

RAYTHEON CO/  
Form 10-K  
February 15, 2017

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

---

FORM 10-K

ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2016 or

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

For the transition period from to  
Commission File Number 1-13699

---

RAYTHEON COMPANY  
(Exact Name of Registrant as Specified in its Charter)

---

Delaware 95-1778500  
(State or Other Jurisdiction of Incorporation or Organization) (I.R.S. Employer Identification No.)

870 Winter Street, Waltham, Massachusetts 02451  
(Address of Principal Executive Offices) (Zip Code)  
(781) 522-3000

(Registrant's telephone number, including area code)

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, \$.01 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 ý 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 ý

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 ý 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 ý 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. ý

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

Edgar Filing: RAYTHEON CO/ - Form 10-K

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐  
Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting stock held by non-affiliates of the Registrant as of July 1, 2016, was approximately \$39.7 billion.

The number of shares of Common Stock outstanding as of February 13, 2017 was 292,880,000.

Documents incorporated by reference and made a part of this Form 10-K:

Portions of the Registrant's Definitive Proxy Statement for its 2017 Annual Meeting of Stockholders are incorporated by reference in Part III of this Form 10-K.

---

Table of Contents

INDEX

PART I

Item 1.	<u>Business</u>	<u>1</u>
Item 1A.	<u>Risk Factors</u>	<u>12</u>
Item 1B.	<u>Unresolved Staff Comments</u>	<u>21</u>
Item 2.	<u>Properties</u>	<u>21</u>
Item 3.	<u>Legal Proceedings</u>	<u>22</u>
Item 4.	<u>Mine Safety Disclosures</u>	<u>23</u>
	<u>Executive Officers of the Registrant</u>	<u>23</u>

PART II

Item 5.	<u>Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	<u>25</u>
Item 6.	<u>Selected Financial Data</u>	<u>27</u>
Item 7.	<u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>28</u>
Item 7A.	<u>Quantitative and Qualitative Disclosures About Market Risk</u>	<u>73</u>
Item 8.	<u>Financial Statements and Supplementary Data</u>	<u>75</u>
Item 9.	<u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	<u>123</u>
Item 9A.	<u>Controls and Procedures</u>	<u>123</u>
Item 9B.	<u>Other Information</u>	<u>123</u>

PART III

Item 10.	<u>Directors, Executive Officers and Corporate Governance</u>	<u>123</u>
Item 11.	<u>Executive Compensation</u>	<u>124</u>
Item 12.	<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>124</u>
Item 13.	<u>Certain Relationships and Related Transactions, and Director Independence</u>	<u>124</u>
Item 14.	<u>Principal Accountant Fees and Services</u>	<u>124</u>

PART IV

Item 15.	<u>Exhibits and Financial Statement Schedules</u>	<u>124</u>
Item 16.	<u>Form 10-K Summary</u>	<u>128</u>

<u>SIGNATURES</u>	<u>129</u>
-------------------	------------

Table of Contents

PART I

ITEM 1. BUSINESS

General

Raytheon Company, together with its subsidiaries, is a technology and innovation leader specializing in defense and other government markets throughout the world. The terms “we”, “us”, “our”, “Raytheon” and the “Company” mean Raytheon Company and its subsidiaries, unless the context indicates another meaning. We develop technologically advanced and integrated products, services and solutions in our core markets: sensing; effects; command, control, communications, computers, cyber and intelligence; mission support; and cybersecurity. We serve both domestic and international customers, primarily as a prime contractor or subcontractor on a broad portfolio of defense and related programs for government customers.

We were founded in 1922 and have grown internally and through a number of acquisitions. We are incorporated in the state of Delaware. Our principal executive offices are located at 870 Winter Street, Waltham, Massachusetts 02451.

In this section, we describe our business, including our business segments, product lines, customers, operations and other considerations.

Business Segments

We operate in five business segments:

Integrated Defense Systems;  
Intelligence, Information and Services;  
Missile Systems;  
Space and Airborne Systems; and  
Forcepoint™.

The following is a description of each of our business segments. As part of the description, we include a discussion of some of the segment’s notable initiatives and achievements in 2016, such as certain key contract awards, new product introductions and acquisitions. For a discussion of the financial performance of our business segments and other financial information, see “Segment Results” within Item 7 of this Form 10-K.

Integrated Defense Systems (IDS)—IDS, headquartered in Tewksbury, Massachusetts, is a leader in integrated air and missile defense; large land- and sea-based radar solutions; command, control, communications, computers, cyber and intelligence solutions; and naval combat and ship electronic systems. IDS delivers combat-proven performance against the complete spectrum of airborne and ballistic missile threats and is a world leader in the technology, development, and production of sensors and mission systems. IDS provides solutions to the U.S. Department of Defense (DoD) and the U.S. Intelligence Community, as well as more than 50 international customers which represent approximately half of IDS’s business.

In 2016, IDS booked a number of awards to provide advanced Patriot Air and Missile Defense (A&MD) systems for the U.S. Army and other international customers. IDS won a competitive award with the U.S. Navy: a development contract for the Enterprise Air Surveillance Radar (EASR) program to provide radars for aircraft carriers and amphibious warfare ships. IDS also received contract awards for missile defense radar sustainment for the Missile Defense Agency (MDA), and contract awards for equipment for DDG 1000 destroyer ships, ship integration and undersea sensor systems for the U.S. Navy.

IDS has the following principal product lines:

Mission Systems and Sensors (MSS)—MSS provides integrated whole-life air and missile defense systems. MSS produces systems and solutions, including Upgraded Early Warning Radars (UEWR), the Army Navy/Transportable Radar Surveillance-Model 2 (AN/TPY-2) and other land-based surveillance and search radars, which provide threat detection, precision tracking, discrimination and classification of ballistic missile threats. In addition, MSS provides command, control, communications, computers, cyber and intelligence solutions through the development, delivery and support of complex integrated, networked, actionable combat command and control solutions for air and land combat commanders. Key MSS customers include the U.S. Army and Air Force, the MDA and international customers.

## Table of Contents

Integrated Air and Missile Defense (IAMD)—IAMD provides combat-proven air and missile defense systems, including the Patriot A&MD system which is the cornerstone of the air and missile defense architecture for thirteen nations around the globe, including the U.S. and five NATO nations. The National Advanced Surface-to-Air Missile System (NASAMS™), also offered by IAMD, is a highly adaptable mid-range solution for any operational air defense requirement. It is deployed in the U.S. and five other countries. Key IAMD customers include the U.S. Army and international customers. Total sales from this business area were approximately 10% of our consolidated revenues for 2016, 2015 and 2014.

Seapower Capability Systems (SCS)—SCS is a provider and integrator of maritime air and missile defense radar systems, naval combat management, and airborne anti-submarine and mine warfare systems, as well as sensors, maritime naval navigation systems, and torpedoes for U.S. and international navies. As a naval radar provider, SCS is designing and will manufacture the low-rate initial production of the U.S. Navy's two newest radars, the Air and Missile Defense Radar (AMDR), designated as AN/SPY-6, for the DDG 51 class of warships and the EASR for aircraft carriers and amphibious warfare ships. As a ship integrator for the U.S. Navy, SCS provides mission systems equipment and combat and missions system integration for the following ship classes: DDG 1000 destroyers; LPD 17 amphibious warfare ships; and CVN 78 aircraft carriers. Key SCS customers include the U.S. Navy and allied navies.

IDS also includes the Advanced Technology Programs (ATP) product line, which executes contract research and development programs primarily with the Office of Naval Research (ONR), the Strategic Capabilities Office (SCO) and the Defense Advanced Research Projects Agency (DARPA) in advanced materials, semiconductors such as Gallium Nitride (GaN) and next-generation radar systems such as Flexible Digital Array Radar (FlexDAR) and Network Cooperative Radar (NCR), to support Raytheon product lines. ATP also pursues attractive adjacent growth markets such as undersea warfare and directed energy.

Intelligence, Information and Services (IIS)—IIS, headquartered in Dulles, Virginia, provides a full range of technical and professional services to intelligence, defense, federal and commercial customers worldwide. IIS specializes in global Intelligence, Surveillance and Reconnaissance (ISR); navigation; DoD space and weather solutions; cybersecurity; analytics; training; logistics; mission support; engineering; automation and sustainment solutions; and international and domestic Air Traffic Management (ATM) systems. Key customers include the U.S. Intelligence Community, the U.S. Armed Forces, the Federal Aviation Administration (FAA), the National Oceanic and Atmospheric Administration (NOAA), the Department of Homeland Security (DHS), the National Aeronautics and Space Administration (NASA) and an increasing number of international customers.

During 2016, IIS won a variety of notable classified and unclassified contracts. IIS will be executing development work for new phases of the Intelligence Community's Future Ground Architecture that provides a common framework for mission management across some of our core customers. IIS also extended new phases of work in support of the operations and sustainment of the Navy's Relocatable Over The Horizon Radar (ROTHR) as well as classified cyber and special mission programs. In addition, IIS has also expanded internationally by providing additional growth in cybersecurity capabilities for our UK customers, as well as continued growth in our weapons systems installation and platform sustainment internationally, including for Canada and Australia.

IIS has the following principal product lines:

Cybersecurity and Special Missions (CSM)—CSM provides integrated cybersecurity and advanced intelligence solutions to strengthen information systems and mission execution. CSM designs and implements customized cyber, managed security services, and quick-reaction solutions, as well as high-consequence special missions support, for the U.S. Intelligence Community, the DoD, civilian federal agencies, international governments and large commercial enterprises. Raytheon leverages and incorporates the cyber capabilities within CSM across the Company by embedding information assurance technologies and know-how into its internal company systems, core solutions and

products.

Global Training Solutions (GTS)—GTS provides training solutions, logistics and engineering support worldwide, principally under the Warfighter Field Operations Customer Support (FOCUS) contract with the U.S. Army, which will continue into the first half of 2018. We expect lower activity on this program beginning in the second half of 2017 when task order submissions are completed. Under this contract, the GTS-led Warrior Training Alliance provides integrated operational training through comprehensive support for live, virtual and constructive training exercises and operations, maintenance for training and range systems, curriculum development and instruction, management oversight and administration for contractor activities, and

## Table of Contents

supply support for government-owned property and material. GTS also provides training solutions to international customers and, through Raytheon Professional Services, provides commercial solutions, processes, tools and training experts to domestic and international commercial customers.

Navigation and Environmental Solutions (NES)—NES primarily supports programs for NASA, NOAA and the U.S. Air Force by implementing secure environmental and navigation ground solutions and data processing. NES capabilities include ground systems for command and control of space assets, large-scale data processing and exploitation, storage architectures, and high-performance data handling and processing systems. Key programs include the Joint Polar Satellite System (JPSS), which supports multiple civil, defense and international polar-orbiting environmental satellites and the Global Positioning System Next Generation Operational Control System (GPS-OCX).

Global Intelligence Solutions (GIS)—GIS provides strategic ISR and advanced technology solutions and services through large-scale satellite command and control, mission planning, constellation management, data processing, mission analytics, and secure data sharing. GIS's highly automated information solutions manage the collection and integration of information across multiple domains. GIS serves members of the Intelligence Community, commercial customers and international markets.

Mission Support and Modernization (MSM)—MSM provides full life-cycle mission operations, engineering, sustainment and modernization services for site and platform missions across all domains, as well as multi-intelligence (multi-INT) ground systems and unmanned systems technology for the U.S. Armed Forces and civil agencies. MSM's core services are applied in two broad areas: proven models to support global mission operations more efficiently; and innovative engineering practices that generate affordable modernization and sustainment of mission-critical systems, weapons or platforms. Programs include advanced ground solutions for tactical ISR missions, such as Global Hawk and the U.S. Air Force's U-2 reconnaissance aircraft; services for the U.S. Air Force's contractor field support; software and avionics solutions for the V-22 Osprey aircraft; border and critical infrastructure security solutions; integrated operations for the North American Aerospace Defense Command (NORAD) command center, NASA's Neutral Buoyancy Lab and, through its RGNEXT joint venture, for U.S. Air Force space launch facilities; and upgrades of airborne and sea-based weapons systems and podded aircraft reconnaissance systems.

Transportation and Support Services (TSS)—TSS develops, delivers and supports domestic and international ATM. TSS is a key provider of ATM solutions including automation, surveillance, and navigation and landing solutions, as well as its Standard Terminal Automation Replacement System (STARS), to the FAA and the DoD. TSS also provides "all-electronic" highway tolling systems for customers such as the Massachusetts Department of Transportation (MassDOT) and a highway system in Canada, infrastructure protection with Perimeter Intrusion Detection technology, and product support services for other Raytheon businesses, including system deployment, installation and integration, logistics and training for military and civil customers in over 80 countries.

IIS also includes the Cyber Operations, Development and Evaluation (CODE) Center, an advanced cyber range in which the Company demonstrates, tests and assesses new cyber products and services to determine how they can best integrate into a customer's Cyber Security Operations Center (CSOC). IIS leverages CODE Center capabilities to drive both internal and external research and development with Governmental entities and commercial cyber protection companies.

Missile Systems (MS)—MS, headquartered in Tucson, Arizona, is a premier developer, integrator and producer of missile and combat systems for the armed forces of the U.S. and allied nations. Leveraging its capabilities in advanced airframes, guidance and navigation systems, high-resolution sensors, surveillance, targeting and netted systems, MS develops and supports a broad range of advanced weapon systems, including missiles, smart munitions, close-in weapon systems, projectiles, kinetic kill vehicles, directed energy effectors and advanced combat sensor solutions. Key customers include the U.S. Navy, Army, Air Force and Marine Corps, the MDA and the armed forces of more



than 40 allied nations.

In 2016, MS continued to capture key contract awards from a broad global customer base, including awards for the Advanced Medium-Range Air-to-Air Missile (AMRAAM®) program, the Paveway™ program, the Standard Missile-3 (SM-3®) program and the Phalanx® weapon system program. In addition to these awards, MS received a significant award for the Hypersonic Air-breathing Weapon Concept (HAWC) program. MS completed successful flight tests on the SM-3 program, the Exoatmospheric Kill Vehicle (EKV) program, the Standard Missile-6 (SM-6®) program and the Small Diameter Bomb II (SDB II™) program.

## Table of Contents

MS has the following principal product lines:

**Air Warfare Systems (AWS)**—AWS products and services enable the U.S. Armed Forces and international customers to attack, suppress and destroy air-, sea- and ground-based targets. Products include the AMRAAM, a state-of-the-art, highly dependable and battle-proven air-to-air missile that also has a surface-to-air launch application; the Tomahawk™ cruise missile, an advanced surface- or submarine-launched cruise missile with loitering and network communication capability; SDB II, an air-to-ground glide weapon designed to engage moving targets in adverse weather and through battlefield conditions; the Joint Standoff Weapon (JSOW®), a family of air-to-ground weapons that employ an integrated GPS/inertial navigation system that guides the weapon to the target; the Paveway family of laser and GPS precision guided munitions; the AIM-9X Sidewinder™ short-range air-to-air missile; the Miniature Air Launched Decoy-Jammer (MALD®-J), a stand-off, high endurance electronic warfare decoy/jammer used to deceive and degrade air defenses; the High-Speed Anti-Radiation Missile (HARM®) and the HARM Targeting System; the Maverick® precision strike missile; and the Griffin®, a small lightweight missile that can be employed from aircraft, unmanned aerial vehicles, ships or ground-launched against light targets. Also, AWS partners with Kongsberg Defence Systems on the Naval Strike Missile (NSM) and the Joint Strike Missile (JSM), which are over-the-horizon anti-surface warfare and land attack weapons systems to be used on various aircraft platforms and ship classes. Total sales from this business area were approximately 10% of our consolidated revenues for 2016, 2015, and 2014.

**Air and Missile Defense Systems (AMDS)**—AMDS designs, develops, produces, and supports air defense and ballistic missile defense interceptor systems. AMDS's primary customers are the MDA, the U.S. Navy and various international customers around the world. The AMDS portfolio contains multiple versions of the Standard Missile family of products, including SM-3 and SM-6, with capabilities ranging from anti-air warfare to ballistic missile defense.

**Naval and Area Mission Defense (NAMD)**—NAMD offers a complete family of mission solutions for customers around the world. The product line provides highly effective layered ship defense for the navies of more than 30 countries across multiple platforms to counter the anti-ship threats of today and tomorrow. NAMD leverages its proven capabilities to provide forward-operating base defense for the U.S. Army, Air Force and Marine Corps. The product line designs, develops, manufactures and supports a variety of products that include the Phalanx Close-In Weapon System (employed afloat and ashore), the Rolling Airframe Missile (RAM™) and Launcher System, the SeaRAM® system, Standard Missile-2 (SM-2), and the Evolved SeaSparrow Missiles (ESSM®) family of missiles for layered ship mission protection against air, subsurface and surface cruise/ballistic missile threats. NAMD continues to leverage its strategic international cooperative partnerships to evolve its existing products and technologies with a goal of addressing the full spectrum of threats.

**Land Warfare Systems (LWS)**—From precision missiles and munitions to advanced electro-optical/infrared (EO/IR) sensors, LWS offers integrated mission solutions in the land domain for the U.S. Army, Marine Corps and more than 40 allied nations that provide warfighters the situational awareness and lethality they need to defeat evolving complex threats. LWS programs include the Tube-launched, Optically-tracked, Wireless-guided (TOW®) weapon system, a long-range precision anti-armor/anti-fortification/anti-amphibious-landing weapon system; Javelin, a shoulder-fired, fire-and-forget anti-tank weapon; Stinger®, a lightweight, self-contained, fire-and-forget, very short-range air defense system; TALON® Laser-Guided Rocket, a precision guided munition co-developed with the United Arab Emirates that can be fired both air-to-ground and ground-to-air; Excalibur®, a GPS-guided artillery round designed to provide indirect precision fire for ground forces; Precision Extended Range Munition (PERM®), a GPS-guided 120mm long-range mortar round; 2nd and 3rd Generation Forward Looking Infrared (FLIR), a sensor technology that provides warfighters with high-definition resolution and magnification of target images in darkness and through weather, smoke, dust and fog; a family of light to heavy Thermal Weapon Sights (TWS); and integrated system solutions for combat vehicle upgrade programs including the U.S. Army's Stryker Fighting Vehicle, the Bradley Fighting Vehicle, the Abrams Main Battle Tank and the U.S. Marine Corps Light Armored Vehicle-Anti-Tank

(LAV-AT) modernization programs.

Advanced Missile Systems (AMS)—AMS focuses on the development and early introduction of next-generation, end-to-end system solutions that support the AWS, AMDS, NAMD and LWS and other Raytheon product lines. AMS is engaged in opportunities involving the transition from weapon development to warfighter fielding in the areas of next generation missile systems, hypersonic vehicles, unmanned aircraft systems, non-kinetic solutions, space applications and collaborative weapon technologies. AMS works closely with DARPA, SCO and the research lab community.

Space and Airborne Systems (SAS)—SAS, headquartered in McKinney, Texas, is a leader in the design, development and manufacture of integrated sensor and communication systems for advanced missions. These missions include intelligence,

## Table of Contents

surveillance and reconnaissance; precision engagement; manned and unmanned aerial operations; and space. Leveraging state-of-the-art technologies, mission systems and domain knowledge, SAS designs, manufactures, supports and sustains civil and military applications of electro-optical/infrared (EO/IR) sensors; airborne radars for surveillance and fire control applications; lasers; precision guidance systems; signals intelligence systems; processors; electronic warfare systems; and communication and space-qualified systems. The U.S. Navy, Air Force, and Army, classified and international allies are key customers.

