assumed	(2,989)
Total consideration	$ 9,078

(a) Recorded in other noncurrent liabilities on our consolidated balance sheets.

Intangible assets related to customer programs were recognized for each major helicopter and aftermarket program and represent the aggregate value associated with the customer relationships, contracts, technology and tradenames underlying the associated program. These intangible assets will be amortized on a straight-line basis over a weighted-average useful life of approximately 15 years. The useful life is based on a period of expected cash flows used to measure the fair value of each of the intangible assets.

Customer contractual obligations represent liabilities on certain development programs where the expected costs exceed the expected sales under contract. We measured these liabilities based on the price to transfer the obligation to a market participant at the measurement date, assuming that the liability will remain outstanding in the marketplace. Based on the estimated net cash outflows of the developmental programs plus a reasonable contracting profit margin required to transfer the contracts to market participants, we recorded assumed liabilities of $507 million. These liabilities will be liquidated in accordance with the underlying economic pattern of the contractual obligations, as reflected by the estimated future net cash outflows incurred on the associated contracts. As of December 31, 2017, we recognized approximately $225 million in sales related to customer contractual obligations. As of December 31, 2017, the estimated liquidation of the customer contractual obligation is approximated as follows: $100 million in 2018, $55 million in 2019, $55 million in 2020, $55 million in 2021, $5 million in 2022 and $12 million thereafter.

The fair values of the assets acquired and liabilities assumed were determined using income, market and cost valuation methodologies. The fair value measurements were estimated using significant inputs that are not observable in the market and thus represent a Level 3 measurement as defined in Accounting Standards Codification (ASC) 820, *Fair Value Measurement*. The income approach was primarily used to value the customer programs and trademarks intangible assets. The income approach indicates value for an asset or liability based on the present value of cash flow projected to be generated over the remaining economic life of the asset or liability being measured. Both the amount and the duration of the cash flows are considered from a market participant perspective. Our estimates of market participant net cash flows considered historical and projected pricing, remaining developmental effort, operational performance including company-specific synergies, aftermarket retention, product life cycles, material and labor pricing, and other relevant customer, contractual and market factors. Where appropriate, the net cash flows are adjusted to reflect the uncertainties associated with the underlying assumptions, as well as the risk profile of the net cash flows utilized in the valuation. The adjusted future cash flows are then discounted to present value using an appropriate discount rate. Projected cash flow is discounted at a required rate of return that reflects the relative risk of achieving the cash flows and the time value of money. The market approach is a valuation technique that uses prices and other relevant information generated by market transactions involving identical or comparable assets, liabilities, or a group of assets and liabilities. Valuation techniques consistent with the market approach often use market multiples derived from a set of comparables. The cost approach, which estimates value by determining the current cost of replacing an asset with another of equivalent economic utility, was used, as appropriate, for property, plant and equipment. The cost to replace a given asset reflects the estimated reproduction or replacement cost, less an allowance for loss in value due to depreciation.

The purchase price allocation resulted in the recognition of $2.8 billion of goodwill, all of which is expected to be amortizable for tax purposes. Substantially all of the goodwill was assigned to our RMS business. The goodwill recognized is attributable to expected revenue synergies generated by the integration of our products and technologies with those of Sikorsky, costs synergies resulting from the consolidation or elimination of certain functions, and intangible assets that do not qualify for separate recognition, such as the assembled workforce of Sikorsky.

Determining the fair value of assets acquired and liabilities assumed requires the exercise of significant judgments, including the amount and timing of expected future cash flows, long-term growth rates and discount rates. The cash flows employed in the DCF analyses are based on our best estimate of future sales, earnings and cash flows after considering factors such as general market conditions, customer budgets, existing firm orders, expected future orders, contracts with suppliers, labor agreements, changes in working capital, long term business plans and recent operating performance. Use of different estimates and judgments could yield different results.

Impact to 2015 Financial Results

Sikorsky's 2015 financial results have been included in our consolidated financial results only for the period from the November 6, 2015 acquisition date through December 31, 2015. As a result, our consolidated financial results for the year ended December 31, 2015 do not reflect a full year of Sikorsky's results. From the November 6, 2015 acquisition date through December 31, 2015, Sikorsky generated net sales of approximately $400 million and operating loss of approximately $45 million, inclusive of intangible amortization and adjustments required to account for the acquisition.

We incurred approximately $38 million of non-recoverable transaction costs associated with the Sikorsky acquisition in 2015 that were expensed as incurred. These costs are included in other income, net on our consolidated statements of earnings. We also incurred approximately $48 million in costs associated with issuing the $7.0 billion November 2015 Notes used to repay all outstanding borrowings under the 364-day Facility used to finance the acquisition. The financing costs were recorded as a reduction of debt and will be amortized to interest expense over the term of the related debt.

Supplemental Pro Forma Financial Information (unaudited)

The following table presents summarized unaudited pro forma financial information as if Sikorsky had been included in our financial results for the entire year in 2015 (in millions):

Net sales	$ 45,366
Net earnings	3,534
Basic earnings per common share	11.39
Diluted earnings per common share	11.23

The unaudited supplemental pro forma financial data above has been calculated after applying our accounting policies and adjusting the historical results of Sikorsky with pro forma adjustments, net of tax, that assume the acquisition occurred on January 1, 2015. Significant pro forma adjustments include the recognition of additional amortization expense related to acquired intangible assets and additional interest expense related to the short-term debt used to finance the acquisition. These adjustments assume the application of fair value adjustments to intangibles and the debt issuance occurred on January 1, 2015 and are approximated as follows: amortization expense of $125 million and interest expense of $40 million. In addition, significant nonrecurring adjustments include the elimination of a $72 million pension curtailment loss, net of tax, recognized in 2015 and the elimination of a $58 million income tax charge related to historic earnings of foreign subsidiaries recognized by Sikorsky in 2015.

The unaudited supplemental pro forma financial information also reflects an increase in interest expense, net of tax, of approximately $110 million in 2015. The increase in interest expense is the result of assuming the November 2015 Notes were issued on January 1, 2015. Proceeds of the November 2015 Notes were used to repay all outstanding borrowings under the 364-day Facility used to finance a portion of the purchase price of Sikorsky, as contemplated at the date of acquisition.

The unaudited supplemental pro forma financial information does not reflect the realization of any expected ongoing cost or revenue synergies relating to the integration of the two companies. Further, the pro forma data should not be considered indicative of the results that would have occurred if the acquisition, related financing and associated notes issuance and repayment of the 364-day Facility had been consummated on January 1, 2015, nor are they indicative of future results.

Consolidation of AWE Management Limited

On August 24, 2016, we increased our ownership interest in the AWE joint venture, which operates the United Kingdom's nuclear deterrent program, from 33% to 51%. At which time, we began consolidating AWE. Consequently, our operating results include 100% of AWE's sales and 51% of its operating profit. Prior to increasing our ownership interest, we accounted for our investment in AWE using the equity method of accounting. Under the equity method, we recognized only 33% of AWE's earnings or losses and no sales. Accordingly, prior to August 24, 2016, the date we obtained control, we recorded 33% of AWE's net earnings in our operating results and subsequent to August 24, 2016, we recognized 100% of AWE's sales and 51% of its operating profit.

We accounted for this transaction as a "step acquisition" (as defined by U.S. GAAP), which requires us to consolidate and record the assets and liabilities of AWE at fair value. Accordingly, we recorded intangible assets of $243 million related to customer relationships, $32 million of net liabilities, and noncontrolling interests of $107 million. The intangible assets are being amortized over a period of eight years in accordance with the underlying pattern of economic benefit reflected by the future net cash flows. In 2016, we recognized a non-cash net gain of $104 million associated with obtaining a controlling interest in AWE, which consisted of a $127 million pretax gain recognized in the operating results of our Space business segment and $23 million of tax-related items at our corporate office. The gain represents the fair value of our 51% interest in AWE, less the carrying value of our previously held investment in AWE and deferred taxes. The gain was recorded in other income, net on our consolidated statements of earnings. The fair value of AWE (including the intangible assets), our controlling interest, and the noncontrolling interests were determined using the income approach.

Divestiture of the Information Systems & Global Solutions Business

On August 16, 2016, we divested our former IS&GS business, which merged with Leidos, in a Reverse Morris Trust transaction (the "Transaction"). The Transaction was completed in a multi-step process pursuant to which we initially contributed the IS&GS business to Abacus Innovations Corporation (Abacus), a wholly owned subsidiary of Lockheed Martin created to facilitate the Transaction, and the common stock of Abacus was distributed to participating Lockheed Martin stockholders through an exchange offer. Under the terms of the exchange offer, Lockheed Martin stockholders had the option to exchange shares of Lockheed Martin common stock for shares of Abacus common stock. At the conclusion of the exchange offer, all shares of Abacus common stock were exchanged for 9,369,694 shares of Lockheed Martin common stock held by Lockheed Martin stockholders that elected to participate in the exchange. The shares of Lockheed Martin common stock that were exchanged and accepted were retired, reducing the number of shares of our common stock outstanding by approximately 3%. Following the exchange offer, Abacus merged with a subsidiary of Leidos, with Abacus continuing as the surviving corporation and a wholly-owned subsidiary of Leidos. As part of the merger, each share of Abacus common stock was automatically converted into one share of Leidos common stock. We did not receive any shares of Leidos common stock as part of the Transaction and do not hold any shares of Leidos or Abacus common stock following the Transaction. Based on an opinion of outside tax counsel, subject to customary qualifications and based on factual representations, the exchange offer and merger will qualify as tax-free transactions to Lockheed Martin and its stockholders, except to the extent that cash was paid to Lockheed Martin stockholders in lieu of fractional shares.

In connection with the Transaction, Abacus borrowed an aggregate principal amount of approximately $1.84 billion under term loan facilities with third party financial institutions, the proceeds of which were used to make a one-time special cash payment of $1.80 billion to Lockheed Martin and to pay associated borrowing fees and expenses. The entire special cash payment was used to repay debt, pay dividends and repurchase stock during the third and fourth quarters of 2016. The obligations under the Abacus term loan facilities were guaranteed by Leidos as part of the Transaction.

As a result of the Transaction, we recognized a net gain of approximately $1.3 billion, including $1.2 billion recognized in 2016. The net gain represents the $2.5 billion fair value of the shares of Lockheed Martin common stock exchanged and retired as part of the exchange offer, plus the $1.8 billion one-time special cash payment, less the net book value of the IS&GS business of about $3.0 billion at August 16, 2016 and other adjustments of about $100 million. During the fourth quarter of 2017, we recognized an additional gain of $73 million, which reflects certain post-closing adjustments, including certain tax adjustments and the final determination of net working capital.

We classified the operating results of our former IS&GS business as discontinued operations in our consolidated financial statements in accordance with U.S. GAAP, as the divestiture of this business represented a strategic shift that had a major effect on our operations and financial results. However, the cash flows generated by the IS&GS business have not been reclassified in our consolidated statements of cash flows as we retained this cash as part of the Transaction.

The operating results of the IS&GS business that have been reflected within net earnings from discontinued operations for the years ended December 31, 2016 and 2015 are as follows (in millions):

	2016 [(a)]	2015
Net sales	$ 3,410	$ 5,596
Cost of sales	(2,953)	(4,868)
Severance charges	(19)	(20)
Gross profit	438	708
Other income, net	16	16
Operating profit	454	724
Earnings from discontinued operations before income taxes	454	724
Income tax expense	(147)	(245)
Net gain on divestiture of discontinued operations	1,242	—
Net earnings from discontinued operations	$ 1,549	$ 479

(a) Operating results for the year ended December 31, 2016 reflect operating results prior to the August 16, 2016 divestiture date.

The operating results of the IS&GS business reported as discontinued operations are different than the results previously reported for the IS&GS business segment. Results reported within net earnings from discontinued operations only include costs that were directly attributable to the IS&GS business and exclude certain corporate overhead costs that were previously allocated to the IS&GS business. As a result, we reclassified $82 million in 2016 and $165 million in 2015 of corporate overhead costs from the IS&GS business to other unallocated, net on our consolidated statements of earnings.

Additionally, we retained all assets and obligations related to the pension benefits earned by former IS&GS business salaried employees through the date of divestiture. Therefore, the non-service portion of net pension costs (e.g., interest cost, actuarial gains and losses and expected return on plan assets) for these plans have been reclassified from the operating results of the IS&GS business segment and reported as a reduction to the FAS/CAS pension adjustment. These net pension costs were $54 million and $71 million for the years ended December 31, 2016 and 2015. The service portion of net pension costs related to IS&GS business's salaried employees that transferred to Leidos were included in the operating results of the IS&GS business classified as discontinued operations because such costs are no longer incurred by us.

Significant severance charges related to the IS&GS business were historically recorded at the Lockheed Martin corporate office. These charges have been reclassified into the operating results of the IS&GS business, classified as discontinued operations, and excluded from the operating results of our continuing operations. The amount of severance charges reclassified were $19 million in 2016 and $20 million in 2015.

In connection with the Transaction, Lockheed Martin retained certain liabilities, including liabilities associated with the New York Metropolitan Transportation Authority and its Capital Construction Company (collectively, the MTA) litigation discussed in “Note 14 - Legal Proceedings, Commitments and Contingencies,” and has indemnified Abacus and Leidos in connection with other liabilities associated with the IS&GS business, including certain liabilities associated with ongoing investigations by the Department of Energy and the Department of Justice (DOJ) relating to the IS&GS business’s involvement in the Mission Support Alliance, LLC (MSA) joint venture that manages and operates the Hanford Nuclear site for the Department of Energy. The DOJ has issued a number of Civil Investigative Demands to MSA, Lockheed Martin and the subsidiary of Lockheed Martin that performed information technology services for MSA, as well as current and former employees of each of these entities, and is continuing its False Claims Act investigation into matters involving MSA and the IS&GS business. The DOJ also is conducting a parallel criminal investigation. The investigations relate primarily to certain information technology services performed by a subsidiary of Lockheed Martin under a fixed price/fixed unit rate subcontract to MSA. In the event that the DOJ were to pursue a claim in connection with the ongoing MSA investigation, through the indemnification provisions agreed to as part of the Transaction, Lockheed Martin and Leidos have allocated liabilities between themselves.

Financial information related to cash flows generated by the IS&GS business, such as depreciation and amortization, capital expenditures, and other non-cash items, included in our consolidated statements of cash flows for the years ended December 31, 2016 and 2015 were not significant.

Other Divestitures

During 2016, we completed the sale of our Lockheed Martin Commercial Flight Training (LMCFT) business, which was classified as held for sale in the fourth quarter of 2015. Other, net in 2015 includes a non-cash asset impairment charge of approximately $90 million. This charge was partially offset by a net deferred tax benefit of about $80 million, which is recorded in income tax expense. The net impact reduced net earnings by about $10 million. LMCFT’s financial results are not material and there was no significant impact on our consolidated financial results as a result of completing the sale of our LMCFT business. Accordingly, LMCFT’s financial results are not classified in discontinued operations.

