



**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K**

(Mark One)

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 1-442

THE BOEING COMPANY

(Exact name of registrant as specified in its charter)

Delaware

State or other jurisdiction of
incorporation or organization

91-0425694

(I.R.S. Employer Identification No.)

100 N. Riverside Plaza, Chicago, IL

(Address of principal executive offices)

60606-1596

(Zip Code)

Registrant's telephone number, including area code (312) 544-2000

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

Common Stock, \$5 par value

(Title of each class)

New York Stock Exchange

(Name of each exchange on which registered)

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

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

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, 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.

Large accelerated filer

Accelerated filer

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

Smaller reporting company

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

As of June 30, 2016, there were 625,858,366 common shares outstanding held by nonaffiliates of the registrant, and the aggregate market value of the common shares (based upon the closing price of these shares on the New York Stock Exchange) was approximately \$81.3 billion.

The number of shares of the registrant's common stock outstanding as of February 1, 2017 was 612,478,643.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates information by reference to the registrant's definitive proxy statement, to be filed with the Securities and Exchange Commission within 120 days after the close of the fiscal year ended December 31, 2016.

THE BOEING COMPANY
Index to the Form 10-K
For the Fiscal Year Ended December 31, 2016

		Page
<u>PART I</u>		
	<u>Item 1. Business</u>	<u>1</u>
	<u>Item 1A. Risk Factors</u>	<u>6</u>
	<u>Item 1B. Unresolved Staff Comments</u>	<u>14</u>
	<u>Item 2. Properties</u>	<u>15</u>
	<u>Item 3. Legal Proceedings</u>	<u>15</u>
	<u>Item 4. Mine Safety Disclosures</u>	<u>15</u>
<u>PART II</u>		
	<u>Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	<u>16</u>
	<u>Item 6. Selected Financial Data</u>	<u>17</u>
	<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>18</u>
	<u>Item 7A. Quantitative and Qualitative Disclosures About Market Risk</u>	<u>47</u>
	<u>Item 8. Financial Statements and Supplementary Data</u>	<u>48</u>
	<u>Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</u>	<u>109</u>
	<u>Item 9A. Controls and Procedures</u>	<u>109</u>
	<u>Item 9B. Other Information</u>	<u>109</u>
<u>PART III</u>		
	<u>Item 10. Directors, Executive Officers and Corporate Governance</u>	<u>110</u>
	<u>Item 11. Executive Compensation</u>	<u>113</u>
	<u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>113</u>
	<u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u>	<u>114</u>
	<u>Item 14. Principal Accounting Fees and Services</u>	<u>114</u>
<u>PART IV</u>		
	<u>Item 15. Exhibits, Financial Statement Schedules</u>	<u>114</u>
	<u>Signatures</u>	<u>118</u>

PART I

Item 1. Business

The Boeing Company, together with its subsidiaries (herein referred to as “Boeing,” the “Company,” “we,” “us,” “our”), is one of the world’s major aerospace firms.

We are organized based on the products and services we offer. We operate in five principal segments:

- Commercial Airplanes;
- Our Defense, Space & Security (BDS) business comprises three segments:
 - Boeing Military Aircraft (BMA)
 - Network & Space Systems (N&SS)
 - Global Services & Support (GS&S)
- Boeing Capital (BCC).

Commercial Airplanes Segment

The Commercial Airplanes segment develops, produces and markets commercial jet aircraft and provides related support services, principally to the commercial airline industry worldwide. We are a leading producer of commercial aircraft and offer a family of commercial jetliners designed to meet a broad spectrum of global passenger and cargo requirements of airlines. This family of commercial jet aircraft in production includes the 737 narrow-body model and the 747, 767, 777 and 787 wide-body models. Development continues on the 787-10 and 737 MAX derivatives and the 777X program. The Commercial Airplanes segment also offers aviation services support, aircraft modifications, spare parts, training, maintenance documents and technical advice to commercial and government customers worldwide.

Defense, Space & Security

Our BDS operations principally involve research, development, production, modification and support of the products and related systems as described below. BDS' primary customer is the United States Department of Defense (U.S. DoD) with approximately 64% of BDS 2016 revenues being derived from this customer (excluding foreign military sales through the U.S. government). Other significant BDS revenues were derived from the National Aeronautics and Space Administration (NASA), international defense markets, civil markets and commercial satellite markets. BDS consists of three capabilities-driven businesses: BMA, N&SS and GS&S. Additionally, the Phantom Works group is an integrated team that works with the three businesses on product development, rapid prototyping and customer engagement through experimentation and enterprise technology investment strategies.

Boeing Military Aircraft Segment

This segment is engaged in the research, development, production and modification of manned and unmanned military aircraft and weapons systems for global strike, including fighter aircraft and missile systems; vertical lift, including rotorcraft and tilt-rotor aircraft; autonomous systems; and mobility, surveillance and engagement, including command and control, battle management, airborne, anti-submarine, transport and tanker aircraft. The major programs in this segment include for global strike: EA-18G Growler Airborne Electronic Attack, F/A-18E/F Super Hornet, F-15 Strike Eagle and Joint Direct Attack Munition; for vertical lift: CH-47 Chinook, AH-64 Apache, and V-22 Osprey; for autonomous systems: ScanEagle and Integrator; and for mobility, surveillance and engagement: P-8 programs, and KC-46A Tanker.

Network & Space Systems Segment

This segment is engaged in the research, development, production and modification of the following products and related services: strategic defense and intelligence systems, including strategic missile and defense systems, command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR), cyber and information solutions, and intelligence systems; satellite systems, including government and commercial satellites and space exploration. The major programs for strategic defense and intelligence systems include: Ground-based Midcourse Defense (GMD); satellite systems: commercial, civil and military satellites; and space exploration: Space Launch System (SLS), Commercial Crew and International Space Station (ISS). This segment also includes our joint venture operations related to United Launch Alliance .

Global Services & Support Segment

This segment provides customers with mission readiness through total support solutions. Our global services business sustains aircraft and systems with a full spectrum of products and services through integrated logistics, including supply chain management and engineering support; maintenance, modification and upgrades for aircraft; and training systems and government services, including pilot and maintenance training. Major programs supported by integrated logistics include the F/A-18E/F Super Hornet, F-15 Strike Eagle, AH-64 Apache and CH-47 Chinook for domestic and international customers. Aircraft modernization and sustainment includes major support performed as part of the C-17 Globemaster III Integrated Sustainment Program and aircraft programs for the Airborne Early Warning and Control (AEW&C) and Airborne Warning and Control Systems (AWACS).

Boeing Capital Segment

BCC seeks to ensure that Boeing customers have the financing they need to buy and take delivery of their Boeing product and manages overall financing exposure. BCC 's portfolio consists of equipment under operating leases, finance leases, notes and other receivables, assets held for sale or re-lease and investments.

Financial and Other Business Information

See the Summary of Business Segment Data and Note 21 to our Consolidated Financial Statements for financial information, including revenues and earnings from operations, for each of our business segments.

Intellectual Property

We own numerous patents and have licenses for the use of patents owned by others, which relate to our products and their manufacture. In addition to owning a large portfolio of intellectual property, we also license intellectual property to and from third parties. For example, the U.S. government has licenses in our patents that are developed in performance of government contracts, and it may use or authorize others to use the inventions covered by such patents for government purposes. Unpatented research, development and engineering skills, as well as certain trademarks, trade secrets, and other intellectual property rights, also make an important contribution to our business. While our intellectual property rights in the aggregate are important to the operation of each of our businesses, we do not believe that our business would be materially affected by the expiration of any particular intellectual property right or termination of any particular intellectual property patent license agreement.

Non-U.S. Revenues

See Note 21 to our Consolidated Financial Statements for information regarding non-U.S. revenues.

Research and Development

Research and development (R&D) expenditures involve experimentation, design, development and related test activities for defense systems, new and derivative jet aircraft including both commercial and military, advanced space and other company-sponsored product development. R&D expenditures are expensed as incurred including amounts allocable as reimbursable overhead costs on U.S. government contracts.

Our total research and development expense, net amounted to \$4.6 billion , \$3.3 billion and \$3.0 billion in 2016, 2015 and 2014 , respectively.

Research and development costs also include bid and proposal efforts related to government products and services, as well as costs incurred in excess of amounts estimated to be recoverable under cost-sharing research and development agreements. Bid and proposal costs were \$311 million , \$286 million and \$289 million in 2016, 2015 and 2014 , respectively.

Employees

Total workforce level at December 31, 2016 was approximately 150,500 . As of December 31, 2016 , our principal collective bargaining agreements were with the following unions:

Union	Percent of our Employees Represented	Status of the Agreements with Major Union
The International Association of Machinists and Aerospace Workers (IAM)	21%	We have two major agreements; one expiring in June 2022 and one in September 2024.
The Society of Professional Engineering Employees in Aerospace (SPEEA)	13%	We have two major agreements expiring in October 2022.
The United Automobile, Aerospace and Agricultural Implement Workers of America (UAW)	1%	We have one major agreement expiring in October 2022.

Competition

The commercial jet aircraft market and the airline industry remain extremely competitive. We face aggressive international competitors who are intent on increasing their market share, such as Airbus, Embraer and Bombardier, and other entrants from Russia, China and Japan. We are focused on improving our processes and continuing cost reduction efforts. We intend to continue to compete with other airplane manufacturers by providing customers with greater value products, services, and support. We continue to leverage our extensive customer support services network which spans the life cycle of the airplane: aircraft acquisition, readying for service, maintenance and engineering, enhancing and upgrading, and transitioning to the next model - as well as the daily cycle of gate-to-gate operations. This enables us to provide a high level of customer satisfaction and productivity.

BDS faces strong competition in all market segments, primarily from Lockheed Martin Corporation, Northrop Grumman Corporation, Raytheon Company, General Dynamics Corporation and SpaceX. Non-U.S. companies such as BAE Systems and Airbus Group, continue to build a strategic presence in the U.S. market by strengthening their North American operations and partnering with U.S. defense companies. In addition, certain competitors have occasionally formed teams with other competitors to address specific customer requirements. BDS expects the trend of strong competition to continue into 2017 .

Regulatory Matters

Our businesses are heavily regulated in most of our markets. We deal with numerous U.S. government agencies and entities, including but not limited to all of the branches of the U.S. military, NASA, the Federal Aviation Administration (FAA) and the Department of Homeland Security. Similar government authorities exist in our international markets.

Government Contracts. The U.S. government, and other governments, may terminate any of our government contracts at their convenience, as well as for default based on our failure to meet specified performance requirements. If any of our U.S. government contracts were to be terminated for convenience, we generally would be entitled to receive payment for work completed and allowable termination or cancellation costs. If any of our government contracts were to be terminated for default, generally the U.S. government would pay only for the work that has been accepted and could require us to pay the difference between the original contract price and the cost to re-procure the contract items, net of the work accepted from the original contract. The U.S. government can also hold us liable for damages resulting from the default.

Commercial Aircraft. In the U.S., our commercial aircraft products are required to comply with FAA regulations governing production and quality systems, airworthiness and installation approvals, repair procedures and continuing operational safety. Internationally, similar requirements exist for airworthiness, installation and operational approvals. These requirements are generally administered by the national aviation authorities of each country and, in the case of Europe, coordinated by the European Joint Aviation Authorities.

Environmental. We are subject to various federal, state, local and non-U.S. laws and regulations relating to environmental protection, including the discharge, treatment, storage, disposal and remediation of hazardous substances and wastes. We continually assess our compliance status and management of environmental matters to ensure our operations are in compliance with all applicable environmental laws and regulations. Investigation, remediation, and operation and maintenance costs associated with environmental compliance and management of sites are a normal, recurring part of our operations. These costs often are allowable costs under our contracts with the U.S. government. It is reasonably possible that costs incurred to ensure continued environmental compliance could have a material impact on our results of operations, financial condition or cash flows if additional work requirements or more stringent clean-up standards are imposed by regulators, new areas of soil, air and groundwater contamination are discovered and/or expansions of work scope are prompted by the results of investigations.

A Potentially Responsible Party (PRP) has joint and several liability under existing U.S. environmental laws. Where we have been designated a PRP by the Environmental Protection Agency or a state environmental agency, we are potentially liable to the government or third parties for the full cost of remediating contamination at our facilities or former facilities or at third-party sites. If we were required to fully fund the remediation of a site for which we were originally assigned a partial share, the statutory framework would allow us to pursue rights to contribution from other PRPs. For additional information relating to environmental contingencies, see Note 11 to our Consolidated Financial Statements.

International. Our international sales are subject to U.S. and non-U.S. governmental regulations and procurement policies and practices, including regulations relating to import-export control, investment, exchange controls, anti-corruption, and repatriation of earnings. International sales are also subject to varying currency, political and economic risks.

Raw Materials, Parts, and Subassemblies

We are highly dependent on the availability of essential materials, parts and subassemblies from our suppliers and subcontractors. The most important raw materials required for our aerospace products are

[Table of Contents](#)

aluminum (sheet, plate, forgings and extrusions), titanium (sheet, plate, forgings and extrusions) and composites (including carbon and boron). Although alternative sources generally exist for these raw materials, qualification of the sources could take a year or more. Many major components and product equipment items are procured or subcontracted on a sole-source basis with a number of companies.

Suppliers

We are dependent upon the ability of a large number of U.S. and non-U.S. suppliers and subcontractors to meet performance specifications, quality standards and delivery schedules at our anticipated costs. While we maintain an extensive qualification and performance surveillance system to control risk associated with such reliance on third parties, failure of suppliers or subcontractors to meet commitments could adversely affect production schedules and program/contract profitability, thereby jeopardizing our ability to fulfill commitments to our customers. We are also dependent on the availability of energy sources, such as electricity, at affordable prices.

Seasonality

No material portion of our business is considered to be seasonal.

Executive Officers of the Registrant

See "Item 10. Directors, Executive Officers and Corporate Governance" in Part III.