In 2016, SAS booked important awards in the electronic warfare, space and international markets. SAS was awarded a \$1 billion contract for engineering, manufacturing and development of Increment 1 of the U.S. Navy's Next Generation Jammer (NGJ) airborne electronic attack and jamming system. SAS also received a \$564 million NASA award for two Visible Infrared Imaging Radiometer Suite (VIIRS) satellite sensor suites, which provide detail for emerging weather and climate patterns. SAS also won key domestic and international classified awards. SAS also launched a new variant of its Multi-Spectral Targeting System (MTS) and was awarded a U.S. Air Force contract for the AN/DAS-4, the newest MTS sensor that provides mission commanders high definition data to identify and engage targets.

SAS has the following principal product lines:

**Intelligence, Surveillance and Reconnaissance Systems (ISRS)**—ISRS designs, develops and manufactures an array of EO/IR sensors, light-sensing focal plane arrays, advanced visible and infrared sensors, active electronically scanned array (AESA) radars and various integrated systems solutions to provide customers with actionable information for strike, persistent surveillance and special mission platforms. These systems perform detection, identification, tracking, targeting, navigation, weather, and situational awareness tasks on a variety of airborne platforms, including maritime, littoral and overland patrol aircraft, unmanned aerial systems, and other tactical, attack and transport rotary- and fixed-wing aircraft. Key ISRS programs include the APY-10 radar on the U.S. Navy's P-8A Poseidon; the MTS on numerous unmanned and manned aircraft; the Enhanced Integrated Sensor Suite for the Global Hawk; the Silent Knight Terrain Following/Terrain Avoiding radar for rotary-wing platforms; and an international classified program.

**Secure Sensor Solutions (S<sup>3</sup>)**—S<sup>3</sup> designs, manufactures and develops cost-effective, high-performance integrated sensor solutions for tactical and strategic platforms, which deliver trusted, actionable information for mission assurance. S<sup>3</sup> provides integrated advanced fire control radars to customers, including the U.S. Navy, Marine Corps, and Air Force and international governments. S<sup>3</sup> produces AESA radars for the U.S. Air Force's F-15 and B-2 aircraft, the U.S. Navy's F/A-18E/F and EA-18G and radars for several international customers, including Australia, Canada, Japan and Saudi Arabia. S<sup>3</sup> also develops sophisticated anti-jam GPS solutions for many customers and provides a wide range of state-of-the-art product families and engineering services for the DoD's response to dynamic threat environments.

**Electronic Warfare Systems (EWS)**—EWS designs and manufactures cost-effective, high-performance electronic warfare systems and equipment for strategic and tactical aircraft, helicopters, surface ships and ground forces for the U.S. Air Force, Army, Navy, Special Operations Forces, and intelligence agencies and international governments. EWS products deliver a range of non-kinetic effects ranging from radar jamming to information operations. The EWS portfolio includes the NGJ program, integrated electronic warfare suites, development of electronic warfare planning and management tools (EW PMT), the Multi-function Integrated Receiver/Exciter System (MFIREs) product family, advanced classified programs, and products which include towed decoys, radar warning receivers, radar and communications countermeasures and missile warning sensors.

**Integrated Communications Systems (ICS)**—ICS is a market leader in tactical airborne communications, software-defined radio technology, advanced tactical networking, cryptology and real-time sensor networking. The ARC-231 radio is deployed on U.S. and International rotary wing platforms and fixed wing aircraft. The Vinson/ANDVT Cryptology Modernization (VACM) family of products provides secure communications for the U.S.

and international customers. ICS is the only producer of Advanced Extremely High Frequency (AEHF) satellite terminals for all U.S. military branches, providing protected, highly secure satellite communications terminals for the U.S. military, including the Navy Multiband Terminal (NMT) and the Air Force Family of Advanced Beyond Line of Sight Terminal (FAB-T) and related ground terminals.

Space Systems (SS)—SS designs and manufactures space and space-qualified sensor payloads for large national programs and develops innovative solutions for emerging intelligence, defense and civil space applications. SS provides EO/IR, radio frequency, radar and laser space-based sensors to customers, including branches of the DoD, MDA, NASA, classified customers and international governments. Its major non-classified program is the JPSS program, which provides the VIIRS, an advanced imaging and radiometric sensor for NASA and NOAA weather/environmental monitoring programs.

## Table of Contents

Advanced Concepts Technology (ACT), an innovation incubator, is also part of SAS. ACT conducts internal research and development for SAS and contract research and development for customers, including the U.S. Air Force Research Laboratory (AFRL) and the DARPA, and produces cutting-edge products including advanced laser weapons systems (high-resolution imaging and directed energy), next-generation all-weather millimeter wave targeting radars, advanced speech recognition with natural language understanding, plus systems exploiting acoustic phenomenology.

Forcepoint—Forcepoint (formerly Raytheon/Websense) is headquartered in Austin, Texas, and develops cybersecurity products serving commercial and government organizations worldwide. Forcepoint is a joint venture of Raytheon and Vista Equity Partners created in May 2015 that brought together the capabilities of the legacy Raytheon Cyber Products (RCP) and Websense, Inc. (Websense) businesses. Forcepoint delivers a portfolio of cybersecurity capabilities, including insider threat solutions; data loss prevention; next-generation firewall technology; cloud and on premise web and email security; and cross domain transfer products. Forcepoint's customers deploy its software products on standard servers or other information technology hardware, including Forcepoint optimized appliances, as a software-as-a-service (otherwise referred to as a cloud-based or cloud service) offering, or in a hybrid hardware/cloud configuration. Forcepoint's customers include large enterprises, small- and medium-sized businesses and both domestic and international government agencies.

In 2016, the joint venture was rebranded as Forcepoint. Forcepoint also acquired the Stonesoft next-generation firewall business, including the Sidewinder proxy firewall technologies.

Effective January 1, 2017, Forcepoint has reorganized into the following principal product lines: Data and Insider Threat Security; Cloud Security; Global Governments; and Network Security. This structure reflects the reorganization of Forcepoint's broad portfolio of cybersecurity products into focused technology and market categories.

Data and Insider Threat Security—Data and Insider Threat Security provides data loss prevention and insider threat security products. Forcepoint's data loss prevention suites, TRITON® AP-DATA and AP-ENDPOINT, extend data security control solutions to enterprise cloud applications, end user software applications and sensitive data and intellectual property on laptops, both on- and off-network. Forcepoint's SureView suite of products spans analytics, insider threat, advanced threat protection and related security features.

Cloud Security—Cloud Security's suite of products includes the TRITON security platform, which provides content security solutions by integrating Forcepoint's web, email and filtering technologies into a single security architecture. These products are deployed in the cloud, on premise (e.g. a proxy server or firewall) and in a hybrid environment. Cloud Security also sells a range of optimized commercial appliances that consolidate multiple security functions into a single hardware platform and deliver real-time security functionalities.

Global Governments—In addition to providing the full suite of Forcepoint products to government customers, Global Governments provides the High Speed Guard product, which enables highly complex, bi-directional, automated data transfers between multiple domains, specializing in real-time streaming video.

Network Security—Network Security delivers the Forcepoint Stonesoft next-generation firewall and the Forcepoint Sidewinder proxy firewall products. The Forcepoint Stonesoft product provides next-generation firewall software and hardware solutions that focus on high-availability, centralized management of large networks and protection from advanced evasion techniques. The Forcepoint Sidewinder product provides proxy-based firewall software and hardware solutions, designed to allow for clear visibility and control of command filtering, protocol enforcement and application access.

In addition to the principal product lines, Forcepoint provides consulting services of certified engineers who assess, plan, design, analyze and optimize security solutions for its customers' business environments.

Table of Contents

## Sales to the U.S. Government

(In millions, except percentages)

	2016		2015		2014
Sales to the U.S. government <sup>(1)</sup>	\$16,101		\$15,767		\$16,083
Sales to the U.S. government as a Percentage of Total Net Sales <sup>(1)</sup>	67	%	68	%	70
Foreign military sales through the U.S. government	\$2,899		\$2,814		\$2,962
Foreign military sales through the U.S. government as a Percentage of Total Net Sales	12	%	12	%	13

(1) Excludes foreign military sales through the U.S. government.

Our principal U.S. government customer is the DoD; other U.S. government customers include other U.S. Intelligence Community agencies, NASA and the FAA.

## U.S. Government Contracts and Regulation

We act as a prime contractor or major subcontractor for numerous U.S. government programs. As a result, we are subject to extensive regulations and requirements of the U.S. government agencies and entities that govern these programs, including with respect to the award, administration and performance of contracts under such programs. We are also subject to certain unique business risks associated with U.S. government program funding and appropriations, U.S. government contracts, and supplying technologically-advanced, cutting-edge defense-related products and services to the U.S. government.

U.S. government contracts generally are subject to the Federal Acquisition Regulation (FAR), which sets forth policies, procedures and requirements for the acquisition of goods and services by the U.S. government; department-specific regulations that implement or supplement the FAR, such as the DoD's Defense Federal Acquisition Regulation Supplement (DFARS); and other applicable laws and regulations. These regulations impose a broad range of requirements, many of which are unique to government contracting, including various procurement, import and export, security, contract pricing and cost, contract termination and adjustment, audit and product integrity requirements. A contractor's failure to comply with these regulations and requirements could result in reductions to the value of contracts, contract modifications or termination, and the assessment of penalties and fines, and could lead to suspension or debarment, for cause, from U.S. government contracting or subcontracting for a period of time. In addition, government contractors are also subject to routine audits and investigations by U.S. government agencies such as the Defense Contract Audit Agency (DCAA) and Defense Contract Management Agency (DCMA). These agencies review a contractor's performance under its contracts, cost structure and compliance with applicable laws, regulations and standards. The DCAA and DCMA also review the adequacy of and a contractor's compliance with its internal control systems and policies, including the contractor's accounting, purchasing, property, estimating, earned value management and material management accounting systems. For a discussion of certain risks associated with compliance with U.S. government contract regulations and requirements, see "Item 1A. Risk Factors" of this Form 10-K.

U.S. government contracts include both cost reimbursement and fixed-price contracts. Cost reimbursement contracts, subject to a contractual cost-ceiling amount in certain cases, provide for the reimbursement of allowable costs plus the payment of a fee. These contracts fall into three basic types: (i) cost-plus fixed fee contracts which provide for the payment of a fixed fee irrespective of the final cost of performance; (ii) cost-plus incentive fee contracts which provide for increases or decreases in the target incentive fee, within specified limits, based upon actual cost results compared to contractual cost targets; and (iii) cost-plus award fee contracts which provide for the payment of an award fee determined at the discretion of the customer based upon the performance of the contractor against pre-established criteria. Under cost reimbursement contracts, the contractor is reimbursed periodically for allowable costs and is paid a portion of the fee based on contract progress. Some costs incidental to performing contracts have been made partially or wholly unallowable for reimbursement by statute, the FAR or other regulation. Examples of such costs include charitable contributions, certain merger and acquisition costs, lobbying costs, interest expense and certain litigation defense costs. We also classify time-and-materials (T&M) contracts as cost reimbursement contracts as they are typically used to cover certain contract costs plus a set amount of fee.



Fixed-price contracts are predominantly either firm fixed-price (FFP) contracts or fixed-price incentive (FPI) contracts. Under FFP contracts, the contractor agrees to perform a specific scope of work for a fixed price and as a result, benefits from cost savings and carries the burden of cost overruns. Under FPI contracts, the contractor shares with the U.S. government savings accrued from contracts performed for less than target costs and costs incurred in excess of targets up to a negotiated ceiling price (which is higher than the target cost) and carries the entire burden of costs exceeding the negotiated ceiling price. Accordingly, under such contracts, the contractor's profit may also be adjusted up or down depending upon whether specified

Table of Contents

cost objectives are met. Under FFP and FPI type contracts, the contractor usually receives either performance-based payments (PBPs) equaling up to 90% of the contract price or monthly progress payments from the U.S. government generally in amounts equaling 80% of costs incurred under U.S. government contracts. The remaining amount, including profits or incentive fees, is billed upon delivery and acceptance of end items under the contract. The DoD has expressed a preference to utilize FPI as opposed to FFP contracts. In the event we experience a greater proportion of FPI contracts and/or progress payments for our fixed-price DoD contracts in the future than historically, it could have an adverse effect on our operating margins, cash flow and liquidity. For a discussion of certain risks associated with fixed-price and cost reimbursement contracts and risks associated with changes in U.S. government procurement rules, regulations and business practices, see “Item 1A. Risk Factors” of this Form 10-K.

U.S. government contracts generally also permit the government to terminate the contract, in whole or in part, without prior notice, at the U.S. government's convenience or for default based on performance. If a contract is terminated for convenience, the contractor is generally entitled to payments for its allowable costs and will receive some allowance for profit on the work performed. If a contract is terminated for default, the contractor is generally entitled to payments for its work that has been accepted by the U.S. government, but a termination arising out of our default could expose us to liability and have a negative impact on our ability to obtain future contracts and orders. The U.S. government's right to terminate its contracts has not had a material adverse effect upon our operations, financial condition or liquidity. For a discussion of the risks associated with the U.S. government's right to terminate its contracts, see “Item 1A. Risk Factors” of this Form 10-K.

U.S. government programs generally are implemented by the award of individual contracts and subcontracts. Congress generally appropriates funds on a fiscal year basis even though a program may extend across several fiscal years. Consequently, programs are often only partially funded initially and additional funds are committed only as Congress makes further appropriations. The contracts and subcontracts under a program generally are subject to termination for convenience or adjustment if appropriations for such programs are not available or change. The U.S. government is required to equitably adjust a contract price for additions or reductions in scope or other changes ordered by it. For a discussion of the risks associated with program funding and appropriations, see “Item 1A. Risk Factors” and “Overview” within Item 7 of this Form 10-K. In addition, because we are engaged in supplying technologically-advanced, cutting-edge defense-related products and services to the U.S. government, we are subject to certain business risks, some of which are specific to our industry. These risks include: the cost of obtaining and retaining trained and skilled employees; the uncertainty and instability of prices for raw materials and supplies; the problems associated with advanced designs, which may result in unforeseen technological difficulties and cost overruns; the intense competition and the constant necessity for improvement in facility utilization and personnel training; and the impact of potential security and cyber threats. Our sales to the U.S. government may be affected by changes in procurement policies, budget considerations, changing priorities for national defense, political developments abroad and other factors. See “Item 1A. Risk Factors” and “Overview” within Item 7 of this Form 10-K for a more detailed discussion of these and other related risks.

We are also involved in U.S. government programs, principally through our IIS and SAS business segments, that are classified by the U.S. government and cannot be specifically described in this Form 10-K. The operating results of these classified programs are included in the applicable business segment's and our consolidated results of operations. The business risks and considerations associated with these and our international classified programs generally do not differ materially from those of our other U.S. government and international programs and products.

We are subject to government regulations and contract requirements that may differ from U.S. government regulation with respect to our sales to non-U.S. customers. See International Sales below for more information regarding our sales outside of the U.S. and “Item 1A. Risk Factors” of this Form 10-K for a discussion of the risks associated with international sales.

**International Sales**

(In millions, except percentages)

Total international sales <sup>(1)</sup>	2016	2015	2014
	\$7,552	\$7,150	\$6,541

Edgar Filing: RAYTHEON CO/ - Form 10-K

Total international sales as a Percentage of Total Net Sales<sup>(1)</sup> 31 % 31 % 29 %

(1) Includes foreign military sales through the U.S. government of \$2,899 million, \$2,814 million and \$2,962 million in 2016, 2015 and 2014, respectively.

International sales are principally in the areas of air and missile defense systems, missile systems, airborne radars, naval systems, air traffic control systems, electronic equipment, computer software and systems, personnel training, equipment

## Table of Contents

maintenance and microwave communications technology, cybersecurity, and other products and services permitted under the International Traffic in Arms Regulations (ITAR) and the Export Administration Regulations (EAR).

Our international sales are conducted through Raytheon Company and certain U.S. and international subsidiaries. For example, Raytheon Systems Limited, a U.K. subsidiary, provides a wide range of products and services, most notably with our MS and SAS business segments, to commercial, defense and other government customers in the U.K. and globally. Raytheon Australia delivers integrated solutions to the Australian Defence Force, most notably with our IDS and IIS business segments. Generally, we internally fund our international subsidiary working capital requirements in the applicable countries. In connection with certain international sales, we utilize the services of sales representatives who are paid commissions in return for services rendered, and international consultants and advisors who are typically paid a fixed retainer fee. Our Forcepoint joint venture also sells certain products and services, both domestically and internationally, primarily through a network of distributors and value-added resellers.

Sales and income from international operations and investments are subject to U.S. government laws, regulations and policies, including the ITAR, the EAR and the Foreign Corrupt Practices Act (FCPA) and other anti-corruption laws and the export laws and regulations described below. They are also subject to foreign government laws, regulations and procurement policies and practices, which may differ from U.S. government regulation, including export-import control, technology transfer, investments, exchange controls, repatriation of earnings and requirements to expend a portion of program funds in-country through manufacturing agreements or other financial support obligations, known as offset obligations. In addition, embargoes, international hostilities and changes in currency and commodity values can also impact our international sales. Exchange restrictions imposed by various countries could restrict the transfer of funds between countries, us and our subsidiaries. We have acted to protect ourselves against various risks through insurance, foreign exchange contracts, contract provisions, government guarantees and/or progress payments. Our international sales in functional currencies other than the U.S. dollar were approximately \$1.3 billion in both 2016 and 2015, and \$1.1 billion in 2014, the majority of which were in British pounds and Australian dollars with the remainder primarily in euros and Canadian dollars. See total net sales and property, plant and equipment by geographical area set forth in “Note 17: Business Segment Reporting” within Item 8 of this Form 10 K.

Depending on the type of international sale, Raytheon must either seek various approvals from the U.S. government under the foreign military sales process or may require an export authorization and the issuance of a license by either the U.S. Department of State under the Arms Export Control Act of 1976 and its implementing regulations under the ITAR, the U.S. Department of Commerce under the Export Administration Act of 1979 and its implementing regulations under the EAR, as kept in force by the International Emergency Economic Powers Act of 1977 (IEEPA), and/or the U.S. Department of the Treasury under IEEPA or the Trading with the Enemy Act of 1917. Such licenses and authorizations may be denied for reasons of U.S. national security or foreign policy. In the case of certain exports of defense equipment and services, the Department of State must notify Congress at least 15-30 days (depending on the identity of the importing country that will utilize the equipment and services) prior to authorizing such exports. During that time, Congress may take action to block or delay a proposed export by joint resolution which is subject to Presidential veto. Additional information regarding the risks associated with our international business is contained in “Item 1A. Risk Factors” of this Form 10-K.

### Classified Sales

Classified sales include U.S. government sales on programs designated as classified by the U.S. government, as well as international sales on programs for which the customer, end user or end product is prohibited from being publicly disclosed. Total classified sales were 17% in 2016, 16% in 2015 and 15% in 2014.