Note 4 – Goodwill and Acquired Intangibles

Changes in the carrying amount of goodwill by segment were as follows (in millions):

	Aeronautics	MFC	RMS	Space	Total
Balance at December 31, 2015	$ 171	$ 2,198	$ 6,738	$ 1,588	$ 10,695
Purchase accounting adjustments	—	—	78	—	78
Other	—	62	(68)	(3)	(9)
Balance at December 31, 2016	171	2,260	6,748	1,585	10,764
Other	**—**	**5**	**36**	**2**	**43**
Balance at December 31, 2017	**$ 171**	**$ 2,265**	**$ 6,784**	**$ 1,587**	**$ 10,807**

The gross carrying amounts and accumulated amortization of our acquired intangible assets consisted of the following (in millions):

	2017			2016		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Finite-Lived:						
Customer programs	**$ 3,184**	**$ (503)**	**$ 2,681**	$ 3,184	$ (273)	$ 2,911
Customer relationships	**352**	**(140)**	**212**	359	(92)	267
Other	**71**	**(54)**	**17**	111	(83)	28
Total finite-lived intangibles	**3,607**	**(697)**	**2,910**	3,654	(448)	3,206
Indefinite-Lived:						
Trademarks	**887**	**—**	**887**	887	—	887
Total acquired intangibles	**$ 4,494**	**$ (697)**	**$ 3,797**	$ 4,541	$ (448)	$ 4,093

Acquired finite-lived intangible assets are amortized to expense primarily on a straight-line basis over the following estimated useful lives: customer programs, from nine to 20 years; customer relationships, from four to 10 years; and other intangibles, from three to 10 years.

Amortization expense for acquired finite-lived intangible assets was $312 million, $284 million and $68 million in 2017, 2016 and 2015. Estimated future amortization expense is as follows: $296 million in 2018; $285 million in 2019; $263 million in 2020; $256 million in 2021; $253 million in 2022 and $1.6 billion thereafter.

Note 5 – Information on Business Segments

We operate in four business segments: Aeronautics, MFC, RMS and Space. We organize our business segments based on the nature of the products and services offered. Following is a brief description of the activities of our business segments:

- **Aeronautics** – Engaged in the research, design, development, manufacture, integration, sustainment, support and upgrade of advanced military aircraft, including combat and air mobility aircraft, unmanned air vehicles and related technologies.

- **Missiles and Fire Control** – Provides air and missile defense systems; tactical missiles and air-to-ground precision strike weapon systems; logistics; fire control systems; mission operations support, readiness, engineering support and integration services; manned and unmanned ground vehicles; and energy management solutions.

- **Rotary and Mission Systems** – Provides design, manufacture, service and support for a variety of military and civil helicopters; ship and submarine mission and combat systems; mission systems and sensors for rotary and fixed-wing aircraft; sea and land-based missile defense systems; radar systems; the Littoral Combat Ship; simulation and training services; and unmanned systems and technologies. In addition, RMS supports the needs of customers in cybersecurity and delivers communications and command and control capability through complex mission solutions for defense applications. The 2015 results of the acquired Sikorsky business have been included in our consolidated results of operations from the November 6, 2015 acquisition date through December 31, 2015. Accordingly, the consolidated results of operations for the year ended December 31, 2015 do not reflect a full year of Sikorsky operations.

- **Space** – Engaged in the research and development, design, engineering and production of satellites, strategic and defensive missile systems and space transportation systems. Space provides network-enabled situational awareness and integrates complex space and ground-based global systems to help our customers gather, analyze and securely distribute critical intelligence data. Space is also responsible for various classified systems and services in support of vital national security systems. Prior to August 24, 2016, the date we obtained control of AWE we accounted for the venture using the equity method of accounting with 33% of AWE's earnings or losses recognized by Space. Subsequent to August 24, 2016, we obtained control of AWE and 100% of AWE's sales and 51% of AWE's earnings have been included in our consolidated results of operations. Accordingly, the consolidated results of operations for the year ended December 31, 2016 do not reflect a full year of AWE operations. Operating profit for our Space business segment also includes our share of earnings for our investment in ULA, which provides expendable launch services to the U.S. Government.

The financial information in the following tables includes the results of businesses we have acquired from their respective dates of acquisition and excludes businesses included in discontinued operations (see "Note 3 – Acquisitions and Divestitures") for all years presented. Net sales of our business segments exclude intersegment sales as these activities are eliminated in consolidation.

Operating profit of our business segments includes our share of earnings or losses from equity method investees as the operating activities of the equity method investees are closely aligned with the operations of our business segments. ULA, results of which are included in our Space business segment, is our primary equity method investee. Operating profit of our business segments excludes the FAS/CAS pension adjustment described below; expense for stock-based compensation; the effects of items not considered part of management's evaluation of segment operating performance, such as charges related to significant severance actions (see "Note 15 – Restructuring Charges") and goodwill impairments; gains or losses from significant divestitures; the effects of certain legal settlements; corporate costs not allocated to our business segments; and other miscellaneous corporate activities. These items are included in the reconciling item "Unallocated items" between operating profit from our business segments and our consolidated operating profit. See "Note 1 – Significant Accounting Policies" (under the caption "Use of Estimates") for a discussion related to certain factors that may impact the comparability of net sales and operating profit of our business segments.

Our business segments' results of operations include pension expense only as calculated under U.S. Government Cost Accounting Standards (CAS), which we refer to as CAS pension cost. We recover CAS pension cost through the pricing of our products and services on U.S. Government contracts and, therefore, the CAS pension cost is recognized in each of our business segments' net sales and cost of sales. Since our consolidated financial statements must present pension expense calculated in accordance with the financial accounting standards (FAS) requirements under GAAP, which we refer to as FAS pension expense, the FAS/CAS pension adjustment increases or decreases the CAS pension cost recorded in our business segments' results of operations to equal the FAS pension expense.

Selected Financial Data by Business Segment

Summary operating results for each of our business segments were as follows (in millions):

	2017	2016	2015
Net sales			
Aeronautics	**$ 20,148**	$ 17,769	$ 15,570
Missiles and Fire Control	**7,212**	6,608	6,770
Rotary and Mission Systems	**14,215**	13,462	9,091
Space	**9,473**	9,409	9,105
Total net sales	**$ 51,048**	$ 47,248	$ 40,536
Operating profit			
Aeronautics	**$ 2,164**	$ 1,887	$ 1,681
Missiles and Fire Control	**1,053**	1,018	1,282
Rotary and Mission Systems	**905**	906	844
Space [(a)]	**993**	1,289	1,171
Total business segment operating profit	**5,115**	5,100	4,978
Unallocated items			
FAS/CAS pension adjustment			
FAS pension expense [(b)(c)]	**(1,372)**	(1,019)	(1,127)
Less: CAS pension cost [(b)(c)]	**2,248**	1,921	1,527
FAS/CAS pension adjustment	**876**	902	400
Severance charges [(b)(d)]	**—**	(80)	(82)
Stock-based compensation	**(158)**	(149)	(133)
Other, net [(e)(f)]	**88**	(224)	(451)
Total unallocated, net	**806**	449	(266)
Total consolidated operating profit	**$ 5,921**	$ 5,549	$ 4,712

(a) On August 24, 2016, our ownership interest in the AWE joint venture increased from 33% to 51% and we were required to change our accounting for this investment from the equity method to consolidation. As a result of the increased ownership interest, we recognized a non-cash gain of $127 million at our Space business segment, which increased net earnings from continuing operations by $104 million ($0.34 per share) in 2016. See "Note 3 – Acquisitions and Divestitures" for more information.

(b) FAS pension expense, CAS pension costs and severance charges reflect the reclassification for discontinued operations presentation of benefits related to former IS&GS salaried employees (see "Note 11 – Postretirement Benefit Plans").

(c) The higher FAS expense in 2017 is primarily due to a lower discount rate and lower expected long-term rate of return on plan assets in 2017 versus 2016. The higher CAS pension cost primarily reflects the impact of phasing in CAS Harmonization (see "Note 11 – Postretirement Benefit Plans").

(d) See "Note 15 – Restructuring Charges" for information on charges related to certain severance actions at our business segments. Severance charges for initiatives that are not significant are included in business segment operating profit.

(e) Other, net in 2017 includes a previously deferred non-cash gain of $198 million related to properties sold in 2015 as a result of completing our remaining obligations (see "Note 8 – Property, Plant and Equipment, net") and a $64 million charge, which represents our portion of a non-cash asset impairment charge recorded by our equity method investee, AMMROC (see "Note 1 – Significant Accounting Policies").

(f) Other, net in 2015 includes a non-cash asset impairment charge of approximately $90 million related to our decision in 2015 to divest our LMCFT business (see "Note 3 – Acquisitions and Divestitures"). This charge was partially offset by a net deferred tax benefit of about $80 million, which is recorded in income tax expense. The net impact reduced net earnings by about $10 million. Additionally other, net in 2015 includes approximately $38 million of non-recoverable transaction costs associated with the acquisition of Sikorsky.

Selected Financial Data by Business Segment (continued)

	2017	2016	2015
Intersegment sales			
Aeronautics	**$ 122**	$ 137	$ 102
Missiles and Fire Control	**366**	305	315
Rotary and Mission Systems	**2,009**	1,816	1,533
Space	**111**	110	146
Total intersegment sales	**$ 2,608**	$ 2,368	$ 2,096
Depreciation and amortization			
Aeronautics	**$ 311**	$ 299	$ 317
Missiles and Fire Control	**99**	105	99
Rotary and Mission Systems	**468**	476	211
Space	**245**	212	220
Total business segment depreciation and amortization	**1,123**	1,092	847
Corporate activities	**72**	75	98
Total depreciation and amortization [(a)]	**$ 1,195**	$ 1,167	$ 945
Capital expenditures			
Aeronautics	**$ 371**	$ 358	$ 387
Missiles and Fire Control	**156**	167	120
Rotary and Mission Systems	**308**	271	169
Space	**179**	183	172
Total business segment capital expenditures	**1,014**	979	848
Corporate activities	**163**	75	60
Total capital expenditures [(b)]	**$ 1,177**	$ 1,054	$ 908

(a) Total depreciation and amortization in the table above excludes $48 million and $81 million for the years ended December 31, 2016 and 2015 related to the former IS&GS business segment. These amounts are included in depreciation and amortization in our consolidated statements of cash flows as we did not reclassify our cash flows to exclude the IS&GS business segment. See “Note 3 – Acquisitions and Divestitures” for more information.

(b) Total capital expenditures in the table above excludes $9 million and $31 million for the years ended December 31, 2016 and 2015 related to the former IS&GS business segment. These amounts are included in capital expenditures in our consolidated statements of cash flows as we did not reclassify our cash flows to exclude the IS&GS business segment. See “Note 3 – Acquisitions and Divestitures” for more information.

Selected Financial Data by Business Segment (continued)

Net Sales by Customer Category

Net sales by customer category were as follows (in millions):

	2017	2016	2015
U.S. Government			
Aeronautics	**$ 12,753**	$ 11,714	$ 11,195
Missiles and Fire Control	**4,640**	4,026	4,150
Rotary and Mission Systems	**9,834**	9,187	6,961
Space	**8,097**	8,543	8,845
Total U.S. Government net sales	**$ 35,324**	$ 33,470	$ 31,151
International [a]			
Aeronautics	**$ 7,307**	$ 5,973	$ 4,328
Missiles and Fire Control	**2,423**	2,444	2,449
Rotary and Mission Systems	**4,006**	3,798	2,016
Space	**1,305**	488	218
Total international net sales	**$ 15,041**	$ 12,703	$ 9,011
U.S. Commercial and Other			
Aeronautics	**$ 88**	$ 82	$ 47
Missiles and Fire Control	**149**	138	171
Rotary and Mission Systems	**375**	477	114
Space	**71**	378	42
Total U.S. commercial and other net sales	**$ 683**	$ 1,075	$ 374
Total net sales	**$ 51,048**	$ 47,248	$ 40,536

(a) International sales include foreign military sales contracted through the U.S. Government, direct commercial sales with international governments and commercial and other sales to international customers.

Our Aeronautics business segment includes our largest program, the F-35 Lightning II Joint Strike Fighter, an international multi-role, multi-variant, stealth fighter aircraft. Net sales for the F-35 program represented approximately 25% of our total consolidated net sales during 2017, and 23% during both 2016 and 2015.

Total assets and customer advances and amounts in excess of costs incurred for each of our business segments were as follows (in millions):

	2017	2016
Assets [a]		
Aeronautics	**$ 7,903**	$ 7,896
Missiles and Fire Control	**4,395**	4,000
Rotary and Mission Systems	**18,235**	18,367
Space	**5,236**	5,250
Total business segment assets	**35,769**	35,513
Corporate assets [b]	**10,752**	12,293
Total assets	**$ 46,521**	$ 47,806
Customer advances and amounts in excess of costs incurred		
Aeronautics	**$ 2,752**	$ 2,133
Missiles and Fire Control	**1,268**	1,517
Rotary and Mission Systems	**2,288**	2,590
Space	**444**	536
Total customer advances and amounts in excess of costs incurred	**$ 6,752**	$ 6,776

(a) We have no long-lived assets with material carrying values located in foreign countries.

(b) Corporate assets primarily include cash and cash equivalents, deferred income taxes, environmental receivables and investments held in a separate trust.

Note 6 – Receivables, net

Receivables, net consisted of the following (in millions):

	2017	2016
U.S. Government		
Amounts billed	$ 1,433	$ 792
Unbilled costs and accrued profits	6,337	6,877
Less: customer advances and progress payments	(1,042)	(1,346)
Total U.S. Government receivables, net	6,728	6,323
Other governments and commercial		
Amounts billed	687	546
Unbilled costs and accrued profits	1,651	1,847
Less: customer advances	(463)	(514)
Total other governments and commercial receivables, net	1,875	1,879
Total receivables, net	$ 8,603	$ 8,202

We expect to bill our customers for the majority of the December 31, 2017 unbilled costs and accrued profits during 2018.

Note 7 – Inventories, net

Inventories, net consisted of the following (in millions):

	2017	2016
Work-in-process, primarily related to long-term contracts and programs in progress	$ 6,510	$ 7,864
Spare parts, used aircraft and general stock materials	811	833
Other inventories	1,134	719
Total inventories	8,455	9,416
Less: customer advances and progress payments	(3,968)	(4,746)
Total inventories, net	$ 4,487	$ 4,670

Work-in-process inventories at December 31, 2017 and 2016 included general and administrative costs of $509 million and $529 million. General and administrative costs incurred and recorded in inventories totaled $3.5 billion in 2017, $3.3 billion in 2016 and $2.7 billion in 2015. General and administrative costs charged to cost of sales from inventories totaled $3.5 billion in 2017, $3.3 billion in 2016 and $2.8 billion in 2015.

Note 8 – Property, Plant and Equipment, net

Property, plant and equipment, net consisted of the following (in millions):

	2017	2016
Land	$ 131	$ 127
Buildings	6,401	6,385
Machinery and equipment	7,624	7,389
Construction in progress	1,205	976
Total property, plant and equipment	15,361	14,877
Less: accumulated depreciation and amortization	(9,586)	(9,328)
Total property, plant and equipment, net	$ 5,775	$ 5,549

Land Sales

During the fourth quarter of 2017, we recognized a previously deferred non-cash gain in other income, net in our consolidated statement of earnings of $198 million ($122 million or $0.42 per share, after tax) related to properties sold in 2015 as a result of completing our remaining obligations.