Other Information

Boeing was originally incorporated in the State of Washington in 1916 and reincorporated in Delaware in 1934. Our principal executive offices are located at 100 N. Riverside Plaza, Chicago, Illinois 60606 and our telephone number is (312) 544-2000.

General information about us can be found at www.boeing.com. The information contained on or connected to our website is not incorporated by reference into this Annual Report on Form 10-K and should not be considered part of this or any other report filed with the Securities and Exchange Commission (SEC). Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as any amendments to those reports, are available free of charge through our website as soon as reasonably practicable after we file them with, or furnish them to, the SEC. These reports may also be obtained at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. The SEC also maintains a website at www.sec.gov that contains reports, proxy statements and other information regarding SEC registrants, including Boeing.

Forward-Looking Statements

This report, as well as our annual report to shareholders, quarterly reports, and other filings we make with the SEC, press and earnings releases and other written and oral communications, contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "should," "expects," "intends," "projects," "plans," "believes," "estimates," "targets," "anticipates" and similar expressions generally identify these forward-looking statements. Examples of forward-looking statements include statements relating to our future financial condition and operating results, as well as any other statement that does not directly relate to any historical or current fact.

Forward-looking statements are based on expectations and assumptions that we believe to be reasonable when made, but that may not prove to be accurate. These statements are not guarantees and are subject to risks, uncertainties and changes in circumstances that are difficult to predict. Many factors, including

those set forth in the “Risk Factors” section below and other important factors disclosed in this report and from time to time in our other filings with the SEC, could cause actual results to differ materially and adversely from these forward-looking statements. Any forward-looking statement speaks only as of the date on which it is made, and we assume no obligation to update or revise any forward-looking statement whether as a result of new information, future events or otherwise, except as required by law.

Item 1A. Risk Factors

An investment in our common stock or debt securities involves risks and uncertainties and our actual results and future trends may differ materially from our past or projected future performance. We urge investors to consider carefully the risk factors described below in evaluating the information contained in this report.

Our Commercial Airplanes business depends heavily on commercial airlines, and is subject to unique risks.

Market conditions have a significant impact on demand for our commercial aircraft. The commercial aircraft market is predominantly driven by long-term trends in airline passenger and cargo traffic. The principal factors underlying long-term traffic growth are sustained economic growth and political stability both in developed and emerging markets. Demand for our commercial aircraft is further influenced by airline profitability, availability of aircraft financing, world trade policies, government-to-government relations, technological changes, price and other competitive factors, fuel prices, terrorism, epidemics and environmental regulations. Traditionally, the airline industry has been cyclical and very competitive and has experienced significant profit swings and constant challenges to be more cost competitive. In addition, availability of financing to non-U.S. customers depends in part on the continued operations of the Export-Import Bank of the United States. Significant deterioration in the global economic environment, the airline industry generally, or in the financial stability of one or more of our major customers could result in fewer new orders for aircraft or could cause customers to seek to postpone or cancel contractual orders and/or payments to us, which could result in lower revenues, profitability and cash flows and a reduction in our contractual backlog. In addition, because our commercial aircraft backlog consists of aircraft scheduled for delivery over a period of several years, any of these macroeconomic, industry or customer impacts could unexpectedly affect deliveries over a long period.

We enter into firm fixed-price aircraft sales contracts with indexed price escalation clauses which could subject us to losses if we have cost overruns or if increases in our costs exceed the applicable escalation rate. Commercial aircraft sales contracts are often entered into years before the aircraft are delivered. In order to account for economic fluctuations between the contract date and delivery date, aircraft pricing generally consists of a fixed amount as modified by price escalation formulas derived from labor, commodity and other price indices. Our revenue estimates are based on current expectations with respect to these escalation formulas, but the actual escalation amounts are outside of our control. Escalation factors can fluctuate significantly from period to period. Changes in escalation amounts can significantly impact revenues and operating margins in our Commercial Airplanes business.

We derive a significant portion of our revenues from a limited number of commercial airlines. We can make no assurance that any customer will exercise purchase options, fulfill existing purchase commitments or purchase additional products or services from us. In addition, fleet decisions, airline consolidations or financial challenges involving any of our major commercial airline customers could significantly reduce our revenues and limit our opportunity to generate profits from those customers.

Our Commercial Airplanes business depends on our ability to maintain a healthy production system, achieve planned production rate targets, successfully develop new aircraft or new derivative aircraft, and meet or exceed stringent performance and reliability standards.

The commercial aircraft business is extremely complex, involving extensive coordination and integration with U.S. and non-U.S. suppliers, highly-skilled labor from thousands of employees and other partners, and stringent regulatory requirements and performance and reliability standards. In addition, the introduction of new aircraft programs and/or derivatives, such as the 787-10, 737 MAX and 777X, involves increased risks associated with meeting development, testing, production and certification schedules. As a result, our ability to deliver aircraft on time, satisfy regulatory and customer requirements, and achieve or maintain, as applicable, program profitability is subject to significant risks.

We must minimize disruption caused by production changes and achieve productivity improvements in order to meet customer demand and maintain our profitability. We have plans to adjust production rates on several of our commercial aircraft programs, while at the same time engaging in significant ongoing development and production of the 787-10, 737 MAX and 777X aircraft. In addition, we continue to seek opportunities to reduce the costs of building our aircraft, including working with our suppliers to reduce supplier costs, identifying and implementing productivity improvements, and optimizing how we manage inventory. If production rate ramp-up efforts at any of our commercial aircraft assembly facilities are delayed, if other production rate changes result in significant disruption to our production system, or if our suppliers cannot timely deliver components to us at the cost and rates necessary to achieve our targets, we may be unable to meet delivery schedules and the financial performance of one or more of our programs may suffer.

Operational challenges impacting the production system for one or more of our commercial aircraft programs could result in production delays and/or failure to meet customer demand for new aircraft, either of which would negatively impact our revenues and operating margins. Our commercial aircraft production system is extremely complex. Operational issues, including delays or defects in supplier components, failure to meet internal performance plans, or delays or failures to achieve required regulatory certifications, could result in significant out-of-sequence work and increased production costs, as well as delayed deliveries to customers, impacts to aircraft performance and/or increased warranty or fleet support costs. Further, if we cannot efficiently and cost-effectively incorporate design changes into early build 787 aircraft, we may face further profitability pressures on this program.

If our commercial airplanes fail to satisfy performance and reliability requirements, we could face additional costs and/or lower revenues. Developing and manufacturing commercial aircraft that meet or exceed our performance and reliability standards, as well as those of customers and regulatory agencies, can be costly and technologically challenging. These challenges are particularly significant with newer aircraft programs. Any failure of any Boeing aircraft to satisfy performance or reliability requirements could result in disruption to our operations, higher costs and/or lower revenues.

Changes in levels of U.S. government defense spending or overall acquisition priorities could negatively impact our financial position and results of operations.

We derive a substantial portion of our revenue from the U.S. government, primarily from defense related programs with the U.S. DoD . Levels of U.S. defense spending are very difficult to predict and may be impacted by numerous factors such as the political environment, U.S. foreign policy, macroeconomic conditions and the ability of the U.S. government to enact relevant legislation such as authorization and appropriations bills.

In addition, significant budgetary delays and constraints have already resulted in reduced spending levels, and additional reductions may be forthcoming. The Budget Control Act of 2011 (The Act) established limits on U.S. government discretionary spending, including a reduction of defense spending between the 2012

and 2021 U.S. government fiscal years. Accordingly, long-term uncertainty remains with respect to overall levels of defense spending and it is likely that U.S. government discretionary spending levels will continue to be subject to pressure.

In addition, there continues to be significant uncertainty with respect to program-level appropriations for the U.S. DoD and other government agencies (including NASA) within the overall budgetary framework described above. While the House and Senate Appropriations committees included funding for Boeing's major programs in FY2017, such as F/A-18, CH-47 Chinook, AH-64 Apache, KC-46A Tanker and P-8 programs, uncertainty remains about how defense budgets in FY2017 and beyond will affect Boeing's programs. Future budget cuts, including cuts mandated by sequestration, or future procurement decisions associated with the authorizations and appropriations process could result in reductions, cancellations, and/or delays of existing contracts or programs. Any of these impacts could have a material effect on the results of the Company's operations, financial position and/or cash flows.

In addition, as a result of the significant ongoing uncertainty with respect to both U.S. defense spending levels and the nature of the threat environment, we expect the U.S. DoD to continue to emphasize cost-cutting and other efficiency initiatives in its procurement processes. If we can no longer adjust successfully to these changing acquisition priorities and/or fail to meet affordability targets set by the U.S. DoD customer, our revenues and market share would be further impacted.

We conduct a significant portion of our business pursuant to U.S. government contracts, which are subject to unique risks.

In 2016, 23% of our revenues were earned pursuant to U.S. government contracts, which include foreign military sales through the U.S. government. Business conducted pursuant to such contracts is subject to extensive procurement regulations and other unique risks.

Our sales to the U.S. government are subject to extensive procurement regulations, and changes to those regulations could increase our costs. New procurement regulations, or changes to existing requirements, could increase our compliance costs or otherwise have a material impact on the operating margins of our BDS business. These requirements may result in increased compliance costs, and we could be subject to additional costs in the form of withheld payments and/or reduced future business if we fail to comply with these requirements in the future. Compliance costs attributable to current and potential future procurement regulations such as these could negatively impact our financial condition and operating results.

The U.S. government may modify, curtail or terminate one or more of our contracts. The U.S. government contracting party may modify, curtail or terminate its contracts and subcontracts with us, without prior notice and either at its convenience or for default based on performance. In addition, funding pursuant to our U.S. government contracts may be reduced or withheld as part of the U.S. Congressional appropriations process due to fiscal constraints, changes in U.S. national security strategy and/or priorities or other reasons. Further uncertainty with respect to ongoing programs could also result in the event that the U.S. government finances its operations through temporary funding measures such as "continuing resolutions" rather than full-year appropriations. Any loss or anticipated loss or reduction of expected funding and/or modification, curtailment, or termination of one or more large programs could have a material adverse effect on our earnings, cash flow and/or financial position.

We are subject to U.S. government inquiries and investigations, including periodic audits of costs that we determine are reimbursable under U.S. government contracts. U.S. government agencies, including the Defense Contract Audit Agency and the Defense Contract Management Agency, routinely audit government contractors. These agencies review our performance under contracts, cost structure and compliance with applicable laws, regulations, and standards, as well as the adequacy of and our compliance with our internal control systems and policies. Any costs found to be misclassified or inaccurately allocated to a

specific contract will be deemed non-reimbursable, and to the extent already reimbursed, must be refunded. Any inadequacies in our systems and policies could result in withholds on billed receivables, penalties and reduced future business. Furthermore, if any audit, inquiry or investigation uncovers improper or illegal activities, we could be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, suspension of payments, fines, and suspension or debarment from doing business with the U.S. government. We also could suffer reputational harm if allegations of impropriety were made against us, even if such allegations are later determined to be false.

We enter into fixed-price contracts which could subject us to losses if we have cost overruns.

Our BDS business generated approximately 71% of its 2016 revenues from fixed-price contracts. While fixed-price contracts enable us to benefit from performance improvements, cost reductions and efficiencies, they also subject us to the risk of reduced margins or incurring losses if we are unable to achieve estimated costs and revenues. If our estimated costs exceed our estimated price, we recognize reach-forward losses which can significantly affect our reported results. For example, during 2016, we recorded a reach-forward loss of \$1,128 million on the USAF KC-46A Tanker contract, primarily driven by additional costs attributable to design changes, testing and manufacturing complexity. The long term nature of many of our contracts makes the process of estimating costs and revenues on fixed-price contracts inherently risky. Fixed-price contracts often contain price incentives and penalties tied to performance which can be difficult to estimate and have significant impacts on margins. In addition, some of our contracts have specific provisions relating to cost, schedule and performance.

Fixed-price development contracts are generally subject to more uncertainty than fixed-price production contracts. Many of these development programs have highly complex designs. In addition, technical or quality issues that arise during development could lead to schedule delays and higher costs to complete, which could result in a material charge or otherwise adversely affect our financial condition. Examples of significant BDS fixed-price development contracts include Commercial Crew, Saudi F-15, USAF KC-46A Tanker , and commercial and military satellites.

We enter into cost-type contracts which also carry risks.

Our BDS business generated approximately 29% of its 2016 revenues from cost-type contracting arrangements. Some of these are development programs that have complex design and technical challenges. These cost-type programs typically have award or incentive fees that are subject to uncertainty and may be earned over extended periods. In these cases the associated financial risks are primarily in reduced fees, lower profit rates or program cancellation if cost, schedule or technical performance issues arise. Programs whose contracts are primarily cost-type include GMD , Proprietary and SLS programs.

We enter into contracts that include in-orbit incentive payments that subject us to risks.

Contracts in the commercial satellite industry and certain government satellite contracts include in-orbit incentive payments. These in-orbit payments may be paid over time after final satellite acceptance or paid in full prior to final satellite acceptance. In both cases, the in-orbit incentive payment is at risk if the satellite does not perform to specifications for up to 15 years after acceptance. The net present value of in-orbit incentive fees we ultimately expect to realize is recognized as revenue in the construction period. If the satellite fails to meet contractual performance criteria, customers will not be obligated to continue making in-orbit payments and/or we may be required to provide refunds to the customer and incur significant charges.

Our ability to deliver products and services that satisfy customer requirements is heavily dependent on the performance of our subcontractors and suppliers, as well as on the availability of raw materials and other components.