Table of Contents

## Backlog

(In millions, except percentages)	2016	2015	% of Total Backlog <sup>(2)</sup>			
			2016	%	2015	%
Total U.S. government backlog <sup>(1)</sup>	\$21,133	\$19,228	57	%	55	%
Total non-U.S. government domestic backlog	623	631	2	%	2	%
Total domestic backlog	21,756	19,859	59	%	57	%
Total foreign military sales backlog	5,969	5,685	16	%	16	%
Total direct foreign government backlog	8,320	8,240	23	%	24	%
Total non-government foreign backlog	810	885	2	%	3	%
Total international backlog	15,099	14,810	41	%	43	%
Total backlog	\$36,855	\$34,669	100	%	100	%

(1) Excludes foreign military sales backlog through the U.S. government which is included in total international backlog.

(2) Percentages may not foot due to rounding.

Approximately \$18.1 billion of the December 31, 2016 year-end backlog is not expected to be filled during the following twelve months. These amounts include both funded backlog (unfilled orders for which funding is authorized, appropriated and contractually obligated by the customer) and unfunded backlog (firm orders for which funding has not been appropriated or obligated to us). For additional information related to backlog figures, see “Segment Results” within Item 7 of this Form 10-K.

## Research and Development

We conduct extensive research and development activities to continually enhance our existing products and services and develop new products and services to meet our customers’ changing needs and requirements, and address new market opportunities. During 2016, we expended \$755 million on research and development efforts compared to \$706 million and \$500 million in 2015 and 2014, respectively. These expenditures principally have been for product development for the U.S. government. We also conduct funded research and development activities under U.S. government contracts which are included in total net sales. For additional information related to our research and development activities, see “Note 1: Summary of Significant Accounting Policies” within Item 8 of this Form 10-K.

## Raw Materials, Suppliers and Seasonality

We are dependent upon the availability of materials and major components and the performance of our suppliers and subcontractors. Some products require relatively scarce raw materials. We generally have not experienced significant difficulties in procuring the necessary raw materials, components and other supplies for our products.

In addition, we must comply with specific procurement requirements which may, in effect, limit the suppliers and subcontractors we may utilize. In some instances, for a variety of reasons, we are dependent on sole-source suppliers. We enter into long-term or volume purchase agreements with certain suppliers and take other actions to ensure the availability of needed materials, components and subsystems. We are also dependent on suppliers to provide genuine original equipment manufacturer parts and have a robust set of standardized policies to detect counterfeit material, especially electronic components, throughout our supply chain.

In recent years, our revenues in the second half of the year have generally exceeded revenues in the first half. Some of the factors that can affect revenue recognition between accounting periods include the timing of new program awards (including international contract awards and approvals), the availability of U.S. government funding, product deliveries (which are dependent on availability of materials) and customer acceptance. We expect this trend to continue in 2017.

#### Competition

We directly participate in most major areas of development in the defense and government electronics, space, information technology and technical services and support markets. Technical superiority, reputation, price, past performance, delivery schedules, financing and reliability are among the principal competitive factors considered by customers in these markets. We also compete in the commercial cybersecurity market, which is characterized by rapid changes in technology, products, customer specifications and industry standards. We compete worldwide with a number of U.S. and international companies

## Table of Contents

in these markets, some of which may have more extensive or more specialized engineering, manufacturing and marketing capabilities than we do in some areas. We frequently partner on various programs with our major suppliers, some of whom are, from time to time, competitors on other programs. In addition, U.S. defense spending levels in the future are increasingly difficult to predict. Changes in U.S. defense spending may potentially limit certain future market opportunities. See “Item 1A. Risk Factors” and “Overview” within Item 7 of this Form 10-K for a more detailed discussion of these and other related risks.

### Intellectual Property

We own an intellectual property portfolio that includes many U.S. and foreign patents, as well as unpatented trade secrets and know-how, data, software, trademarks and copyrights, all of which contribute to the preservation of our competitive position in the market. In certain instances, we have augmented our technology base by licensing the proprietary intellectual property of others. We also license our intellectual property to others, including our customers, in certain instances. The U.S. government has licenses to certain of our intellectual property, including certain patents, developed in the performance of U.S. government contracts, and has the right to use and authorize others to use such intellectual property, including the inventions covered by such patents for U.S. government purposes. While our intellectual property rights in the aggregate are important to our operations, we do not believe that any particular trade secret, patent, trademark, copyright, license or other intellectual property right is of such importance that its loss or termination would have a material effect on our business.

### Employment

As of December 31, 2016, we had approximately 63,000 employees.

### Environmental Regulation

Our operations are subject to and affected by a variety of international, federal, state and local environmental protection laws and regulations. We have provided for the estimated cost to complete remediation—or, in the case of multi-party sites, our reasonably expected share thereof—where we have determined that it is probable that we will incur such costs in the future in connection with (i) facilities that are now, or were previously, owned or operated by us, (ii) sites where we have been named a Potentially Responsible Party (PRP) by the U.S. Environmental Protection Agency (EPA) or similarly designated by other environmental agencies, or (iii) sites where we have been named in a cost recovery or contribution claim by a non-governmental third party. It is difficult to estimate the timing and ultimate amount of environmental cleanup costs to be incurred in the future due to the uncertainties regarding the extent of the required cleanup, the discovery and application of innovative remediation technologies, and the status and interpretation of laws and regulations.

If we are ultimately found to have liability at a multi-party site where we have been designated a PRP or have been named in a cost recovery or contribution claim from a non-governmental third party, we expect that the actual costs of remediation will be shared with other PRPs. Generally in the U.S. and certain other countries, PRPs that are ultimately determined to be responsible parties are strictly liable for site clean-up and usually agree among themselves to share, on an allocated basis, the costs and expenses for investigation and remediation of hazardous materials. Under existing U.S. environmental laws, responsible parties are usually jointly and severally liable and, therefore, potentially liable for the full cost of funding such remediation. In the unlikely event that we are required to fund the entire cost of such remediation, the statutory framework provides that we may pursue rights of contribution from the other PRPs. The amounts we record do not reflect the unlikely event that we would be required to fund the entire cost of such remediation, nor do they reflect the possibility that we may recover some of these additional environmental costs from insurance policies or from other PRPs. However, a portion of these costs is eligible for future recovery through the pricing of our products and services to the U.S. government.

We manage various government-owned facilities on behalf of the U.S. government. At such facilities, environmental compliance and remediation costs have historically been primarily the responsibility of the U.S. government and we



relied (and continue to rely with respect to past practices) upon U.S. government funding to pay such costs. While the government remains responsible for capital and operating costs associated with environmental compliance, responsibility for fines and penalties associated with environmental noncompliance is typically borne by either the U.S. government or the contractor, depending on the contract and the relevant facts. Fines and penalties are unallowable costs under the contracts pursuant to which such facilities are managed.

Most of the U.S. laws governing environmental matters include criminal provisions. If we were to be convicted of a criminal violation of certain U.S. federal environmental statutes, including the Federal Clean Air Act and the Clean Water Act, the facility or facilities involved in the violation would be placed by the EPA on the “Excluded Parties List” maintained by the Government Services Administration. The listing would continue until the EPA concluded that the cause of the violation had

Table of Contents

been cured. Listed facilities cannot be used in performing any U.S. government contract awarded during any period of listing by the EPA.

Additional information regarding the effect of compliance with environmental protection requirements and the resolution of environmental claims against us and our operations, including expected remediation costs, is contained in “Item 1A. Risk Factors”, “Commitments and Contingencies” within Item 7 and “Note 12: Commitments and Contingencies” within Item 8 of this Form 10-K.

Available Information

Our internet address is [www.raytheon.com](http://www.raytheon.com). We use our Investor Relations website as a routine channel for distribution of important information, including news releases, analyst presentations and financial information. We make available free of charge on or through our Investor Relations website our annual reports and quarterly reports on Forms 10-K and 10-Q (including related filings in XBRL format), current reports on Form 8-K and amendments to those reports as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (SEC). Our SEC filings are also at the Public Reference Room of the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling 1-800-SEC-0330. In addition, the SEC also maintains an internet site at [www.sec.gov](http://www.sec.gov) that contains reports, proxy statements and other information regarding registrants that file electronically, including Raytheon.

Additionally, we also make available on or through our website copies of our key corporate governance documents, including our Governance Principles, Certificate of Incorporation, By-laws and charters for the Audit Committee, Management Development and Compensation Committee, Governance and Nominating Committee, Public Affairs Committee and Special Activities Committee of the Board of Directors and our code of ethics entitled “Code of Conduct”. Raytheon stockholders may request free copies of these documents from our Investor Relations Department by writing to Raytheon Company, Investor Relations, 870 Winter Street, Waltham, MA 02451, or by calling (781) 522-5123 or sending an email request to [invest@raytheon.com](mailto:invest@raytheon.com).

The content on any website referred to in this Form 10-K is not incorporated by reference into this Form 10-K unless expressly noted.

ITEM 1A. RISK FACTORS

This Form 10-K and the information we are incorporating by reference contain forward-looking statements within the meaning of federal securities laws, including information regarding our financial outlook, future plans, objectives, business prospects, products and services, trends and anticipated financial performance including with respect to our revenue, liquidity and capital resources; our bookings and backlog; international sales; cybersecurity sales; our pension and other postretirement benefit (PRB) expense and funding; our expectations regarding customer contracts; our capital expenditures; the impact of new accounting pronouncements; our expected tax payments; our unrecognized tax benefits; the impact of acquisitions, investments and other business arrangements; the impact and outcome of audits and legal and administrative proceedings, claims, investigations, commitments and contingencies; and the impact of changes in fair value of our reporting units; the impact of changes in foreign currency rates and interest rates; as well as information regarding domestic and international defense spending, budgets and business practices. You can identify these statements by the fact that they include words such as “will”, “believe”, “anticipate”, “expect”, “estimate”, “intend”, “plan”, or variations of these words, or similar expressions. These forward-looking statements are not statements of historical facts and represent only our current expectations regarding such matters. These statements inherently involve a wide range of known and unknown uncertainties. Our actual actions and results could differ materially from what is expressed or implied by these statements. Specific factors that could cause such a difference include, but are not limited to, those set forth below and other important factors disclosed previously and from time to time in our other filings with the Securities and Exchange Commission (SEC). Given these factors, as

well as other variables that may affect our operating results, you should not rely on forward-looking statements, assume that past financial performance will be a reliable indicator of future performance, or use historical trends to anticipate results or trends in future periods. We expressly disclaim any obligation or intention to provide updates to the forward-looking statements and the estimates and assumptions associated with them, except as required by law.

## Table of Contents

We depend on the U.S. government for a substantial portion of our business, and changes in government defense spending and priorities could have consequences on our financial position, results of operations and business.

In 2016, U.S. government sales, excluding foreign military sales, accounted for approximately 67% of our total net sales. Our revenues from the U.S. government largely result from contracts awarded to us under various U.S. government programs, primarily defense-related programs with the U.S. Department of Defense (DoD), as well as a broad range of programs with the U.S. Intelligence Community and other departments and agencies. The funding of our programs is subject to the overall U.S. government policies, budget and appropriation decisions and processes which are driven by numerous factors, including geopolitical events, macroeconomic conditions, and the ability of the U.S. government to enact relevant legislation, such as appropriations bills and accords on the debt ceiling.

In recent years, U.S. government appropriations have been affected by larger U.S. government budgetary issues and related legislation. In 2011, Congress enacted the Budget Control Act of 2011 (BCA), which established specific limits on annual appropriations for fiscal years (FY) 2012–2021. The BCA has been amended a number of times, most recently by the Bipartisan Budget Act of 2015 (BBA). As a result, DoD funding levels have fluctuated over this period and have been difficult to predict. For example, the DoD budget was reduced by 7.8% in FY 2013 as compared to FY 2012, but remained essentially flat for FY 2014 and 2015. The BBA raised DoD FY 2016 funding approximately 5% relative to FY 2015, but the ultimate DoD funding for FY 2017 remains uncertain because the DoD is currently operating under a Continuing Resolution (CR) for FY 2017. The CR limits funding levels to FY 2016 and does not authorize new spending initiatives. Future spending levels are subject to a wide range of outcomes, depending on Congressional action. In addition, in recent years the U.S. government has been unable to complete its budget process before the end of its fiscal year, resulting in both a governmental shut-down and CRs to extend sufficient funds only for U.S. government agencies to continue operating. Additionally, the national debt has recently threatened to reach the statutory debt ceiling, and such an event in future years could result in the U.S. government defaulting on its debts.

As a result, defense spending levels are difficult to predict beyond the near-term due to numerous factors, including the external threat environment, future governmental priorities and the state of governmental finances. Significant changes in defense spending or changes in U.S. government priorities, policies and requirements could have a material adverse effect on our results of operations, financial condition or liquidity.

Our financial results largely are dependent on our ability to perform on our U.S. government contracts, which are subject to uncertain levels of funding and timing, as well as termination. Our financial results could also be affected by development delays, cost overruns or product failures in connection with these contracts.

Our financial results largely are dependent on our performance under our U.S. government contracts. While we are involved in numerous programs and are party to thousands of U.S. government contracts, the termination of one or more of such contracts, or the occurrence of delays, cost overruns and product failures in connection with one or more large contracts, could negatively impact our results of operations, financial condition or liquidity. Furthermore, we can give no assurance that we would be awarded new U.S. government contracts to offset the revenues lost as a result of termination of any of our contracts.

U.S. government contracts generally permit the government to terminate the contract, in whole or in part, without prior notice, at the U.S. government's convenience or for default based on performance. If one of our contracts is terminated for convenience, we would generally be entitled to payments for our allowable costs and would receive some allowance for profit on the work performed. If one of our contracts is terminated for default, we would generally be entitled to payments for our work that has been accepted by the U.S. government. A termination arising out of our default could expose us to liability and have a negative impact on our ability to obtain future contracts and orders. Furthermore, on contracts for which we are a subcontractor and not the prime contractor, the U.S. government could terminate the prime contract for convenience or otherwise, irrespective of our performance as a subcontractor.

The funding of U.S. government programs is subject to congressional appropriations, which are made on a fiscal year basis even for multi-year programs. Consequently, programs are often only partially funded initially and may not continue to be funded in future years. In addition, regular appropriation bills may be delayed, which may result in revenue and collection delays or delays in our contract performance due to lack of funds to procure related products and services. Under certain circumstances, we may use our own funds to meet our customer's desired delivery dates or other requirements. Furthermore,

## Table of Contents

if appropriations for one of our programs become unavailable, or are reduced or delayed, the U.S. government may terminate our contract or subcontract under such program.

Our U.S. government contracts also typically involve the development, application and manufacture of advanced defense and technology systems and products aimed at achieving challenging goals. New technologies may be untested or unproven. In some instances, product requirements or specifications may be modified. As a result, we may experience technological and other performance difficulties, which may result in delays, setbacks, cost overruns and product failures, in connection with performing our U.S. government contracts. Additionally, in order to win certain U.S. government contracts, we may be required to invest in development prior to award as our customers demand more mature and proven solutions. These additional investment amounts may not be recouped if we are not chosen for new contract awards.

Our U.S. government contracts are typically either fixed-priced contracts or cost reimbursable contracts. Fixed-price contracts represent approximately 56% of our backlog, and are predominantly either firm fixed-price (FFP) contracts or fixed-price incentive (FPI) contracts. Under FFP contracts, we receive a fixed price irrespective of the actual costs we incur and we therefore carry the burden of any cost overruns. Under FPI contracts, we carry the burden of cost overruns in excess of a negotiated cost ceiling, and share with the U.S. government any costs incurred in excess of a negotiated cost target up to the cost ceiling amount. Under cost reimbursable contracts, we are reimbursed for allowable costs and paid a fixed or performance-based fee, but generally are not reimbursed for costs not allowable under the contract or applicable regulations or unauthorized costs above any cost ceiling amount. Due to the nature of our work under many of our U.S. government contracts discussed above, we may experience unforeseen technological difficulties and cost overruns. If we are unable to control costs or if our initial cost estimates are incorrect, our profitability could be negatively affected, particularly under fixed-price development contracts. Some of our U.S. government contracts have provisions relating to cost controls and audit rights, and if we fail to meet the terms specified in those contracts, this could have a negative impact on our result of operations or financial condition and liquidity. Our contracts also require us to comply with extensive and evolving procurement rules and regulations, which are discussed in more detail below.

In addition, we are involved in programs that are classified by the U.S. government, principally through our Intelligence, Information and Services (IIS) and Space and Airborne Systems (SAS) business segments, which have security requirements that place limits on our ability to discuss our performance on these programs, including any risks, disputes and claims.

Our future success depends on our ability to develop new offerings and technologies for our current and future markets.

To achieve our business strategies and continue to grow our revenues and operating profit, we must successfully develop new offerings and technologies or adapt or modify our existing offerings and technologies for our current and future markets, including new international, civil, commercial, growth and emerging markets. Accordingly, our future performance depends on a number of factors, including our ability to:

- Identify the needs of, and growth opportunities in, new and emerging markets;
- Identify emerging technological and other trends in our current and future markets;
- Identify additional uses for our existing technology to address customer needs in our current and future markets;
- Develop and maintain competitive products and services for our current and future markets;
- Enhance our offerings by adding innovative features that differentiate our offerings from those of our competitors;
- Develop, manufacture and bring solutions to market quickly at cost-effective prices;
- Enhance product designs for export and releasability to international markets; and

-

Effectively structure our businesses, through the use of joint ventures, collaborative agreements and other forms of alliances, to reflect the competitive environment.

We believe that, in order to remain competitive in the future, we will need to continue to invest significant financial resources to develop new offerings and technologies or to adapt or modify our existing offerings and technologies, including through customer funded and internal research and development, acquisitions and joint ventures or other teaming arrangements. We believe this is true to meet demands and expand within both our domestic and international markets, including emerging opportunities within the DoD market as well as our Forcepoint joint venture's growth in the commercial cybersecurity market. Our expenditures to develop new offerings and technologies, or adapt and modify existing offerings and technologies, through research and development, acquisitions, joint ventures or other arrangements could divert our attention and resources from

Table of Contents

other projects, and we cannot be sure that these expenditures will ultimately lead to the timely development of new offerings and technologies or identification of and expansion into new markets.

Due to the design complexity of our products, we may in the future experience delays in completing the development and introduction of new products. Any delays could result in increased costs of development or deflect resources from other projects. In addition, there can be no assurance that the market for our offerings will develop or continue to expand or that we will be successful in newly identified markets as we currently anticipate or that the acquisitions, joint ventures or other teaming arrangements we may enter into in pursuit of developing new offerings and technologies will be successful. The failure of our technology to gain market acceptance could significantly reduce our revenues and harm our business. Furthermore, we cannot be sure that our competitors will not develop competing technologies which gain market acceptance in advance of our products.

Additionally, the possibility exists that our competitors might develop new technology or offerings that might cause our existing technology and offerings to become obsolete. If we fail in our new product development efforts or our products or services fail to achieve market acceptance more rapidly than our competitors, our ability to procure new contracts could be negatively impacted, which would negatively impact our results of operations and financial condition.

Competition within our markets may reduce our revenues and market share and limit our future market opportunities.