Note 9 – Income Taxes

On December 22, 2017, the President signed the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act, among other things, lowered the U.S. corporate income tax rate from 35% to 21% effective January 1, 2018. Consequently, we wrote down our net deferred tax assets as of December 31, 2017 by $1.9 billion to reflect the estimated impact of the Tax Act. We recorded a corresponding net one-time charge of $1.9 billion ($6.69 per share), substantially all of which was non-cash, primarily related to enactment of the Tax Act, the re-measurement of certain net deferred tax assets using the lower U.S. corporate income tax rate, a deemed repatriation tax, and a reduction in the U.S. manufacturing benefit as a result of our decision to accelerate contributions to our pension fund in 2018 in order to receive a tax deduction in 2017.

While we have substantially completed our provisional analysis of the income tax effects of the Tax Act and recorded a reasonable estimate of such effects, the net one-time charge related to the Tax Act may differ, possibly materially, due to, among other things, further refinement of our calculations, changes in interpretations and assumptions that we have made, additional guidance that may be issued by the U.S. Government, and actions and related accounting policy decisions we may take as a result of the Tax Act. We will complete our analysis over a one-year measurement period ending December 22, 2018, and any adjustments during this measurement period will be included in net earnings from continuing operations as an adjustment to income tax expense in the reporting period when such adjustments are determined.

Our provision for federal and foreign income tax expense for continuing operations consisted of the following (in millions):

	2017	2016	2015
Federal income tax expense (benefit):			
Current			
Operations	**$ (189)**	$ 1,327	$ 1,573
One-time charge due to tax legislation [a]	**43**	—	—
Deferred			
Operations	**1,613**	(231)	(473)
One-time charge due to tax legislation [a]	**1,819**	—	—
Total federal income tax expense	**3,286**	1,096	1,100
Foreign income tax expense (benefit):			
Current	**53**	56	39
Deferred	**1**	(19)	34
Total foreign income tax expense	**54**	37	73
Total income tax expense	**$ 3,340**	$ 1,133	$ 1,173

[a] Represents one-time charge due primarily to the re-measurement of certain net deferred tax assets using the lower U.S. corporate income tax rate and a deemed repatriation tax.

State income taxes are included in our operations as general and administrative costs and, under U.S. Government regulations, are allowable costs in establishing prices for the products and services we sell to the U.S. Government. Therefore, a substantial portion of state income taxes is included in our net sales and cost of sales. As a result, the impact of certain transactions on our operating profit and of other matters presented in these consolidated financial statements is disclosed net of state income taxes. Our total net state income tax expense was $103 million for 2017, $112 million for 2016, and $106 million for 2015.

Our reconciliation of the 35% U.S. federal statutory income tax rate to actual income tax expense for continuing operations is as follows (dollars in millions):

	2017		2016		2015	
	Amount	**Rate**	**Amount**	**Rate**	**Amount**	**Rate**
Income tax expense at the U.S. federal statutory tax rate	**$ 1,844**	**35.0%**	$ 1,710	35.0%	$ 1,505	35.0%
Deferred tax write down and transition tax [(a)]	**1,862**	**35.3**	—	—	—	—
Excess tax benefits for share-based payment awards	**(106)**	**(2.0)**	(152)	(3.1)	—	—
U.S. manufacturing deduction benefit [(b)]	**(7)**	**(0.1)**	(117)	(2.4)	(123)	(2.9)
Research and development tax credit	**(115)**	**(2.2)**	(107)	(2.2)	(70)	(1.6)
Tax deductible dividends	**(94)**	**(1.8)**	(92)	(1.9)	(87)	(2.0)
Other, net	**(44)**	**(0.8)**	(109)	(2.2)	(52)	(1.2)
Income tax expense	**$ 3,340**	**63.4%**	$ 1,133	23.2%	$ 1,173	27.3%

(a) Includes one-time charge due primarily to the re-measurement of certain net deferred tax assets using the lower U.S. corporate income tax rate and a deemed repatriation tax.

(b) Includes a reduction in our 2017 manufacturing benefit as a result of our decision to accelerate contributions to our pension fund in 2018.

In 2016, we adopted the accounting standard update for employee share-based payment awards on a prospective basis. Accordingly, we recognized additional income tax benefits of $106 million and $152 million during the years ended December 31, 2017 and 2016. The 2016 income tax rate also benefited from the nontaxable gain recorded in connection with the consolidation of AWE.

Tax benefits from the U.S. manufacturing deduction were insignificant in 2017, $117 million in 2016, and $123 million in 2015. We recognized tax benefits of $115 million in 2017, $107 million in 2016, and $70 million in 2015 from U.S. research and development (R&D) tax credits, including benefits attributable to prior periods.

We receive a tax deduction for dividends paid on shares of our common stock held by certain of our defined contribution plans with an employee stock ownership plan feature. The amount of the tax deduction has increased as we increased our dividend over the last three years, partially offset by a decline in the number of shares in these plans.

As a result of a decision in 2015 to divest our LMCFT business (see "Note 3 – Acquisitions and Divestitures"), we recorded an asset impairment charge of approximately $90 million. This charge was partially offset by a net deferred tax benefit of about $80 million. The net impact of the resulting tax benefit reduced the effective income tax rate by 1.2 percentage points in 2015.

We participate in the IRS Compliance Assurance Process program. Examinations of the years 2015, 2016, and 2017 remain under IRS review.

The primary components of our federal and foreign deferred income tax assets and liabilities at December 31 were as follows (in millions):

	2017[a]	2016
Deferred tax assets related to:		
Accrued compensation and benefits	**$ 595**	$ 1,012
Pensions [b]	**2,495**	5,197
Other postretirement benefit obligations	**153**	302
Contract accounting methods	**487**	878
Foreign company operating losses and credits	**27**	30
Other	**154**	327
Valuation allowance [c]	**(20)**	(15)
Deferred tax assets, net	**3,891**	7,731
Deferred tax liabilities related to:		
Goodwill and purchased intangibles	**266**	378
Property, plant and equipment	**239**	346
Exchanged debt securities and other	**303**	418
Deferred tax liabilities	**808**	1,142
Net deferred tax assets	**$ 3,083**	$ 6,589

(a) Components of our federal and foreign deferred income tax assets and liabilities at December 31, 2017 after taking into account the estimated impacts of the Tax Act and related items.

(b) The decrease in 2017 was primarily due to the enactment of the Tax Act and our decision to accelerate contributions of cash to our defined benefit pension plans, partially offset by the reduction in the discount rate used to measure our postretirement benefit plans (see "Note 11 – Postretirement Benefit Plans").

(c) A valuation allowance was provided against certain foreign company deferred tax assets arising from carryforwards of unused tax benefits.

As of December 31, 2017 and 2016, our liabilities associated with unrecognized tax benefits are not material.

We and our subsidiaries file income tax returns in the U.S. federal jurisdiction and various foreign jurisdictions. With few exceptions, the statute of limitations is no longer open for U.S. federal or non-U.S. income tax examinations for the years before 2014, other than with respect to refunds.

U.S. income taxes have been provided on deemed repatriated earnings of $435 million related to our non-U.S. companies as of December 31, 2017, as a result of the enactment of the Tax Act. The additional net transition tax of $43 million on the deemed repatriated earnings was recorded for 2017. Before the Tax Act, U.S. income taxes and foreign withholding taxes have not been provided on earnings of $386 million and $310 million that have not been distributed by our non-U.S. companies as of December 31, 2016 and 2015. Our intention before enactment of the Tax Act was to permanently reinvest these earnings, thereby indefinitely postponing their remittance to the U.S. If these earnings had been remitted, we estimate that the additional income taxes after foreign tax credits would have been approximately $64 million in 2016 and $49 million in 2015. In addition, we have reevaluated our intention concerning repatriation of foreign earnings. While our investment in foreign subsidiaries continues to be permanent in duration, in light of our decision to accelerate contributions to our defined benefit pension plans, earnings from certain foreign subsidiaries may be repatriated.

Our federal and foreign income tax payments, net of refunds received, were $1.1 billion in 2017, $1.3 billion in 2016, and $1.8 billion in 2015.

Note 10 – Debt

Our long-term debt consisted of the following (in millions):

	December 31, 2017	December 31, 2016
Notes		
1.85% due 2018	**$ 750**	$ 750
4.25% due 2019	**900**	900
2.50% due 2020	**1,250**	1,250
3.35% due 2021	**900**	900
3.10% due 2023	**500**	500
2.90% due 2025	**750**	750
3.55% due 2026	**2,000**	2,000
3.60% due 2035	**500**	500
4.50% and 6.15% due 2036	**1,054**	1,152
4.85% due 2041	**239**	600
4.07% due 2042	**1,336**	1,336
3.80% due 2045	**1,000**	1,000
4.70% due 2046	**1,326**	2,000
4.09% due 2052	**1,578**	—
Other notes with rates from 5.50% to 8.50%, due 2023 to 2040	**1,415**	1,656
Total debt	**15,498**	15,294
Less: unamortized discounts and issuance costs	**(1,235)**	(1,012)
Total debt, net	**14,263**	14,282
Less: current portion	**(750)**	—
Long-term debt, net	**$ 13,513**	$ 14,282

Revolving Credit Facilities

On October 9, 2015, we entered into a $2.5 billion revolving credit facility (the 5-year Facility) with various banks. The 5-year Facility was amended in October 2017 to extend its expiration date by one year from October 9, 2021 to October 9, 2022. The 5-year Facility is available for general corporate purposes. The undrawn portion of the 5-year Facility is also available to serve as a backup facility for the issuance of commercial paper. We may request and the banks may grant, at their discretion, an increase in the borrowing capacity under the 5-year Facility of up to an additional $500 million. There were no borrowings outstanding under the 5-year Facility as of December 31, 2017 and 2016.

Borrowings under the 5-year Facility are unsecured and bear interest at rates based, at our option, on a Eurodollar Rate or a Base Rate, as defined in the 5-year Facility's agreement. Each bank's obligation to make loans under the 5-year Facility is subject to, among other things, our compliance with various representations, warranties, and covenants, including covenants limiting our ability and certain of our subsidiaries' ability to encumber assets and a covenant not to exceed a maximum leverage ratio, as defined in the 5-year Facility agreement. As of December 31, 2017 and 2016, we were in compliance with all covenants contained in the 5-year Facility agreement, as well as in our debt agreements.

Long-Term Debt

In September 2017, we issued notes totaling approximately $1.6 billion with a fixed interest rate of 4.09% maturing in September 2052 (the New Notes) in exchange for outstanding notes totaling approximately $1.4 billion with fixed interest rates ranging from 4.70% to 8.50% maturing 2029 to 2046 (the Old Notes). In connection with the exchange of principal, we paid a premium of $237 million, substantially all of which was in the form of New Notes. This premium will be amortized as additional interest expense over the term of the New Notes using the effective interest method. We may, at our option, redeem some or all of the New Notes at any time by paying the principal amount of notes being redeemed plus a make-whole premium and accrued and unpaid interest. Interest on the New Notes is payable on March 15 and September 15 of each year, beginning on March 15, 2018. The New Notes are unsecured senior obligations and rank equally in right of payment with all of our existing and future unsecured and unsubordinated indebtedness.

We made interest payments of approximately $610 million, $600 million and $375 million during the years ended December 31, 2017, 2016 and 2015, respectively.

In September 2016, we repaid $500 million of long-term notes with a fixed interest rate of 2.13% according to their scheduled maturities. In May 2016, we repaid $452 million of long-term notes with a fixed interest rate of 7.65% according to their scheduled maturities. We also had related variable interest rate swaps with a notional amount of $450 million mature, which did not have a significant impact on net earnings or comprehensive income.

Commercial Paper

We have agreements in place with financial institutions to provide for the issuance of commercial paper backed by our $2.5 billion 5-year Facility. During 2017 and 2016, we borrowed and fully repaid amounts under our commercial paper programs. There were no commercial paper borrowings outstanding as of December 31, 2017 and 2016. However, we may as conditions warrant issue commercial paper backed by our credit facility to manage the timing of cash flows and to fund a portion of our defined benefit pension contributions of approximately $5.0 billion in 2018.

Note 11 – Postretirement Benefit Plans

Defined Benefit Pension Plans and Retiree Medical and Life Insurance Plans

Many of our employees are covered by qualified defined benefit pension plans and we provide certain health care and life insurance benefits to eligible retirees (collectively, postretirement benefit plans). We also sponsor nonqualified defined benefit pension plans to provide for benefits in excess of qualified plan limits. Non-union employees hired after December 2005 do not participate in our qualified defined benefit pension plans, but are eligible to participate in a qualified defined contribution plan in addition to our other retirement savings plans. They also have the ability to participate in our retiree medical plans, but we do not subsidize the cost of their participation in those plans as we do with employees hired before January 1, 2006. Over the last few years, we have negotiated similar changes with various labor organizations such that new union represented employees do not participate in our defined benefit pension plans. In June 2014, we amended certain of our qualified and nonqualified defined benefit pension plans for non-union employees; comprising the majority of our benefit obligations; to freeze future retirement benefits. The calculation of retirement benefits under the affected defined benefit pension plans is determined by a formula that takes into account the participants' years of credited service and average compensation. The freeze will take effect in two stages. On January 1, 2016, the pay-based component of the formula used to determine retirement benefits was frozen so that future pay increases, annual incentive bonuses or other amounts earned for or related to periods after December 31, 2015 are not used to calculate retirement benefits. On January 1, 2020, the service-based component of the formula used to determine retirement benefits will also be frozen so that participants will no longer earn further credited service for any period after December 31, 2019. When the freeze is complete, the majority of our salaried employees will have transitioned to an enhanced defined contribution retirement savings plan. As part of the November 6, 2015 acquisition of Sikorsky, we established a new defined benefit pension plan for Sikorsky's union workforce that provides benefits for their prospective service with us. The Sikorsky salaried employees participate in a defined contribution plan. We did not assume any legacy pension liability from UTC.

We have made contributions to trusts established to pay future benefits to eligible retirees and dependents, including Voluntary Employees' Beneficiary Association trusts and 401(h) accounts, the assets of which will be used to pay expenses of certain retiree medical plans. We use December 31 as the measurement date. Benefit obligations as of the end of each year reflect assumptions in effect as of those dates. Net periodic benefit cost is based on assumptions in effect at the end of the respective preceding year.

The rules related to accounting for postretirement benefit plans under GAAP require us to recognize on a plan-by-plan basis the funded status of our postretirement benefit plans as either an asset or a liability on our consolidated balance sheets. The funded status is measured as the difference between the fair value of the plan's assets and the benefit obligation of the plan.