We rely on other companies including U.S. and non-U.S. subcontractors and suppliers to provide and produce raw materials, integrated components and sub-assemblies, and production commodities and to perform some of the services that we provide to our customers. If one or more of our suppliers or subcontractors experiences delivery delays or other performance problems, we may be unable to meet commitments to our customers or incur additional costs. In addition, if one or more of the raw materials on which we depend (such as aluminum, titanium or composites) becomes unavailable or is available only at very high prices, we may be unable to deliver one or more of our products in a timely fashion or at budgeted costs. In some instances, we depend upon a single source of supply. Any service disruption from one of these suppliers, either due to circumstances beyond the supplier's control, such as geo-political developments, or as a result of performance problems or financial difficulties, could have a material adverse effect on our ability to meet commitments to our customers or increase our operating costs. For example, we continue to monitor political unrest involving Russia and Ukraine, where we and some of our suppliers source titanium products and/or have operations.

We use estimates in accounting for many contracts and programs. Changes in our estimates could adversely affect our future financial results.

Contract and program accounting require judgment relative to assessing risks, estimating revenues and costs and making assumptions for schedule and technical issues. Due to the size and nature of many of our contracts and programs, the estimation of total revenues and cost at completion is complicated and subject to many variables. Assumptions have to be made regarding the length of time to complete the contract or program because costs also include expected increases in wages and employee benefits, material prices and allocated fixed costs. Incentives or penalties related to performance on contracts are considered in estimating sales and profit rates, and are recorded when there is sufficient information for us to assess anticipated performance. Suppliers' assertions are also assessed and considered in estimating costs and profit rates. Estimates of award fees are also used in sales and profit rates based on actual and anticipated awards.

With respect to each of our commercial aircraft programs, inventoriable production costs (including overhead), program tooling and other non-recurring costs and routine warranty costs are accumulated and charged as cost of sales by program instead of by individual units or contracts. A program consists of the estimated number of units (accounting quantity) of a product to be produced in a continuing, long-term production effort for delivery under existing and anticipated contracts limited by the ability to make reasonably dependable estimates. To establish the relationship of sales to cost of sales, program accounting requires estimates of (a) the number of units to be produced and sold in a program, (b) the period over which the units can reasonably be expected to be produced and (c) the units' expected sales prices, production costs, program tooling and other non-recurring costs, and routine warranty costs for the total program. Several factors determine accounting quantity, including firm orders, letters of intent from prospective customers and market studies. Changes to customer or model mix, production costs and rates, learning curve, changes to price escalation indices, costs of derivative aircraft, supplier performance, customer and supplier negotiations/settlements, supplier claims and/or certification issues can impact these estimates. Any such change in estimates relating to program accounting may adversely affect future financial performance.

Because of the significance of the judgments and estimation processes described above, materially different sales and profit 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 future period financial performance. For additional information on our accounting policies for recognizing sales and profits, see our discussion under "Management's Discussion and Analysis –

Critical Accounting Policies – Contract Accounting/Program Accounting” on pages 44 – 45 and Note 1 to our Consolidated Financial Statements on pages 55 – 66 of this Form 10-K.

Competition within our markets and with respect to the products we sell may reduce our future contracts and sales.

The markets in which we operate are highly competitive and one or more of our competitors may have more extensive or more specialized engineering, manufacturing and marketing capabilities than we do in some areas. In our Commercial Airplanes business, we anticipate increasing competition among non-U.S. aircraft manufacturers and service providers in one or more of our market segments. In our BDS business, we anticipate that the effects of defense industry consolidation, fewer large and new programs and new priorities, including near and long-term cost competitiveness, of our U.S. DoD and international customers will intensify competition for many of our products and services. Furthermore, we are facing increased international competition and cross-border consolidation of competition. There can be no assurance that we will be able to compete successfully against our current or future competitors or that the competitive pressures we face will not result in reduced revenues and market share.

We derive a significant portion of our revenues from non-U.S. sales and are subject to the risks of doing business in other countries.

In 2016, non-U.S. customers accounted for approximately 59% of our revenues. We expect that non-U.S. sales will continue to account for a significant portion of our revenues for the foreseeable future. As a result, we are subject to risks of doing business internationally, including:

- changes in regulatory requirements;
- domestic and international government policies, including requirements to expend a portion of program funds locally and governmental industrial cooperation or participation requirements;
- fluctuations in international currency exchange rates;
- volatility in international political and economic environments and changes in non-U.S. national priorities and budgets, which can lead to delays or fluctuations in orders;
- the complexity and necessity of using non-U.S. representatives and consultants;
- the uncertainty of the ability of non-U.S. customers to finance purchases, including the availability of financing from the Export-Import Bank of the United States;
- uncertainties and restrictions concerning the availability of funding credit or guarantees;
- imposition of domestic and international taxes, export controls, tariffs, embargoes, sanctions and other trade restrictions;
- the difficulty of management and operation of an enterprise spread over many countries;
- compliance with a variety of international laws, as well as U.S. laws affecting the activities of U.S. companies abroad; and
- unforeseen developments and conditions, including terrorism, war, epidemics and international tensions and conflicts.

While the impact of these factors is difficult to predict, any one or more of these factors could adversely affect our operations in the future.

The outcome of litigation and of government inquiries and investigations involving our business is unpredictable and an adverse decision in any such matter could have a material effect on our financial position and results of operations.

We are involved in a number of litigation matters. 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 of any of these lawsuits could have a material impact on our financial position and results of operations. In addition, we are subject to extensive regulation under the laws of the United States and its various states, as well as other jurisdictions in which we operate. As a result, we are sometimes subject to government inquiries and investigations of our business due, among other things, to our business relationships with the U.S. government, the heavily regulated nature of our industry, and in the case of environmental proceedings, our current or past ownership of certain property. Any such inquiry or investigation could potentially result in an adverse ruling against us, which could have a material impact on our financial position and results of operations.

A significant portion of our customer financing portfolio is concentrated among certain customers and in certain types of Boeing aircraft, which exposes us to concentration risks.

A significant portion of our customer financing portfolio is concentrated among certain customers and in distinct geographic regions. Our portfolio is also concentrated by varying degrees across Boeing aircraft product types, most notably 717 and 747-8 aircraft, and among customers that we believe have less than investment-grade credit. If one or more customers holding a significant portion of our portfolio assets experiences financial difficulties or otherwise defaults on or does not renew its leases with us at their expiration, and we are unable to redeploy the aircraft on reasonable terms, or if the types of aircraft that are concentrated in our portfolio suffer greater than expected declines in value, our earnings, cash flows and/or financial position could be materially adversely affected.

We may be unable to obtain debt to fund our operations and contractual commitments at competitive rates, on commercially reasonable terms or in sufficient amounts.

We depend, in part, upon the issuance of debt to fund our operations and contractual commitments. As of December 31, 2016 and 2015, our airplane financing commitments totaled \$14,847 million and \$16,283 million. If we require additional funding in order to fund outstanding financing commitments or meet other business requirements, our market liquidity may not be sufficient. A number of factors could cause us to incur increased borrowing costs and to have greater difficulty accessing public and private markets for debt. These factors include disruptions or declines in the global capital markets and/or a decline in our financial performance, outlook or credit ratings. The occurrence of any or all of these events may adversely affect our ability to fund our operations and contractual or financing commitments.

We may not realize the anticipated benefits of mergers, acquisitions, joint ventures/strategic alliances or divestitures.

As part of our business strategy, we may merge with or acquire businesses and/or form joint ventures and strategic alliances. Whether we realize the anticipated benefits from these acquisitions and related activities depends, in part, upon our ability to integrate the operations of the acquired business, the performance of the underlying product and service portfolio, and the performance of the management team and other personnel of the acquired operations. Accordingly, our financial results could be adversely affected by unanticipated performance issues, legacy liabilities, transaction-related charges, amortization of expenses related to intangibles, charges for impairment of long-term assets, credit guarantees, partner performance and indemnifications. Consolidations of joint ventures could also impact our reported results of operations or financial position. While we believe that we have established appropriate and adequate procedures and processes to mitigate these risks, there is no assurance that these transactions will be successful. We

also may make strategic divestitures from time to time. These transactions may result in continued financial involvement in the divested businesses, such as through guarantees or other financial arrangements, following the transaction. Nonperformance by those divested businesses could affect our future financial results through additional payment obligations, higher costs or asset write-downs.

Our insurance coverage may be inadequate to cover all significant risk exposures.

We are exposed to liabilities that are unique to the products and services we provide. We maintain insurance for certain risks and, in some circumstances, we may receive indemnification from the U.S. government. The amount of our insurance coverage may not cover all claims or liabilities and we may be forced to bear substantial costs. For example, liabilities arising from the use of certain of our products, such as aircraft technologies, missile systems, border security systems, anti-terrorism technologies, and/or air traffic management systems may not be insurable on commercially reasonable terms. While some of these products are shielded from liability within the U.S. under the SAFETY Act provisions of the 2002 Homeland Security Act, no such protection is available outside the U.S., potentially resulting in significant liabilities. The amount of insurance coverage we maintain may be inadequate to cover these or other claims or liabilities.

Business disruptions could seriously affect our future sales and financial condition or increase our costs and expenses.

Our business may be impacted by disruptions including threats to physical security, information technology or cyber-attacks or failures, damaging weather or other acts of nature and pandemics or other public health crises. Any of these disruptions could affect our internal operations or our ability to deliver products and services to our customers. Any significant production delays, or any destruction, manipulation or improper use of our data, information systems or networks could impact our sales, increase our expenses and/or have an adverse effect on the reputation of Boeing and of our products and services.

Some of our and our suppliers' workforces are represented by labor unions, which may lead to work stoppages.

Approximately 57,000 employees, which constitute 38% of our total workforce, were union represented as of December 31, 2016. We experienced a work stoppage in 2008 when a labor strike halted commercial aircraft and certain BMA program production. We may experience additional work stoppages in the future, which could adversely affect our business. We cannot predict how stable our relationships, currently with 11 U.S. labor organizations and 7 non-U.S. labor organizations, will be or whether we will be able to meet the unions' requirements without impacting our financial condition. The unions may also limit our flexibility in dealing with our workforce. Union actions at suppliers can also affect us. Work stoppages and instability in our union relationships could delay the production and/or development of our products, which could strain relationships with customers and cause a loss of revenues which would adversely affect our operations.

We have substantial pension and other postretirement benefit obligations, which have a material impact on our earnings, shareholders' equity and cash flows from operations and could have significant adverse impacts in future periods.

The majority of our employees have earned benefits under defined benefit pension plans. Potential pension contributions include both mandatory amounts required under the Employee Retirement Income Security Act and discretionary contributions to improve the plans' funded status. The extent of future contributions depends heavily on market factors such as the discount rate and the actual return on plan assets. We estimate future contributions to these plans using assumptions with respect to these and other items. Changes to those assumptions could have a significant effect on future contributions as well as on our

annual pension costs and/or result in a significant change to shareholders' equity. For U.S. government contracts, we allocate pension costs to individual contracts based on U.S. Cost Accounting Standards which can also affect contract profitability. We also provide other postretirement benefits to certain of our employees, consisting principally of health care coverage for eligible retirees and qualifying dependents. Our estimates of future costs associated with these benefits are also subject to assumptions, including estimates of the level of medical cost increases. For a discussion regarding how our financial statements can be affected by pension and other postretirement plan accounting policies, see "Management's Discussion and Analysis - Critical Accounting Policies - Pension Plans" on pages 46 – 47 of this Form 10-K. Although GAAP expense and pension or other postretirement benefit contributions are not directly related, the key economic factors that affect GAAP expense would also likely affect the amount of cash or stock we would contribute to our plans.

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

We are subject to various federal, state, local and non-U.S. laws and regulations related to environmental protection, including the discharge, treatment, storage, disposal and remediation of hazardous substances and wastes. We could incur substantial costs, including cleanup costs, fines and civil or criminal sanctions, as well as third-party claims for property damage or personal injury, if we were to violate or become liable under environmental laws or regulations. In some cases, we may be subject to such costs due to environmental impacts attributable to our current or past manufacturing operations or the operations of companies we have acquired. In other cases, we may become subject to such costs due to an indemnification agreement between us and a third party relating to such environmental liabilities. In addition, new laws and regulations, more stringent enforcement of existing laws and regulations, the discovery of previously unknown contamination or the imposition of new remediation requirements could result in additional costs. For additional information relating to environmental contingencies, see Note 11 to our Consolidated Financial Statements.

Unauthorized access to our or our customers' information and systems could negatively impact our business.

We face certain security threats, including threats to the confidentiality, availability and integrity of our data and systems. We maintain an extensive network of technical security controls, policy enforcement mechanisms, monitoring systems and management oversight in order to address these threats. While these measures are designed to prevent, detect and respond to unauthorized activity in our systems, certain types of attacks, including cyber-attacks, could result in significant financial or information losses and/or reputational harm. In addition, we manage information and information technology systems for certain customers. Many of these customers face similar security threats. If we cannot prevent the unauthorized access, release and/or corruption of our customers' confidential, classified or personally identifiable information, our reputation could be damaged, and/or we could face financial losses.

Item 1B. Unresolved Staff Comments

Not applicable

Item 2. Properties

We occupied approximately 86 million square feet of floor space on December 31, 2016 for manufacturing, warehousing, engineering, administration and other productive uses, of which approximately 96% was located in the United States. The following table provides a summary of the floor space by business as of December 31, 2016 :

<i>(Square feet in thousands)</i>	Owned	Leased	Government Owned ⁽¹⁾	Total
Commercial Airplanes	41,470	5,753		47,223
Defense, Space & Security	26,775	7,975		34,750
Other ⁽²⁾	2,399	866	319	3,584
Total	70,644	14,594	319	85,557

⁽¹⁾ Excludes rent-free space furnished by U.S. government landlord of 260 square feet.

⁽²⁾ Other includes BCC, sites used for common internal services and our Corporate Headquarters.