We operate in highly competitive markets and our competitors may have more extensive or more specialized engineering, manufacturing and marketing capabilities than we do in some areas. We anticipate increased competition in our core markets as a result of continued defense industry consolidation, including cross-border consolidation of competition, and the expansion of competitors' capabilities throughout the supply chain through vertical integration, each of which has enabled companies to enhance their competitive position against us. We are also facing heightened competition in our domestic and international markets from foreign and multinational firms. In addition, as discussed in more detail above, changes in U.S. defense spending and the U.S. government procurement environment may limit certain future market opportunities for us. For example, the DoD increasingly is committed to awarding contracts through competitive bidding and relying on competitive contract award types. Additionally, some customers, including the DoD, are increasingly turning to commercial contractors, rather than traditional defense contractors, for information technology and other support work. If we are unable to continue to compete successfully against our current or future competitors in our core markets, we may experience declines in revenues and market share which could negatively impact our results of operations, financial condition or liquidity. In addition, due to the current competitive environment, we continue to see an increase in bid protests from unsuccessful bidders on new program awards. Generally, a bid protest will delay the start of contract activities, delay earnings, and could result in the award decision being overturned, requiring a re-bid of the contract.

In addition, our Forcepoint joint venture, formed in May 2015, to accelerate our growth in the commercial cybersecurity market, faces significant competition in its areas of market focus due to rapid changes in technology, products, customer specifications and industry standards, as well as a wide range of market competitors, some of whom are significantly larger with broader product and service offerings, have best-of-breed products and/or maintain strong customer relationships. In order to compete effectively, Forcepoint must successfully execute on its growth strategy, including the development of new products and services. If Forcepoint is unable to compete successfully in the commercial cybersecurity market, it may divert financial and management resources that would otherwise be used to benefit our other operations.

As a U.S. government contractor, we are subject to extensive procurement rules and regulations. Changes in such rules, regulations and business practice could negatively affect current programs and potential awards, and our business could be negatively affected if we fail to comply with any procurement rules and regulations.



U.S. government contractors must comply with specific procurement regulations and other requirements including export-import control, security, contract pricing and cost, contract termination and adjustment, audit and product integrity requirements. These requirements impact our performance and compliance costs. In addition, the U.S. government has and may continue to implement initiatives focused on efficiencies, affordability and cost growth and other changes to its procurement practices which may negatively affect our results of operations, financial condition or liquidity, and could affect whether and, if so, how we pursue certain opportunities and the terms under which we are able to do so.

## Table of Contents

The DoD has adopted various procurement policies and practices, including contractual payment and cost reimbursement terms such as incentive-based contracts that require contractors to share cost overruns and underruns with the U.S. government, and terms relating to contractor independent research and development efforts under Better Buying Power 3.0. Recent legislation provides for other requirements, some of which differ with these policies and practices. It is unclear which policies the new Administration will follow, implement or change.

In addition, failure to comply with the procurement regulations and requirements could result in reductions of the value of contracts, contract modifications or termination, cash withholds on contract payments, forfeiture of profits, and the assessment of civil and criminal penalties and fines, which could negatively impact our results of operations, financial condition or liquidity. Our failure to comply with these regulations and requirements could also lead to suspension or debarment, for cause, from U.S. government contracting or subcontracting for a period of time. Among the causes for debarment are violations of various statutes, including those related to procurement integrity, export control, U.S. government security regulations, employment practices, protection of the environment, accuracy of records and the recording of costs, and foreign corruption. The penalties or sanctions, including contract termination, resulting from any failure to comply with applicable requirements could have a negative impact on our results of operations, financial condition or liquidity, and could have a negative impact on our reputation and ability to procure other U.S. government contracts in the future.

Issues with component availability, subcontractor performance or key supplier performance may affect our ability to manufacture and deliver our products and services.

We are dependent upon the delivery by suppliers of materials and the assembly by subcontractors of major components and subsystems used in our products in a timely and satisfactory manner and in full compliance with applicable terms and conditions. Some products require relatively scarce raw materials. We also are subject to specific procurement requirements that limit the types of materials we use and may, in effect, limit the suppliers and subcontractors we may utilize. These procurement requirements include restrictions on the use of certain chemicals in the European Union and requirements for genuine original equipment manufacturer parts. As we continue to seek further cost efficiencies throughout the enterprise, we may centralize procurements in order to attain better pricing through strategic sourcing, which may increase our dependency on certain suppliers. In some instances, we are dependent on sole-source suppliers. If certain component materials are not available or if any of these suppliers or subcontractors otherwise fails to meet our needs or becomes insolvent, we may not have readily available alternatives or alternatives at prices that meet the demands of our customers. While we enter into long-term or volume purchase agreements with certain suppliers and take other actions, such as accelerating supplier payments commensurate with value delivered, to ensure financial viability and the availability of needed materials, components and subsystems, we cannot be sure that such items will be available in the quantities we require, if at all. In addition, some of our suppliers or subcontractors, especially smaller entities, may be susceptible to changes in global economic conditions that could impair their ability to meet their obligations to us. If we experience a material supplier or subcontractor problem, our ability to satisfactorily and timely complete our customer obligations could be negatively impacted, which could result in reduced sales, termination of contracts and damage to our reputation and relationships with our customers. We could also incur additional costs in addressing such a problem. Any of these events could have a negative impact on our results of operations, financial condition or liquidity. In addition, we must conduct diligence and provide disclosure regarding the use of certain minerals, known as conflict minerals, which may impact our procurement practices and increase our costs.

Our international business is subject to geopolitical and economic factors, regulatory requirements and other risks.

Our international business exposes us to geopolitical and economic factors, regulatory requirements, increasing competition and other risks associated with doing business in foreign countries. These risks differ from and potentially may be greater than those associated with our domestic business. In 2016, our sales to customers outside the U.S.

(including foreign military sales through the U.S. government) accounted for 31% of our total net sales. Our exposure to such risks may increase if our international business continues to grow as we anticipate.

Our international business is sensitive to changes in the priorities and budgets of international customers, which may be driven by changes in threat environments, geopolitical uncertainties, volatility in worldwide economic conditions, and various regional and local economic and political factors, including volatility in energy prices, changes in U.S. foreign policy, and other risks and uncertainties. Our international sales are subject to U.S. laws, regulations and policies, including the International Traffic in Arms Regulations (ITAR), the Export Administration Regulations (EAR), the Foreign Corrupt Practices Act (FCPA), and other anti-corruption and export laws and regulations. We maintain policies and controls to comply with such laws and

Table of Contents

regulations and exercise oversight of such compliance. However, any failure by us or others working on our behalf to comply with these laws and resolutions could result in criminal, civil or administrative penalties, including fines, suspension or debarment from government contracts or suspension of our ability to export our products. In addition, due to the nature of our products, we must first obtain licenses and authorizations from various U.S. government agencies before we are permitted to sell our products outside of the U.S. We can give no assurance that we will continue to be successful in obtaining or maintaining the necessary licenses or authorizations or that certain sales will not be prevented or delayed. Any significant impairment of our ability to sell products outside of the U.S. could negatively impact our results of operations, financial condition or liquidity.

Our international sales are also subject to local government laws, regulations, and procurement policies and practices which may differ from U.S. government regulations. These include regulations relating to export-import control, technology transfer, investments, exchange controls and repatriation of earnings. Furthermore, our international sales contracts may be subject to non-U.S. contract laws and regulations and include contractual terms that differ from those of similar contracts in the U.S. or terms that may be interpreted differently by foreign courts. In addition, the occurrence of delays, cost overruns and product failures, or technological or other difficulties could affect our ability to perform on our international contracts and negatively affect our profitability, and these contracts may be subject to termination for default based on performance. These contracts may also be subject to termination at the customer's convenience, and may be subject to funding risks. In connection with our international business, we also operate subsidiaries domiciled in non-U.S. locations that are subject to local government laws and regulations which may differ from U.S. government regulations. In addition, the timing of orders, customer negotiations, governmental approvals and notifications from our international customers can be less predictable than from our domestic customers, and this may lead to variations in international bookings and sales each year. We must also manage a certain degree of exposure to the risk of currency fluctuations.

Our international business faces substantial competition from both U.S. companies and foreign companies. In some instances, foreign companies may receive loans, marketing subsidies and other assistance from their governments that may not be available to U.S. companies. In addition, foreign companies may be subject to fewer restrictions on technology transfer than U.S. companies.

Our international contracts may include industrial cooperation agreements requiring specific local purchases, manufacturing agreements or financial support obligations, known as offset obligations, and provide for penalties if we fail to meet such requirements. Approvals of offset thresholds and requirements may be subjective and time-consuming and may delay contract awards. The costs to satisfy our offset obligations are included in the estimates of our total costs to complete the contract. Offset requirements may, in certain countries, include the creation of a joint venture with a local company, which may control the venture. This could result in liability for violations of law for actions taken by these entities, such as laws related to anti-corruption, import and export, or local laws which may differ from U.S. laws and requirements. In addition, the ability to recover investments that we make may be dependent upon the success of ventures that we do not control. Such offset obligations are generally multi-year arrangements and may provide for penalties in the event we fail to perform in accordance with the offset requirements. In addition, customers' demands may increase for greater offset commitment levels, higher-value content to satisfy offset obligations, including the transfer of technologies and capabilities, and local economic development. We also are exposed to risks associated with using third-party foreign representatives and consultants for international sales, and teaming with international subcontractors, partners and suppliers in connection with international programs. As a result of the above factors, we could experience financial penalties and award and funding delays on international programs, our profitability on these programs could be negatively affected, and we could incur losses on these programs which could negatively impact our results of operations, financial condition or liquidity.

We depend on the recruitment and retention of qualified personnel, and our failure to attract and retain such personnel could seriously harm our business.

Due to the specialized nature of our business, our future performance is highly dependent upon the continued services of our key technical personnel and executive officers, the development of additional management personnel and the hiring of new qualified technical, manufacturing, marketing, sales and management personnel for our operations. In addition, certain personnel may be required to receive various security clearances and substantial training in order to work on certain programs or perform certain tasks. Competition for personnel is intense and we may not be successful in attracting or retaining qualified personnel. Furthermore, a significant percentage of our current workforce is nearing retirement. To the extent that we lose experienced personnel, it is critical that we develop other employees, hire new qualified personnel and successfully manage

Table of Contents

the transfer of critical knowledge. The loss of key employees, our inability to attract new qualified employees or adequately train employees, or the delay in hiring key personnel could seriously harm our business.

Our business could be negatively impacted by cyber attacks and other security breaches and other disruptions.

As part of our business, we face certain security threats, including threats to our information technology infrastructure, attempts to gain access to our proprietary, sensitive or classified information, threats to physical security, including our facilities and personnel, and threats from terrorism or similar acts. We also face the potential for business disruptions associated with natural disasters. Cybersecurity threats in particular are persistent, evolve quickly and include, but are not limited to, computer viruses, attempts to access information, denial of service attacks and other electronic security breaches. Our information technology networks and related systems are critical to the operation of our business and essential to our ability to successfully perform day-to-day operations. We have in the past and will in the future continue to be the subject of cybersecurity threats. In addition, our customers, suppliers, subcontractors and other third parties with whom we do business generally face similar security threats, and in some cases we must rely on the safeguards put in place by these parties to protect against security threats. We believe we have implemented appropriate measures and controls and have invested in significant resources to appropriately identify and monitor these threats and mitigate potential risks, including risks involving our customers and suppliers. However, there can be no assurance that any such actions will be sufficient to prevent cybersecurity breaches, disruptions to mission critical systems, the unauthorized release of sensitive information or corruption of data, or harm to facilities or personnel.

In addition, as a provider of products and services to government and commercial customers, including through Forcepoint, our products and services may be the targets of cyber attacks that attempt to sabotage or otherwise disable them, or our cybersecurity and other products and services ultimately may not be able to effectively detect, prevent, or protect against or otherwise mitigate customer losses from all cyber attacks.

The impact of these security threats and other disruptions, including cyber attacks and other security breaches, is difficult to predict. Furthermore, our insurance coverage may not be adequate to cover all related costs. These threats and other events could disrupt our operations, or the operations of our customers, suppliers, subcontractors and other third parties, could require significant management attention and resources, could result in the loss of business, regulatory actions and potential liability, and could negatively impact our reputation among our customers and the public, any one of which could have a negative impact on our financial condition, results of operations or liquidity.

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

As a government contractor, we are subject to audits and investigations by U.S. government agencies including the Defense Contract Audit Agency (DCAA), the Defense Contract Management Agency (DCMA), the Inspectors General of the DoD and other departments and agencies, the Government Accountability Office, the Department of Justice (DoJ) and Congressional Committees. From time to time, these and other agencies investigate or conduct audits to determine whether our operations are being conducted in accordance with applicable requirements. The DCAA and DCMA also review the adequacy of, and our compliance with, our internal control systems and policies, including our accounting, purchasing, property, estimating, earned value management and material management accounting systems. Our final allowable incurred costs for each year are subject to audit and have from time to time resulted in disputes between us and the U.S. government. The DoJ has, from time to time, convened grand juries to investigate possible irregularities in our costs. Any costs found to be improperly allocated to a specific contract will not be reimbursed or must be refunded if already reimbursed. An adverse outcome of any audit or investigation could result in civil and criminal penalties and fines, which could negatively impact our results of operations, financial condition or liquidity. In addition, we could suffer serious reputational harm, which could negatively affect our financial position, results of operations or liquidity, if allegations of impropriety were made against us.

We use estimates in accounting for many of our programs, and changes in our estimates could adversely affect our future financial results.

Contract accounting requires judgment relative to assessing risks, including risks associated with customer-directed delays and reductions in scheduled deliveries, unfavorable resolutions of claims and contractual matters, management's judgments associated with estimating contract revenues and costs, and assumptions for schedule and technical issues. Due to the size and nature of many of our contracts, the estimation of total revenues and cost at completion is complicated and subject to many variables. For example, we must make assumptions regarding the length of time to complete a contract because costs

Table of Contents

also include expected increases in wages and prices for materials; consider whether the intent of entering into multiple contracts was effectively to enter into a single project in order to determine whether such contracts should be combined or segmented; consider incentives or penalties related to performance on contracts in estimating sales and profit rates, and record them when there is sufficient information for us to assess anticipated performance; and use estimates of award fees in estimating sales and profit rates based on actual and anticipated awards. Because of the significance of management's judgments and estimation processes described above, it is likely that materially different amounts could be recorded if we used different assumptions or if the underlying circumstances were to change. Changes in underlying assumptions, circumstances or estimates may adversely affect our future results of operations and financial condition.

For a detailed discussion of how our financial statements can be affected by contract accounting policies, see “Critical Accounting Estimates” within Item 7 of this Form 10-K.

Significant changes in key estimates and assumptions, such as discount rates and assumed long-term return on plan assets (ROA), as well as our actual investment returns on our pension plan assets and other actuarial factors, could affect our earnings, equity and pension contributions in future periods.

We must determine our pension and PRB plans' expense or income which involves significant judgment, particularly with respect to our discount rate, long-term ROA and other actuarial assumptions. The discount rate assumption is set annually and we determine on an annual basis whether it is appropriate to change our long-term ROA assumption. These assumptions and other actuarial assumptions may change significantly due to changes in economic, legislative, and/or demographic experience or circumstances. Changes in our assumptions could result in negative changes to our pension and PRB plans' expense and funded status, and our cash contributions to such plans, which changes would negatively impact our results of operations. In addition, differences between our actual investment returns and our long-term ROA assumption would result in a change to our pension and PRB plans' expense and funded status and our required contributions to the plans. They may also be impacted by changes in regulatory, accounting and other requirements applicable to pensions.

For a detailed discussion of how our financial statements can be affected by pension and PRB plan accounting policies, see “Critical Accounting Estimates” within Item 7 of this Form 10-K.

If we fail to manage our acquisitions, investments, divestitures, joint ventures and other transactions successfully, these activities could adversely affect our future financial results.

In pursuing our business strategies, we continually review, evaluate and consider potential investments, acquisitions, divestitures, and joint venture, teaming and other collaborative arrangements. We undertake to identify opportunities that will complement our existing products and services or customer base, as well as expand our offerings and market reach into new areas that naturally extend from our core capabilities. In evaluating such transactions, we are required to make difficult judgments regarding the value of business opportunities, technologies and other assets, and the risks and cost of potential liabilities. Furthermore, these transactions involve certain other risks and uncertainties, including the risks involved with entering new markets, the difficulty in integrating newly-acquired businesses and managing or monitoring other collaborative business arrangements, challenges and failures in achieving strategic objectives and other expected benefits which may result in certain liabilities to us for guarantees and other commitments, unidentified issues not discovered in Raytheon's due diligence, the diversion of our attention and resources from our operations and other initiatives, the potential impairment of acquired assets, the performance of underlying products, capabilities or technologies, and the potential loss of key employees and customers of acquired businesses.

Additionally, the joint venture agreement for our Forcepoint cybersecurity joint venture company, of which Raytheon owns 80.3% and Vista Equity Partners owns 19.7%, provides Vista Equity Partners with certain rights to exit the joint



venture, including the right to require Raytheon to purchase all of Vista Equity Partners' interest in Forcepoint and the right to require Forcepoint to pursue an initial public offering, as well as certain other rights with respect to the management of Forcepoint's business. In addition to the other risks described above, the exercise of any such rights by Vista Equity Partners could adversely affect our results of operations, financial condition or liquidity, or the management of our business as a whole. For a more detailed discussion regarding Forcepoint, see "Forcepoint" beginning on page 6 within Item 1 of this Form 10-K.

## Table of Contents

Goodwill and other intangible assets represent a significant portion of our assets, and any impairment of these assets could negatively impact our results of operations and financial condition.

At December 31, 2016, we had goodwill and other intangible assets of approximately \$15.7 billion, net of accumulated amortization, which represented approximately 52% of our total assets. Our goodwill is subject to an impairment test on an annual basis and is also tested whenever events and circumstances indicate that goodwill may be impaired. Any excess goodwill resulting from the impairment test must be written off in the period of determination. Intangible assets (other than goodwill) are generally amortized over the useful life of such assets. In addition, from time to time, we may acquire or make an investment in a business which will require us to record goodwill and intangible assets based on the purchase price and the value of the acquired assets. We may subsequently experience unforeseen events that could adversely affect the value of our goodwill or intangible assets and trigger an evaluation of the recoverability of the recorded goodwill and intangible assets. Future determinations of significant impairments of goodwill or intangible assets as a result of an impairment test or any accelerated amortization of other intangible assets could have a negative impact on our results of operations and financial condition.

For a detailed discussion of how our financial statements can be affected by goodwill accounting policies, see “Critical Accounting Estimates” within Item 7 of this Form 10-K.

The outcome of litigation in which we have been named, or may in the future be named, as a defendant is unpredictable, and an adverse decision in any such matter could have a material adverse effect on our financial condition or results of operations.

We are the defendant in a number of litigation matters and are subject to various other claims, demands and investigations. In addition, we may be subject to future litigation matters, claims, demands and investigations. These matters may divert financial and management resources that would otherwise be used to benefit our operations. No assurances can be given that the results of these matters will be favorable to us. An adverse resolution or outcome of any of these lawsuits, claims, demands or investigations could have a negative impact on our financial condition, results of operations or liquidity.

We may be unable to adequately protect our intellectual property rights, which could affect our ability to compete.

We own many U.S. and foreign patents and patent applications, and have rights in unpatented know-how, data, software, trademarks and copyrights. The U.S. government has licenses under certain of our patents and certain other intellectual property that are developed or used in performance of government contracts, and it may use or authorize others (including our competitors) to use such patents and intellectual property for government and other purposes. The U.S. government may challenge the sufficiency of intellectual property rights we have granted in U.S. government contracts and attempt to obtain greater rights. There can be no assurance that any of our patents and other intellectual property will not be challenged, invalidated, misappropriated or circumvented by third parties. In some instances, we have augmented our technology base by licensing the proprietary intellectual property of others. In the future, we may not be able to obtain necessary licenses on commercially reasonable terms. We enter into confidentiality and intellectual property assignment agreements with our employees and enter into non-disclosure agreements with our suppliers and appropriate customers so as to limit access to and prevent disclosure of our trade secrets and other proprietary information. These measures may not suffice to deter misappropriation or third-party development of similar technologies. Moreover, the laws concerning intellectual property vary among nations and the protection provided to our intellectual property by the laws and courts of foreign nations may differ from those of the U.S.