The net periodic benefit cost recognized each year included the following (in millions):

	Qualified Defined Benefit Pension Plans [(a)]			Retiree Medical and Life Insurance Plans		
	2017	**2016**	**2015**	**2017**	**2016**	**2015**
Service cost	**$ 820**	$ 827	$ 836	**$ 20**	$ 24	$ 21
Interest cost	**1,809**	1,861	1,791	**102**	119	110
Expected return on plan assets	**(2,408)**	(2,666)	(2,734)	**(128)**	(138)	(147)
Recognized net actuarial losses	**1,506**	1,359	1,599	**19**	34	43
Amortization of net prior service (credit) cost [(b)]	**(355)**	(362)	(365)	**15**	22	4
Total net periodic benefit cost	**$ 1,372**	$ 1,019	$ 1,127	**$ 28**	$ 61	$ 31

(a) Total net periodic benefit cost associated with our qualified defined benefit plans represents pension expense calculated in accordance with GAAP (FAS pension expense). We are required to calculate pension expense in accordance with both GAAP and CAS rules, each of which results in a different calculated amount of pension expense. The CAS pension cost is recovered through the pricing of our products and services on U.S. Government contracts and, therefore, is recognized in net sales and cost of sales for products and services. We include the difference between FAS pension expense and CAS pension cost, referred to as the FAS/CAS pension adjustment, as a component of other unallocated, net on our consolidated statements of earnings. The FAS/CAS pension adjustment, which was $876 million in 2017, $902 million in 2016, and $400 million in 2015, effectively adjusts the amount of CAS pension cost in the business segment operating profit so that pension expense recorded on our consolidated statements of earnings is equal to FAS pension expense. FAS pension expense and CAS pension costs reflect the reclassification for discontinued operations presentation of benefits related to former IS&GS salaried employees.

(b) Net of the reclassification for discontinued operations presentation of pension benefits related to former IS&GS salaried employees ($14 million in 2016 and $24 million in 2015).

The following table provides a reconciliation of benefit obligations, plan assets and unfunded status related to our qualified defined benefit pension plans and our retiree medical and life insurance plans (in millions):

	Qualified Defined Benefit Pension Plans		Retiree Medical and Life Insurance Plans	
	2017	**2016**	**2017**	**2016**
Change in benefit obligation				
Beginning balance	**$ 45,064**	$ 43,702	**$ 2,649**	$ 2,883
Service cost	**820**	827	**20**	24
Interest cost	**1,809**	1,861	**102**	119
Benefits paid	**(2,310)**	(2,172)	**(232)**	(222)
Actuarial losses (gains)	**3,377**	1,402	**23**	(135)
Changes in longevity assumptions [(a)]	**(352)**	(687)	**(24)**	(53)
Plan amendments and acquisitions [(b)]	**278**	110	**—**	(32)
Service cost related to discontinued operations	**—**	21	**—**	—
Medicare Part D subsidy	**—**	—	**—**	4
Participants’ contributions	**—**	—	**64**	61
Ending balance	**$ 48,686**	$ 45,064	**$ 2,602**	$ 2,649
Change in plan assets				
Beginning balance at fair value	**$ 31,417**	$ 32,096	**$ 1,787**	$ 1,813
Actual return on plan assets	**3,942**	1,470	**224**	95
Benefits paid	**(2,310)**	(2,172)	**(232)**	(222)
Company contributions	**46**	23	**40**	36
Medicare Part D subsidy	**—**	—	**—**	4
Participants’ contributions	**—**	—	**64**	61
Ending balance at fair value	**$ 33,095**	$ 31,417	**$ 1,883**	$ 1,787
Unfunded status of the plans	**$ (15,591)**	$ (13,647)	**$ (719)**	$ (862)

(a) As published by the Society of Actuaries.

(b) Includes special termination benefits of $27 million for qualified pension, and $9 million for retiree medical, recognized in 2016 related to former IS&GS salaried employees.

The following table provides amounts recognized on our consolidated balance sheets related to our qualified defined benefit pension plans and our retiree medical and life insurance plans (in millions):

	Qualified Defined Benefit Pension Plans		Retiree Medical and Life Insurance Plans	
	2017	**2016**	**2017**	**2016**
Prepaid pension asset	**$ 112**	$ 208	**$ —**	$ —
Accrued postretirement benefit liabilities	**(15,703)**	(13,855)	**(719)**	(862)
Accumulated other comprehensive loss (pre-tax) related to:				
Net actuarial losses	**20,169**	20,184	**331**	447
Prior service (credit) cost [(a)]	**(2,263)**	(2,896)	**81**	96
Total [(b)]	**$ 17,906**	$ 17,288	**$ 412**	$ 543

(a) During 2016 pre-tax amounts of $210 million for qualified pension prior service credits and $9 million for retiree medical prior service costs were recognized from the divestiture of our IS&GS business (combined $134 million, net of tax).

(b) Accumulated other comprehensive loss related to postretirement benefit plans, after tax, of $12.6 billion and $12.0 billion at December 31, 2017 and 2016 (see "Note 12 – Stockholders' Equity") includes $17.9 billion ($11.8 billion, net of tax) and $17.3 billion ($11.2 billion, net of tax) for qualified defined benefit pension plans, $412 million ($252 million, net of tax) and $543 million ($351 million, net of tax) for retiree medical and life insurance plans and $705 million ($479 million, net of tax) and $677 million ($448 million, net of tax) for other plans.

The accumulated benefit obligation (ABO) for all qualified defined benefit pension plans was $48.5 billion and $44.9 billion at December 31, 2017 and 2016, of which $48.5 billion and $44.8 billion related to plans where the ABO was in excess of plan assets. The ABO represents benefits accrued without assuming future compensation increases to plan participants. Certain key information related to our qualified defined benefit pension plans as of December 31, 2017 and 2016 is as follows (in millions):

	2017	**2016**
Plans where ABO was in excess of plan assets		
Projected benefit obligation	**$ 48,628**	$ 44,946
Less: fair value of plan assets	**32,925**	31,091
Unfunded status of plans [(a)]	**(15,703)**	(13,855)
Plans where ABO was less than plan assets		
Projected benefit obligation	**58**	118
Less: fair value of plan assets	**170**	326
Funded status of plans [(b)]	**$ 112**	$ 208

(a) Represents accrued pension liabilities, which are included on our consolidated balance sheets.

(b) Represents prepaid pension assets, which are included on our consolidated balance sheets in other noncurrent assets.

We also sponsor nonqualified defined benefit plans to provide benefits in excess of qualified plan limits. The aggregate liabilities for these plans at December 31, 2017 and 2016 were $1.3 billion and $1.2 billion, which also represent the plans' unfunded status. We have set aside certain assets totaling $530 million and $460 million as of December 31, 2017 and 2016 in a separate trust which we expect to be used to pay obligations under our nonqualified defined benefit plans. In accordance with GAAP, those assets may not be used to offset the amount of the benefit obligation similar to the postretirement benefit plans in the table above. The unrecognized net actuarial losses at December 31, 2017 and 2016 were $646 million and $642 million. The unrecognized prior service credit at December 31, 2017 and 2016 were $61 million and $74 million. The expense associated with these plans totaled $126 million in 2017, $125 million in 2016 and $117 million in 2015. We also sponsor a small number of other postemployment plans and foreign benefit plans. The aggregate liability for the other postemployment plans was $60 million and $63 million as of December 31, 2017 and 2016. The expense for the other postemployment plans, as well as the liability and expense associated with the foreign benefit plans, was not material to our results of operations, financial position or cash flows. The actuarial assumptions used to determine the benefit obligations and expense associated with our nonqualified defined benefit plans and postemployment plans are similar to those assumptions used to determine the benefit obligations and expense related to our qualified defined benefit pension plans and retiree medical and life insurance plans as described below.

The following table provides the amounts recognized in other comprehensive income (loss) related to postretirement benefit plans, net of tax, for the years ended December 31, 2017, 2016 and 2015 (in millions):

	Incurred but Not Yet Recognized in Net Periodic Benefit Cost			Recognition of Previously Deferred Amounts		
	2017	**2016**	**2015**	**2017**	**2016**	**2015**
	Gains (losses)			*(Gains) losses*		
Actuarial gains and losses						
Qualified defined benefit pension plans	**$ (1,172)**	$ (1,236)	$ (291)	**$ 974**	$ 879	$ 1,034
Retiree medical and life insurance plans	**77**	94	46	**12**	22	28
Other plans	**(66)**	(62)	21	**44**	37	47
	(1,161)	(1,204)	(224)	**1,030**	938	1,109
	Credit (cost)			*(Credit) cost* [(a)]		
Net prior service credit and cost						
Qualified defined benefit pension plans	**(219)**	(54)	(18)	**(229)**	(235)	(235)
Retiree medical and life insurance plans	**—**	27	(102)	**10**	14	2
Other plans	**—**	(1)	(7)	**(9)**	(9)	(10)
	(219)	(28)	(127)	**(228)**	(230)	(243)
	$ (1,380)	$ (1,232)	$ (351)	**$ 802**	$ 708	$ 866

(a) Reflects the reclassification for discontinued operations presentation of benefits related to former IS&GS salaried employees ($9 million in 2016 and $16 million in 2015). In addition, we recognized $134 million in 2016 of prior service credits from the divestiture of our IS&GS business, which were reclassified as discontinued operations.

We expect that approximately $1.5 billion, or about $1.2 billion net of tax, of actuarial losses and net prior service credit related to postretirement benefit plans included in accumulated other comprehensive loss at the end of 2017 to be recognized in net periodic benefit cost during 2018. Of this amount, $1.4 billion, or $1.1 billion net of tax, relates to our qualified defined benefit plans and is included in our expected 2018 pension expense of $1.4 billion.

Actuarial Assumptions

The actuarial assumptions used to determine the benefit obligations at December 31 of each year and to determine the net periodic benefit cost for each subsequent year, were as follows:

	Qualified Defined Benefit Pension Plans			Retiree Medical and Life Insurance Plans		
	2017	**2016**	**2015**	**2017**	**2016**	**2015**
Weighted average discount rate	**3.625%**	4.125%	4.375%	**3.625%**	4.000%	4.250%
Expected long-term rate of return on assets	**7.50%**	7.50%	8.00%	**7.50%**	7.50%	8.00%
Rate of increase in future compensation levels (for applicable bargained pension plans)	**4.50%**	4.50%	4.50%			
Health care trend rate assumed for next year				**8.50%**	8.75%	9.00%
Ultimate health care trend rate				**5.00%**	5.00%	5.00%
Year that the ultimate health care trend rate is reached				**2032**	2032	2032

The decrease in the discount rate from December 31, 2016 to December 31, 2017 resulted in an increase in the projected benefit obligations of our qualified defined benefit pension plans of approximately $2.9 billion at December 31, 2017. The decrease in the discount rate from December 31, 2015 to December 31, 2016 resulted in an increase in the projected benefit obligations of our qualified defined benefit pension plans of approximately $1.4 billion at December 31, 2016.

The long-term rate of return assumption represents the expected long-term rate of earnings on the funds invested, or to be invested, to provide for the benefits included in the benefit obligations. That assumption is based on several factors including historical market index returns, the anticipated long-term allocation of plan assets, the historical return data for the trust funds, plan expenses and the potential to outperform market index returns.

Plan Assets

Investment policies and strategies – Lockheed Martin Investment Management Company (LMIMCo), our wholly-owned subsidiary, has the fiduciary responsibility for making investment decisions related to the assets of our postretirement benefit plans. LMIMCo's investment objectives for the assets of these plans are (1) to minimize the net present value of expected funding contributions; (2) to ensure there is a high probability that each plan meets or exceeds our actuarial long-term rate of return assumptions; and (3) to diversify assets to minimize the risk of large losses. The nature and duration of benefit obligations, along with assumptions concerning asset class returns and return correlations, are considered when determining an appropriate asset allocation to achieve the investment objectives. Investment policies and strategies governing the assets of the plans are designed to achieve investment objectives within prudent risk parameters. Risk management practices include the use of external investment managers; the maintenance of a portfolio diversified by asset class, investment approach and security holdings; and the maintenance of sufficient liquidity to meet benefit obligations as they come due.

LMIMCo's investment policies require that asset allocations of postretirement benefit plans be maintained within the following approximate ranges:

Asset Class	Asset Allocation Ranges
Cash and cash equivalents	0-20%
Equity	15-65%
Fixed income	10-60%
Alternative investments:	
Private equity funds	0-15%
Real estate funds	0-10%
Hedge funds	0-20%
Commodities	0-15%

Fair value measurements – The rules related to accounting for postretirement benefit plans under GAAP require certain fair value disclosures related to postretirement benefit plan assets, even though those assets are not separately presented on our consolidated balance sheets. The following table presents the fair value of the assets (in millions) of our qualified defined benefit pension plans and retiree medical and life insurance plans by asset category and their level within the fair value hierarchy, which has three levels based on the reliability of the inputs used to determine fair value. Level 1 refers to fair values determined based on quoted prices in active markets for identical assets, Level 2 refers to fair values estimated using significant other observable inputs and Level 3 includes fair values estimated using significant unobservable inputs. Certain other investments are measured at their Net Asset Value (NAV) per share and do not have readily determined values and are thus not subject to leveling in the fair value hierarchy. The NAV is the total value of the fund divided by the number of the fund's shares outstanding. We recognize transfers between levels of the fair value hierarchy as of the date of the change in circumstances that causes the transfer. We did not have any transfers of assets between Level 1 and Level 2 of the fair value hierarchy during 2017.

	December 31, 2017				December 31, 2016			
	Total	**Level 1**	**Level 2**	**Level 3**	**Total**	**Level 1**	**Level 2**	**Level 3**
Investments measured at fair value								
Cash and cash equivalents [a]	**$ 1,419**	**$ 1,419**	**$ —**	**$ —**	$ 2,301	$ 2,301	$ —	$ —
Equity [a]:								
U.S. equity securities	**4,922**	**4,905**	**14**	**3**	4,166	4,139	23	4
International equity securities	**5,370**	**5,355**	**13**	**2**	3,971	3,927	40	4
Commingled equity funds	**4,453**	**1,493**	**2,960**	**—**	2,332	788	1,544	—
Fixed income [a]:								
Corporate debt securities	**4,910**	**—**	**4,905**	**5**	4,333	—	4,316	17
U.S. Government securities	**3,775**	**—**	**3,775**	**—**	6,811	—	6,811	—
U.S. Government-sponsored enterprise securities	**817**	**—**	**817**	**—**	919	—	919	—
Other fixed income investments	**2,412**	**—**	**2,401**	**11**	2,215	—	2,214	1
Alternative investments:								
Hedge funds	**7**	**—**	**7**	**—**	33	—	33	—
Commodities [a]	**2**	**1**	**1**	**—**	523	525	(2)	—
Total	**$28,087**	**$13,173**	**$14,893**	**$ 21**	$27,604	$11,680	$15,898	$ 26
Investments measured at NAV [b]								
Commingled equity funds	**99**				60			
Other fixed income investments	**68**				—			
Private equity funds	**4,334**				3,614			
Real estate funds	**1,611**				1,411			
Hedge funds	**711**				462			
Total investments measured at NAV	**6,823**				5,547			
Receivables, net	**68**				53			
Total	**$34,978**				$33,204			

(a) Cash and cash equivalents, equity securities, fixed income securities and commodities included derivative assets and liabilities whose fair values were not material as of December 31, 2017 and 2016. LMIMCo's investment policies restrict the use of derivatives to either establish long exposures for purposes of expediency or capital efficiency or to hedge risks to the extent of a plan's current exposure to such risks. Most derivative transactions are settled on a daily basis.