At December 31, 2016 , we occupied in excess of 76.9 million square feet of floor space at the following major locations:

- Commercial Airplanes – Greater Seattle, WA; Greater Charleston, SC; Portland, OR; Greater Los Angeles, CA; Greater Salt Lake City, UT; Australia; and Canada
- Defense, Space & Security – Greater St. Louis, MO; Greater Los Angeles, CA; Greater Seattle, WA; Philadelphia, PA; Mesa, AZ; San Antonio, TX; Huntsville, AL; Greater Washington, DC; Oklahoma City, OK; and Houston, TX
- Other – Chicago, IL and Greater Seattle, WA

Most runways and taxiways that we use are located on airport properties owned by others and are used jointly with others. Our rights to use such facilities are provided for under long-term leases with municipal, county or other government authorities. In addition, the U.S. government furnishes us certain office space, installations and equipment at U.S. government bases for use in connection with various contract activities.

We believe that our major properties are adequate for our present needs and, as supplemented by planned improvements and construction, expect them to remain adequate for the foreseeable future.

Item 3. Legal Proceedings

Currently, we are involved in a number of legal proceedings. For a discussion of contingencies related to legal proceedings, see Note 20 to our Consolidated Financial Statements, which is hereby incorporated by reference.

Item 4. Mine Safety Disclosures

Not applicable

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

The principal market for our common stock is the New York Stock Exchange where it trades under the symbol BA. As of February 1, 2017, there were 113,517 shareholders of record. Additional information required by this item is incorporated by reference from Note 22 to our Consolidated Financial Statements.

Issuer Purchases of Equity Securities

The following table provides information about purchases we made during the quarter ended December 31, 2016 of equity securities that are registered by us pursuant to Section 12 of the Exchange Act:

(Dollars in millions, except per share data)

	(a)	(b)	(c)	(d)
	Total Number of Shares Purchased ⁽¹⁾	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet be Purchased Under the Plans or Programs ⁽²⁾
10/1/2016 thru 10/31/2016	3,677,690	\$136.16	3,672,589	\$7,000
11/1/2016 thru 11/30/2016	12,436	140.32		7,000
12/1/2016 thru 12/31/2016	54,175	155.67		14,000
Total	3,744,301	\$136.46	3,672,589	

⁽¹⁾ We purchased an aggregate of 3,672,589 shares of our common stock in the open market pursuant to our repurchase plan and 71,713 shares transferred to us from employees in satisfaction of minimum tax withholding obligations associated with the vesting of restricted stock units during the period. We did not purchase shares in swap transactions.

⁽²⁾ On December 12, 2016, we announced a new repurchase plan for up to \$14 billion of common stock, replacing the plan previously authorized in 2015.

Item 6. Selected Financial Data
Five-Year Summary (Unaudited)
(Dollars in millions, except per share data)

	2016	2015	2014	2013	2012
Operations					
Revenues:					
Commercial Airplanes	\$65,069	\$66,048	\$59,990	\$52,981	\$49,127
Defense, Space & Security: ⁽¹⁾					
Boeing Military Aircraft	12,515	13,424	13,410	15,161	15,223
Network & Space Systems	7,046	7,751	8,003	8,512	7,911
Global Services & Support	9,937	9,213	9,468	9,524	9,473
Total Defense, Space & Security	29,498	30,388	30,881	33,197	32,607
Boeing Capital	298	413	416	408	468
Unallocated items, eliminations, and other	(294)	(735)	(525)	37	(504)
Total revenues	\$94,571	\$96,114	\$90,762	\$86,623	\$81,698
General and administrative expense	3,616	3,525	3,767	3,956	3,717
Research and development expense	4,627	3,331	3,047	3,071	3,298
Other income/(loss), net	40	(13)	(3)	56	62
Net earnings from continuing operations	\$4,895	\$5,176	\$5,446	\$4,586	\$3,903
Net loss on disposal of discontinued operations, net of tax				(1)	(3)
Net earnings	\$4,895	\$5,176	\$5,446	\$4,585	\$3,900
Basic earnings per share from continuing operations	7.70	7.52	7.47	6.03	5.15
Diluted earnings per share from continuing operations	7.61	7.44	7.38	5.96	5.11
Cash dividends declared	\$2,902	\$2,575	\$2,210	\$1,642	\$1,360
Per share	4.69	3.82	3.10	2.19	1.81
Additions to Property, plant and equipment	2,613	2,450	2,236	2,098	1,703
Depreciation of Property, plant and equipment	1,418	1,357	1,414	1,338	1,248
Year-end workforce	150,500	161,400	165,500	168,400	174,400
Financial position at December 31					
Total assets	\$89,997	\$94,408	\$92,921	\$90,014	\$84,528
Working capital	12,354	17,822	19,534	19,830	16,667
Property, plant and equipment, net	12,807	12,076	11,007	10,224	9,660
Cash and cash equivalents	8,801	11,302	11,733	9,088	10,341
Short-term and other investments	1,228	750	1,359	6,170	3,217
Total debt	9,952	9,964	9,070	9,635	10,409
Customer financing assets	4,201	3,570	3,561	3,971	4,420
Shareholders' equity	817	6,335	8,665	14,875	5,867
Common shares outstanding (in millions)	617.2	666.6	706.7	747.4	755.6
Contractual Backlog:					
Commercial Airplanes	\$416,198	\$431,408	\$440,118	\$372,980	\$317,287
Defense, Space & Security:					
Boeing Military Aircraft	21,415	19,947	21,078	23,510	27,787
Network & Space Systems	5,054	7,368	8,935	9,832	10,078
Global Services & Support	15,610	17,872	16,961	16,339	17,203
Total Defense, Space & Security	42,079	45,187	46,974	49,681	55,068
Total contractual backlog	\$458,277	\$476,595	\$487,092	\$422,661	\$372,355

Cash dividends have been paid on common stock every year since 1942.

⁽¹⁾ Effective in 2016, certain programs were realigned between BDS segments. Prior years have been recast for segment realignments.

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

Consolidated Results of Operations and Financial Condition

Overview

We are a global market leader in design, development, manufacture, sale, service and support of commercial jetliners, military aircraft, satellites, missile defense, human space flight and launch systems and services. We are one of the two major manufacturers of 100+ seat airplanes for the worldwide commercial airline industry and one of the largest defense contractors in the U.S. While our principal operations are in the U.S., we conduct operations in many countries and rely on an extensive network of international partners, key suppliers and subcontractors.

Our strategy is centered on successful execution in healthy core businesses – Commercial Airplanes and Defense, Space & Security (BDS) – supplemented and supported by Boeing Capital (BCC). Taken together, these core businesses have historically generated substantial earnings and cash flow that permit us to invest in new products and services. We focus on producing the products and providing the services that the market demands and we price our products and services to provide a fair return for our shareholders while continuing to find new ways to improve efficiency and quality. Commercial Airplanes is committed to being the leader in commercial aviation by offering airplanes and services that deliver superior design, efficiency and value to customers around the world. BDS integrates its resources in defense, intelligence, communications, security, space and services to deliver capability-driven solutions to its customers at reduced costs. Our BDS strategy is to leverage our core businesses to capture key next-generation programs while expanding our presence in adjacent and international markets, underscored by an intense focus on growth and productivity. Our strategy also benefits us as the cyclical nature of commercial and defense markets sometimes offset. BCC facilitates, arranges, structures and provides selective financing solutions for our Boeing customers.

In November 2016, we announced plans for the formation of Boeing Global Services (BGS), which will bring together certain Commercial Aviation Services businesses currently included in the Commercial Airplanes segment and certain BDS businesses (primarily those currently included in the Global Services & Support (GS&S) segment). We expect BGS to be operational during the second half of 2017.

Consolidated Results of Operations

The following table summarizes key indicators of consolidated results of operations:

(Dollars in millions, except per share data)

Years ended December 31,	2016	2015	2014
Revenues	\$94,571	\$96,114	\$90,762
GAAP			
Earnings from operations	5,834	7,443	7,473
Operating margins	6.2%	7.7%	8.2%
Effective income tax rate	12.1%	27.7%	23.7%
Net earnings	\$4,895	\$5,176	\$5,446
Diluted earnings per share	\$7.61	\$7.44	\$7.38
Non-GAAP ⁽¹⁾			
Core operating earnings	\$5,464	\$7,741	\$8,860
Core operating margins	5.8%	8.1%	9.8%
Core earnings per share	\$7.24	\$7.72	\$8.60

⁽¹⁾ These measures exclude certain components of pension and other postretirement benefit expense. See page 42 - 43 for important information about these non-GAAP measures and reconciliations to the most comparable GAAP measures.

Revenues

The following table summarizes Revenues:

(Dollars in millions)

Years ended December 31,	2016	2015	2014
Commercial Airplanes	\$65,069	\$66,048	\$59,990
Defense, Space & Security	29,498	30,388	30,881
Boeing Capital	298	413	416
Unallocated items, eliminations and other	(294)	(735)	(525)
Total	\$94,571	\$96,114	\$90,762

Revenues in 2016 decreased by \$1,543 million or 2% compared with 2015. Commercial Airplanes revenues decreased by \$979 million or 1% primarily due to lower deliveries. BDS revenues for 2016 decreased by \$890 million compared with the same period in 2015 due to lower revenues in Boeing Military Aircraft (BMA) and Network & Space Systems (N&SS), partially offset by higher revenues in GS&S.

Revenues in 2015 increased by \$5,352 million or 6% compared with 2014. Commercial Airplanes revenues increased by \$6,058 million or 10% due to higher new airplane deliveries and mix. BDS revenues decreased by \$493 million or 2% primarily due to lower revenues in the GS&S and N&SS segments.

The changes in unallocated items, eliminations and other in 2016, 2015 and 2014 primarily reflect the timing of eliminations for intercompany aircraft deliveries.

Earnings From Operations

The following table summarizes Earnings from operations:

(Dollars in millions)

Years ended December 31,	2016	2015	2014
Commercial Airplanes	\$3,130	\$5,157	\$6,411
Defense, Space & Security	3,008	3,274	3,133
Boeing Capital	59	50	92
Unallocated pension and other postretirement benefit income/(expense)	370	(298)	(1,387)
Other unallocated items and eliminations	(733)	(740)	(776)
Earnings from operations (GAAP)	\$5,834	\$7,443	\$7,473
Unallocated pension and other postretirement benefit	(370)	298	1,387
Core operating earnings (Non-GAAP)	\$5,464	\$7,741	\$8,860

Earnings from operations in 2016 decreased by \$1,609 million compared with 2015 due to lower earnings at Commercial Airplanes, partially offset by the change in unallocated pension and postretirement income/(expense). Commercial Airplanes earnings in 2016 decreased by \$2,027 million primarily due to the reclassification of \$1,235 million of 787 flight test aircraft costs to research and development and higher reach-forward losses on the 747 and KC-46A Tanker programs. The reclassification of flight test aircraft costs was recorded in second quarter as a result of our determination that two 787 flight test aircraft were no longer commercially saleable. The change in the unallocated pension and postretirement income/(expense) in 2016 was primarily driven by lower service costs and lower amortization of actuarial losses.

Earnings from operations in 2015 decreased by \$30 million compared with 2014 primarily reflecting a fourth quarter charge of \$885 million related to the 747 program at Commercial Airplanes and higher charges of \$410 million related to the USAF KC-46A Tanker recorded by Commercial Airplanes and our BMA segment, partially offset by lower unallocated pension and other postretirement benefit expense of \$1,089 million. The 2015 unallocated expense is lower than 2014, primarily due to the lower amortization of pension costs capitalized as inventory in prior years as well as lower settlements and curtailments.

During 2016, 2015 and 2014, we recorded reach-forward losses on the KC-46A Tanker program. In 2016, we recorded charges of \$1,128 million, of which \$772 million was recorded at Commercial Airplanes and \$356 million at our BMA segment. During 2015, we recorded charges of \$835 million: \$513 million at Commercial Airplanes and \$322 million at our BMA segment. During 2014, we recorded charges of \$425 million: \$238 million at Commercial Airplanes and \$187 million at our BMA segment. During 2016 and 2015 we recorded reach-forward losses on the 747 program of \$1,258 million and \$885 million.

Core operating earnings for 2016 decreased by \$2,277 million compared with 2015 primarily due to the reclassification of costs related to the 787 flight test aircraft and higher charges on the 747 and KC-46A Tanker programs described above.

Core operating earnings in 2015 decreased by \$1,119 million compared with 2014 primarily due to the 2015 747 charge and higher KC-46A Tanker charges.

Unallocated Items, Eliminations and Other The most significant items included in Unallocated items, eliminations and other are shown in the following table:

(Dollars in millions)

Years ended December 31,	2016	2015	2014
Share-based plans	(\$66)	(\$76)	(\$67)
Deferred compensation	(46)	(63)	(44)
Eliminations and other	(621)	(601)	(665)
Sub-total (included in core operating earnings*)	(733)	(740)	(776)
Pension	217	(421)	(1,469)
Postretirement	153	123	82
Pension and other postretirement benefit income/(expense) (excluded from core operating earnings*)	370	(298)	(1,387)
Total unallocated items, eliminations and other	(\$363)	(\$1,038)	(\$2,163)

* Core operating earnings is a Non-GAAP measure that excludes certain components of pension and other postretirement benefit expense. See pages 42 - 43 .

Deferred compensation expense decreased by \$17 million in 2016 and increased by \$19 million in 2015, primarily driven by changes in broad stock market conditions and our stock price.

Eliminations and other unallocated expense increased by \$ 20 million in 2016 and decreased by \$ 64 million in 2015 primarily due to the timing of the elimination of profit on intercompany aircraft deliveries and expense allocations.