Our operations expose us to the risk of material environmental liabilities.

We use hazardous substances and generate hazardous wastes in our manufacturing operations. As a result, we are subject to potentially material liabilities related to personal injuries or property damage that may be caused by hazardous substance releases and exposures. For example, we are investigating and remediating contamination related to past practices at a number of properties and, in some cases, have in the past been named as a defendant in related “toxic tort” claims.

We are also subject to laws and regulations that: (i) impose requirements for the proper management, treatment, storage and disposal of hazardous substances and wastes; (ii) restrict air and water emissions from our operations (including U.S. government-owned facilities we manage); and (iii) require maintenance of a safe workplace. These laws and regulations can lead to substantial fines and criminal sanctions for violations, and may require the installation of costly equipment or operational

Table of Contents

changes to limit pollution emissions, decrease the likelihood of accidental hazardous substance releases and/or reduce the risks of injury to people in our workplaces.

If we were to be convicted of a criminal violation of certain U.S. federal environmental statutes, including the Federal Clean Air Act and the Clean Water Act, the facility or facilities involved in the violation would be placed by the U.S. Environmental Protection Agency (EPA) on the “Excluded Parties List” maintained by the Government Services Administration. The listing would continue until the EPA concluded that the cause of the violation had been cured. Listed facilities cannot be used in performing any U.S. government contract awarded during any period of listing by the EPA.

We incur, and expect to continue to incur, capital and operating costs to comply with these laws and regulations. In addition, new laws and regulations, changes in the interpretation and enforcement of existing laws and regulations, the discovery of previously unknown contamination, or the imposition of new clean-up standards could require us to incur costs in the future that would have a negative effect on our financial condition, results of operations or liquidity.

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

A significant portion of our business relates to designing, developing and manufacturing advanced defense and technology systems and products. New technologies may be untested or unproven. In addition, we may incur significant liabilities that are unique to our products and services, including but not limited to missile systems, command and control systems, border security systems, air traffic management systems, and cybersecurity products and services. In some, but not all, circumstances, we may be entitled to indemnification from our customers through contractual provisions, and obtain limitations of liability and additional defenses from the qualification of our products and services by the Department of Homeland Security (DHS) under the SAFETY Act provisions of the Homeland Security Act of 2002, or otherwise. The amount of the insurance coverage we maintain or indemnification to which we may be contractually or otherwise entitled may not be adequate to cover all claims or liabilities. Accordingly, we may be forced to bear substantial costs resulting from risks and uncertainties of our business which would negatively impact our results of operations, financial condition or liquidity.

Unanticipated changes in our tax provisions or exposure to additional income tax liabilities could affect our profitability.

We are subject to income taxes in the U.S. and many foreign jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes. In the ordinary course of our business, there are transactions and calculations where the ultimate tax determination is uncertain. Furthermore, changes in domestic or foreign income tax laws and regulations, or their interpretation, could result in higher or lower income tax rates assessed or changes in the taxability of certain sales or the deductibility of certain expenses, thereby affecting our income tax expense and profitability. In addition, we are regularly under audit by tax authorities. The final determination of tax audits and any related litigation could be materially different from our historical income tax provisions and accruals. Additionally, changes in the geographic mix of our sales could impact our tax liabilities and affect our income tax expense and profitability.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We and our subsidiaries operate in a number of plants, laboratories, warehouses and office facilities in the U.S. and abroad.

As of December 31, 2016 we owned, leased and/or utilized (through operating agreements) approximately 26.6 million square feet of floor space for manufacturing, engineering, research, administration, sales and warehousing, approximately 92% of which was located in the U.S. Of such total, approximately 45% was owned (or held under a long-term ground lease with ownership of the improvements), approximately 50% was leased, and approximately 5% was Government owned. In addition to the 26.6 million square feet of floor space described above, approximately 119,000 square feet of space was leased or subleased by us to unrelated third parties.

There are no major encumbrances on any of our facilities other than financing arrangements, which in the aggregate are not material. In the opinion of management, our properties have been well maintained and are suitable and adequate for us to

Table of Contents

operate at present levels, and the productive capacity and extent of utilization of the facilities are appropriate for our existing real estate requirements.

As of December 31, 2016, our business segments had major operations at the following locations:

Integrated Defense Systems—Huntsville, AL; Fullerton, CA; San Diego, CA; Andover, MA; Billerica, MA; Marlboro, MA; Tewksbury, MA; Woburn, MA; Maple Lawn, MD; Portsmouth, RI; Keyport, WA; Waterloo, Canada; and Kiel, Germany.

Intelligence, Information and Services—Aurora, CO; Orlando, FL; Indianapolis, IN; Burlington, MA; Riverdale, MD; Troy, MI; Omaha, NE; State College, PA; Richardson, TX; Dulles, VA; Norfolk, VA; and Springfield, VA.

Missile Systems—Huntsville, AL; East Camden, AR; Tucson, AZ; Rancho Cucamonga, CA; Louisville, KY; Albuquerque, NM; Farmington, NM; Dallas, TX; Richardson, TX; Midland, Canada; Harlow, United Kingdom; and Glenrothes, Scotland.

Space and Airborne Systems—El Segundo, CA; Goleta, CA; Sunnyvale, CA; Largo, FL; Cambridge, MA; Forest, MS; Dallas, TX; and McKinney, TX.

Forcepoint—Los Gatos, CA; San Diego, CA; Minneapolis, MN; Austin, TX; Salt Lake City, UT; Herndon, VA; – Sydney, Australia; Beijing, China; Reading, England; Helsinki, Finland; Chennai, India; Dublin, Ireland; Ra'anana, Israel; and Krakow, Poland.

Corporate—Billerica, MA; Waltham, MA; Greenville, TX; Richardson, TX; Plano, TX; Arlington, VA; and Dulles, VA.

A summary of the space owned, leased and/or utilized by us as of December 31, 2016, by business segment is as follows:

(In square feet)	Leased	Owned <sup>(1)</sup>	Government owned <sup>(2)</sup>	Total <sup>(3)</sup>
Integrated Defense Systems	1,295,789	3,746,859	129,968	5,172,616
Intelligence, Information and Services	4,562,093	1,184,665	108,756	5,855,514
Missile Systems	2,623,257	2,729,682	1,222,531	6,575,470
Space and Airborne Systems	3,656,225	3,865,510	—	7,521,735
Forcepoint	555,820	—	—	555,820
Corporate <sup>(4)</sup>	605,583	340,226	3,136	948,945
Total square feet	13,298,767	11,866,942	1,464,391	26,630,100

(1) Ownership may include either fee ownership of land and improvements or a long-term ground lease with ownership of improvements.

(2) “Government owned” means space owned by the U.S. or a foreign government utilized by us pursuant to an operating agreement with the U.S. or a foreign government.

(3) Includes approximately 276,000 square feet of vacant space, but excludes approximately 119,000 square feet of space leased or subleased to unrelated third parties.

(4) Includes business development and Raytheon International, Inc.

### ITEM 3. LEGAL PROCEEDINGS

We primarily engage in providing products and services under contracts with the U.S. government and, to a lesser degree, under direct foreign sales contracts, some of which the U.S. government funds. As a U.S. government contractor, we are subject to many levels of audit and investigation by the U.S. government relating to our contract performance and compliance with applicable rules and regulations. Agencies that oversee contract performance include: the Defense Contract Audit Agency (DCAA); the Defense Contract Management Agency (DCMA); the Inspectors General of the U.S. Department of Defense (DoD) and other departments and agencies; the Government Accountability Office; the Department of Justice (DoJ); and Congressional Committees. From time to time, these and other agencies investigate or conduct audits to determine whether our operations are being conducted in accordance

with applicable requirements. Such investigations and audits may be initiated due to a number of reasons, including as a result of a whistleblower complaint. Such investigations and audits could result in administrative, civil or criminal liabilities, including repayments, fines or penalties being imposed upon us, the suspension of government export licenses or the suspension or debarment from future U.S. government contracting. U.S. government investigations often take years to complete and many result in no adverse action against us. Our final allowable incurred costs for each year are also subject to audit and have, from time to time, resulted in disputes between us and the U.S. government, with litigation resulting at the Court of Federal Claims (COFC) or the Armed Services Board of Contract Appeals (ASBCA) or their related courts of appeals. In addition, the DoJ has, from time to time, convened grand juries to investigate possible irregularities by us. We also provide products and services to customers outside of the U.S., and those sales are subject to local government laws, regulations, and procurement policies and practices. Our compliance with such local government

Table of Contents

regulations or any applicable U.S. government regulations (e.g., the Foreign Corrupt Practices Act (FCPA) and International Traffic in Arms Regulations (ITAR)) may also be investigated or audited. Other than as specifically disclosed in this Form 10-K, we do not expect these audits, investigations or disputes to have a material effect on our financial position, results of operations or liquidity, either individually or in the aggregate.

In addition, various other claims and legal proceedings generally incidental to the normal course of business are pending or threatened against us. We do not expect these proceedings to result in any additional liability that would materially affect our financial position, results of operations or liquidity.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

EXECUTIVE OFFICERS OF THE REGISTRANT

Our executive officers are listed below. Each executive officer was elected by our Board of Directors to serve for a term of one year and until his or her successor is elected and qualified or until his or her earlier removal, resignation or death.

Frank R. Jimenez

Mr. Jimenez has served as Vice President and General Counsel since January 2015 and Corporate Secretary since April 2015. Prior to joining Raytheon, Mr. Jimenez served as General Counsel, Secretary and Managing Director, Corporate Affairs of Bunge Limited, a leading global agribusiness and food company, from July 2012 to January 2015. From 2011 to 2012, he served as Senior Vice President, General Counsel and Corporate Secretary at Xylem Inc., a global water technology company spun off from ITT Corporation in 2011. From 2009 to 2011, he served as Vice President and General Counsel of ITT Corporation. From 2006 to 2009, he served as General Counsel of the U.S. Department of the Navy. He previously held a variety of other positions in government, including Deputy General Counsel (Legal Counsel) for the U.S. Department of Defense and Chief of Staff at the U.S. Department of Housing and Urban Development, as well as Deputy Chief of Staff and Acting General Counsel to the Governor of Florida. Age 52.

Thomas A. Kennedy

Dr. Kennedy has served as Chairman of the Board since October 2014, Chief Executive Officer since April 2014 and a Director since January 2014. From April 2013 to March 2014, he served as Executive Vice President and Chief Operating Officer of Raytheon Company. From June 2010 to March 2013, he served as Vice President of Raytheon Company and President of the Integrated Defense Systems (IDS) business unit. From July 2007 to June 2010, he was Vice President of the Tactical Airborne Systems product line within the Space and Airborne Systems (SAS) business unit, and from May 2003 to July 2007, he was Vice President of the Mission System Integration product line within SAS. Dr. Kennedy joined Raytheon in 1983 and has held positions of increasing responsibility as a new business leader and program manager for several radar and electronic warfare systems development programs. Age 61.

Wesley D. Kremer

Mr. Kremer has served as President of the Integrated Defense Systems (IDS) business unit since July 2015 and Vice President of Raytheon Company since October 2015. From July 2011 to July 2015, he was Vice President of the Air and Missile Defense Systems product line within the Missile Systems (MS) business unit. From May 2010 to July 2011, Mr. Kremer was Director of the Standard Missile-3 program, and from June 2008 to May 2010, he was Director of Systems Design and Performance Engineering within MS. From December 2006 to June 2008, he was General Manager of the Advanced Products Center within the Space and Airborne Systems (SAS) business unit. Prior to joining Raytheon in 2003, Mr. Kremer served 11 years in the U.S. Air Force as a weapon systems officer. Age 51.



Taylor W. Lawrence

Dr. Lawrence has served as Vice President of Raytheon Company and President of the Missiles Systems (MS) business unit since July 2008. Dr. Lawrence joined Raytheon in April 2006 and until July 2008, he served as Vice President, Engineering, Technology and Mission Assurance. From August 2001 to April 2006, Dr. Lawrence was sector vice president and general manager, C4ISR & Space Sensors Division for Northrop Grumman Electronic Systems. From March 1999 to August 2001, Dr. Lawrence was vice president, Products and Technology for Northrop Grumman's Systems Development & Technology Division. Before joining Northrop Grumman, Dr. Lawrence served as the staff director for the Select Committee on Intelligence

Table of Contents

for the U.S. Senate and, previously, as deputy director, Information Systems Office of the Defense Advanced Research Projects Agency. Age 53.

Randa G. Newsome

Ms. Newsome has served as Vice President of Human Resources and Global Security since January 2015. From April 2013 to December 2014, she was Vice President of Human Resources and Security for Raytheon's Integrated Defense Systems (IDS) business unit. From December 2008 to April 2013, she was Vice President of Human Resources and Security for the former Technical Services (TS) business unit. From May 2004 to December 2008, Ms. Newsome was Director of Organization Performance and Talent Management for the former Intelligence and Information Systems business unit. Ms. Newsome joined Raytheon in 2001 as a human resources manager for the former Network Centric Systems business unit, after holding various assignments of increasing responsibility at Lockheed Martin Corporation. Age 51.

Anthony F. O'Brien

Mr. O'Brien has served as Vice President and Chief Financial Officer since March 2015. From March 2008 to March 2015, he was Vice President and Chief Financial Officer of Raytheon's Integrated Defense Systems (IDS) business unit. Mr. O'Brien joined Raytheon in 1986 and has held numerous finance positions of increasing responsibility with the Company over the course of his 30-year career, including Vice President of Finance and the senior finance executive responsible for Raytheon Airline Aviation Services and Raytheon's International Landed Companies, and Chief Financial Officer for Raytheon Aircraft Company. Age 52.

Rebecca R. Rhoads

Ms. Rhoads has served as Vice President of Raytheon Company and President of Global Business Services (GBS) since December 2013. From April 2001 to December 2013, she was a Vice President and the Chief Information Officer for Raytheon Company. From 1999 to April 2001, she was the Vice President of Information Technology for Raytheon's former Electronics Systems business unit. Ms. Rhoads began her career with General Dynamics as an electrical engineer in 1979, and worked in Engineering and Operations holding various assignments of increasing responsibility at General Dynamics, Hughes and Raytheon. Age 59.

David C. Wajsglas

Mr. Wajsglas has served as Vice President of Raytheon Company and President of the Intelligence, Information and Services (IIS) business unit since March 2015. From March 2006 to March 2015, he was Senior Vice President and Chief Financial Officer for Raytheon Company. From August 2005 to March 2006, he was Executive Vice President and Chief Financial Officer of Lear Corporation, an automotive interior systems and components supplier. From January 2002 to August 2005, he served as Senior Vice President and Chief Financial Officer of Lear. Mr. Wajsglas joined Lear in September 1999 as Vice President and Controller. Age 57.

Michael J. Wood

Mr. Wood has served as Vice President, Controller and Chief Accounting Officer since October 2006. Prior to joining Raytheon, Mr. Wood held positions of increasing responsibility over a 16-year career at KPMG LLP, an accounting firm, including as an Audit Partner serving various aerospace and defense clients. Age 48.

Richard R. Yuse

Mr. Yuse has served as Vice President of Raytheon Company and President of the Space and Airborne Systems (SAS) business unit since March 2010. From May 2007 to March 2010, he was President of the former Technical Services (TS) business unit. From March 2007 to May 2007, Mr. Yuse was Vice President and Deputy General Manager of TS, and from January 2006 to March 2007, he served as Vice President of the Integrated Air Defense product line of the Integrated Defense Systems (IDS) business unit. Mr. Yuse joined Raytheon in 1976 and has held positions of increasing responsibility on a variety of programs ranging from system architecture and design to flight test director

and program manager. Age 65.

Table of Contents

## PART II

## ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

At February 13, 2017, there were 22,771 record holders of our common stock. Our common stock is traded on the New York Stock Exchange under the symbol "RTN". For information concerning stock prices and dividends paid during the past two years, see "Note 18: Quarterly Operating Results (Unaudited)" within Item 8 of this Form 10-K.

## Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information about our equity compensation plans that authorize the issuance of shares of our common stock. This information is provided as of December 31, 2016.

Plan Category	(A) Number of securities to be issued upon exercise of outstanding options, warrants and rights <sup>(1)</sup>	(B) Weighted average exercise price of outstanding options, warrants and rights <sup>(2)</sup>	(C) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column A)
Equity compensation plans approved by stockholders	1,566,115	\$—	6,728,759
Equity compensation plans not approved by stockholders	—	—	—
Total	1,566,115	\$—	6,728,759

This amount includes 1,008,946 shares, which is the aggregate of the actual number of shares that will be issued pursuant to the 2014 Long-term Performance Plan (LTTP) awards and the maximum number of shares that may be issued upon settlement of outstanding 2015 and 2016 LTTP awards, including estimated dividend equivalent amounts. The shares to be issued pursuant to the 2014, 2015 and 2016 LTTP awards will be issued under the (1) Raytheon 2010 Stock Plan. The material terms of the 2014, 2015 and 2016 LTTP awards are described in more detail in "Note 14: Stock-based Compensation Plans" within Item 8 of this Form 10-K. These awards, which are granted as restricted stock units (RSUs), may be settled in cash or in stock at the discretion of the Management Development and Compensation Committee.

This amount also includes 557,169 shares that may be issued upon settlement of RSUs, generally issued to retirement-eligible and non-U.S. employees. The shares to be issued in settlement of the RSUs will be issued under the 2010 Stock Plan. The RSUs generally vest one-third per year on the second, third and fourth anniversaries of the date of grant.

(2) Since RSU awards do not have an exercise price, and there are no other options, warrants or rights outstanding at December 31, 2016, the weighted-average exercise price is zero.

## Stock Performance Graph

The following chart compares the total return on a cumulative basis of \$100 invested in our common stock on December 31, 2011 to the Standard & Poor's (S&P) 500 Stock Index and the S&P Aerospace & Defense Index.

## Total Return To Stockholders (Includes reinvestment of dividends)

Annual Return Percentage  
Years Ending

Edgar Filing: RAYTHEON CO/ - Form 10-K

Company/Index	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016
Raytheon Common Stock	23.29	62.33	21.50	18.02	17.12
S&P 500 Index	16.00	32.39	13.69	1.38	11.96
S&P Aerospace & Defense Index	14.56	54.92	11.43	5.43	18.90

Table of Contents

Company/Index	Indexed Returns					
	Years Ending					
	Base Period 12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016
Raytheon Common Stock	\$100	\$ 123.29	\$ 200.13	\$ 243.15	\$ 286.96	\$ 336.08
S&P 500 Index	100	116.00	153.57	174.60	177.01	198.18
S&P Aerospace & Defense Index	100	114.56	177.48	197.77	208.52	247.93

## Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased <sup>(1)</sup>	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans	Approximate Dollar Value (in Billions) of Shares that May Yet Be Purchased Under the Plans <sup>(2)</sup>
October (October 3, 2016–October 30, 2016)	1,004	\$137.17	—	\$ 1.7
November (October 31, 2016–November 27, 2016)	289,261	135.20	287,922	1.7
December (November 28, 2016–December 31, 2016)	422,974	143.44	422,974	1.6
Total	713,239	\$140.09	710,896	

Includes shares purchased related to activity under our stock plans. Such activity during the fourth quarter of 2016 (1) includes the surrender by employees of 2,343 shares to satisfy tax withholding obligations in connection with the vesting of restricted stock issued to employees.