(b) Certain investments that are valued using the net asset value per share (or its equivalent) as a practical expedient have not been classified in the fair value hierarchy and are included in the table to permit reconciliation of the fair value hierarchy to the aggregate postretirement benefit plan assets.

As of December 31, 2017 and 2016, the assets associated with our foreign defined benefit pension plans were not material and have not been included in the table above. The changes during 2017 and 2016 in the fair value of plan assets categorized as Level 3 were insignificant.

Valuation techniques – Cash equivalents are mostly comprised of short-term money-market instruments and are valued at cost, which approximates fair value.

U.S. equity securities and international equity securities categorized as Level 1 are traded on active national and international exchanges and are valued at their closing prices on the last trading day of the year. For U.S. equity securities and international equity securities not traded on an active exchange, or if the closing price is not available, the trustee obtains indicative quotes from a pricing vendor, broker or investment manager. These securities are categorized as Level 2 if the custodian obtains corroborated quotes from a pricing vendor or categorized as Level 3 if the custodian obtains uncorroborated quotes from a broker or investment manager.

Commingled equity funds categorized as Level 1 are traded on active national and international exchanges and are valued at their closing prices on the last trading day of the year. For commingled equity funds not traded on an active exchange, or if the closing price is not available, the trustee obtains indicative quotes from a pricing vendor, broker or investment manager. These securities are categorized as Level 2 if the custodian obtains corroborated quotes from a pricing vendor.

Fixed income investments categorized as Level 2 are valued by the trustee using pricing models that use verifiable observable market data (e.g., interest rates and yield curves observable at commonly quoted intervals and credit spreads), bids provided by brokers or dealers or quoted prices of securities with similar characteristics. Fixed income investments are categorized at Level 3 when valuations using observable inputs are unavailable. The trustee obtains pricing based on indicative quotes or bid evaluations from vendors, brokers or the investment manager.

Commodities are traded on an active commodity exchange and are valued at their closing prices on the last trading day of the year.

Certain commingled equity funds, consisting of equity mutual funds, are valued using the NAV. The NAV valuations are based on the underlying investments and typically redeemable within 90 days.

Private equity funds consist of partnership and co-investment funds. The NAV is based on valuation models of the underlying securities, which includes unobservable inputs that cannot be corroborated using verifiable observable market data. These funds typically have redemption periods between eight and 12 years.

Real estate funds consist of partnerships, most of which are closed-end funds, for which the NAV is based on valuation models and periodic appraisals. These funds typically have redemption periods between eight and 10 years.

Hedge funds consist of direct hedge funds for which the NAV is generally based on the valuation of the underlying investments. Redemptions in hedge funds are based on the specific terms of each fund, and generally range from a minimum of one month to several months.

Contributions and Expected Benefit Payments

The funding of our qualified defined benefit pension plans is determined in accordance with ERISA, as amended by the PPA, and in a manner consistent with CAS and Internal Revenue Code rules. There were no material contributions to our qualified defined benefit pension plans during 2017. We will make contributions of $5.0 billion to our qualified defined benefit pension plans in 2018, including required and discretionary contributions. As a result of these contributions, we do not expect any material qualified defined benefit cash funding will be required until 2021. We plan to fund these contributions using a mix of cash on hand and commercial paper. While we do not anticipate a need to do so, our capital structure and resources would allow us to issue new debt if circumstances change.

The following table presents estimated future benefit payments, which reflect expected future employee service, as of December 31, 2017 (in millions):

	2018	2019	2020	2021	2022	2023 – 2027
Qualified defined benefit pension plans	$ 2,450	$ 2,480	$ 2,560	$ 2,630	$ 2,700	$ 14,200
Retiree medical and life insurance plans	180	180	180	180	180	820

Defined Contribution Plans

We maintain a number of defined contribution plans, most with 401(k) features, that cover substantially all of our employees. Under the provisions of our 401(k) plans, we match most employees' eligible contributions at rates specified in the plan documents. Our contributions were $613 million in 2017, $617 million in 2016 and $393 million in 2015, the majority of which were funded using our common stock. Our defined contribution plans held approximately 35.5 million and 36.9 million shares of our common stock as of December 31, 2017 and 2016.

Note 12 – Stockholders' Equity

At December 31, 2017 and 2016, our authorized capital was composed of 1.5 billion shares of common stock and 50 million shares of series preferred stock. Of the 285 million shares of common stock issued and outstanding as of December 31, 2017, 284 million shares were considered outstanding for consolidated balance sheet presentation purposes; the remaining shares were held in a separate trust. Of the 290 million shares of common stock issued and outstanding as of December 31, 2016, 289 million shares were considered outstanding for consolidated balance sheet presentation purposes; the remaining shares were held in a separate trust. No shares of preferred stock were issued and outstanding at December 31, 2017 or 2016.

Repurchases of Common Stock

During 2017, we repurchased 7.1 million shares of our common stock for $2.0 billion. During 2016 and 2015, we paid $2.1 billion and $3.1 billion to repurchase 8.9 million and 15.2 million shares of our common stock.

On September 28, 2017, our Board of Directors approved a $2.0 billion increase to our share repurchase program. Inclusive of this increase, the total remaining authorization for future common share repurchases under our program was $3.5 billion as of December 31, 2017. As we repurchase our common shares, we reduce common stock for the $1 of par value of the shares repurchased, with the excess purchase price over par value recorded as a reduction of additional paid-in capital. If additional paid-in capital is reduced to zero, we record the remainder of the excess purchase price over par value as a reduction of retained earnings. Due to the volume of repurchases made under our share repurchase program, additional paid-in capital was reduced to zero, with the remainder of the excess purchase price over par value of $1.6 billion and $1.7 billion recorded as a reduction of retained earnings in 2017 and 2016.

Dividends

We paid dividends totaling $2.2 billion ($7.46 per share) in 2017, $2.0 billion ($6.77 per share) in 2016 and $1.9 billion ($6.15 per share) in 2015. We paid quarterly dividends of $1.82 per share during each of the first three quarters of 2017 and $2.00 per share during the fourth quarter of 2017; $1.65 per share during each of the first three quarters of 2016 and $1.82 per share during the fourth quarter of 2016; and $1.50 per share during each of the first three quarters of 2015 and $1.65 per share during the fourth quarter of 2015.

Accumulated Other Comprehensive Loss

Changes in the balance of AOCL, net of income taxes, consisted of the following (in millions):

	Postretirement Benefit Plans [a]	Other, net	AOCL
Balance at December 31, 2014	$ (11,813)	$ (57)	$ (11,870)
Other comprehensive loss before reclassifications	(351)	(73)	(424)
Amounts reclassified from AOCL			
Recognition of net actuarial losses	1,109	—	1,109
Amortization of net prior service credits	(259)	—	(259)
Total reclassified from AOCL	850	—	850
Total other comprehensive income (loss)	499	(73)	426
Balance at December 31, 2015	(11,314)	(130)	(11,444)
Other comprehensive loss before reclassifications	(1,232)	—	(1,232)
Amounts reclassified from AOCL			
Recognition of net actuarial losses	938	—	938
Amortization of net prior service credits	(239)	—	(239)
Recognition of net prior service credits from divestiture of IS&GS segment [b]	(134)	—	(134)
Other	—	9	9
Total reclassified from AOCL	565	9	574
Total other comprehensive (loss) income	(667)	9	(658)
Balance at December 31, 2016	(11,981)	(121)	(12,102)
Other comprehensive (loss) income before reclassifications	**(1,380)**	**120**	**(1,260)**
Amounts reclassified from AOCL			
Recognition of net actuarial losses	**1,030**	**—**	**1,030**
Amortization of net prior service credits	**(228)**	**—**	**(228)**
Other	**—**	**20**	**20**
Total reclassified from AOCL	**802**	**20**	**822**
Total other comprehensive (loss) income	**(578)**	**140**	**(438)**
Balance at December 31, 2017	**$ (12,559)**	**$ 19**	**$ (12,540)**

(a) AOCL related to postretirement benefit plans is shown net of tax benefits of $6.5 billion at both December 31, 2017 and 2016 and $6.2 billion at December 31, 2015. These tax benefits include amounts recognized on our income tax returns as current deductions and deferred income taxes, which will be recognized on our tax returns in future years. See “Note 9 – Income Taxes” and “Note 11 – Postretirement Benefit Plans” for more information on our income taxes and postretirement benefit plans.

(b) Associated with the 2016 divestiture of the IS&GS business and included in net gain on divestiture of discontinued operations.

Note 13 – Stock-Based Compensation

During 2017, 2016 and 2015, we recorded non-cash stock-based compensation expense totaling $158 million, $149 million and $133 million, which is included as a component of other unallocated, net on our consolidated statements of earnings. The net impact to earnings for the respective years was $103 million, $97 million and $86 million.

As of December 31, 2017, we had $91 million of unrecognized compensation cost related to nonvested awards, which is expected to be recognized over a weighted average period of 1.7 years. We received cash from the exercise of stock options totaling $71 million, $106 million and $174 million during 2017, 2016 and 2015. In addition, our income tax liabilities for 2017, 2016 and 2015 were reduced by $203 million, $219 million and $213 million due to recognized tax benefits on stock-based compensation arrangements.

Stock-Based Compensation Plans

Under plans approved by our stockholders, we are authorized to grant key employees stock-based incentive awards, including options to purchase common stock, stock appreciation rights, RSUs, PSUs or other stock units. The exercise price of options to purchase common stock may not be less than the fair market value of our stock on the date of grant. No award of stock options may become fully vested prior to the third anniversary of the grant and no portion of a stock option grant may become vested in less than one year. The minimum vesting period for restricted stock or stock units payable in stock is three years. Award agreements may provide for shorter or pro-rated vesting periods or vesting following termination of employment in the case of death, disability, divestiture, retirement, change of control or layoff. The maximum term of a stock option or any other award is 10 years.

At December 31, 2017, inclusive of the shares reserved for outstanding stock options, RSUs and PSUs, we had approximately 10 million shares reserved for issuance under the plans. At December 31, 2017, approximately six million of the shares reserved for issuance remained available for grant under our stock-based compensation plans. We issue new shares upon the exercise of stock options or when restrictions on RSUs and PSUs have been satisfied.

RSUs

The following table summarizes activity related to nonvested RSUs:

	Number of RSUs (In thousands)	Weighted Average Grant-Date Fair Value Per Share
Nonvested at December 31, 2014	2,326	$ 97.80
Granted	595	192.47
Vested	(1,642)	103.30
Forfeited	(43)	132.28
Nonvested at December 31, 2015	1,236	$ 134.87
Granted	679	206.69
Vested	(1,009)	137.62
Forfeited	(118)	203.65
Nonvested at December 31, 2016	788	$ 183.00
Granted	**519**	**254.58**
Vested	**(624)**	**201.65**
Forfeited	**(32)**	**223.23**
Nonvested at December 31, 2017	**651**	**$ 220.21**

In 2017, we granted certain employees approximately 0.5 million RSUs with a weighted average grant-date fair value of $254.58 per RSU. The grant-date fair value of these RSUs is equal to the closing market price of our common stock on the grant date less a discount to reflect the delay in payment of dividend-equivalent cash payments that are made only upon vesting, which is generally three years from the grant date. We recognize the grant-date fair value of RSUs, less estimated forfeitures, as compensation expense ratably over the requisite service period, which is shorter than the vesting period if the employee is retirement eligible on the date of grant or will become retirement eligible before the end of the vesting period.

Stock Options

We generally recognize compensation cost for stock options ratably over the three-year vesting period. At December 31, 2017 and 2016, there were 2.2 million (weighted average exercise price of $82.71) and 3.0 million (weighted average exercise price of $85.82) stock options outstanding. All of the stock options outstanding are vested as of December 31, 2017 and have a weighted average remaining contractual life of approximately 2.5 years and an aggregate intrinsic value of $533 million. There were 0.8 million (weighted average exercise price of $95.06) stock options exercised during 2017. We have not granted stock options to employees since 2012.

The following table pertains to stock options granted through 2012, in addition to stock options that vested and were exercised in 2017, 2016 and 2015 (in millions):

	2017	2016	2015
Grant-date fair value of all stock options that vested	**$ —**	$ —	$ 8
Intrinsic value of all stock options exercised	**139**	172	265

In 2012, we estimated the fair value for stock options at the date of grant using the Black-Scholes option pricing model, which required us to make certain assumptions. We used the following weighted average assumptions in the model: risk-free interest rate of 0.78%, dividend yield of 5.40%, a five year historical volatility factor of 0.28 and an expected option life of five years.

PSUs

In 2017, we granted certain employees PSUs with an aggregate target award of approximately 0.1 million shares of our common stock. The PSUs vest three years from the grant date based on continuous service, with the number of shares earned (0% to 200% of the target award) depending upon the extent to which we achieve certain financial and market performance targets measured over the period from January 1, 2017 through December 31, 2019. About half of the PSUs were valued at $254.53 per PSU in a manner similar to RSUs mentioned above as the financial targets are based on our operating results. We recognize the grant-date fair value of these PSUs, less estimated forfeitures, as compensation expense ratably over the vesting period based on the number of awards expected to vest at each reporting date. The remaining PSUs were valued at $266.44 per PSU using a Monte Carlo model as the performance target is related to our total shareholder return relative to our peer group. We recognize the grant-date fair value of these awards, less estimated forfeitures, as compensation expense ratably over the vesting period.

Note 14 – Legal Proceedings, Commitments and Contingencies

We are a party to or have property subject to litigation and other proceedings that arise in the ordinary course of our business, including matters arising under provisions relating to the protection of the environment and are subject to contingencies related to certain businesses we previously owned. These types of matters could result in fines, penalties, compensatory or treble damages or non-monetary sanctions or relief. We believe the probability is remote that the outcome of each of these matters, including the legal proceedings described below, will have a material adverse effect on the corporation as a whole, notwithstanding that the unfavorable resolution of any matter may have a material effect on our net earnings in any particular interim reporting period. Among the factors that we consider in this assessment are the nature of existing legal proceedings and claims, the asserted or possible damages or loss contingency (if estimable), the progress of the case, existing law and precedent, the opinions or views of legal counsel and other advisers, our experience in similar cases and the experience of other companies, the facts available to us at the time of assessment and how we intend to respond to the proceeding or claim. Our assessment of these factors may change over time as individual proceedings or claims progress.

Although we cannot predict the outcome of legal or other proceedings with certainty, where there is at least a reasonable possibility that a loss may have been incurred, GAAP requires us to disclose an estimate of the reasonably possible loss or range of loss or make a statement that such an estimate cannot be made. We follow a thorough process in which we seek to estimate the reasonably possible loss or range of loss, and only if we are unable to make such an estimate do we conclude and disclose that an estimate cannot be made. Accordingly, unless otherwise indicated below in our discussion of legal proceedings, a reasonably possible loss or range of loss associated with any individual legal proceeding cannot be estimated.

Legal Proceedings

As a result of our acquisition of Sikorsky, we assumed the defense of and any potential liability for two civil False Claims Act lawsuits pending in the U.S. District Court for the Eastern District of Wisconsin. In October 2014, the U.S. Government filed a complaint in intervention in the first suit, which was brought by *qui tam* relator Mary Patzer, a former Derco Aerospace (Derco) employee. In May 2017, the U.S. Government filed a complaint in intervention in the second suit, which was brought by *qui tam* relator Peter Cimma, a former Sikorsky Support Services, Inc. (SSSI) employee. In November 2017, the Court consolidated the cases into a single action for discovery and trial.