Net periodic benefit cost related to pension totaled \$523 million , \$2,786 million and \$2,208 million in 2016, 2015 and 2014 , respectively. The components of net periodic benefit cost are shown in the following table:

Years ended December 31,	Pension		
	2016	2015	2014
Service cost	\$604	\$1,764	\$1,661
Interest cost	3,050	2,990	3,058
Expected return on plan assets	(3,999)	(4,031)	(4,169)
Amortization of prior service costs	38	196	177
Recognized net actuarial loss	790	1,577	1,020
Settlement/curtailment/other losses	40	290	461
Net periodic benefit cost	\$523	\$2,786	\$2,208

The decrease in net periodic pension benefit cost of \$2,263 million in 2016 is primarily due to lower service costs and lower amortization of actuarial losses. The lower service costs reflect the changes to our retirement plans whereby certain employees transitioned in 2016 to a company-funded defined contribution retirement savings plan. The lower amortization of actuarial losses reflects actuarial gains in 2015 resulting from the year-end discount rate increase from 3.9% to 4.2%.

The increase in 2015 net periodic benefit cost related to pension is primarily due to \$557 million of higher amortization of actuarial losses in 2015 resulting from the 2014 year-end discount rate decrease from 4.8% to 3.9%.

A portion of net periodic benefit cost is recognized in Earnings from operations in the period incurred and the remainder is included in inventory at the end of the reporting period and recorded in Earnings from operations in subsequent periods. Costs are allocated to the business segments as described in Note 21 .

Net periodic benefit costs included in Earnings from operations were as follows:

<i>(Dollars in millions)</i>	Pension		
	2016	2015	2014
Years ended December 31,			
Allocated to business segments	(\$2,196)	(\$1,945)	(\$1,746)
Unallocated items, eliminations and other	217	(421)	(1,469)
Total	(\$1,979)	(\$2,366)	(\$3,215)

The unallocated pension costs recognized in earnings in 2016 was a benefit of \$217 million compared with expense of \$421 million in 2015. The 2016 benefit reflects the difference between the higher segment allocation compared to the U.S. GAAP net periodic pension costs recognized in earnings in the current period. Unallocated pension expense recognized in earnings decreased by \$1,048 million in 2015 primarily due to lower amortization of pension costs capitalized as inventory in prior years and lower curtailment charges in 2015.

Other Earnings Items

(Dollars in millions)

Years ended December 31,	2016	2015	2014
Earnings from operations	\$5,834	\$7,443	\$7,473
Other income/(loss), net	40	(13)	(3)
Interest and debt expense	(306)	(275)	(333)
Earnings before income taxes	5,568	7,155	7,137
Income tax expense	(673)	(1,979)	(1,691)
Net earnings from continuing operations	\$4,895	\$5,176	\$5,446

Interest and debt expense increased by \$31 million in 2016 as a result of higher average debt balances.

Our effective income tax rates were 12.1% , 27.7% and 23.7% for the years ended December 31, 2016, 2015 and 2014, respectively. Our 2016 effective tax rate was lower than 2015 primarily due to tax benefits of \$617 million recorded in the third quarter of 2016 related to tax basis adjustments and settlement of the 2011 - 2012 federal tax audits. Our 2015 effective tax rate was higher than 2014 primarily due to tax benefits of \$524 million recorded in the second quarter of 2014 related to tax basis adjustments and settlement of the 2007-2010 federal tax audits. For additional discussion related to Income Taxes, see Note 4 to our Consolidated Financial Statements.

Total Costs and Expenses ("Cost of Sales")

Cost of sales, for both products and services, consists primarily of raw materials, parts, sub-assemblies, labor, overhead and subcontracting costs. Our Commercial Airplanes segment predominantly uses program accounting to account for cost of sales and BDS predominantly uses contract accounting. Under program accounting, cost of sales for each commercial airplane program equals the product of (i) revenue recognized in connection with customer deliveries and (ii) the estimated cost of sales percentage applicable to the total remaining program. Under contract accounting, the amount reported as cost of sales is determined by applying the estimated cost of sales percentage to the amount of revenue recognized.

[Table of Contents](#)

The following table summarizes cost of sales:

(Dollars in millions)

Years ended December 31,	2016	2015	Change	2015	2014	Change
Cost of sales	\$80,790	\$82,088	(\$1,298)	\$82,088	\$76,752	\$5,336
Cost of sales as a % of revenues	85.4%	85.4%	0.0%	85.4%	84.6%	0.8%

Cost of sales in 2016 decreased by \$1,298 million , or 2%, compared with 2015 , primarily due to lower volume across all segments, partially offset by the 747 reach-forward losses at Commercial Airplanes.

Cost of sales in 2015 increased by \$5,336 million, or 7%, compared with 2014, primarily driven by the \$5,352 million, or 6%, increase in revenues. Cost of sales at Commercial Airplanes increased by \$6,846 million, or 14%, primarily driven by the 10% increase in revenues. Cost of sales at BDS decreased by \$252 million, or 1%, primarily due to the 2% reduction in revenues. Cost of sales as a percentage of revenue was approximately 85.4% in 2015 compared with 84.6% in 2014 primarily driven by the 2015 747 charge and higher KC-46A Tanker charges.

Research and Development The following table summarizes our Research and development expense:

(Dollars in millions)

Years ended December 31,	2016	2015	2014
Commercial Airplanes	\$3,755	\$2,340	\$1,881
Defense, Space & Security	919	986	1,158
Other	(47)	5	8
Total	\$4,627	\$3,331	\$3,047

Research and development expense in 2016 increased by \$1,296 million compared with 2015 primarily due to the reclassification of \$1,235 million of costs from inventory in the second quarter of 2016 related to the fourth and fifth 787 flight test aircraft and higher spending on 777X at Commercial Airplanes. Research and development expense in 2015 increased by \$284 million compared with 2014 primarily due to higher 777X spending at Commercial Airplanes which more than offset lower spending at BDS.

Backlog

Our backlog at December 31 was as follows:

(Dollars in millions)

	2016	2015	2014
Contractual Backlog:			
Commercial Airplanes	\$416,198	\$431,408	\$440,118
Defense, Space & Security:			
Boeing Military Aircraft	21,415	19,947	21,078
Network & Space Systems	5,054	7,368	8,935
Global Services & Support	15,610	17,872	16,961
Total Defense, Space & Security	42,079	45,187	46,974
Total contractual backlog	\$458,277	\$476,595	\$487,092
Unobligated backlog	\$15,215	\$12,704	\$15,299

[Table of Contents](#)

Contractual backlog of unfilled orders excludes purchase options, announced orders for which definitive contracts have not been executed, and unobligated U.S. and non-U.S. government contract funding. The decrease in contractual backlog during 2016 and 2015 was primarily due to deliveries in excess of net orders.

Unobligated backlog includes U.S. and non-U.S. government definitive contracts for which funding has not been authorized. The increase in unobligated backlog in 2016 was primarily due to contract awards, partially offset by reclassifications to contractual backlog related to BDS contracts. The decrease in unobligated backlog in 2015 was primarily due to reclassifications to contractual backlog related to incremental funding for BDS contracts, partially offset by contract awards.

Additional Considerations

KC-46A Tanker In 2011, we were awarded a contract from the U.S. Air Force (USAF) to design, develop, manufacture and deliver four next generation aerial refueling tankers. The KC-46A Tanker is a derivative of our 767 commercial aircraft. This Engineering, Manufacturing and Development (EMD) contract is a fixed-price incentive fee contract valued at \$4.9 billion and involves highly complex designs and systems integration. The EMD contract is currently in the certification and flight testing phases. In 2015, we began work on low rate initial production (LRIP) aircraft for the USAF. During the third quarter of 2016, following our achievement of key flight testing milestones, the USAF authorized two LRIP lots for 7 and 12 aircraft valued at \$2.8 billion. On January 27, 2017, the USAF authorized an additional LRIP lot for 15 aircraft valued at \$2.1 billion.

Through 2015, we recorded reach-forward losses of \$1,260 million related to the EMD contract and LRIP aircraft. During 2016 we recorded reach-forward losses of \$1,128 million . In the first quarter of 2016, we recorded charges of \$243 million which were primarily driven by higher than anticipated certification and test rework and the change incorporation impact to EMD and LRIP aircraft. In the second quarter of 2016, technical complexities and schedule delays resulted in charges of \$573 million. The charges were driven by costs associated with certification delays and higher costs associated with the overall revised schedule, as well as a boom axial load issue that required a hardware solution, and production concurrency between late-stage development testing and the initial production aircraft. Charges of \$312 million in the fourth quarter were primarily driven by greater than anticipated effort required to incorporate previously identified changes into LRIP aircraft currently in production, along with associated manufacturing and schedule disruptions. The need for this additional work was identified as aircraft were being prepared for certification and testing. As with any development program, this program remains subject to additional reach-forward losses if we experience further technical or quality issues, schedule delays or increased costs.

The first tanker delivery is expected to occur in late 2017 with 18 fully operational aircraft to be delivered in early 2018. The contract contains production options for both LRIP aircraft and full rate production aircraft. If all options under the contract are exercised, we expect to deliver 179 aircraft for a total expected contract value of approximately \$30 billion.

Russia/Ukraine We continue to monitor political unrest involving Russia and Ukraine, where we and some of our suppliers source titanium products and/or have operations. A number of our commercial customers also have operations in Russia and Ukraine. To date, we have not experienced any significant disruptions to production or deliveries. Should suppliers or customers experience disruption, our production and/or deliveries could be materially impacted.

Export-Import Bank of the United States Many of our non-U.S. customers finance purchases through the Export-Import Bank of the United States. Following the expiration of the bank's charter on June 30, 2015, the bank's charter was reauthorized in December 2015. The bank is now authorized through September 30, 2019. However, until the U.S. Senate confirms members sufficient to reconstitute a quorum of the bank's board of directors, the bank will not be able to approve any transaction totaling more than

\$10 million. As a result, we may fund additional commitments and/or enter into new financing arrangements with customers. Certain of our non-U.S. customers also may seek to delay purchases if they cannot obtain financing at reasonable costs, and there may be further impacts with respect to future sales campaigns involving non-U.S. customers. We continue to work with our customers to mitigate risks associated with the lack of a quorum of the bank's board of directors and assist with alternative third party financing sources.

Segment Results of Operations and Financial Condition

Commercial Airplanes

Business Environment and Trends

Airline Industry Environment Passenger traffic growth is estimated at approximately 6% in 2016. While growth was strong across all major world regions, there continues to be significant variation between regions and airline business models. Airlines operating in the Middle East and Asia Pacific regions as well as low-cost-carriers globally are currently leading passenger growth. Air cargo traffic growth is estimated at approximately 3% in 2016. The sluggish air cargo market recovery has resulted in reduced orders and demand for new freighter aircraft and freighter conversions.

Airline financial performance also plays a role in the demand for new capacity. Airlines continue to focus on increasing revenue through alliances, partnerships, new marketing initiatives, and effective leveraging of ancillary services and related revenues. Airlines are also relentlessly focusing on reducing costs by renewing fleets to leverage more efficient airplanes and in 2016 benefited significantly from lower fuel costs. Net profits for the global airline industry are estimated to be approximately \$36 billion in 2016. 2017 airline profits are expected to be slightly lower than 2016, at approximately \$30 billion.

The long-term outlook for the industry continues to remain positive due to the fundamental drivers of air travel growth: economic growth and the increasing propensity to travel due to increased trade, globalization, and improved airline services driven by liberalization of air traffic rights between countries. Our 20-year forecast projects a long-term average growth rate of 4.8% per year for passenger traffic and 4.2% for cargo traffic. Based on long-term projections of 2.9% average annual GDP growth, we project a \$5.9 trillion market for approximately 39,600 new airplanes over the next 20 years. However, we continue to monitor near-term market conditions in the wide-body segment.

The industry remains vulnerable to near-term exogenous developments including fuel price spikes, credit market shocks, terrorism, natural disasters, conflicts, epidemics and increased global environmental regulations.

Industry Competitiveness The commercial jet airplane market and the airline industry remain extremely competitive. Market liberalization in Europe, the Middle East and Asia is enabling low-cost airlines to continue gaining market share. These airlines are increasing the pressure on airfares. This results in continued cost pressures for all airlines and price pressure on our products. Major productivity gains are essential to ensure a favorable market position at acceptable profit margins.

Continued access to global markets remains vital to our ability to fully realize our sales potential and long-term investment returns. Approximately 11% of Commercial Airplanes' contractual backlog, in dollar terms, is with U.S. airlines, including cargo carriers.

We face aggressive international competitors who are intent on increasing their market share. They offer competitive products and have access to most of the same customers and suppliers. With government support, Airbus has historically invested heavily to create a family of products to compete with ours. Regional jet makers Embraer and Bombardier, coming from the less than 100-seat commercial jet market, continue to develop larger and increasingly capable airplanes. Additionally, other competitors from Russia, China and Japan are developing commercial jet aircraft in the market above 90 seats. Some of these competitors

[Table of Contents](#)

have historically enjoyed access to government-provided financial support, including “launch aid,” which greatly reduces the commercial risks associated with airplane development activities and enables airplanes to be brought to market more quickly than otherwise possible. This market environment has resulted in intense pressures on pricing and other competitive factors, and we expect these pressures to continue or intensify in the coming years.

Worldwide, airplane sales are generally conducted in U.S. dollars. Fluctuating exchange rates affect the profit potential of our major competitors, all of whom have significant costs in other currencies. Changes in value of the U.S. dollar relative to their local currencies impact competitors’ revenues and profits. Many competitors are expected to benefit from the strong U.S. dollar experienced in 2016 and ongoing improvements in efficiency, which may result in funding product development, gaining market share through pricing and/or improving earnings.

We are focused on improving our processes and continuing cost-reduction efforts. We continue to leverage our extensive customer support services network which includes aviation support, spare parts, training, maintenance documents and technical advice for airlines throughout the world. This enables us to provide a high level of customer satisfaction and productivity. These efforts enhance our ability to pursue pricing strategies that enable us to price competitively.