(2) In November 2015, our Board of Directors authorized the repurchase of up to \$2.0 billion of our outstanding common stock.

Table of Contents

## ITEM 6. SELECTED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with the information contained in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and notes thereto included in Item 8 of this Form 10-K, which are incorporated herein by reference, in order to understand the factors that may affect the comparability of the financial data presented below.

## FIVE-YEAR STATISTICAL SUMMARY

(In millions, except per share amounts and total employees)	2016	2015	2014	2013	2012
<b>Results of Operations</b>					
Total net sales	\$24,069	\$23,247	\$22,826	\$23,706	\$24,414
Operating income	3,240	3,013	3,179	2,938	2,989
Interest expense, net	216	222	203	198	192
Income from continuing operations <sup>(1)</sup>	2,173	2,054	2,193	1,949	1,901
Income (loss) from discontinued operations, net of tax	1	13	65	64	(1 )
Net income <sup>(1)</sup>	2,174	2,067	2,258	2,013	1,900
Net income attributable to Raytheon Company <sup>(1)</sup>	2,211	2,074	2,244	1,996	1,888
Diluted earnings per share from continuing operations attributable to Raytheon Company common stockholders <sup>(1)</sup>	\$7.44	\$6.75	\$6.97	\$5.96	\$5.65
Diluted earnings per share attributable to Raytheon Company common stockholders <sup>(1)</sup>	\$7.44	\$6.80	\$7.18	\$6.16	\$5.65
Average diluted shares outstanding	296.8	305.2	312.6	324.2	334.2
<b>Financial Position at Year-End</b>					
Cash and cash equivalents	\$3,303	\$2,328	\$3,222	\$3,296	\$3,188
Short-term investments	100	872	1,497	1,001	856
Total current assets	10,678	9,812	10,279	9,792	9,150
Property, plant and equipment, net	2,166	2,005	1,935	1,937	1,986
Total assets	30,052	29,281	27,716	25,964	26,685
Total current liabilities	6,427	6,126	5,752	5,704	5,902
Long-term liabilities (excluding debt)	7,775	7,140	6,918	4,329	7,862
Long-term debt	5,335	5,330	5,325	4,734	4,731
Total equity	10,066	10,330	9,721	11,197	8,190
<b>Cash Flow and Other Information</b>					
Net cash provided by (used in) operating activities from continuing operations <sup>(1)</sup>	\$2,852	\$2,346	\$2,064	\$2,382	\$1,951
Net cash provided by (used in) investing activities	53	(1,744 )	(1,322 )	(473 )	(1,523 )
Net cash provided by (used in) financing activities <sup>(1)</sup>	(1,930 )	(1,509 )	(936 )	(1,797 )	(1,246 )
Bookings	27,836	25,227	24,052	22,132	26,504
Total backlog	36,855	34,669	33,571	33,685	36,181
Dividends declared per share	\$2.93	\$2.68	\$2.42	\$2.20	\$2.00
Total employees from continuing operations	63,000	61,000	61,000	63,000	67,800

Amounts prior to 2016 do not reflect the impact of the prospective adoption of Accounting Standards Update (ASU) 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, in the first quarter of 2016. See "Note 1: Summary of Significant Accounting Policies" within Item 8 of this Form 10-K for additional information.





Table of Contents

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Topic	Page
<u>Overview</u>	<u>28</u>
<u>Financial Summary</u>	<u>31</u>
<u>Critical Accounting Estimates</u>	<u>31</u>
<u>Accounting Standards</u>	<u>39</u>
<u>Consolidated Results of Operations</u>	<u>41</u>
<u>Segment Results</u>	<u>48</u>
<u>Financial Condition and Liquidity</u>	<u>66</u>
<u>Capital Resources</u>	<u>69</u>
<u>Contractual Obligations</u>	<u>70</u>
<u>Off-Balance Sheet Arrangements</u>	<u>70</u>
<u>Commitments and Contingencies</u>	<u>71</u>

OVERVIEW

Introduction

Raytheon Company develops technologically advanced and integrated products, services and solutions in our core markets: sensing; effects; command, control, communications, computers, cyber and intelligence; mission support; and cybersecurity. We serve both domestic and international customers, primarily as a prime contractor or subcontractor on a broad portfolio of defense and related programs for government customers.

We operate in five segments: Integrated Defense Systems (IDS); Intelligence, Information and Services (IIS); Missile Systems (MS); Space and Airborne Systems (SAS); and Forcepoint. For a more detailed description of our segments, see "Business Segments" within Item 1 of this Form 10-K.

In this section, we discuss our business environment and how certain factors may affect our business, key elements of our strategy, and how our financial performance is assessed and measured by management.

Business Environment

Domestic Considerations

U.S. government sales, excluding foreign military sales, accounted for 67% of our total net sales in 2016. Our principal U.S. government customer is the U.S. Department of Defense (DoD).

DoD funding levels, which are subject to budget and appropriation decisions and processes, are difficult to predict beyond the near-term. Spending caps on DoD funding imposed by the Budget Control Act of 2011 (BCA) have been raised several times, most recently by the Bipartisan Budget Act of 2015 (BBA) for fiscal years (FY) 2016 and 2017. DoD modernization funding, which consists of procurement and research and development, is of particular importance to defense contractors, and the DoD increased such funding in FY 2016. To date, the U.S. government has not signed a formal appropriation bill into law for FY 2017 and Congress has instead passed a Continuing Resolution (CR), under which the DoD is currently operating, through April 28, 2017. In addition, DoD funding levels for FY 2018 through 2021 remain governed by the BCA, and any change to those funding levels would require Congress to enact legislation. If the BCA caps are not amended, FY 2018 DoD funding would be similar to FY 2016 funding before gradually rising thereafter.

In addition to the DoD budget considerations discussed above, future domestic defense spending levels are impacted by a number of additional factors, including external threats to our national security, funding for on-going operations overseas, the priorities of the Administration and the Congress, overall health of the U.S. and world economies, and the state of governmental finances. However, we also continue to expect the DoD to continue to prioritize and protect the key capabilities required to execute its strategy, including being able to deter and defeat near peer adversaries. Such capabilities include Intelligence,

## Table of Contents

Surveillance and Reconnaissance (ISR), cybersecurity, missile defense, electronic warfare, improved kinetic and non-kinetic effectors, undersea warfare, unmanned systems, special operations forces and interoperability with allied forces. We believe those priorities are well aligned with our product offerings, technologies, services and capabilities.

We currently are involved in tens of thousands of contracts, with no single contract accounting for more than 5% of our total net sales in 2016. Although we believe our diverse portfolio of programs and capabilities is well suited to a changing defense environment, we face numerous challenges and risks, as discussed above. For more information on the risks and uncertainties that could impact the U.S. government's demand for our products and services, see "Item 1A. Risk Factors" of this Form 10-K.

### International Considerations

In 2016, our sales to customers outside of the U.S. accounted for 31% of our total net sales (including foreign military sales through the U.S. government). Internationally, the growing threat of additional terrorist activity, cyber threats, emerging nuclear states, long-range missiles and conventional military threats have led to an increase in demand for defense systems and services and other security solutions. In North Asia, both short- and long-term regional security concerns are increasing demand for air and missile defense, air/naval modernization and maritime security. In the Middle East and North Africa, threats from state and non-state actors are increasing demand for air and missile defense, air/land/naval force modernization, precision engagement, ISR, maritime and border security, and cybersecurity solutions. Given such threat environments, we expect our customers to continue to prioritize security investments even if their budgets are impacted by volatile short-term energy prices. In Europe, while economic and political challenges have constrained defense spending of certain European nations, others have begun to increase spending in response to geopolitical events and conflicts in Eastern Europe and the resulting uncertainty and security threat environment. Based on the foregoing, we expect that European nations will continue to seek advanced air and missile defense and other capabilities. Overall, we believe many international defense budgets have the potential to grow and to do so at a faster rate than the U.S. defense budget. However, international demand is sensitive to changes in the priorities and budgets of international customers and geopolitical uncertainties, which may be driven by changes in threat environments, volatility in worldwide economic conditions, regional and local economic and political factors, U.S. foreign policy and other risks and uncertainties. For more information on the risks and uncertainties that could impact international demand for our products and services, see "Item 1A. Risk Factors" of this Form 10-K.

### Our Strategy

The following are the broad elements of our strategy:

- Build upon our areas of strength within our key mission areas;
- Focus additional resources on emerging opportunities within the DoD market;
- Engage key countries as individual markets with multiple customers; and
- Extend Raytheon's advanced cyber solutions beyond the U.S. government into international and commercial markets.

We believe that our broad mix of technologies, domain expertise and key capabilities, our cost-effective, best-value solutions and the alignment of these strengths with customer needs position us favorably to grow in our key mission areas of missile defense; electronic warfare; command, control, communications, computers, cyber, intelligence, surveillance and reconnaissance; precision weapons; cybersecurity; and training. Globally, customers are increasingly seeking cost-effective mission solutions. These solutions can take the form of new electronics or electronic upgrades, but draw on our market focus area capabilities, deep domain expertise and system architecture skills. We continue to explore opportunities to make these affordable solutions more readily available to our international customers, including through enhanced design for export and releasability. We also continue to make investments to support our strategy, including through acquisitions and research and development.

**International Growth**—Because of the breadth of our offerings, our systems integration capability, the value of our solutions and our strong legacy in the international marketplace, we believe that we are well positioned to continue to

grow our international business. As discussed above in International Considerations, we believe demand continues to grow for solutions in air and missile defense, precision engagement, naval systems integration, ISR and cybersecurity. As a result we continue to enhance our focus on global growth through increased investment in our international business in existing and new international markets. Such investment provides additional resources and capabilities, both in-country and in the U.S., that strengthen the Company's position to pursue both existing and new opportunities. Although we believe our international business is well positioned to continue to grow, we recognize that we face substantial competition from both U.S. companies and other competitors in international markets, as well as the challenges of changing budget priorities, overall spending pressures and the timing of contract awards.

Table of Contents

(In millions)	2016	2015	2014
International sales <sup>(1)</sup>	\$7,552	\$7,150	\$6,541
International bookings	8,194	8,511	8,362

(1) Includes foreign military sales through the U.S. government.

Cybersecurity—We continue to both enhance our capabilities in the cyber market and leverage the capabilities of the 17 cyber acquisitions made since 2007. In 2015, we successfully executed on our strategy to extend our significant cyber capabilities into the commercial markets by creating Forcepoint, a new commercial cybersecurity joint venture company (with Vista Equity Partners) that combined Websense, Inc. (Websense) and Raytheon Cyber Products (RCP), formerly part of our IIS business. Forcepoint is leveraging its unique combination of capabilities to deliver “defense-grade” cybersecurity solutions to commercial markets worldwide. For more information on the Forcepoint joint venture transaction, see “Item 1. Business”, and “Note 6: Forcepoint Joint Venture” within Item 8 of this Form 10-K.

We also provide cyber capabilities to government customers, including the Intelligence Community, the DoD, other defense and civil global customers, as well as embed information assurance capabilities in our products and our information technology infrastructure. We believe the commercial and government cyber markets both represent strong growth markets for Raytheon. We expect to continue to seek opportunities to leverage our extensive cyber capabilities and to grow and scale our cyber businesses.

#### Focus on the Customer and Execution

Our customer focus continues to be a critical part of our strategy—underpinned by a focus on performance, relationships and solutions. Performance means being able to meet customer commitments, which is ensured through strong processes, metrics and oversight. We maintain a “process architecture” that spans our defense businesses and our broad programs and pursuits. It consists of enterprisewide processes and systems such as our Integrated Product Development System (IPDS), which assures consistency of evaluation and execution at each step in a program's life-cycle; Product Data Management (PDM), which is our business system software for engineering; Achieving Process Excellence (APEX), which is our SAP business system software for accounting, finance and program management; Process Re-Invention Integrating Systems for Manufacturing (PRISM), which is our SAP software for manufacturing operations; Advanced Company Estimating System (ACES), which is our cost proposal system; and Raytheon Enterprise Supplier Assessment (RESA) tool for Supply Chain Management. These processes and systems are linked to an array of front-end and back-end metrics. With this structure, we are able to track results and be alerted to potential issues through numerous oversight mechanisms, including operating reviews and annual operating plan reviews.

We are also continuing to build strong customer relationships by working with customers as partners and including them on Raytheon Six Sigma™ teams to jointly improve their programs and processes. We are increasingly focused on responding to our customers' changing requirements with rapid and effective solutions to real-world problems. In recognition of our customers' constraints and priorities, we also continue to drive various cost reductions across the Company by continuing to focus on enterprise collaboration and improving productivity and strong execution throughout our programs. We have worked to reduce costs across the Company and improve efficiencies in our production facilities, and we continue to increase value through Raytheon Six Sigma, the implementation of lean processes, reduced cycle times and strategic supply chain initiatives, in addition to other initiatives.

Table of Contents

## FINANCIAL SUMMARY

We use the following key financial performance measures to manage our business on a consolidated basis and by business segment, and to monitor and assess our results of operations:

Bookings—a forward-looking metric that measures the value of firm orders awarded to us during the year;

Net Sales—a growth metric that measures our revenue for the current year;

Operating Income—a measure of our profit from continuing operations for the year, before non-operating expenses, net and taxes; and

Operating Margin—a measure of our operating income as a percentage of total net sales.

(In millions, except percentages)	2016	2015	2014
Bookings	\$27,836	\$25,227	\$24,052
Total backlog	36,855	34,669	33,571
Total net sales	24,069	23,247	22,826
Total operating income <sup>(1)</sup>	3,240	3,013	3,179
Total operating margin	13.5 %	13.0 %	13.9 %
Operating cash flow from continuing operations	\$2,852	\$2,346	\$2,064

<sup>(1)</sup> Includes FAS/CAS Adjustment, described below in Critical Accounting Estimates, of \$435 million of income, \$185 million of income and \$286 million of income in 2016, 2015 and 2014, respectively.

Backlog represents the dollar value of firm orders for which work has not been performed. Backlog generally increases with bookings and generally converts into sales as we incur costs under the related contractual commitments. Therefore, we discuss changes in backlog, including any individually significant cancellations, for each of our segments, as we believe such discussion provides an understanding of the awarded but not executed portions of our contracts.

In addition, we maintain a strong focus on program execution and the prudent management of capital and investments in order to maximize operating income and cash. We pursue a capital deployment strategy that balances funding for growing our business, including capital expenditures, acquisitions and research and development; prudently managing our balance sheet, including debt repayments and pension contributions; and returning cash to our shareholders, including dividend payments and share repurchases.

We also focus on earnings per share (EPS) and measures to assess our cash generation and the efficiency and effectiveness of our use of capital, such as free cash flow (FCF) and return on invested capital (ROIC).

Considered together, we believe these metrics are strong indicators of our overall performance and our ability to create shareholder value. We feel these measures are balanced among long-term and short-term performance, efficiency and growth. We also use these and other performance metrics for executive compensation purposes.

A discussion of our results of operations and financial condition follows below in Consolidated Results of Operations; Segment Results; Financial Condition and Liquidity; and Capital Resources.

## CRITICAL ACCOUNTING ESTIMATES

Our consolidated financial statements are based on the application of U.S. Generally Accepted Accounting Principles (GAAP), which require us to make estimates and assumptions about future events that affect the amounts reported in our consolidated financial statements and the accompanying notes. Future events and their effects cannot be determined with certainty; therefore, the determination of estimates requires the exercise of judgment. Actual results could differ from those estimates, and any such differences may be material to our consolidated financial statements. We believe the estimates set forth below may involve a higher degree of judgment and complexity in their application than our other accounting estimates and represent the critical accounting estimates used in the preparation of our consolidated financial statements. We believe our judgments related to these accounting estimates are appropriate.

However, if different assumptions or conditions were to prevail, the results could be materially different from the amounts recorded.

## Table of Contents

### Revenue Recognition

We determine the appropriate revenue recognition method by analyzing the type, terms and conditions of each contract or arrangement entered into with our customers. The significant estimates we make in recognizing revenue for the types of revenue-generating activities in which we are involved are described below. We classify contract revenues as product or service according to the predominant attributes of the relevant underlying contracts unless the contract can clearly be split between product and service. We define service revenue as revenue from activities that are not associated with the design, development or production of tangible assets, the delivery of software code or a specific capability. Our service revenue is primarily related to our IIS business segment.

**Percentage-of-Completion Accounting**—We use the percentage-of-completion accounting method to account for our long-term contracts associated with the design, development, manufacture, or modification of complex aerospace or electronic equipment and related services, such as certain cost-plus service contracts. Under this method, revenue is recognized based on the extent of progress toward completion of the long-term contract. Our analysis of these contracts also contemplates whether contracts should be combined or segmented in accordance with the applicable criteria under U.S. GAAP. We combine closely related contracts when all the applicable criteria under U.S. GAAP are met. The combination of two or more contracts requires judgment in determining whether the intent of entering into the contracts was effectively to enter into a single project, which should be combined to reflect an overall profit rate. Similarly, we may segment a project, which may consist of a single contract or group of contracts, with varying rates of profitability, only if the applicable criteria under U.S. GAAP are met. Judgment also is involved in determining whether a single contract or group of contracts may be segmented based on how the arrangement was negotiated and the performance criteria. The decision to combine a group of contracts or segment a contract could change the amount of revenue and gross profit recorded in a given period.

The selection of a method to measure progress toward completion of a contract also requires judgment and is based on the nature of the products or services to be provided. We generally use the cost-to-cost measure of progress for our long-term contracts unless we believe another method more clearly measures progress toward completion of the contract. Under the cost-to-cost measure of progress, the extent of progress toward completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the contract. Contract costs include labor, materials and subcontractors costs, as well as an allocation of indirect costs. Revenues, including estimated fees or profits, are recorded as costs are incurred. Due to the nature of the work required to be performed on many of our contracts, the estimation of total revenue and cost at completion (the process for which we describe below in more detail) is complex and subject to many variables. Incentive and award fees generally are awarded at the discretion of the customer or upon achievement of certain program milestones or cost targets. Incentive and award fees, as well as penalties related to contract performance, are considered in estimating profit rates. Estimates of award fees are based on actual awards and anticipated performance, which may include the performance of subcontractors or partners depending on the individual contract requirements. Such incentives and penalties are recorded when there is sufficient information for us to assess anticipated performance. Incentive provisions that increase or decrease earnings based solely on a single significant event generally are not recognized until the event occurs. Our claims on contracts are recorded only if it is probable that the claim will result in additional contract revenue and the amounts can be reliably estimated.