The U.S. Government alleges that Sikorsky and two of its wholly-owned subsidiaries, Derco and SSSI, violated the civil False Claims Act, the Anti-Kickback Act, and the Truth in Negotiations Act in connection with a contract the U.S. Navy awarded to SSSI in June 2006 to support the Navy's T-34 and T-44 fixed-wing turboprop training aircraft. SSSI subcontracted with Derco, primarily to procure and manage spare parts for the training aircraft. The U.S. Government alleges that SSSI overbilled the Navy on the contract as the result of Derco's use of prohibited cost-plus-percentage-of-cost pricing to add profit and overhead costs as a percentage of the price of the spare parts that Derco procured and then sold to SSSI. The U.S. Government alleges that Derco's claims to SSSI, SSSI's claims to the Navy, and SSSI's yearly Certificates of Final Indirect Costs from 2006 through 2012 were false. In addition to violations of the False Claims Act, the U.S. Government alleges violations of the Anti-Kickback Act based on a monthly "chargeback," through which SSSI billed Derco for the cost of certain SSSI personnel, allegedly in exchange for SSSI's permitting a pricing arrangement that was "highly favorable" to Derco. The U.S. Government also claims that SSSI submitted inaccurate cost or pricing data in violation of the Truth in Negotiations Act for a sole-sourced, follow-on "bridge" contract. The U.S. Government's complaints assert common law claims for breach of contract and unjust enrichment. On January 12, 2018, the Corporation filed a partial motion to dismiss intended to narrow the Government's claims. The Corporation also moved to dismiss Cimma as a party under the False Claims Act's first-to-file rule, which permits only the first relator to recover in a pending case.

The U.S. Government currently seeks damages in these lawsuits of approximately $52 million, subject to trebling, plus statutory penalties. We believe that we have legal and factual defenses to the U.S. Government's claims. Although we continue to evaluate our liability and exposure, we do not currently believe that it is probable that we will incur a material loss. If, contrary to our expectations, the U.S. Government prevails in this matter and proves damages at or near $52 million and is successful in having such damages trebled, the outcome could have an adverse effect on our results of operations in the period in which a liability is recognized and on our cash flows for the period in which any damages are paid.

On April 24, 2009, we filed a declaratory judgment action against the MTA asking the U.S. District Court for the Southern District of New York to find that the MTA is in material breach of our agreement based on the MTA's failure to provide access to sites where work must be performed and the customer-furnished equipment necessary to complete the contract. The MTA filed an answer and counterclaim alleging that we breached the contract and subsequently terminated the contract for alleged default. The primary damages sought by the MTA are the cost to complete the contract and potential re-procurement costs. While we are unable to estimate the cost of another contractor to complete the contract and the costs of re-procurement, we note that our contract with the MTA had a total value of $323 million, of which $241 million was paid to us, and that the MTA is seeking damages of approximately $190 million. We dispute the MTA's allegations and are defending against them. Additionally, following an investigation, our sureties on a performance bond related to this matter, who were represented by independent counsel, concluded that the MTA's termination of the contract was improper. Finally, our declaratory judgment action was later amended to include claims for monetary damages against the MTA of approximately $95 million. This matter was taken under submission by the District Court in December 2014, after a five-week bench trial and the filing of post-trial pleadings by the parties. We continue to await a decision from the District Court. Although this matter relates to our former IS&GS business, we retained the litigation when we divested IS&GS.

Environmental Matters

We are involved in proceedings and potential proceedings relating to soil, sediment, surface water and groundwater contamination, disposal of hazardous waste and other environmental matters at several of our current or former facilities and at third-party sites where we have been designated as a potentially responsible party (PRP). A substantial portion of environmental costs will be included in our net sales and cost of sales in future periods pursuant to U.S. Government regulations. At the time a liability is recorded for future environmental costs, we record a receivable for estimated future recovery considered probable through the pricing of products and services to agencies of the U.S. Government, regardless of the contract form (e.g., cost-reimbursable, fixed-price). We continually evaluate the recoverability of our environmental receivables by assessing, among other factors, U.S. Government regulations, our U.S. Government business base and contract mix, our history of receiving reimbursement of such costs, and efforts by some U.S. Government representatives to limit such reimbursement. We include the portion of those environmental costs expected to be allocated to our non-U.S. Government contracts, or that is determined not to be recoverable under U.S. Government contracts, in our cost of sales at the time the liability is established.

At December 31, 2017 and 2016, the aggregate amount of liabilities recorded relative to environmental matters was $920 million and $1.0 billion, most of which are recorded in other noncurrent liabilities on our consolidated balance sheets. We have recorded receivables totaling $799 million and $870 million at December 31, 2017 and 2016, most of which are recorded in other noncurrent assets on our consolidated balance sheets, for the estimated future recovery of these costs, as we consider the recovery probable based on the factors previously mentioned. We project costs and recovery of costs over approximately 20 years.

Environmental remediation activities usually span many years, which makes estimating liabilities a matter of judgment because of uncertainties with respect to assessing the extent of the contamination as well as such factors as changing remediation technologies and changing regulatory environmental standards. There are a number of former and present operating facilities that we are monitoring or investigating for potential future remediation. We perform quarterly reviews of the status of our environmental remediation sites and the related liabilities and receivables. Additionally, in our quarterly reviews, we consider these and other factors in estimating the timing and amount of any future costs that may be required for remediation activities and record a liability when it is probable that a loss has occurred and the loss can be reasonably estimated. The amount of liability recorded is based on our estimate of the costs to be incurred for remediation at a particular site. We do not discount the recorded liabilities, as the amount and timing of future cash payments are not fixed or cannot be reliably determined. We reasonably cannot determine the extent of our financial exposure in all cases as, although a loss may be probable or reasonably possible, in some cases it is not possible at this time to estimate the loss or reasonably possible loss or range of loss.

We also pursue claims for recovery of costs incurred or contribution to site cleanup costs against other PRPs, including the U.S. Government, and are conducting remediation activities under various consent decrees, orders, and agreements relating to soil, groundwater, sediment or surface water contamination at certain sites of former or current operations. Under agreements related to certain sites in California and New York, the U.S. Government reimburses us an amount equal to a percentage, specific to each site, of expenditures for certain remediation activities in the U.S. Government's capacity as a PRP under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

In addition to the proceedings and potential proceedings discussed above, California previously established a maximum level of the contaminant hexavalent chromium in drinking water of 10 parts per billion (ppb). Recently, this standard was successfully challenged by the California Manufacturers and Technology Association (CMTA) for failure to conduct the required economic feasibility analysis. In response to the court's ruling, the State Water Resources Control Board (State Board), a branch of the California Environmental Protection Agency, withdrew the hexavalent chromium standard from the published regulations, leaving only the 50 ppb standard for total chromium. The State Board has indicated it will work to re-establish a hexavalent chromium standard. If the standard for hexavalent chromium is re-established at 10 ppb or above, it will not have a material impact on our existing remediation costs in California. Further, the U.S. Environmental Protection Agency (U.S. EPA) is considering whether to regulate hexavalent chromium.

California is also reevaluating its existing drinking water standard of 6 ppb for perchlorate, and the U.S. EPA is taking steps to regulate perchlorate in drinking water. If substantially lower standards are adopted, in either California or at the federal level for perchlorate or for hexavalent chromium, we expect a material increase in our estimates for environmental liabilities and the related assets for the portion of the increased costs that are probable of future recovery in the pricing of our products and services for the U.S. Government. The amount that would be allocable to our non-U.S. Government contracts or that is determined not to be recoverable under U.S. Government contracts would be expensed, which may have a material effect on our earnings in any particular interim reporting period.

Operating Leases

We rent certain equipment and facilities under operating leases. Certain major plant facilities and equipment are furnished by the U.S. Government under short-term or cancelable arrangements. Our total rental expense under operating leases was $169 million, $202 million and $195 million for 2017, 2016 and 2015. Future minimum lease commitments at December 31, 2017 for long-term non-cancelable operating leases were $623 million ($162 million in 2018, $154 million in 2019, $116 million in 2020, $82 million in 2021, $54 million in 2022 and $55 million in later years).

Letters of Credit, Surety Bonds and Third-Party Guarantees

We have entered into standby letters of credit and surety bonds issued on our behalf by financial institutions and other directly issued guarantees to third parties primarily relating to advances received from customers and the guarantee of future performance on certain contracts. Letters of credit and surety bonds generally are available for draw down in the event we do not perform. In some cases, we may guarantee the contractual performance of third parties such as venture partners. We had total outstanding letters of credit, surety bonds and third-party guarantees aggregating $3.3 billion at December 31, 2017 and $3.7 billion at December 31, 2016. Third-party guarantees do not include guarantees of subsidiaries and other consolidated entities.

At December 31, 2017 and 2016, third-party guarantees totaled $750 million and $709 million, of which approximately 62% and 56% related to guarantees of contractual performance of ventures to which we currently are or previously were a party. This amount represents our estimate of the maximum amount we would expect to incur upon the contractual non-performance of the venture, venture partners or divested businesses. Generally, we also have cross-indemnities in place that may enable us to recover amounts that may be paid on behalf of a venture partner.

In determining our exposures, we evaluate the reputation, performance on contractual obligations, technical capabilities and credit quality of our current and former venture partners and the transferee under novation agreements all of which include a guarantee as required by the FAR. There were no material amounts recorded in our financial statements related to third-party guarantees or novation agreements.

United Launch Alliance

In connection with our 50% ownership interest of ULA, we and The Boeing Company (Boeing) are required to provide ULA an additional capital contribution if ULA is unable to make required payments under its inventory supply agreement with Boeing. As of December 31, 2017, ULA's total remaining obligation to Boeing under the inventory supply agreement was $120 million. The parties have agreed to defer the remaining payment obligation, as it is more than offset by other commitments to ULA. Accordingly, we do not expect to be required to make a capital contribution to ULA under this agreement.

In addition, both we and Boeing have cross-indemnified each other for guarantees by us and Boeing of the performance and financial obligations of ULA under certain launch service contracts. We believe ULA will be able to fully perform its obligations, as it has done through December 31, 2017, and that it will not be necessary to make payments under the cross-indemnities or guarantees.

Our share of ULA's net earnings are reported as equity in net earnings (losses) of equity investees in other income, net on our consolidated statements of earnings. Our investment in ULA totaled $794 million and $788 million at December 31, 2017 and 2016.

Note 15 – Restructuring Charges

2016 Actions

During 2016, we recorded severance charges totaling approximately $80 million related to our Aeronautics business segment. The charges consisted of severance costs associated with the planned elimination of certain positions through either voluntary or involuntary actions. Upon separation, terminated employees receive lump-sum severance payments primarily based on years of service, the majority of which are expected to be paid over the next several quarters. As of the end of the first quarter of 2017, we had substantially paid the severance costs associated with these actions.

2015 Actions

During 2015, we recorded severance charges totaling $82 million, of which $67 million related to our RMS business segment and $15 million related to businesses that were reported in our former IS&GS business prior to our fourth quarter 2015 program realignment. The charges consisted of severance costs associated with the planned elimination of certain positions through either voluntary or involuntary actions. Upon separation, terminated employees receive lump-sum severance payments primarily based on years of service. As of December 31, 2016, we substantially paid the severance costs associated with these actions.

In connection with the Sikorsky acquisition, we assumed obligations related to certain restructuring actions committed to by Sikorsky in June 2015. Net of amounts we anticipate to recover through the pricing of our products and services to our customers, we incurred and paid $40 million of costs in 2016 related to these actions.

We have recovered a substantial amount of the restructuring charges through the pricing of our products and services to the U.S. Government and other customers in future periods, with the impact included in the respective business segment's results of operations.

Note 16 – Fair Value Measurements

Assets and liabilities measured and recorded at fair value on a recurring basis consisted of the following (in millions):

	December 31, 2017			December 31, 2016		
	Total	Level 1	Level 2	Total	Level 1	Level 2
Assets						
Equity securities	$ 39	$ 39	$ —	$ 79	$ 79	$ —
Mutual funds	917	917	—	856	856	—
U.S. Government securities	116	—	116	113	—	113
Other securities	170	—	170	151	—	151
Derivatives	23	—	23	27	—	27
Liabilities						
Derivatives	106	—	106	85	—	85
Assets measured at NAV						
Other commingled funds	19			—		

Substantially all assets measured at fair value, other than derivatives, represent investments classified as trading securities held in a separate trust to fund certain of our non-qualified deferred compensation plans and are recorded in other noncurrent assets on our consolidated balance sheets. The fair values of equity securities and mutual funds are determined by reference to the quoted market price per unit in active markets multiplied by the number of units held without consideration of transaction costs. The fair values of U.S. Government and other securities are determined using pricing models that use observable inputs (e.g., interest rates and yield curves observable at commonly quoted intervals), bids provided by brokers or dealers or quoted prices of securities with similar characteristics. The fair values of derivative instruments, which consist of foreign currency exchange forward and interest rate swap contracts, primarily are determined based on the present value of future cash flows using model-derived valuations that use observable inputs such as interest rates, credit spreads and foreign currency exchange rates. Certain other investments are measured at fair value using their NAV per share and do not have readily determined values and are thus not subject to leveling in the fair value hierarchy. We did not have any transfers of assets or liabilities between levels of the fair value hierarchy during 2017.

In addition to the financial instruments listed in the table above, we hold other financial instruments, including cash and cash equivalents, receivables, accounts payable and debt. The carrying amounts for cash and cash equivalents, receivables and accounts payable approximated their fair values. The estimated fair value of our outstanding debt was \$16.8 billion and \$16.2 billion at December 31, 2017 and 2016. The outstanding principal amount was \$15.5 billion and \$15.3 billion at December 31, 2017 and 2016, excluding \$1.2 billion and \$1.0 billion of unamortized discounts and issuance costs. The estimated fair values of our outstanding debt were determined based on quoted prices for similar instruments in active markets (Level 2).

In connection with the Sikorsky acquisition, we recorded the assets acquired and liabilities assumed at fair value. See “Note 3 – Acquisitions and Divestitures” for further information about the fair values assigned.