Results of Operations

(Dollars in millions)

Years ended December 31,	2016	2015	2014
Revenues	\$65,069	\$66,048	\$59,990
% of total company revenues	69%	69%	66%
Earnings from operations	\$3,130	\$5,157	\$6,411
Operating margins	4.8%	7.8%	10.7%
Research and development	\$3,755	\$2,340	\$1,881
Contractual backlog	\$416,198	\$431,408	\$440,118
Unobligated backlog	\$160	\$216	\$360

Revenues

Commercial Airplanes revenues decreased by \$979 million or 1% in 2016 compared with 2015 primarily due to lower deliveries. Revenues increased by \$6,058 million or 10% in 2015 compared with 2014 primarily due to higher new airplane deliveries and mix.

Commercial Airplanes deliveries as of December 31 were as follows:

	737 *	747 †	767	777	787	Total
2016						
Cumulative deliveries	6,203	1,528	1,096	1,460	500	
Deliveries	490 ⁽¹⁹⁾	9 ⁽³⁾	13	99	137	748
2015						
Cumulative deliveries	5,713	1,519	1,083	1,361	363	
Deliveries	495 ⁽¹⁵⁾	18 ⁽³⁾	16	98	135	762
2014						
Cumulative deliveries	5,218	1,501	1,067	1,263	228	
Deliveries	485 ⁽¹⁵⁾	19 ⁽³⁾	6	99	114	723

* Intercompany deliveries identified by parentheses

Earnings From Operations

Earnings from operations in 2016 decreased by \$2,027 million compared with the same period in 2015. The decrease in earnings and operating margins is primarily due to higher research and development costs of \$1,415 million, delivery mix and higher reach-forward losses on the 747 program of \$1,258 million compared with \$885 million in 2015. Research and development expense in 2016 reflect the reclassification from inventory to research and development expense of \$1,235 million related to the fourth and fifth 787 flight test aircraft and higher planned spending related to the 777X program. Earnings include reach-forward losses related to the KC-46A Tanker of \$772 million recorded in 2016 compared with \$513 million in 2015.

Earnings from operations in 2015 decreased by \$1,254 million or 20% compared with 2014 primarily due to higher reach-forward losses of \$1,160 million and higher research and development spending of \$459 million, largely on the 777X, which more than offset higher new airplane deliveries and mix. During the fourth quarter of 2015 we recorded a charge of \$885 million to recognize a reach-forward loss on the 747 program. In addition, we recorded reach-forward losses on the KC-46A Tanker contract of \$513 million in the second quarter of 2015 and \$238 million in the second quarter of 2014. Operating margins in 2015 decreased primarily due to additional reach-forward losses, higher research and development expense and the dilutive impact of 787 volume and mix.

Backlog

Firm backlog represents orders for products and services where no contingencies remain before we and the customer are required to perform. Backlog does not include prospective orders where customer controlled contingencies remain, such as the customers receiving approval from their board of directors, shareholders or government and completing financing arrangements. All such contingencies must be satisfied or have expired prior to recording a new firm order even if satisfying such conditions is highly certain. Firm orders exclude options. A number of our customers may have contractual remedies that may be implicated by program delays. We address customer claims and requests for other contractual relief as they arise. However, once orders are included in firm backlog, orders remain in backlog until canceled or fulfilled, although the value of orders is adjusted as changes to price and schedule are agreed to with customers.

The decrease in backlog during 2016 and 2015 was due to deliveries in excess of net orders.

Accounting Quantity The accounting quantity is our estimate of the quantity of airplanes that will be produced for delivery under existing and anticipated contracts. The determination of the accounting quantity

[Table of Contents](#)

is limited by the ability to make reasonably dependable estimates of the revenue and cost of existing and anticipated contracts. It is a key determinant of the gross margins we recognize on sales of individual airplanes throughout a program's life. Estimation of each program's accounting quantity takes into account several factors that are indicative of the demand for that program, including firm orders, letters of intent from prospective customers and market studies. We review our program accounting quantities quarterly.

The accounting quantity for each program may include units that have been delivered, undelivered units under contract, and units anticipated to be under contract in the reasonable future (anticipated orders). In developing total program estimates, all of these items within the accounting quantity must be considered.

The following table provides details of the accounting quantities and firm orders by program as of December 31. Cumulative firm orders represent the cumulative number of commercial jet aircraft deliveries plus undelivered firm orders.

	Program					
	737	747*	767	777	777X	787
2016						
Program accounting quantities	9,000	1,555	1,159	1,625	**	1,300
Undelivered units under firm orders	4,452	28	93	136	306	700
Cumulative firm orders	10,655	1,556	1,189	1,596	306	1,200
2015						
Program accounting quantities	8,400	1,574	1,147	1,650	**	1,300
Undelivered units under firm orders	4,392	20	80	218	306	779
Cumulative firm orders	10,105	1,539	1,163	1,579	306	1,142
2014						
Program accounting quantities	7,800	1,574	1,113	1,600	**	1,300
Undelivered units under firm orders	4,299	36	47	278	286	843
Cumulative firm orders	9,517	1,537	1,114	1,541	286	1,071

* At December 31, 2016, the 747 accounting quantity has 26 undelivered aircraft, including 9 that have not been sold or may be remarketed.

** The accounting quantity for the 777X will be determined in the year of first airplane delivery, targeted for 2020.

Program Highlights

737 Program The accounting quantity for the 737 program increased by 600 units during 2016 due to the program's normal progress of obtaining additional orders and delivering airplanes. We are currently producing at a rate of 42 per month and plan to increase to 47 per month in 2017. We plan to further increase the rate to 52 per month in 2018 and to 57 per month in 2019. First delivery of the 737 MAX is expected in 2017.

747 Program During the fourth quarter of 2016 we received an order for 14 new aircraft. We are currently producing at rate of 0.5 aircraft per month having reduced the rate from 1.0 per month in September 2016. Lower-than-expected demand for large commercial passenger and freighter aircraft and slower-than-expected growth of global freight traffic have continued to drive market uncertainties, pricing pressures and fewer orders than anticipated. As a result, during 2016, we canceled previous plans to return to a production rate of 1.0 aircraft per month beginning in 2019, resulting in a reduction in the program accounting quantity from 1,574 to 1,555 aircraft. This reduction in the program accounting quantity, together with lower anticipated revenues from future sales and higher costs associated with producing fewer airplanes, resulted

in a reach-forward loss of \$1,188 million in the second quarter of 2016. We previously recognized reach-forward losses of \$885 million in 2015 and \$70 million during the first quarter of 2016 related to our prior decision to reduce the production rate to 0.5 per month and anticipating lower estimated revenue from future sales due to ongoing pricing and market pressures. We continue to have a number of completed aircraft in inventory as well as unsold production positions and we remain focused on obtaining additional orders and implementing cost-reduction efforts. If we are unable to obtain sufficient orders and/or market, production and other risks cannot be mitigated, we could record additional losses that may be material, and it is reasonably possible that we could decide to end production of the 747.

767 Program The accounting quantity for the 767 program increased by 12 units during 2016 due to the program's normal progress of obtaining additional orders and delivering airplanes. The 767 assembly line includes a 767 derivative to support the tanker program. We increased the combined tanker and commercial production rate from 1.5 per month to 2 per month in April 2016. We plan to further increase the rate to 2.5 per month in the fourth quarter of 2017.

777 Program We produced at a rate of 8.3 per month during 2016. We implemented a planned production rate decrease to 7 per month at the beginning of 2017. In addition, we announced in December 2016 that, due to lower than anticipated 777 orders, we plan to further reduce the rate to 5 per month in the second half of 2017. We reduced the program accounting quantity from 1,650 to 1,625 aircraft, reflecting recent order activity and planned production rates.

In the fourth quarter of 2013, we launched the 777X, which features a new composite wing, new engines and folding wing-tips. The 777X will have a separate program accounting quantity, which will be determined in the year of first airplane delivery, targeted for 2020.

787 Program During 2016, the program received 58 net new orders and increased the production rate from 10 per month to a rate of 12 per month. We are planning a further rate increase to 14 per month by the end of the decade. First delivery of the 787-10 derivative aircraft is targeted for 2018. The accounting quantity of 1,300 units remains unchanged.

We remain focused on improving productivity and obtaining additional orders to support planned production. We continue to monitor and address challenges associated with aircraft production and assembly, including management of our manufacturing operations and extended global supply chain, completion and integration of traveled work, as well as completing and delivering early build aircraft.

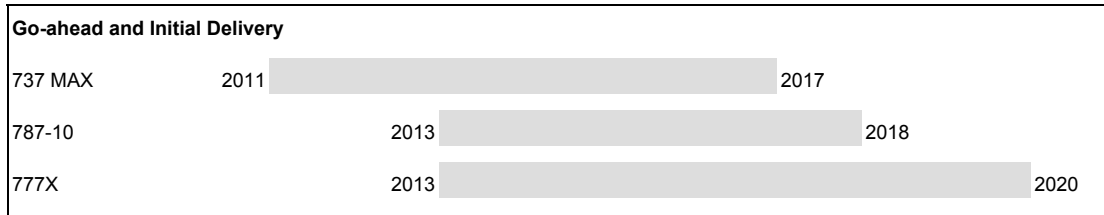
During 2009, we concluded that the first three flight-test 787 aircraft could not be sold as previously anticipated due to the inordinate amount of rework and unique and extensive modifications made to those aircraft. As a result, costs associated with those airplanes were included in research and development expense. We produced the fourth and fifth flight test aircraft in 2009 but have been unable to sell them at acceptable prices. The aircraft have been used extensively for flight and ground testing and we intended to begin to refurbish the aircraft in early 2017 for commercial sale based on sales activity and market interest. However, during the second quarter of 2016 we determined that firm orders for these aircraft prior to refurbishment were now unlikely, and that the Company would not invest company funds for their refurbishment. The Company also determined the costs to refurbish the aircraft at a future date would be prohibitively expensive. We therefore determined that the aircraft were not commercially saleable, and accordingly, costs of \$1,235 million associated with these aircraft were reclassified from 787 program inventory to research and development expense during the second quarter of 2016. We have firm orders for the five remaining undelivered early build aircraft and plan to complete retrofitting them by the end of 2017 .

The combination of production challenges, change incorporation on early build aircraft, schedule delays, customer and supplier impacts and changes to price escalation factors has created significant pressure on program profitability and we continue to have near breakeven gross margins. We are continuing to monitor wide-body demand and if sufficient orders do not materialize during the next several quarters we

may consider appropriate adjustments to the planned production rate increase. If risks related to these challenges, together with risks associated with the planned production rate and productivity improvements, supply chain management or introducing or manufacturing the 787-10 derivative as scheduled cannot be mitigated, the program could face further pressures on program profitability and/or a reach-forward loss. We continue to implement mitigation plans and cost-reduction efforts to improve program profitability and address program risks.

Fleet Support We provide the operators of our commercial airplanes with assistance and services to facilitate efficient and safe airplane operation. Collectively known as fleet support services, these activities and services begin prior to airplane delivery and continue throughout the operational life of the airplane. They include flight and maintenance training, field service support, engineering services, information services and systems and technical data and documents. The costs for fleet support are expensed as incurred and have historically been approximately 1.5% of total consolidated costs of products and services.

Program Development The following chart summarizes the time horizon between go-ahead and planned initial delivery for major Commercial Airplanes derivatives and programs.



Reflects models in development during 2016

We launched the 787-10 in June 2013 and the 777X in November 2013.

Additional Considerations

The development and ongoing production of commercial aircraft is extremely complex, involving extensive coordination and integration with suppliers and highly-skilled labor from thousands of employees and other partners. Meeting or exceeding our performance and reliability standards, as well as those of customers and regulators, can be costly and technologically challenging. In addition, the introduction of new aircraft and derivatives, such as the 787-10, 737 MAX and 777X, involves increased risks associated with meeting development, production and certification schedules. As a result, our ability to deliver aircraft on time, satisfy performance and reliability standards and achieve or maintain, as applicable, program profitability is subject to significant risks. Factors that could result in lower margins (or a material charge if an airplane program has or is determined to have reach-forward losses) include the following: changes to the program accounting quantity, customer and model mix, production costs and rates, changes to price escalation factors due to changes in the inflation rate or other economic indicators, performance or reliability issues involving completed aircraft, capital expenditures and other costs associated with increasing or adding new production capacity, learning curve, additional change incorporation, achieving anticipated cost reductions, flight test and certification schedules, costs, schedule and demand for new airplanes and derivatives and status of customer claims, supplier assertions and other contractual negotiations. While we believe the cost and revenue estimates incorporated in the consolidated financial statements are appropriate, the technical complexity of our airplane programs creates financial risk as additional completion costs may become necessary or scheduled delivery dates could be extended, which could trigger termination provisions, order cancellations or other financially significant exposure.

Defense, Space & Security**Business Environment and Trends**

United States Government Defense Environment Overview The new U.S. administration and key members of the 115th Congress have expressed a general desire to reverse the effects of the budgetary reductions of the past several years. However, the Budget Control Act of 2011 (The Act), which mandated limits on U.S. government discretionary spending, remains in effect through the 2021 government fiscal year causing budget uncertainty and continued risk of future sequestration cuts.

In addition, there continues to be uncertainty with respect to program-level appropriations for the U.S. Department of Defense (U.S. DoD) and other government agencies, including the National Aeronautics and Space Administration (NASA), within the overall budgetary framework described above. Future budget cuts or investment priority changes could result in reductions, cancellations and/or delays of existing contracts or programs. Any of these impacts could have a material effect on the results of the Company's operations, financial position and/or cash flows.

Funding timeliness also remains a risk as the federal government is currently operating under a continuing resolution that expires on April 28, 2017. If Congress is unable to pass appropriations bills before the continuing resolution expires, a government shutdown could result which may have impacts above and beyond those resulting from budget cuts, sequestration impacts or program-level appropriations. For example, requirements to furlough employees in the U.S. DoD or other government agencies could result in payment delays, impair our ability to perform work on existing contracts, and/or negatively impact future orders.

International Environment Overview The international market continues to be driven by complex and evolving security challenges and the need to modernize aging equipment and inventories. BDS expects that it will continue to have a wide range of international opportunities across Asia, Europe and the Middle East given the diverse regional threats.