We have a companywide standard and disciplined quarterly Estimate at Completion (EAC) process in which management reviews the progress and performance of our contracts. As part of this process, management reviews information including, but not limited to, any outstanding key contract matters, progress toward completion and the related program schedule, identified risks and opportunities, and the related changes in estimates of revenues and costs. The risks and opportunities include management's judgment about the ability and cost to achieve the schedule (e.g., the number and type of milestone events), technical requirements (e.g., a newly-developed product versus a mature product) and other contract requirements. Management must make assumptions and estimates regarding labor productivity and availability, the complexity of the work to be performed, the availability of materials, the length of



time to complete the contract (e.g., to estimate increases in wages and prices for materials and related support cost allocations), performance by our subcontractors, the availability and timing of funding from our customer, and overhead cost rates, among other variables. These estimates also include the estimated cost of satisfying our industrial cooperation agreements, sometimes referred to as offset obligations, required under certain contracts. Based on this analysis, any quarterly adjustments to net sales, cost of sales and the related impact to operating income are recognized as necessary in the period they become known. These adjustments may result from positive program performance, and may result in an increase in operating income during the performance of individual contracts, if we determine we will be successful in mitigating risks surrounding the technical, schedule, and cost aspects of those contracts or in realizing related opportunities. Likewise, these adjustments may result in a decrease in operating income if we determine we will not be successful in mitigating these risks or in realizing related opportunities. Changes in estimates of net sales, cost of sales, and

Table of Contents

the related impact to operating income are recognized quarterly on a cumulative catch-up basis, which recognizes in the current period the cumulative effect of the changes on current and prior periods based on a contract's percentage of completion. A significant change in one or more of these estimates could affect the profitability of one or more of our contracts. When estimates of total costs to be incurred on a contract exceed total estimates of revenue to be earned, a provision for the entire loss on the contract is recognized in the period the loss is determined.

Net EAC adjustments had the following impact on our operating results:

(In millions, except per share amounts)	2016	2015	2014
Operating income	\$401	\$371	\$513
Income from continuing operations attributable to Raytheon Company	272	241	333
Diluted EPS from continuing operations attributable to Raytheon Company	\$0.92	\$0.79	\$1.07

Other 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 Federal Acquisition Regulation (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, certain merger and acquisition costs, lobbying costs, interest expense and certain litigation defense costs are unallowable. In addition, we may enter into agreements with the U.S. government that address the allowability and allocation of costs to contracts for specific matters. Certain costs incurred in the performance of our U.S. government contracts are required to be recorded under U.S. GAAP but are not currently allocable to contracts. Such costs are deferred and primarily include a portion of our environmental expenses, asset retirement obligations, certain restructuring costs, deferred state income taxes, workers' compensation and certain other accruals. These costs are allocated to contracts when they are paid or otherwise agreed. We regularly assess the probability of recovery of these costs. This assessment requires us to make assumptions about the extent of cost recovery under our contracts and the amount of future contract activity. If the level of backlog in the future does not support the continued deferral of these costs, the profitability of our remaining contracts could be adversely affected.

Pension and other postretirement benefits (PRB) costs are allocated to our contracts as allowed costs based upon the U.S. government Cost Accounting Standards (CAS). The CAS requirements for pension and PRB costs differ from the Financial Accounting Standards (FAS) requirements under U.S. GAAP. Given the inability to match with reasonable certainty individual expense and income items between the CAS and FAS requirements to determine specific recoverability, we have not estimated the incremental FAS income or expense to be recoverable under our expected future contract activity, and therefore did not defer any FAS expense for pension and PRB plans in 2014 through 2016. This resulted in \$435 million of income, \$185 million of income and \$286 million of income in 2016, 2015 and 2014, respectively, reflected in our consolidated results of operations as the difference between CAS and FAS requirements for our pension and PRB plans in those years.

#### Pension and Other Postretirement Benefits (PRB) Costs

We have pension plans covering the majority of our employees hired prior to January 1, 2007, including certain employees in foreign countries. We must calculate our pension and PRB costs under both U.S. government CAS requirements and FAS requirements under U.S. GAAP, and both calculations require judgment. U.S. GAAP outlines the methodology used to determine pension and PRB expense or income for financial reporting purposes, which is not indicative of the funding requirements for pension and PRB plans that we determine under the Employee Retirement Income Security Act of 1974 (ERISA). CAS prescribes the allocation to and recovery of pension and PRB costs on U.S. government contracts. The CAS requirements for pension and PRB costs and its calculation methodology differ from the FAS requirements and calculation methodology. As a result, while both CAS and FAS use long-term assumptions in their calculation methodologies, each method results in different calculated amounts of pension and PRB cost. In addition, we are subject to the funding requirements under the Pension Protection Act of 2006 (PPA), which amended ERISA. Under the PPA, we are required to fully fund our pension plans over a rolling seven-year

period as determined annually based upon the PPA calculated funded status at the beginning of each year. The funding requirements are primarily based on the year's expected service cost and amortization of other previously unfunded liabilities.

We record CAS expense in our business segment results. Due to the differences between FAS and CAS amounts, we also present the difference between FAS and CAS expense, referred to as our FAS/CAS Adjustment, as a separate line item in our segment results. This effectively increases or decreases the amount of total pension expense in our results of operations so that such amount is equal to the FAS expense amount under U.S. GAAP. Due to the foregoing differences in requirements

## Table of Contents

and calculation methodologies, our FAS pension expense or income is not indicative of the funding requirements or amount of government recovery.

On December 27, 2011, the CAS Pension Harmonization Rule (CAS Harmonization) was published in the Federal Register. The rule was intended to improve the alignment of the pension cost recovered through contract pricing under CAS and the pension funding requirements under the PPA. The rule shortened the CAS amortization period for gains and losses from 15 to 10 years and requires the use of a discount rate based on high quality corporate bonds, consistent with PPA, to measure liabilities in determining the CAS pension expense. CAS Harmonization increases pension costs under CAS and the related FAS/CAS Pension Adjustment results in an increase to income in 2014 and beyond, primarily due to the liability measurement transition period of 0% in 2013, 25% in 2014, 50% in 2015, 75% in 2016 and 100% in 2017 included in the rule. Because CAS Harmonization is a required change in cost accounting for government contractors, we are entitled to an equitable adjustment for the increase in costs on our contracts. We have completed our negotiations with the government on the amount of the equitable adjustment which had an immaterial impact on our 2016 financial results.

In July 2012, the Surface Transportation Extension Act (STE Act) was passed by Congress and signed by the President. The STE Act includes a provision for temporary pension funding relief due to the low interest rate environment. The provision adjusts the 24-month average high quality corporate bond rates used to determine the PPA funded status so that they are within a floor and cap, or “corridor”, based on the 25-year average of corporate bond rates. The STE Act gradually phased out this interest rate provision beginning in 2013. Subsequent to the STE Act, the Highway and Transportation Funding Act of 2014 (HATFA) and the Bipartisan Budget Act of 2015 (BBA) further extended this interest rate provision until 2020, at which time the provision is gradually phased out. The STE, HATFA and BBA impact CAS expense as well because CAS Harmonization incorporates the PPA interest rate into CAS calculations. The BBA also increases the insurance premiums that we are required to pay the Pension Benefit Guarantee Corporation (PBGC). However, we do not expect the increases to have a material effect on our financial position, results of operations or liquidity.

The assumptions in the calculations of our pension FAS expense and CAS expense, which involve significant judgment, are described below.

**FAS Expense**—Our long-term return on plan assets (ROA) and discount rate assumptions are the key variables in determining pension expense or income and the funded status of our pension plans under U.S. GAAP.

The long-term ROA represents the average rate of earnings expected over the long term on the assets invested to provide for anticipated future benefit payment obligations. The long-term ROA used to calculate net periodic pension cost is set annually at the beginning of each year. Given the long-term nature of the ROA assumption, which we believe should not be solely reactive to short-term market conditions that may not persist, we expect the long-term ROA to remain unchanged unless there are significant changes in our investment strategy, the underlying economic assumptions or other major factors.

To establish our long-term ROA assumption we employ a “building block” approach. We then annually consider whether it is appropriate to change our long-term ROA assumption by reviewing the existing assumption against a statistically determined reasonable range of outcomes. The building block approach and the reasonable range of outcomes are based upon our asset allocation assumptions and long-term capital market assumptions. Such assumptions incorporate the economic outlook for various asset classes over short- and long-term periods and also take into consideration other factors, including historical market performance, inflation and interest rates.

For purposes of our long-term ROA assumptions for 2014 and prior, we considered the reasonable range to be between the 25th and 75th percentile likelihood of achieving a long-term return over future years, consistent with the Actuarial Standard of Practice No. 27, Selection of Economic Assumptions for Measuring Pension Obligations

(ASOP 27) in effect at the time. Therefore, it was less than 25% likely that the long-term return of the pension plan would fall below or above the 25th and 75th percentiles points, respectively (i.e., it is 50% likely that the long-term return of the pension plan will be within the 25th and 75th percentile range). In September 2013, the Actuarial Standards Board issued a revision to ASOP 27, that replaced the explicit reference to the best estimate range concept with the selection of a reasonable assumption that considers multiple criteria including the purposes of measurement, the actuary's professional judgment, historical and current economic data and estimates of future experience and has no significant bias. The revised standard is effective for assumptions established on or after September 30, 2014. As a result of the revised standard, we continue to evaluate our long-term ROA assumption against a reasonable range of possible outcomes, but effective for our 2015 and future years assumptions, we modified that range to be between the 35th to 65th percentile likelihood of achieving a long-term return over future years. We believe that continuing

Table of Contents

to validate our ROA assumption within a reasonable range that is narrowed to the 35th to 65th percentile ensures an unbiased result while also ensuring that the ROA assumption is not solely reactive to short-term market conditions that may not persist, and is consistent with external actuarial practices.

The reasonable range of long-term returns that was used to validate the long-term ROA assumption for the calculation of the net periodic benefit cost for 2016, 2015 and 2014, is shown below.

Percentile	2016	2015	2014
25 <sup>th</sup>	N/A	N/A	5.53 %
35 <sup>th</sup>	6.09 %	6.37 %	N/A
65 <sup>th</sup>	8.16 %	8.37 %	N/A
75 <sup>th</sup>	N/A	N/A	9.65 %

2014 ROA Assumption—The long-term domestic ROA of 8.75% fell between the 60th–65th percentile of the applicable reasonable range for 2014. The 50th percentile of this reasonable range was 7.59%.

2015 ROA Assumption—In the fourth quarter of 2014, we reduced our long-term target allocation for equities and increased our target allocation for fixed income within the investment policy allocations established by our Investment Committee in order to reduce the overall exposure to equity volatility. This change in asset allocation reduced the range of reasonable outcomes that we use to evaluate our long-term ROA assumption and we determined that the historical assumption of 8.75% no longer fell within this range. As a result, we employed a building block approach to develop our 2015 long-term ROA assumption. Under this building block method, the overall expected investment return equals the weighted-average of the individual expected return for each asset class based on the target asset allocation and the long-term capital market assumptions. The expected return for each asset class is composed of inflation plus a risk-free rate of return, plus an expected risk premium for that asset class. The resulting return is then adjusted for administrative, investment management and trading expenses as well as recognition of alpha for active management. The building block approach resulted in a long-term ROA assumption of 8.0% for 2015. To validate this assumption we compared the result against the reasonable range of outcomes and confirmed that the 8.0% result fell between the 55th–60th percentile of the reasonable range for 2015 with the 50th percentile at 7.37%. In addition, when we updated our target asset allocation and our long-term ROA assumption changed from 8.75% to 8.0%, we assessed what our historical asset performance may have been since 1986 using the updated target allocation and concluded the average return would likely have been equal to or greater than 8.0% for the time period from 1986 through 2014.

Based upon our application of the building block approach and our review of the resulting assumption against the 35th to 65th reasonable range and an analysis of our historical results, we established a 2015 long-term domestic ROA assumption of 8.0% for purposes of determining the net periodic benefit cost for 2015 and determined that the assumption is reasonable and consistent with the provisions of ASOP 27.

2016 ROA Assumption—The long-term domestic ROA of 8.0% fell between the 60th–65th percentile of the applicable reasonable range for 2016. The 50th percentile of this reasonable range was 7.12%.

2017 ROA Assumption—At year end 2016, we determined that the 8.0% long-term ROA assumption no longer fell within the range of reasonable outcomes, driven primarily by the current outlook on economic assumptions used to develop the reasonable range. As a result, we employed the building block approach described above to develop our 2017 long-term ROA assumption. The building block approach resulted in a long-term ROA assumption of 7.5% for 2017. To validate this assumption, we compared the result against the reasonable range of outcomes and confirmed that the 7.5% fell between the 55<sup>th</sup> and 60<sup>th</sup> percentile of the reasonable range for 2017 with the 50<sup>th</sup> percentile at 6.89%.

Once our long-term ROA has been determined to be within the 35th to 65th percentile range of results, we review historical averages and patterns of returns to confirm reasonability of our long-term ROA assumption compared to past results. While history is not solely indicative of future market expectations, it does provide insight into general historical trends and long-term asset performance. Our average annual actual rate of return from 1986 to 2016 of 8.80%, determined on an arithmetic basis, exceeds our estimated 7.5% assumed return. Arithmetic annual averages represent the simple average returns over independent annual periods, whereas geometric returns reflect the compound average returns of dependent annual periods.

## Table of Contents

The average annual actual return on a geometric basis for the same period was 8.14%. In addition, the actual annual returns have exceeded our long-term ROA assumption of 7.5% in five of the past ten years.

Based upon our application of the building block approach and our review of the resulting assumption against the 35<sup>th</sup> to 65<sup>th</sup> percentile reasonable range and an analysis of our historical results, we have established a 2017 long-term ROA domestic assumption of 7.5% for purposes of determining the net periodic benefit cost for 2017 and have determined that the new assumption is reasonable and consistent with the provisions of ASOP 27.

If we significantly change our long-term investment allocation or strategy, or if there is a significant change in the economic assumptions, then our long-term ROA assumption could change in the future.

Our domestic pension plans' actual rates of return were approximately 6%, 0% and 6% for 2016, 2015 and 2014, respectively. Asset returns in recent years have been impacted by the historically low risk-free interest rate environment, which is not expected to persist in the long term. The difference between the actual rate of return and our long-term ROA assumption is included in deferred losses.

The investment policy asset allocation ranges for our domestic pension plans, as set by our Investment Committee, for the year ended December 31, 2016 were as follows:

Asset Category	
Global equity (combined U.S. and international equity)	40%-60%
U.S. equities	25%-40%
International equities	15%-25%
Fixed-income securities	25%-40%
Cash and cash equivalents	0%-10%
Private equity and private real estate	5%-25%
Other (including absolute return funds)	5%-20%

Our long-term ROA assumptions for foreign pension plans are based on the asset allocations and the economic environment prevailing in the locations where the pension plans reside. Foreign pension assets do not make up a significant portion of the total assets for all of our pension plans.

The discount rate represents the interest rate that should be used to determine the present value of future cash flows currently expected to be required to settle our pension and PRB obligations. The discount rate assumption is determined by using a theoretical bond portfolio model consisting of bonds rated AA or better by Moody's Investors Service for which the timing and amount of cash flows approximate the estimated benefit payments for each of our pension plans. The discount rate assumption for our domestic pension plans at December 31, 2016 is 4.36%, which represents a weighted-average discount rate across our plans, compared to the December 31, 2015 discount rate of 4.47%.

**CAS Expense**—In addition to providing the methodology for calculating pension costs, CAS also prescribes the method for assigning those costs to specific periods. While the ultimate liability for pension costs under FAS and CAS is similar, the pattern of cost recognition is different. The key drivers of CAS pension expense include the funded status and the method used to calculate CAS reimbursement for each of our plans. Under the prior CAS rules, the discount rate used to measure liabilities was required to be consistent with the long-term ROA assumption, which generally changes infrequently given its long-term nature. In addition to certain other changes, CAS Harmonization requires contractors to compare the liability under the prior CAS methodology and assumptions to a liability using a discount rate based on high-quality corporate bonds, and use the greater of the two liability calculations in developing CAS expense. In addition, unlike FAS, we can only allocate pension costs for a plan under CAS until such plan is fully funded as determined under CAS requirements. When the estimated future CAS pension costs increase, the estimated



CAS cost allocated to our contracts in the future increases.

Table of Contents

Other FAS and CAS Considerations—An increase or decrease of 25 basis points in the discount rate assumption would have had the following approximate impacts on 2016 FAS pension results:

(In millions)

Impact of change in discount rate on net periodic benefit cost	\$65
Impact of change in discount rate on benefit obligations	722

Changes in the high-quality corporate bond rate assumption could impact the CAS discount rate for purposes of determining CAS pension expense due to CAS Harmonization. However in 2016, the CAS pension expense was not impacted by this assumption due to the passage of HATFA and BBA which extended the provisions of pension funding relief as described above. The discount rate assumption could impact CAS pension expense in future periods depending upon the interest rate and regulatory environments.

An increase or decrease of 25 basis points in the long-term ROA assumption would have had the following approximate impacts on 2016 FAS and CAS pension results:

(In millions)

FAS expense	\$(46)
CAS expense	3
FAS/CAS Pension Adjustment	\$(43)

A 25 basis point increase or decrease in our long-term ROA assumption would result in a decrease or increase to our FAS pension expense by approximately \$46 million for 2016. In addition to the impact on our 2016 FAS/CAS Pension Adjustment, a portion of the \$3 million change in CAS pension expense would also be allocated to fixed-price contracts in backlog and would either increase or decrease the profit rate on those contracts at the time of such a change (i.e., a change in the long-term ROA assumption on January 1, 2016 would drive a change in estimated costs in EACs and related contract profit rates as of December 31, 2015). The contract impact resulting from the change in CAS pension expense is difficult to estimate because remaining performance periods can vary, the amount and timing of expected new awards (i.e., the proposals expected to be awarded in the year which will bear their allocated portion of the change in CAS pension expense), and our mix of fixed-price and cost reimbursable contracts can change. Based on our contract profile at December 31, 2015, if we had 65% of our backlog in fixed-price contracts, and they were on average 50% complete, with our actual new award profile for 2016, a 25 basis point change in our long-term ROA assumption at January 1, 2016 would drive less than \$1 million of aggregate total EAC adjustments at December 31, 2015. In addition, our fixed-price contracts in backlog as of December 31, 2015 would have a lower profit rate in 2016, resulting in less than \$1 million impact as costs are incurred in that year on those contracts. The total impact on 2015 would be less than \$1 million driven by the aggregate EAC adjustments and the total impact on 2016 would be approximately \$43 million (the FAS/CAS Pension Adjustment and the lower profit rate impact in 2016 on fixed-price contracts in backlog at December 31, 2015). A change in our long-term ROA assumption would be subject to review by our government customer for reasonableness. Given our history of recovering changes to CAS pension expense, we expect the assumption change would be allocable and allowable, per regulatory guidelines, as long as the assumption is reasonable.

The impact of changing our long-term ROA for our domestic pension plans from 8.75% to 8.0% in 2015 increased our FAS expense by \$140 million, increased our CAS expense by \$40 million and decreased our FAS/CAS Pension Adjustment to income by \$100 million in 2015. The impact of changing our long-term ROA for our domestic pension plans from 8.0% to 7.5% in 2017 is expected to increase our FAS expense by \$87 million, decrease our CAS expense by \$18 million and decrease our FAS/CAS Pension Adjustment to income by \$105 million in 2017. The CAS impact is primarily driven by whether the pre-CAS Harmonization methodology applies, which uses a discount rate based on the long-term ROA assumption, or the post-CAS Harmonization methodology applies, which uses a discount rate based on high-quality corporate bond rates. The actual CAS impact is not linear and can vary significantly from the theoretical impact described above because it relies on the actual change in the long-term ROA and the corresponding

relationship between the long-term ROA, which is used under the pre-CAS Harmonization methodology, and the high-quality corporate bond rates, which are used under the post-CAS Harmonization methodology. In addition, the timing of the change relative to the transition period for CAS Harmonization affects the CAS impact. The \$40 million increase in our CAS expense in 2015 was included in our EACs and did not have a significant impact on our 2014 results based on our overall ending overhead positions. The \$18 million decrease in our CAS

Table of Contents

expense in 2017 was included in our EACs and did not have a significant impact on our 2016 results based on our overall ending overhead positions.