Note 17 – Summary of Quarterly Information (Unaudited)

A summary of quarterly information is as follows (in millions, except per share data):

	2017 Quarters			
	First[b]	Second	Third	Fourth[c][d]
Net sales	$ 11,057	$ 12,685	$ 12,169	$ 15,137
Operating profit	1,149	1,485	1,428	1,859
Net earnings (loss) from continuing operations	763	942	939	(715)
Net earnings from discontinued operations	—	—	—	73
Net earnings (loss)	763	942	939	(642)
Earnings (loss) per common share from continuing operations [a]:				
Basic	2.63	3.27	3.27	(2.50)
Diluted	2.61	3.23	3.24	(2.50)
Earnings per common share from discontinued operations:				
Basic	—	—	—	0.25
Diluted	—	—	—	0.25
Basic earnings (loss) per common share [a]	2.63	3.27	3.27	(2.25)
Diluted earnings (loss) per common share [a]	2.61	3.23	3.24	(2.25)

	2016 Quarters			
	First	Second	Third[d][e]	Fourth[e]
Net sales	$ 10,368	$ 11,577	$ 11,551	$ 13,752
Operating profit	1,158	1,375	1,588	1,428
Net earnings from continuing operations	806	899	1,089	959
Net earnings from discontinued operations	92	122	1,306	29
Net earnings	898	1,021	2,395	988
Earnings per common share from continuing operations [a]:				
Basic	2.65	2.97	3.64	3.29
Diluted	2.61	2.93	3.61	3.25
Earnings per common share from discontinued operations [a]:				
Basic	0.30	0.40	4.38	0.10
Diluted	0.30	0.39	4.32	0.10
Basic earnings per common share [a]	2.95	3.37	8.02	3.39
Diluted earnings per common share [a]	2.91	3.32	7.93	3.35

(a) The sum of the quarterly earnings per share amounts do not equal the earnings per share amounts included on our consolidated statements of earnings. The difference in 2017 is primarily due the net loss in the fourth quarter causing any potentially dilutive securities to have an anti-dilutive effect, which resulted in the weighted average shares outstanding for basic and dilutive earnings per share being equivalent. In addition, the differences in 2017 and 2016 also relate to the timing of our share repurchases during each respective year.

(b) The first quarter of 2017 includes a $120 million ($74 million or $0.25 per share, after tax) charge on our EADGE-T program and a $64 million ($40 million or $0.14 per share, after tax) charge, which represents our portion of a non-cash asset impairment charge recorded by our equity method investee, AMMROC (see "Note 1 – Significant Accounting Policies").

(c) In the fourth quarter of 2017, we recorded a net one-time tax charge of $1.9 billion ($6.80 per share), substantially all of which was non-cash, primarily related to the estimated impact of the Tax Act (see "Note 9 – Income Taxes"). In addition, the fourth quarter of 2017 includes a previously deferred non-cash gain of $198 million ($122 million or $0.43 per share, after tax) related to properties sold in 2015 as a result of completing our remaining obligations.

(d) The fourth quarter of 2017 and the third quarter of 2016 include a net gain of $73 million and $1.2 billion, respectively, reported in net earnings from discontinued operations, related to the 2016 divestiture of our former IS&GS business.

(e) The third quarter of 2016 includes the results of AWE from August 26, 2016, the date we obtained controlling interest, including $103 million in net sales and $104 million in net earnings. Net earnings during the third quarter of 2016 are primarily the result of a non-cash gain recognized on the step acquisition of AWE (see "Note 3 – Acquisitions and Divestitures"). The fourth quarter of 2016 includes the results of AWE for the entire quarter, including $307 million in net sales and $3 million in net earnings.

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

None.

ITEM 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We performed an evaluation of the effectiveness of our disclosure controls and procedures as of December 31, 2017. The evaluation was performed with the participation of senior management of each business segment and key corporate functions, under the supervision of the Chief Executive Officer (CEO) and Chief Financial Officer (CFO). Based on this evaluation, the CEO and CFO concluded that our disclosure controls and procedures were effective.

Management, including our CEO (principal executive officer) and CFO (principal financial officer), believes the consolidated financial statements included in this Annual Report on Form 10-K fairly represent in all material respects our financial condition, results of operations and cash flows at and for the periods presented in accordance with U.S. GAAP.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system is designed to provide reasonable assurance to our management and Board of Directors regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes.

Our management conducted an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2017. This assessment was based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework (2013 framework). Based on this assessment, management determined that our internal control over financial reporting was effective as of December 31, 2017.

Our independent registered public accounting firm has issued a report on the effectiveness of our internal control over financial reporting which is below.

Remediation of Material Weakness

During the year ended December 31, 2016, management completed its initial assessment of the effectiveness of our internal control over financial reporting for our Sikorsky business, which was acquired on November 6, 2015. During 2016, we performed our first comprehensive assessment of the design and operating effectiveness of internal controls at Sikorsky and determined that Sikorsky's internal control over financial reporting was ineffective as of December 31, 2016. Specifically, Sikorsky did not adequately identify, design and implement appropriate process-level controls for its accounting processes, including Sikorsky's contract accounting and sales recognition processes, inventory accounting process and payroll process, and appropriate information technology controls for its information technology systems.

During 2017, management improved controls at Sikorsky in order to remediate the material weakness in Lockheed Martin's internal control over financial reporting. To accomplish this we implemented several actions at Sikorsky, including increasing the number of individuals responsible for implementing and monitoring controls; training individuals responsible for designing, executing, testing and monitoring controls; expanding the scope of the internal controls program to include additional information technology systems; adding new process-level and information technology controls; modifying existing controls; and enhancing documentation that evidences that controls are performed. During the third quarter of 2017, we substantially completed our evaluation of the design of process-level and information technology controls. We successfully completed testing of the improved controls during the fourth quarter of 2017, and we have concluded that the material weakness has been remediated as of December 31, 2017. There were no material errors in our financial results or balances and there was no restatement of prior period financial statements and no change in previously released financial results as a result of the material weakness in internal controls over financial reporting.

Changes in Internal Control Over Financial Reporting

Other than the remediation efforts identified above to address the material weakness, there were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rules 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the quarter ended December 31, 2017 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Ernst & Young LLP,
Independent Registered Public Accounting Firm,
Regarding Internal Control Over Financial Reporting*

Board of Directors and Stockholders
Lockheed Martin Corporation

Opinion on Internal Control over Financial Reporting

We have audited Lockheed Martin Corporation's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Lockheed Martin Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), consolidated balance sheets of Lockheed Martin Corporation as of December 31, 2017 and 2016, and the related consolidated statements of earnings, comprehensive income, equity, and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the "financial statements") of the Corporation and our report dated February 6, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

The Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Corporation's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Corporation in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

Ernst + Young LLP

Tysons, Virginia
February 6, 2018

* This is the report included in the Form 10-K/A filed with the Securities and Exchange Commission on February 16, 2018.

ITEM 9B. Other Information

None.

PART III

ITEM 10. Directors, Executive Officers and Corporate Governance

The information concerning directors required by Item 401 of Regulation S-K is included under the caption "Proposal 1 - Election of Directors" in our definitive Proxy Statement to be filed pursuant to Regulation 14A (the 2018 Proxy Statement), and that information is incorporated by reference in this Annual Report on Form 10-K (Form 10-K). Information concerning executive officers required by Item 401 of Regulation S-K is located under Part I, Item 4(a) of this Form 10-K. The information required by Item 405 of Regulation S-K is included under the caption "Section 16(a) Beneficial Ownership Reporting Compliance" in the 2018 Proxy Statement, and that information is incorporated by reference in this Form 10-K. The information required by Items 407(c)(3), (d)(4) and (d)(5) of Regulation S-K is included under the captions "Committees of the Board of Directors" and "Audit Committee Report" in the 2018 Proxy Statement, and that information is incorporated by reference in this Form 10-K.

We have had a written code of ethics in place since our formation in 1995. *Setting the Standard*, our Code of Ethics and Business Conduct, applies to all our employees, including our principal executive officer, principal financial officer, and principal accounting officer and controller, and to members of our Board of Directors. A copy of our Code of Ethics and Business Conduct is available on our investor relations website: www.lockheedmartin.com/investor. Printed copies of our Code of Ethics and Business Conduct may be obtained, without charge, by contacting Investor Relations, Lockheed Martin Corporation, 6801 Rockledge Drive, Bethesda, Maryland 20817. We are required to disclose any change to, or waiver from, our Code of Ethics and Business Conduct for our Chief Executive Officer and senior financial officers. We use our website to disseminate this disclosure as permitted by applicable SEC rules.

ITEM 11. Executive Compensation

The information required by Item 402 of Regulation S-K is included in the text and tables under the captions "Executive Compensation" and "Director Compensation" in the 2018 Proxy Statement and that information is incorporated by reference in this Annual Report on Form 10-K (Form 10-K). The information required by Item 407(e)(5) of Regulation S-K is included under the caption "Compensation Committee Report" in the 2018 Proxy Statement, and that information is furnished by incorporation by reference in this Form 10-K.

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

The information required by Item 12 is included under the heading "Security Ownership of Management and Certain Beneficial Owners" in the 2018 Proxy Statement, and that information is incorporated by reference in this Annual Report on Form 10-K. The information required by this Item 12 related to our equity compensation plans that authorize the issuance of shares of Lockheed Martin common stock to employees and directors is included under the heading "Executive Compensation - Equity Compensation Plan Information" in the 2018 Proxy Statement, and that information is incorporated by reference in this Form 10-K.

ITEM 13. Certain Relationships and Related Transactions and Director Independence

The information required by this Item 13 is included under the captions "Corporate Governance - Related Person Transaction Policy," "Corporate Governance - Certain Relationships and Related Person Transactions of Directors, Executive Officers, and 5 Percent Stockholders," and "Corporate Governance - Director Independence" in the 2018 Proxy Statement, and that information is incorporated by reference in this Annual Report on Form 10-K.

ITEM 14. Principal Accountant Fees and Services

The information required by this Item 14 is included under the caption "Proposal 2 - Ratification of Appointment of Independent Auditors" in the 2018 Proxy Statement, and that information is incorporated by reference in this Annual Report on Form 10-K.

PART IV

ITEM 15. Exhibits and Financial Statement Schedules

List of financial statements filed as part of this Form 10-K

The following financial statements of Lockheed Martin Corporation and consolidated subsidiaries are included in Item 8 of this Annual Report on Form 10-K (Form 10-K) at the page numbers referenced below:

The report of Lockheed Martin Corporation's independent registered public accounting firm with respect to the above-referenced financial statements and their report on internal control over financial reporting are included in Item 8 and Item 9A of this Form 10-K at the page numbers referenced below. Their consent appears as Exhibit 23 of this Form 10-K.

List of financial statement schedules filed as part of this Form 10-K

All schedules have been omitted because they are not applicable, not required or the information has been otherwise supplied in the consolidated financial statements or notes to consolidated financial statements.

Exhibits

2.1 Stock Purchase Agreement dated as of July 19, 2015 by and among United Technologies Corporation, the other Sellers identified therein and Lockheed Martin Corporation (incorporated by reference to Exhibit 2.1 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on July 20, 2015). The schedules and exhibits to the Stock Purchase Agreement have been omitted pursuant to Item 601(b)(2) of Regulation S-K. Lockheed Martin agrees to furnish supplementally a copy of such schedules and exhibits, or any section thereof, to the SEC upon request.

2.2 Amendment No. 1 to Stock Purchase Agreement dated as of November 5, 2015 by and among United Technologies Corporation and certain affiliated entities identified therein and Lockheed Martin Corporation (incorporated by reference to Exhibit 2.1 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on November 6, 2015). The exhibits to Amendment No. 1 to Stock Purchase Agreement have been omitted pursuant to Item 601(b)(2) of Regulation S-K. Lockheed Martin agrees to furnish supplementally a copy of such exhibits, or any section thereof, to the SEC upon request.

2.3 Agreement and Plan of Merger, dated as of January 26, 2016, among Lockheed Martin Corporation, Leidos Holdings, Inc., Abacus Innovations Corporation and Lion Merger Co. (incorporated by reference to Exhibit 2.1 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on January 27, 2016). The schedules and attachments to the Merger Agreement have been omitted pursuant to Item 601(b)(2) of Regulation S-K, and such schedules and attachments will be furnished to the SEC upon request.

2.4 Amendment dated as of June 27, 2016 to Agreement and Plan of Merger, dated as of January 26, 2016, among Lockheed Martin Corporation, Leidos Holdings, Inc., Abacus Innovations Corporation and Lion Merger Co. (incorporated by reference to Exhibit 2.1 to Lockheed Martin Corporation's Quarterly Report on Form 10-Q for the quarter ended June 26, 2016).

2.5 Separation Agreement, dated as of January 26, 2016, between Lockheed Martin Corporation and Abacus Innovations Corporation (incorporated by reference to Exhibit 2.2 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on January 27, 2016). The schedules and attachments to the Separation Agreement have been omitted pursuant to Item 601(b)(2) of Regulation S-K, and such schedules and attachments will be furnished to the SEC upon request.

2.6 Amendment dated as of June 27, 2016 to Separation Agreement, dated as of January 26, 2016, between Lockheed Martin Corporation and Abacus Innovations Corporation (incorporated by reference to Exhibit 2.2 to Lockheed Martin Corporation's Quarterly Report on Form 10-Q for the quarter ended June 26, 2016). The schedules to the amendment have been omitted pursuant to Item 601(b)(2) of Regulation S-K, and such schedules and attachments will be furnished to the SEC upon request.

3.1 Charter of Lockheed Martin Corporation, as amended by Articles of Amendment dated April 23, 2009 (incorporated by reference to Exhibit 3.1 to Lockheed Martin Corporation's Annual Report on Form 10-K for the year ended December 31, 2010 (File No. 001-11437)).

3.2 Bylaws of Lockheed Martin Corporation, as amended and restated effective December 8, 2017 (incorporated by reference to Exhibit 3.1 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on December 11, 2017).

4.1 Indenture, dated May 15, 1996, among Lockheed Martin Corporation, Lockheed Martin Tactical Systems, Inc. and First Trust of Illinois, National Association as Trustee.

4.2 Indenture, dated as of August 30, 2006, between Lockheed Martin Corporation and The Bank of New York (incorporated by reference to Exhibit 99.1 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on August 31, 2006 (File No. 001-11437)).

4.3 Indenture, dated as of March 11, 2008, between Lockheed Martin Corporation and The Bank of New York (incorporated by reference to Exhibit 4.1 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on March 12, 2008 (File No. 001-11437)).

4.4 Indenture, dated as of May 25, 2010, between Lockheed Martin Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 99.1 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on May 25, 2010 (File No. 001-11437)).

4.5 Indenture, dated as of September 6, 2011, between Lockheed Martin Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on September 8, 2011 (File No. 001-11437)).

4.6 Indenture, dated as of December 14, 2012, between Lockheed Martin Corporation and U.S. Bank National Association (incorporated by reference to Exhibit 99.1 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on December 17, 2012 (File No. 001-11437)).

4.7 Indenture dated as of September 7, 2017, between Lockheed Martin Corporation and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 99.1 of Lockheed Martin's Current Report on Form 8-K filed with the SEC on September 7, 2017).

See also Exhibits 3.1 and 3.2.

No instruments defining the rights of holders of long-term debt that is not registered are filed because the total amount of securities authorized under any such instrument does not exceed 10% of the total assets of Lockheed Martin Corporation on a consolidated basis. Lockheed Martin Corporation agrees to furnish a copy of such instruments to the SEC upon request.

10.1 Five-Year Credit Agreement dated as of October 9, 2015, among Lockheed Martin Corporation, the lenders listed therein, and Bank of America, N.A., as administrative agent (incorporated by reference to Exhibit 10.2 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on October 13, 2015).

10.2 Extension Agreement dated as of October 7, 2016 by and among Lockheed Martin Corporation, the lenders listed therein, and Bank of America, N.A., as administrative agent (incorporated by reference to Exhibit 10.1 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on October 7, 2016).