Results of Operations

(Dollars in millions)

Years ended December 31,	2016	2015	2014
Revenues	\$29,498	\$30,388	\$30,881
% of total company revenues	31%	32%	34%
Earnings from operations	\$3,008	\$3,274	\$3,133
Operating margins	10.2%	10.8%	10.1%
Contractual backlog	\$42,079	\$45,187	\$46,974
Unobligated backlog	\$15,055	\$12,488	\$14,939

Since our operating cycle is long-term and involves many different types of development and production contracts with varying delivery and milestone schedules, the operating results of a particular year, or year-to-year comparisons of revenues, earnings and backlog may not be indicative of future operating results. In addition, depending on the customer and their funding sources, our orders might be structured as annual follow-on contracts, or as one large multi-year order or long-term award. As a result, period-to-period comparisons of backlog are not necessarily indicative of future workloads. The following discussions of comparative results among periods should be viewed in this context.

Deliveries of units for new-build production aircraft, including remanufactures and modifications, were as follows:

Years ended December 31,	2016	2015	2014
F/A-18 Models	25	35	44
F-15 Models	15	12	14
C-17 Globemaster III	4	5	7
CH-47 Chinook (New)	25	41	54
CH-47 Chinook (Renewed)	25	16	
AH-64 Apache (New)	31	23	45
AH-64 Apache (Remanufactured)	34	38	37
P-8 Models	18	14	11
AEW&C		1	3
C-40A	1	1	1
Total	178	186	216

Revenues

BDS revenues in 2016 decreased by \$890 million compared with the same period in 2015 due to lower revenues of \$909 million and \$705 million in the BMA and N&SS segments, partially offset by higher revenues of \$724 million in the GS&S segment.

BDS revenues in 2015 decreased by \$493 million compared with 2014 primarily due to lower revenues in the GS&S and N&SS segments.

Earnings From Operations

BDS earnings from operations in 2016 decreased by \$266 million compared with the same period in 2015 due to lower earnings of \$233 million and \$80 million in the N&SS and BMA segments, partially offset by higher earnings of \$47 million in the GS&S segment. Included above are net unfavorable cumulative contract catch-up adjustments, which were \$429 million higher in 2016 compared with 2015, primarily reflecting the absence of favorable F-15 program adjustments recorded in 2015 and the charge of \$162 million on the Commercial Crew program recorded at N&SS during 2016.

BDS earnings from operations in 2015 increased by \$141 million compared with 2014 due to higher earnings in all three segments. Included above are net favorable cumulative contract catch-up adjustments, which were \$49 million lower in 2015 compared with 2014, primarily reflecting higher charges of \$135 million on the USAF KC-46A Tanker contract recorded at BMA which more than offset higher favorable adjustments in the GS&S segment.

During 2016, 2015 and 2014, BDS earnings from operations include reach-forward losses of \$356 million, \$322 million and \$187 million on the KC-46A Tanker program.

Backlog

Total backlog is comprised of contractual backlog, which represents work we are on contract to perform for which we have received funding, and unobligated backlog, which represents work we are on contract to perform for which funding has not yet been authorized and appropriated. BDS total backlog was \$57,134 million at December 31, 2016, reflecting a decrease of 1% from December 31, 2015. BDS total backlog was \$57,675 million at December 31, 2015, reflecting a decrease of 7% from December 31, 2014. For further details on the changes between periods, refer to the discussions of the individual segments below.

Additional Considerations

Our BDS business includes a variety of development programs which have complex design and technical challenges. Many of these programs have cost-type contracting arrangements. In these cases, the associated financial risks are primarily in reduced fees, lower profit rates or program cancellation if cost, schedule or technical performance issues arise. Examples of these programs include Ground-based Midcourse Defense (GMD), Proprietary and Space Launch System (SLS) programs.

Some of our development programs are contracted on a fixed-price basis. Many of these programs have highly complex designs. As technical or quality issues arise during development, we may experience schedule delays and cost impacts, which could increase our estimated cost to perform the work or reduce our estimated price, either of which could result in a material charge or otherwise adversely affect our financial condition. These programs are ongoing, and while we believe the cost and fee estimates incorporated in the financial statements are appropriate, the technical complexity of these programs creates financial risk as additional completion costs may become necessary or scheduled delivery dates could be extended, which could trigger termination provisions, the loss of satellite in-orbit incentive payments, or other financially significant exposure. These programs have risk for reach-forward losses if our estimated costs exceed our estimated contract revenues. Examples of significant fixed-price development programs include Saudi F-15, USAF KC-46A Tanker, Commercial Crew and commercial and military satellites.

Boeing Military Aircraft**Results of Operations**

(Dollars in millions)

Years ended December 31,	2016	2015	2014
Revenues	\$12,515	\$13,424	\$13,410
% of total company revenues	13%	14%	15%
Earnings from operations	\$1,231	\$1,311	\$1,294
Operating margins	9.8%	9.8%	9.6%
Contractual backlog	\$21,415	\$19,947	\$21,078
Unobligated backlog	\$4,026	\$7,141	\$7,962

Revenues

BMA revenues in 2016 decreased by \$909 million compared with 2015 primarily due to lower revenues of \$973 million related to fewer C-17 deliveries and timing and mix of deliveries on the CH-47 Chinook and F/A-18 programs.

BMA revenues in 2015 increased by \$14 million compared with 2014 primarily due to higher revenues of \$1,131 million from a cumulative catch-up adjustment recorded in the third quarter of 2015 on the F-15 program due to completion of contract negotiations, higher milestone revenue on the USAF KC-46A Tanker program, and higher deliveries and mix on the CH-47 Chinook program. The increase was partially offset by fewer deliveries and mix on the F/A-18, Apache and V-22 programs.

Earnings From Operations

BMA earnings from operations in 2016 decreased by \$80 million compared with 2015 primarily due to lower volume and mix on the CH-47 Chinook, and C-17, partially offset by higher volume and mix on the Apache and P-8 programs. BMA recorded charges of \$356 million in 2016 compared with \$322 million in 2015 related to the USAF KC-46A Tanker contract. Net unfavorable cumulative contract catch-up adjustments were \$253 million higher in 2016 than in 2015 primarily driven by the absence of favorable

F-15 program adjustments recorded in 2015 and higher USAF KC-46A Tanker charges recorded in 2016.

BMA earnings from operations in 2015 increased by \$17 million compared with 2014 primarily due to C-17 charges in 2014, higher CH-47 Chinook deliveries in 2015 and higher earnings on the F-15 program, primarily due to a cumulative catch-up adjustment recorded in the third quarter of 2015. These increases were partially offset by higher charges of \$135 million on the USAF KC-46A Tanker contract and lower earnings on proprietary programs. BMA recorded charges of \$322 million in the second quarter of 2015 and \$187 million in the second quarter of 2014 related to the USAF KC-46A Tanker contract. In addition, BMA recorded a charge of \$48 million in the first quarter of 2014 to write-off inventory and accrue termination liabilities as a result of our decision to produce three fewer C-17 aircraft in 2015 than previously planned. Net favorable cumulative contract catch-up adjustments were \$96 million lower in 2015 than in 2014 primarily driven by the USAF KC-46A Tanker charges and lower favorable F/A-18 adjustments, partially offset by higher favorable F-15 program adjustments.

During 2016, 2015 and 2014, BMA earnings from operations include reach-forward losses of \$356 million, \$322 million and \$187 million on the KC-46A Tanker program.

Backlog

BMA total backlog of \$25,441 million at December 31, 2016 decreased by 6% from December 31, 2015, reflecting revenue recognized on contracts awarded in prior years, partially offset by current year contract awards for the P-8, Apache, CH-47 Chinook, and weapons programs.

BMA total backlog at December 31, 2015 was \$27,088 million, a decrease of 7% reflecting revenue recognized on contracts awarded in prior years, partially offset by contract awards for the F-15, Apache, C-17 and F/A-18 programs.

Additional Considerations

F/A-18 See the discussion of the F/A-18 program in Note 11 to our Consolidated Financial Statements.

KC-46A Tanker See the discussion of the USAF KC-46A Tanker program on page 24.

Network & Space Systems

Results of Operations

(Dollars in millions)

Years ended December 31,	2016	2015	2014
Revenues	\$7,046	\$7,751	\$8,003
% of total company revenues	7%	8%	9%
Earnings from operations	\$493	\$726	\$698
Operating margins	7.0%	9.4%	8.7%
Contractual backlog	\$5,054	\$7,368	\$8,935
Unobligated backlog	\$8,293	\$4,979	\$5,987

Revenues

N&SS revenues in 2016 decreased by \$705 million compared with 2015 primarily due to lower revenue of \$838 million related to the Commercial Crew program, lower milestone revenue on government satellite programs, and lower volume on proprietary programs. These decreases were partially offset by higher volume on the SLS program.

[Table of Contents](#)

N&SS revenues in 2015 decreased by \$252 million compared with 2014 primarily due to lower revenue of \$1,061 million, primarily on satellite and proprietary programs and volume and mix of sales to our United Launch Alliance (ULA) joint venture, partially offset by higher volume on the Commercial Crew program.

New-build satellite deliveries were as follows:

Years ended December 31,	2016	2015	2014
Commercial and civil satellites	5	3	5
Military satellites	2	1	

Earnings From Operations

N&SS earnings from operations in 2016 decreased by \$233 million compared with 2015 primarily due to a charge of \$162 million during the third quarter of 2016 and lower volume on the Commercial Crew program. Net unfavorable cumulative contract catch-up adjustments were \$186 million higher in 2016 than 2015 primarily reflecting the charge on the Commercial Crew program during 2016. These decreases were partially offset by higher equity earnings.

N&SS earnings from operations in 2015 increased by \$28 million compared with 2014 primarily due to higher earnings of \$83 million from improved performance on several Electronic and Information Solutions (E&IS) programs partially offset by lower performance on a development program. Net favorable cumulative contract catch-up adjustments were \$10 million lower in 2015 than in 2014 primarily due to higher unfavorable adjustments on commercial satellite programs.

N&SS earnings from operations include equity earnings of \$255 million , \$183 million and \$211 million primarily from our ULA joint venture in 2016, 2015 and 2014 , respectively.

Backlog

N&SS total backlog of \$13,347 million at December 31, 2016 increase d by 8% compared to December 31, 2015 . The increase was due to adjustments recorded in 2016 related to backlog in prior years. Current year contract awards for missile defense, SLS, and government satellite programs were more than offset by revenue recognized on contracts awarded in prior years.

N&SS total backlog was \$12,347 million at December 31, 2015, reflecting a decrease of 17% from December 31, 2014 primarily due to revenue recognized on contracts awarded in prior years, partially offset by current year contract awards including orders from NASA for International Space Station engineering support and Post Certification Mission 1 on the Commercial Crew program.

Additional Considerations

United Launch Alliance See the discussion of Indemnifications to ULA and Financing Commitments in Notes 6 , 11 , and 12 to our Consolidated Financial Statements.

Sea Launch See the discussion of the Sea Launch receivables in Note 10 to our Consolidated Financial Statements.

Commercial Crew See the discussion of Fixed-Price Development Contracts in Note 8 to our Consolidated Financial Statements.

Global Services & Support**Results of Operations***(Dollars in millions)*

Years ended December 31,	2016	2015	2014
Revenues	\$9,937	\$9,213	\$9,468
% of total company revenues	11%	10%	10%
Earnings from operations	\$1,284	\$1,237	\$1,141
Operating margins	12.9%	13.4%	12.1%
Contractual backlog	\$15,610	\$17,872	\$16,961
Unobligated backlog	\$2,736	\$368	\$990

Revenues

GS&S revenues in 2016 increased by \$724 million compared with the same period in 2015 primarily due to higher volume in several Aircraft Modernization & Sustainment (AM&S), Training Systems & Government Services (TSGS), and Integrated Logistics (IL) programs.

GS&S revenues in 2015 decreased by \$255 million compared with 2014 primarily due to final Airborne Early Warning and Control (AEW&C) deliveries and lower volume in several TSGS programs, partially offset by higher volume on several IL programs.

Earnings From Operations

GS&S earnings from operations in 2016 increased by \$47 million compared with the same period in 2015 primarily due to higher volume and mix across the segment partially offset by lower performance. The impact of cumulative contract catch-up adjustments was not significant in 2016.

GS&S earnings from operations in 2015 increased by \$96 million compared with 2014 primarily due to improved performance across the segment. Net favorable cumulative contract catch-up adjustments were \$57 million higher in 2015 than in 2014 primarily due to favorable F-15 program adjustments.

Backlog

GS&S total backlog has remained consistent at \$18,346 million , \$18,240 million and \$17,951 million at December 31, 2016, 2015 and 2014 , respectively.

Boeing Capital

Business Environment and Trends

BCC's gross customer financing and investment portfolio at December 31, 2016 totaled \$4,115 million . A substantial portion of BCC's portfolio is related to customers that we believe have less than investment-grade credit. BCC's portfolio is also concentrated by varying degrees across Boeing aircraft product types, most notably 717 and 747-8 aircraft.

BCC provided customer financing of \$1,376 million and \$586 million during 2016 and 2015 . While we may be required to fund a number of new aircraft deliveries in 2017 and/or provide refinancing for existing bridge debt, we expect alternative financing will be available at reasonable prices from broad and globally diverse sources. However, a number of factors could cause BCC's new business volume to increase further, including if the Export-Import Bank of the United States continues to be unable to, or does not, approve new financing transactions.

Aircraft values and lease rates are impacted by the number and type of aircraft that are currently out of service. Approximately 2,200 western-built commercial jet aircraft (8.8% of current world fleet) were parked at the end of 2016 , including both in-production and out-of-production aircraft types. Of these parked aircraft, approximately 7% are not expected to return to service. At the end of 2015 and 2014 , 9.5% and 9.8% of the western-built commercial jet aircraft were parked. Aircraft valuations could decline if significant numbers of additional aircraft, particularly types with relatively few operators, are placed out of service.