In accordance with both FAS and CAS, a calculated “market-related value” of our plan assets is used to develop the amount of deferred asset gains or losses to be amortized. The market-related value of assets is determined using actual asset gains or losses over a certain prior period (three years for FAS and five years for CAS, subject to certain limitations under CAS on the difference between the market-related value and actual market value of assets). Because of this difference in the number of years over which actual asset gains or losses are recognized and subsequently amortized, FAS expense generally tends to reflect recent asset gains or losses faster than CAS. Another driver of CAS expense (but not FAS expense) is the funded status of our pension plans under CAS. As noted above, CAS expense is only recognized for plans that are not fully funded; consequently, if plans become or cease to be fully funded under CAS due to our asset or liability experience, our CAS expense will change accordingly.

Under FAS, a “corridor” approach may be elected and applied in the recognition of asset and liability gains or losses which limits expense recognition to the net outstanding gains and losses in excess of the greater of 10% of the projected benefit obligation or the calculated “market-related value” of assets. We do not use a “corridor” approach in the calculation of FAS expense.

Our pension and PRB plans' investments are stated at fair value. Investments in equity securities (common and preferred) are valued at the last reported sales price when an active market exists. Investments in fixed-income securities are generally valued using methods based upon market transactions for comparable securities and various relationships between securities which are generally recognized by institutional traders. Investments in private equity funds, private real estate funds, and other commingled funds are estimated at fair market value which primarily utilizes net asset values reported by the investment manager or fund administrator. We review additional valuation and pricing information from the fund managers, including audited financial statements, to evaluate the net asset values.

The change in accumulated other comprehensive loss (AOCL) related to pension and PRB plans was as follows:

(In millions)	2016	2015	2014
Beginning balance	\$(10,912)	\$(11,437)	\$(7,923 )
Amortization of net losses included in net income	1,006	1,135	898
Gain (loss) arising during the period	(1,209 )	(610 )	(4,412 )
Ending balance	\$(11,115)	\$(10,912)	\$(11,437)

The balance in AOCL related to our pension and PRB plans is composed primarily of differences between changes in discount rates, differences between actual and expected asset returns, differences between actual and assumed demographic experience, and changes in plan provisions. Changes to our pension and PRB obligation as a result of these variables are initially reflected in other comprehensive income. The deferred gains and losses are amortized and included in future pension expense over the average employee service period of approximately 9 years at December 31, 2016. The \$1.2 billion in 2016 losses arising during the period were driven primarily by the decrease in the discount rate from 4.47% at December 31, 2015 to 4.36% at December 31, 2016, which had an impact of approximately \$0.5 billion, and actual returns, which were lower than our expected return, and had an impact of approximately \$0.4 billion, as well as other actuarial factors.

The \$0.6 billion in 2015 losses arising during the period were driven primarily by actual returns, which were lower than our expected return and had an impact of approximately \$1.6 billion, as well as other actuarial factors, partially offset by the increase in the discount rate from 4.08% at December 31, 2014 to 4.47% at December 31, 2015, which had an impact of approximately \$1.2 billion.

The \$4.4 billion in 2014 losses arising during the period were driven primarily by the decrease in the discount rate from 5.08% at December 31, 2013 to 4.08% at December 31, 2014, which had an impact of approximately \$3.0

billion, and actual returns which were lower than our expected return and had an impact of approximately \$0.3 billion, as well as other actuarial factors including mortality. The mortality assumption is the basis for determining the longevity of our pension participants and the expected period over which they will receive pension benefits. A 2014 study released by the Society of Actuaries indicated that life expectancies have increased over the past several years and are longer than what was assumed by most existing mortality tables. Since December 31, 2014, our pension obligations reflect a change in the underlying mortality assumption,

## Table of Contents

which reflects improvements in life expectancy consistent with the Society of Actuaries 2014 study. In addition, these pension obligations reflect an increase in the expected rate of future longevity improvement taking into consideration data from multiple sources including the Society of Actuaries 2014 study and Social Security Administration data. These changes resulted in an increase in our projected benefit obligation of \$0.6 billion as of December 31, 2014.

### Goodwill

We evaluate our goodwill for impairment annually as of the first day of our fiscal fourth quarter and in any interim period in which circumstances arise that indicate our goodwill may be impaired. Indicators of impairment include, but are not limited to, the loss of significant business, significant decreases in federal government appropriations or funding for our contracts, or other significant adverse changes in industry or market conditions. No events occurred during the periods presented that indicated the existence of an impairment with respect to our goodwill. We estimate the fair value of our reporting units using a discounted cash flow (DCF) model based on our most recent long-range plan in place at the time of our impairment testing, and compare the estimated fair value of each reporting unit to its net book value, including goodwill. We discount the cash flow forecasts using the weighted-average cost of capital method at the date of evaluation. The weighted-average cost of capital is comprised of the estimated required rate of return on equity, based on publicly available data for peer companies, plus an equity risk premium related to specific company risk factors, and the after-tax rate of return on debt, weighted at the relative values of the estimated debt and equity for the industry. Preparation of forecasts for use in the long-range plan and the selection of the discount rate involve significant judgments that we base primarily on existing firm orders, expected future orders, contracts with suppliers, labor agreements and general market conditions. Significant changes in these forecasts or the discount rate selected could affect the estimated fair value of one or more of our reporting units and could result in a goodwill impairment charge in a future period. When available and as appropriate, we also use comparative market multiples to corroborate our DCF model results. There was no indication of goodwill impairment as a result of our 2016 annual impairment analysis, as the fair values of each of our reporting units exceeded their respective net book values, including goodwill.

Based on our 2016 impairment analysis, the Forcepoint reporting unit had a fair value in excess of net book value, including goodwill, of approximately 25%. All other factors equal, a 10% decrease in expected future cash flows for our Forcepoint reporting unit would result in an excess of fair value over net book value of approximately 10%. Alternatively, all other factors being equal, a 100 basis points increase in the discount rate used in the calculation of the fair value of our Forcepoint reporting unit would also result in an excess of fair value over net book value of approximately 10%. Based on our 2016 impairment analysis of the other reporting units, the reporting unit that was closest to impairment had a fair value in excess of net book value, including goodwill, of approximately 85%. All other factors equal, a 10% decrease in expected future cash flows for that reporting unit would result in an excess of fair value over net book value of approximately 70%. Alternatively, all other factors being equal, a 100 basis points increase in the discount rate used in the calculation of the fair value of that reporting unit would result in an excess of fair value over net book value of approximately 55%. If we are required to record an impairment charge in the future, it could materially affect our results of operations.

### ACCOUNTING STANDARDS

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-09, Revenue from Contracts with Customers (Topic 606), which will replace numerous requirements in U.S. GAAP, including industry-specific requirements, and provide companies with a single revenue recognition model for recognizing revenue from contracts with customers. The core principle of the new standard is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The two permitted transition methods under the new standard are the full retrospective method, in which case the standard would be applied to each prior reporting period presented and the cumulative effect of applying the standard would be recognized at the earliest period shown, or the modified retrospective method, in which case the cumulative effect of

applying the standard would be recognized at the date of initial application. In July 2015, the FASB approved the deferral of the new standard's effective date by one year. The new standard is effective for annual reporting periods beginning after December 15, 2017. The FASB will permit companies to adopt the new standard early, but not before the original effective date of annual reporting periods beginning after December 15, 2016.

In 2014, we established a cross-functional implementation team consisting of representatives from across all of our business segments. We utilized a bottom-up approach to analyze the impact of the standard on our contract portfolio by reviewing our current accounting policies and practices to identify potential differences that would result from applying the requirements of the new standard to our revenue contracts. In addition, we identified and implemented appropriate changes to our business processes, systems and controls to support recognition and disclosure under the new standard. The implementation team has

Table of Contents

reported the findings and progress of the project to management and the Audit Committee on a frequent basis over the last two years.

We have been closely monitoring FASB activity related to the new standard, as well as working with various non-authoritative groups to conclude on specific interpretative issues. In the first half of 2016, we made significant progress toward completing our evaluation of the potential changes from adopting the new standard on our future financial reporting and disclosures. Our progress was aided by the FASB issuing ASU 2016-10, Identifying Performance Obligations and Licensing, which amended the current guidance on performance obligations and provided additional clarity on this topic, and the significant progress of the non-authoritative groups in concluding on specific interpretative issues. In the second half of 2016, we finalized our contract reviews and detailed policy drafting. Based on our evaluation, we will early adopt the requirements of the new standard in the first quarter of 2017 and will use the full retrospective transition method.

The impact of adopting the new standard on our 2015 and 2016 total net sales and operating income is not material. The immaterial impact of adopting Topic 606 primarily relates to the deferral of commissions on our commercial software arrangements, which previously were expensed as incurred but under the new standard will generally be capitalized and amortized over the period of contract performance or a longer period if renewals are expected and the renewal commission is not commensurate with the initial commission, and policy changes related to the recognition of revenue and costs on our defense and commercial software contracts to better align our policies with the new standard, which may impact the timing of revenue. The impact to our results is not material because the analysis of our contracts under the new revenue recognition standard supports the recognition of revenue over time under the cost-to-cost method for the majority of our contracts, which is consistent with our current revenue recognition model. Revenue on the majority of our contracts will continue to be recognized over time because of the continuous transfer of control to the customer. For U.S. government contracts, this continuous transfer of control to the customer is supported by clauses in the contract that allow the customer to unilaterally terminate the contract for convenience, pay us for costs incurred plus a reasonable profit and take control of any work in process. Similarly, for non-U.S. government contracts, the customer typically controls the work in process as evidenced either by contractual termination clauses or by our rights to payment for work performed to date to deliver products or services that do not have an alternative use to the company. Under the new standard, the cost-to-cost measure of progress continues to best depict the transfer of control of assets to the customer, which occurs as we incur costs. In addition, the number of our performance obligations under the new standard is not materially different from our contract segments under the existing standard. Lastly, the accounting for the estimate of variable consideration is not materially different compared to our current practice.

Select recast unaudited financial statement line items, which reflect the adoption of Topic 606 are as follows:

(In millions, except per

share amounts) Years 2016

2015

Ended December 31:

Total net sales	\$	24,124	\$	23,321
Operating income		3,295		3,067

Basic earnings per  
share attributable to  
Raytheon Company  
common stockholders:

Income from continuing operations	\$	7.55	\$	6.88
Income (loss) from discontinued operations, net of tax	—			0.04
Net income		7.56		6.92



Diluted earnings per  
share attributable to  
Raytheon Company  
common stockholders:

Income from continuing operations	\$	7.55	\$	6.87
Income (loss) from discontinued operations, net of tax	—		0.04	
Net income		7.55		6.91

We also do not expect the standard to have a material impact on our consolidated balance sheet. The immaterial impact primarily relates to reclassifications among financial statement accounts to align with the new standard. Most notably, contracts in process, net will be reclassified as receivables or contract assets based on amounts billed or unbilled, respectively. Advance payments and billings in excess of costs incurred and deferred revenue will be combined and reclassified as contract liabilities. Our contract balances will be reported in a net contract asset or liability position on a contract-by-contract basis at the end of each reporting period.

Table of Contents

In March 2016, the FASB issued ASU 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, which amends the accounting for employee share-based payment transactions to require recognition of the tax effects resulting from the settlement of stock-based awards as income tax expense or benefit in the income statement in the reporting period in which they occur. In addition, the ASU requires that all tax-related cash flows resulting from share-based payments, including the excess tax benefits related to the settlement of stock-based awards, be classified as cash flows from operating activities in the statement of cash flows. The ASU also requires that cash paid by directly withholding shares for tax withholding purposes be classified as a financing activity in the statement of cash flows. In addition, the ASU allows companies to make an accounting policy election to either estimate the number of awards that are expected to vest, consistent with current U.S. GAAP, or account for forfeitures when they occur. The new standard is effective for annual reporting periods beginning after December 15, 2016 with early adoption permitted. We elected to early adopt the requirements of the amended standard in the first quarter of 2016. In accordance with U.S. GAAP, we adopted the amendment requiring recognition of excess tax benefits and tax deficiencies in the income statement prospectively beginning in the first quarter of 2016, which could result in fluctuations in our effective tax rate period over period depending on how many awards vest in a quarter as well as the volatility of our stock price. In 2016, the impact to our income statement was \$47 million, included in federal and foreign income taxes. In addition, we elected to adopt the amendment related to the presentation of excess tax benefits within operating activities on the statement of cash flows prospectively beginning in the first quarter of 2016. We had previously classified cash paid for tax withholding purposes as a financing activity in the statement of cash flows, therefore there is no change related to this requirement. Furthermore, we elected to change our accounting policy to account for forfeitures when they occur for consistency with our government recovery accounting practices on a modified retrospective basis.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842), which requires lessees to recognize a right-of-use asset and lease liability for most lease arrangements. The new standard is effective for annual reporting periods beginning after December 15, 2018 with early adoption permitted, and must be adopted using the modified retrospective approach. We are currently evaluating the potential changes from this ASU to our future financial reporting and disclosures. We expect the standard to have an impact of approximately \$1 billion on our assets and liabilities for the addition of right-of-use assets and lease liabilities, but we do not expect it to have a material impact to our results of operations or liquidity.

Other new pronouncements issued but not effective until after December 31, 2016 are not expected to have a material impact on our financial position, results of operations or liquidity.

## CONSOLIDATED RESULTS OF OPERATIONS

### Total Net Sales

The composition of external net sales by products and services for each segment in 2016 was approximately the following:

(% of segment total external net sales)	IDS	IIS	MS	SAS	Forcepoint
Products <sup>(1)</sup>	90%	50%	100%	95%	90%
Services	10%	50%	—%	5%	10%

(1) Products net sales includes software related sales, including software subscriptions.

			% of Total Net Sales						
(In millions, except percentages)	2016	2015	2014	2016	2015	2014			
Net sales									
Products	\$20,166	\$19,443	\$19,126	83.8 %	83.6 %	83.8 %			
Services	3,903	3,804	3,700	16.2 %	16.4 %	16.2 %			
Total net sales	\$24,069	\$23,247	\$22,826	100.0%	100.0%	100.0%			

Total Net Sales - 2016 vs. 2015—The increase in total net sales of \$822 million in 2016 compared to 2015 was primarily due to higher external net sales of \$536 million at MS and \$394 million at SAS, partially offset by lower external net sales of \$376 million at IDS. The increase in external net sales at MS was primarily due to higher net sales on the Paveway program principally driven by international requirements. The increase in external net sales at SAS was primarily due to higher net sales on classified programs, including an international classified program awarded in the first quarter of 2016. The decrease in external net sales at IDS was primarily due to lower net sales on our missile defense radar production programs, lower net

## Table of Contents

sales on an international communications program and lower net sales on the Air Warfare Destroyer (AWD) program, all due to the scheduled completion of certain production phases on these programs.

**Products and Services Net Sales - 2016 vs. 2015**—The increase in products net sales of \$723 million in 2016 compared to 2015 was primarily due to higher external products net sales of \$519 million at MS and \$515 million at SAS, partially offset by lower external products net sales of \$431 million at IDS. The increase in external products net sales at MS and SAS was primarily due to the programs discussed above. The decrease in external products net sales at IDS was primarily due to the programs discussed above. The increase in services net sales of \$99 million in 2016 compared to 2015 was primarily due to higher external services net sales of \$117 million at IIS and \$55 million at IDS, partially offset by lower external services net sales of \$121 million at SAS. The increase in external services net sales at IIS was spread across numerous programs with no individual driver. The increase in external services net sales at IDS was driven principally by higher services net sales on radar sustainment programs for the Missile Defense Agency (MDA) and various Patriot support programs. The decrease in external services net sales at SAS was primarily due to lower service net sales on classified programs.

**Total Net Sales - 2015 vs. 2014**—The increase in total net sales of \$421 million in 2015 compared to 2014 was primarily due to higher external net sales of \$279 million at IDS, \$244 million at MS, and \$159 million at Forcepoint including the unfavorable impact of the deferred revenue adjustment recorded at corporate, partially offset by lower external net sales of \$215 million at SAS. The increase in external net sales at IDS was primarily due to higher net sales from an international Patriot program awarded in the second quarter of 2015 driven by program activity and the recognition of previously deferred precontract costs, higher net sales from an international Patriot program awarded in the fourth quarter of 2014, higher net sales on the AWD program driven by additional scope awarded in the fourth quarter of 2014 and higher net change in EAC adjustments as discussed below in Segment Results beginning on page 48, and higher net sales from an international air and missile defense system program awarded in the fourth quarter of 2013 due to scheduled production phases. The higher net sales were partially offset by lower net sales from the scheduled completion of certain production phases on various Patriot programs for international customers and from the scheduled completion of certain production phases on our missile defense radar programs. The increase in external net sales at MS was primarily due to higher net sales on the Paveway program principally driven by international requirements, higher net sales on the Tube-launched, Optically-tracked, Wireless-guided (TOW) missile program primarily due to planned increases in production, and higher net sales on certain air and missile defense programs primarily due to a contract awarded in the third quarter of 2015, partially offset by lower net sales on the Standard Missile-3 (SM-3) program primarily due to the planned transition from development to production. The increase in external net sales at Forcepoint was primarily due to higher sales of \$160 million resulting from the acquisition of Websense in the second quarter of 2015, including the unfavorable impact of the deferred revenue adjustment recorded at Corporate. Included in the change in external net sales at SAS was lower net sales primarily due to reduced schedule requirements on international tactical radar systems programs, lower intersegment sales driven by lower volume on contracts supporting radar programs, and higher net sales on classified programs. The remaining change in total net sales at SAS was spread across numerous programs with no individual or common significant driver.

**Products and Services Net Sales - 2015 vs. 2014**—The increase in products net sales of \$317 million in 2015 compared to 2014 was primarily due to higher external products net sales of \$262 million at MS and \$161 million at Forcepoint, partially offset by lower external products net sales of \$126 million at SAS. The increase in external products net sales at MS was primarily due to the programs discussed above. The increase in external products net sales at Forcepoint was principally driven by the acquisition of Websense. The decrease in external products net sales at SAS was primarily due to the international tactical radar systems programs discussed above. The increase in services net sales of \$104 million in 2015 compared to 2014 was primarily due to higher external services net sales of \$160 million at IDS, partially offset by lower external services net sales of \$89 million at SAS. The increase in external services net sales at IDS was driven principally by higher services net sales on radar sustainment programs for the MDA and new

service program awards, partially offset by lower services net sales on various other programs. The decrease in external services net sales at SAS was principally driven by several Intelligence, Surveillance and Reconnaissance Systems (ISRS) maintenance and sustainment programs due to scheduled completion in 2014.

Table of Contents

Sales to Major Customers

% of Total Net  
Sales

(In millions, except percentages) 2016 2015 2014 2016 2015 2014  
Sales to the U.S. government<sup>(1)</sup> \$16,101