10.3 Extension Agreement dated as of October 9, 2017 by and among Lockheed Martin Corporation, the lenders listed therein, and Bank of America, N.A., as administrative agent (incorporated by reference to Exhibit 10.1 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on October 10, 2017).

10.4 Lockheed Martin Corporation Directors Deferred Compensation Plan, as amended (incorporated by reference to Exhibit 10.2 to Lockheed Martin Corporation's Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11437)).

10.5 Lockheed Martin Corporation Directors Equity Plan, as amended (incorporated by reference to Exhibit 10.1 to Lockheed Martin Corporation's Current Report on Form 8-K filed with the SEC on November 2, 2006 (File No. 001-11437)).

10.6 Lockheed Martin Corporation 2009 Directors Equity Plan (incorporated by reference to Appendix E to Lockheed Martin Corporation's Definitive Proxy Statement on schedule 14A filed with the SEC on March 14, 2008 (File No. 001-11437)).

10.7 Amendment to Lockheed Martin Corporation 2009 Directors Equity Plan, effective January 1, 2018 (incorporated by reference to Exhibit 10.2 to Lockheed Martin Corporation's Quarterly Report on Form 10-Q for the quarter ended September 24, 2017).

10.8 Lockheed Martin Corporation Supplemental Savings Plan, as amended and restated effective January 1, 2015 (incorporated by reference to Exhibit 10.4 to Lockheed Martin Corporation’s Quarterly Report on Form 10-Q for the quarter ended March 29, 2015).

10.9 Lockheed Martin Corporation Deferred Management Incentive Compensation Plan, as amended and restated effective May 16, 2016 (incorporated by reference to Exhibit 10.1 to Lockheed Martin Corporation’s Quarterly Report on Form 10-Q for the quarter ended June 26, 2016).

10.10 Lockheed Martin Corporation Amended and Restated 2006 Management Incentive Compensation Plan (Performance Based), amended and restated effective January 1, 2017 (incorporated by reference to Exhibit 10.1 to Lockheed Martin Corporation’s Quarterly Report on Form 10-Q for the quarter ended March 26, 2017).

10.11 Amendment No. 1 dated December 19, 2017 to Lockheed Martin Corporation Amended and Restated 2006 Management Incentive Compensation Plan (Performance Based), amended and restated effective January 1, 2017.

10.12 Lockheed Martin Corporation Amended and Restated 2003 Incentive Performance Award Plan (incorporated by reference to Exhibit 10.17 to Lockheed Martin Corporation’s Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11437)).

10.13 Forms of Stock Option Award Agreements under the Lockheed Martin Corporation 2003 Incentive Performance Award Plan (incorporated by reference to Exhibit 10.32 to Lockheed Martin Corporation’s Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 001-11437)).

10.14 Forms of Stock Option Award Agreements under the Lockheed Martin Corporation 2003 Incentive Performance Award Plan (incorporated by reference to Exhibit 10.33 to Lockheed Martin Corporation’s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-11437)).

10.15 Form of Stock Option Award Agreement under the Lockheed Martin Corporation 2003 Incentive Performance Award Plan (incorporated by reference to Exhibit 99.3 of Lockheed Martin Corporation’s Current Report on Form 8-K filed with the SEC on February 3, 2011 (File No. 001-11437)).

10.16 Form of Indemnification Agreement (incorporated by reference to Exhibit 10.34 to Lockheed Martin Corporation’s Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-11437)).

10.17 Lockheed Martin Corporation 2011 Incentive Performance Award Plan, as amended June 23, 2016 effective as of January 1, 2017 (incorporated by reference to Exhibit 10.2 to Lockheed Martin Corporation’s Quarterly Report on Form 10-Q for the quarter ended June 26, 2016).

10.18 Forms of Stock Option Award Agreements under the Lockheed Martin Corporation 2011 Incentive Performance Award Plan (incorporated by reference to Exhibit 10.39 of Lockheed Martin Corporation’s Annual Report on Form 10-K for the year ended December 31, 2011 (File No. 001-11437)).

10.19 Lockheed Martin Corporation Nonqualified Capital Accumulation Plan, as amended and restated generally effective as of December 18, 2015 (incorporated by reference to Exhibit 10.22 of Lockheed Martin Corporation’s Annual Report on Form 10-K for the year ended December 31, 2015).

10.20 Non-Employee Director Compensation Summary (incorporated by reference to Exhibit 10.1 to Lockheed Martin Corporation’s Quarterly Report on Form 10-Q for the quarter ended September 24, 2017).

10.21 Form of Restricted Stock Unit Award Agreement, Form of Long-Term Incentive Performance Award Agreement (2015-2017 performance period), and Form of Performance Stock Unit Award Agreement (2015-2017 performance period) under the Lockheed Martin Corporation 2011 Incentive Performance Award Plan (incorporated by reference to Exhibit 10.30 to Lockheed Martin Corporation’s Annual Report on Form 10-K for the year ended December 31, 2014 (File No. 001-11437)).

10.22 Form of Restricted Stock Unit Award Agreement under the Lockheed Martin Corporation 2011 Incentive Performance Award Plan (incorporated by reference to Exhibit 10.2 to Lockheed Martin Corporation’s Current Report on Form 8-K filed on February 2, 2016).

10.23 Form of Performance Stock Unit Award Agreement (2016-2018 performance period) under the Lockheed Martin Corporation 2011 Incentive Performance Award Plan (incorporated by reference to Exhibit 10.3 to Lockheed Martin Corporation’s Current Report on Form 8-K filed on February 2, 2016).

10.24 Form of Long-Term Incentive Performance Award Agreement (2016-2018 performance period) under the Lockheed Martin Corporation 2011 Incentive Performance Award Plan (incorporated by reference to Exhibit 10.4 to Lockheed Martin Corporation’s Current Report on Form 8-K filed on February 2, 2016).

10.25 Form of Restricted Stock Unit Award Agreement under the Lockheed Martin Corporation 2011 Incentive Performance Award Plan (incorporated by reference to Exhibit 10.2 to Lockheed Martin Corporation's Quarterly Report on Form 10-Q for the quarter ended March 26, 2017).

10.26 Form of Performance Stock Unit Award Agreement (2017 to 2019 Performance Period) under the Lockheed Martin Corporation 2011 Incentive Performance Award Plan (incorporated by reference to Exhibit 10.3 to Lockheed Martin Corporation's Quarterly Report on Form 10-Q for the quarter ended March 26, 2017).

10.27 Form of Long-Term Incentive Performance Award Agreement (2017 to 2019 Performance Period) under the Lockheed Martin Corporation 2011 Incentive Performance Award Plan (incorporated by reference to Exhibit 10.4 to Lockheed Martin Corporation's Quarterly Report on Form 10-Q for the quarter ended March 26, 2017).

10.28 Lockheed Martin Corporation Consolidated Supplemental Retirement Benefit Plan, as amended and restated effective December 31, 2017.

10.29 Lockheed Martin Corporation Executive Severance Plan, as amended and restated effective December 1, 2016 (incorporated by reference to Exhibit 10.26 to Lockheed Martin Corporation's Annual Report on Form 10-K for the year ended December 31, 2016).

10.30 Amendment to Terms of Outstanding Restricted Stock Unit Awards and Performance Stock Unit Awards under the Lockheed Martin Corporation 2011 Incentive Performance Award Plan Relating to Tax Withholding (incorporated by reference to Exhibit 10.27 to Lockheed Martin Corporation's Annual Report on Form 10-K for the year ended December 31, 2016).

10.31 Amendments to Terms of Outstanding Long-Term Incentive Performance Award Agreements (2015-2017 Performance Period and 2016-2018 Performance Period) under the Lockheed Martin Corporation 2011 Performance Award Plan Relating to Tax Withholding (incorporated by reference to Exhibit 10.1 to Lockheed Martin Corporation's Quarterly Report on Form 10-Q for the quarter ended June 25, 2017).

12 Computation of ratio of earnings to fixed charges.

21 Subsidiaries of Lockheed Martin Corporation.

23 Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.

24 Powers of Attorney.

31.1 Certification of Marillyn A. Hewson pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

31.2 Certification of Bruce L. Tanner pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

32 Certification of Marillyn A. Hewson and Bruce L. Tanner Pursuant to 18 U.S.C. Section 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 Document

101.CAL XBRL Taxonomy Extension Calculation Linkbase Document

101.DEF XBRL Taxonomy Extension Definition Linkbase Document

101.LAB XBRL Taxonomy Extension Label Linkbase Document

101.PRE XBRL Taxonomy Extension Presentation Linkbase Document

* Exhibits 10.4 through 10.31 constitute management contracts or compensatory plans or arrangements.

ITEM 16. Form 10-K Summary

None.

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.

Lockheed Martin Corporation
(Registrant)

Date: February 6, 2018

By: Brian P Colan

Brian P. Colan
Vice President, Controller, and Chief Accounting 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.

Signatures	Titles	Date
Marillyn A. Hewson Marillyn A. Hewson	Chairman, President and Chief Executive Officer (Principal Executive Officer)	February 6, 2018
Bruce L. Tanner Bruce L. Tanner	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 6, 2018
Brian P Colan Brian P. Colan	Vice President, Controller, and Chief Accounting Officer (Principal Accounting Officer)	February 6, 2018
* Daniel F. Akerson	Director	February 6, 2018
* Nolan D. Archibald	Director	February 6, 2018
* David B. Burritt	Director	February 6, 2018
* Bruce A. Carlson	Director	February 6, 2018
* James O. Ellis, Jr.	Director	February 6, 2018
* Thomas J. Falk	Director	February 6, 2018
* Ilene S. Gordon	Director	February 6, 2018
* Jeh C. Johnson	Director	February 6, 2018
* James M. Loy	Director	February 6, 2018
* Joseph W. Ralston	Director	February 6, 2018
* James D. Taiclet, Jr.	Director	February 6, 2018

*By Maryanne R. Lavan pursuant to a Power of Attorney executed by the Directors listed above, which has been filed with this Annual Report on Form 10-K.

Date: February 6, 2018

By: Maryanne R. Lavan

Maryanne R. Lavan
Attorney-in-fact

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Exhibit 31.1

**CERTIFICATION OF MARILLYN A. HEWSON PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Marillyn A. Hewson, certify that:

1. I have reviewed this Annual Report on Form 10-K of Lockheed Martin Corporation;

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;

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.

Marillyn A. Hewson

Marillyn A. Hewson
Chief Executive Officer

Date: February 6, 2018

Exhibit 31.2

CERTIFICATION OF BRUCE L. TANNER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Bruce L. Tanner, certify that:

1. I have reviewed this Annual Report on Form 10-K of Lockheed Martin Corporation;

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;

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.

Bruce L. Tanner

Bruce L. Tanner
Chief Financial Officer

Date: February 6, 2018

Exhibit 32

CERTIFICATION OF MARILLYN A. HEWSON AND BRUCE L. TANNER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Lockheed Martin Corporation (the “Corporation”) on Form 10-K for the period ended December 31, 2017, as filed with the U.S. Securities and Exchange Commission on the date hereof (the “Report”), I, Marillyn A. Hewson, Chief Executive Officer of the Corporation, and I, Bruce L. Tanner, Chief Financial Officer of the Corporation, each certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Marillyn A. Hewson
Chief Executive Officer

Bruce L. Tanner
Chief Financial Officer

Date: February 6, 2018

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NON-GAAP DEFINITIONS AND RECONCILIATION OF NON-GAAP MEASURES TO GAAP MEASURES

This annual report contains non-generally accepted accounting principles (GAAP) financial measures. While we believe that these non-GAAP financial measures may be useful in evaluating Lockheed Martin, this information should be considered supplemental and is not a substitute for financial information prepared in accordance with GAAP. In addition, our definitions for non-GAAP measures may differ from similarly titled measures used by other companies or analysts.

Segment Operating Profit / Margin

Segment Operating Profit represents the total earnings from our business segments before unallocated income and expense, interest expense, other non-operating income and expense, and income tax expense. This measure is used by our senior management in evaluating the performance of our business segments. The caption "Total Unallocated Items" reconciles Segment Operating Profit to Consolidated Operating Profit. Segment Margin is calculated by dividing Segment Operating Profit by Net Sales.

In millions	2017	2016	2015
Net Sales	**$ 51,048**	$ 47,248	$ 40,536
Consolidated Operating Profit	**$ 5,921**	$ 5,549	$ 4,712
Less: Total Unallocated Items	**806**	449	(266)
Segment Operating Profit (Non-GAAP)	**$ 5,115**	$ 5,100	$ 4,978
Consolidated Operating Margin	**11.6%**	11.7%	11.6%
Segment Operating Margin (Non-GAAP)	**10.0%**	10.8%	12.3%

Free Cash Flow

Lockheed Martin defines Free Cash Flow (FCF) as Cash from Operations, less Capital Expenditures.

In millions	2017
Cash from Operations	**$ 6,476**
Capital Expenditures	**(1,177)**
Free Cash Flow (Non-GAAP)	**$ 5,299**

GENERAL INFORMATION

As of December 31, 2017, there were approximately 27,793 holders of record of Lockheed Martin common stock and 285,492,199 shares outstanding.

TRANSFER AGENT, REGISTRAR AND DIVIDEND DISBURSING AGENT

Computershare Trust Company, N.A.
Shareholder Services
P.O. Box 505000
Louisville, KY 40233
Telephone: 1-877-498-8861
TDD for the hearing impaired: 1-800-952-9245
Internet: www.computershare.com/investor

Overnight correspondence should be mailed to:
Computershare Trust Company, N.A.
462 South 4th Street, Suite 1600
Louisville, KY 40202

ELECTRONIC DELIVERY

Stockholders are encouraged to enroll in electronic delivery to receive all stockholder communications, including proxy voting materials, electronically, by visiting Shareholder Services at www.lockheedmartin.com/investor

DIRECT STOCK PURCHASE AND DIVIDEND REINVESTMENT PLAN

Lockheed Martin Direct Invest is a convenient direct stock purchase and dividend reinvestment program available for new investors to make an initial investment in Lockheed Martin common stock and for existing stockholders to increase their holdings of Lockheed Martin common stock. For more information about Lockheed Martin Direct Invest, contact Computershare Trust Company, N.A. at 1-877-498-8861, or view plan materials online and enroll electronically at www.computershare.com/investor

INDEPENDENT AUDITORS

Ernst & Young LLP
1775 Tysons Boulevard
Tysons, VA 22102
Telephone: 703-747-1000

COMMON STOCK

Stock symbol: LMT
Listed: New York Stock Exchange (NYSE)

2017 FORM 10-K

Our 2017 Form 10-K is included in this Annual Report in its entirety with the exception of certain exhibits. All of the exhibits may be obtained on our Investor Relations homepage at www.lockheedmartin.com/investor or by accessing our filings with the U.S. Securities and Exchange Commission. In addition, stockholders may obtain a paper copy of any exhibit by writing to:

Gregory M. Gardner - Vice President, Investor Relations
Lockheed Martin Corporation
Investor Relations Department MP 279
6801 Rockledge Drive
Bethesda, MD 20817

Lockheed Martin financial data and requests for printed materials may also be obtained on our website at www.lockheedmartin.com/investor

Lockheed Martin Corporation
6801 Rockledge Drive
Bethesda, MD 20817
www.lockheedmartin.com

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