Results of Operations

(Dollars in millions)

Years ended December 31,	2016	2015	2014
Revenues	\$298	\$413	\$416
Earnings from operations	\$59	\$50	\$92
Operating margins	20%	12%	22%

Revenues

BCC segment revenues consist principally of lease income from equipment under operating lease, interest income from financing receivables and notes, and other income. BCC 's revenues in 2016 decreased by \$115 million compared with 2015 primarily due to lower lease income, and lower end of lease settlement payments. BCC 's revenues in 2015 were consistent with 2014.

Earnings From Operations

BCC's earnings from operations are presented net of interest expense, provision for (recovery of) losses, asset impairment expense, depreciation on leased equipment and other operating expenses. Earnings from operations in 2016 increased by \$9 million primarily due to lower asset impairment expense which more than offset lower revenues. Earnings from operations in 2015 decreased by \$42 million compared with 2014 primarily due to higher asset impairment expense.

Financial Position

The following table presents selected financial data for BCC as of December 31:

<i>(Dollars in millions)</i>	2016	2015
Customer financing and investment portfolio, net	\$4,109	\$3,449
Other assets, primarily cash and short-term investments	346	480
Total assets	\$4,455	\$3,929
Other liabilities, primarily deferred income taxes	\$1,007	\$1,099
Debt, including intercompany loans	2,864	2,355
Equity	584	475
Total liabilities and equity	\$4,455	\$3,929
Debt-to-equity ratio	4.9-to-1	5.0-to-1

BCC's customer financing and investment portfolio at December 31, 2016 increased from December 31, 2015, primarily due to new volume of \$1,376 million partially offset by note payoffs, asset sales and portfolio run-off.

At December 31, 2016 and 2015, BCC had \$6 million and \$49 million of assets that were held for sale or re-lease. Additionally, aircraft subject to leases with a carrying value of approximately \$46 million are scheduled to be returned off lease during 2017. We are seeking to remarket these aircraft or have the leases extended.

BCC enters into certain transactions with Boeing, reflected in Unallocated items, eliminations and other, in the form of intercompany guarantees and other subsidies that mitigate the effects of certain credit quality or asset impairment issues on the BCC segment.

Liquidity and Capital Resources**Cash Flow Summary**

<i>(Dollars in millions)</i>	2016	2015	2014
Years ended December 31,			
Net earnings	\$4,895	\$5,176	\$5,446
Non-cash items	2,559	2,392	2,515
Changes in working capital	3,045	1,795	897
Net cash provided by operating activities	10,499	9,363	8,858
Net cash (used)/provided by investing activities	(3,380)	(1,846)	2,467
Net cash used by financing activities	(9,587)	(7,920)	(8,593)
Effect of exchange rate changes on cash and cash equivalents	(33)	(28)	(87)
Net (decrease)/increase in cash and cash equivalents	(2,501)	(431)	2,645
Cash and cash equivalents at beginning of year	11,302	11,733	9,088
Cash and cash equivalents at end of period	\$8,801	\$11,302	\$11,733

Operating Activities Net cash provided by operating activities was \$10.5 billion during 2016, compared with \$9.4 billion during 2015 and \$8.9 billion in 2014. The increase of \$1.1 billion in 2016 was primarily

due to lower expenditures on commercial airplane program inventory, primarily 787. The increase of \$0.5 billion in 2015 was primarily due to lower inventory growth, partially offset by lower receipts of advances and progress billings. Advances and progress billings decreased by \$1.9 billion in 2016 and increased by \$0.4 billion in 2015 and \$6.9 billion in 2014 . Discretionary contributions to our pension plans were \$0.1 billion in 2016 and insignificant in 2015 compared with \$0.8 billion in 2014 .

Investing Activities Cash used by investing activities during 2016 and 2015 was \$3.4 billion and \$1.8 billion , largely due to capital expenditures. Cash provided by investing activities during 2014 was \$2.5 billion , largely due to changes in investments in time deposits. Net contributions to investments were \$0.5 billion in 2016 compared with net proceeds from investments of \$0.6 billion in 2015 and \$4.8 billion in 2014 . Acquisitions, net of cash acquired, during 2016 was \$0.3 billion compared with an insignificant amount in 2015 and \$0.2 billion in 2014 . In 2016 , capital expenditures totaled \$2.6 billion , up from \$2.5 billion in 2015 and \$2.2 billion in 2014 . We expect capital expenditures in 2017 to be lower than 2016 .

Financing Activities Cash used by financing activities was \$9.6 billion during 2016 , an increase of \$1.7 billion compared with 2015 primarily due to net borrowings in 2015 as well as higher share repurchases and dividend payments in 2016. Cash used by financing activities was \$7.9 billion during 2015, a decrease of \$0.7 billion compared with 2014 primarily due to higher new borrowings in 2015 of \$0.8 billion and lower repayments of debt and distribution rights of \$0.9 billion in 2015, which more than offset higher share repurchases of \$0.8 billion and higher dividend payments of \$0.4 billion.

During 2016 , we issued \$1.3 billion and repaid \$1.4 billion of debt. At December 31, 2016 and 2015 the recorded balance of debt was \$10.0 billion and \$10.0 billion of which \$0.4 billion and \$1.2 billion was classified as short-term. At December 31, 2016 and 2015 this included \$2.9 billion and \$2.4 billion of debt attributable to BCC , of which \$0.1 billion and \$0.5 billion were classified as short-term.

During 2016 and 2015 we repurchased 55.1 million and 46.7 million shares totaling \$7.0 billion and \$6.8 billion through our open market share repurchase program. In 2016 and 2015 , we had 0.7 million shares transferred to us from employees for tax withholdings. At December 31, 2016 , the amount available under the share repurchase plan, announced on December 12, 2016, totaled \$14 billion .

Capital Resources We have substantial borrowing capacity. Any future borrowings may affect our credit ratings and are subject to various debt covenants as described below. We have a commercial paper program that continues to serve as a significant potential source of short-term liquidity. Throughout 2016 and at December 31, 2016 , we had no commercial paper borrowings outstanding. Currently, we have \$5.0 billion of unused borrowing capacity on revolving credit line agreements. We anticipate that these credit lines will primarily serve as backup liquidity to support our general corporate borrowing needs.

Financing commitments totaled \$14.8 billion and \$16.3 billion at December 31, 2016 and 2015 . We anticipate that we will not be required to fund a significant portion of our financing commitments as we continue to work with third party financiers to provide alternative financing to customers. Historically, we have not been required to fund significant amounts of outstanding commitments. However, there can be no assurances that we will not be required to fund greater amounts than historically required. In addition, many of our non-U.S. customers finance aircraft purchases through the Export-Import Bank of the United States. Following the expiration of the bank's charter on June 30, 2015, the bank's charter was reauthorized in December 2015. The bank is now authorized through September 30, 2019. However, until the U.S. Senate confirms members sufficient to reconstitute a quorum of the bank's board of directors, the bank will not be able to approve any transaction totaling more than \$10 million. As a result, we may fund additional commitments and/or enter into new financing arrangements with customers.

In the event we require additional funding to support strategic business opportunities, our commercial aircraft financing commitments, unfavorable resolution of litigation or other loss contingencies, or other business requirements, we expect to meet increased funding requirements by issuing commercial paper or term debt. We believe our ability to access external capital resources should be sufficient to satisfy

existing short-term and long-term commitments and plans, and also to provide adequate financial flexibility to take advantage of potential strategic business opportunities should they arise within the next year. However, there can be no assurance of the cost or availability of future borrowings, if any, under our commercial paper program, in the debt markets or our credit facilities.

At December 31, 2016 and 2015, our pension plans were \$20.1 billion and \$17.9 billion underfunded as measured under GAAP. On an Employee Retirement Income Security Act (ERISA) basis our plans are more than 100% funded at December 31, 2016 with minimal required contributions in 2017. We expect to make contributions to our plans of approximately \$0.5 billion in 2017. We may be required to make higher contributions to our pension plans in future years.

At December 31, 2016, we were in compliance with the covenants for our debt and credit facilities. The most restrictive covenants include a limitation on mortgage debt and sale and leaseback transactions as a percentage of consolidated net tangible assets (as defined in the credit agreements), and a limitation on consolidated debt as a percentage of total capital (as defined). When considering debt covenants, we continue to have substantial borrowing capacity.

Contractual Obligations

The following table summarizes our known obligations to make future payments pursuant to certain contracts as of December 31, 2016, and the estimated timing thereof.

<i>(Dollars in millions)</i>	Total	Less than 1 year	1-3 years	3-5 years	After 5 years
Long-term debt (including current portion)	\$9,945	\$327	\$1,911	\$1,840	\$5,867
Interest on debt ⁽¹⁾	5,656	459	872	691	3,634
Pension and other postretirement cash requirements	15,476	779	3,412	3,969	7,316
Capital lease obligations	144	60	64	13	7
Operating lease obligations	1,494	239	400	235	620
Purchase obligations not recorded on the Consolidated Statements of Financial Position	107,564	38,458	31,381	20,478	17,247
Purchase obligations recorded on the Consolidated Statements of Financial Position	17,415	16,652	746	3	14
Total contractual obligations ⁽²⁾	\$157,694	\$56,974	\$38,786	\$27,229	\$34,705

⁽¹⁾ Includes interest on variable rate debt calculated based on interest rates at December 31, 2016. Variable rate debt was 3% of our total debt at December 31, 2016.

⁽²⁾ Excludes income tax matters. As of December 31, 2016, our net liability for income taxes payable, including uncertain tax positions of \$1,557 million, was \$1,169 million. For further discussion of income taxes, see Note 4 to our Consolidated Financial Statements. We are not able to reasonably estimate the timing of future cash flows related to uncertain tax positions.

Pension and Other Postretirement Benefits Pension cash requirements are based on an estimate of our minimum funding requirements, pursuant to ERISA regulations, although we may make additional discretionary contributions. Estimates of other postretirement benefits are based on both our estimated future benefit payments and the estimated contributions to plans that are funded through trusts.

Purchase Obligations Purchase obligations represent contractual agreements to purchase goods or services that are legally binding; specify a fixed, minimum or range of quantities; specify a fixed, minimum, variable, or indexed price provision; and specify approximate timing of the transaction. Purchase obligations include amounts recorded as well as amounts that are not recorded on the Consolidated Statements of Financial Position.

Purchase Obligations Not Recorded on the Consolidated Statements of Financial Position Production related purchase obligations not recorded on the Consolidated Statements of Financial Position include agreements for inventory procurement, tooling costs, electricity and natural gas contracts, property, plant and equipment, and other miscellaneous production related obligations. The most significant obligation relates to inventory procurement contracts. We have entered into certain significant inventory procurement contracts that specify determinable prices and quantities, and long-term delivery timeframes. In addition, we purchase raw materials on behalf of our suppliers. These agreements require suppliers and vendors to be prepared to build and deliver items in sufficient time to meet our production schedules. The need for such arrangements with suppliers and vendors arises from the extended production planning horizon for many of our products. A significant portion of these inventory commitments is supported by firm contracts and/or has historically resulted in settlement through reimbursement from customers for penalty payments to the supplier should the customer not take delivery. These amounts are also included in our forecasts of costs for program and contract accounting. Some inventory procurement contracts may include escalation adjustments. In these limited cases, we have included our best estimate of the effect of the escalation adjustment in the amounts disclosed in the table above.

Purchase Obligations Recorded on the Consolidated Statements of Financial Position Purchase obligations recorded on the Consolidated Statements of Financial Position primarily include accounts payable and certain other current and long-term liabilities including accrued compensation.

Industrial Participation Agreements We have entered into various industrial participation agreements with certain customers outside of the U.S. to facilitate economic flow back and/or technology transfer to their businesses or government agencies as the result of their procurement of goods and/or services from us. These commitments may be satisfied by our placement of direct work or vendor orders for supplies, opportunities to bid on supply contracts, transfer of technology or other forms of assistance. However, in certain cases, our commitments may be satisfied through other parties (such as our vendors) who purchase supplies from our non-U.S. customers. We do not commit to industrial participation agreements unless a contract for sale of our products or services is signed. In certain cases, penalties could be imposed if we do not meet our industrial participation commitments. During 2016, we incurred no such penalties. As of December 31, 2016, we have outstanding industrial participation agreements totaling \$18.1 billion that extend through 2029. Purchase order commitments associated with industrial participation agreements are included in purchase obligations in the table above. To be eligible for such a purchase order commitment from us, a foreign supplier must have sufficient capability to meet our requirements and must be competitive in cost, quality and schedule.

Commercial Commitments

The following table summarizes our commercial commitments outstanding as of December 31, 2016 .

<i>(Dollars in millions)</i>	Total Amounts Committed/Maximum Amount of Loss	Less than 1 year	1-3 years	4-5 years	After 5 years
Standby letters of credit and surety bonds	\$4,701	\$3,051	\$805	\$3	\$842
Commercial aircraft financing commitments	14,847	2,432	6,874	3,493	2,048
Total commercial commitments	\$19,548	\$5,483	\$7,679	\$3,496	\$2,890

Commercial aircraft financing commitments include commitments to provide financing related to aircraft on order, under option for deliveries or proposed as part of sales campaigns or refinancing with respect to delivered aircraft, based on estimated earliest potential funding dates. Based on historical experience, we anticipate that we will not be required to fund a significant portion of our financing commitments. However, there can be no assurances that we will not be required to fund greater amounts than historically required, particularly if the Export-Import Bank of the United States continues to be unable to, or does not, provide new financing support. See Note 11 to our Consolidated Financial Statements.

Contingent Obligations

We have significant contingent obligations that arise in the ordinary course of business, which include the following:

Legal Various legal proceedings, claims and investigations are pending against us. Legal contingencies are discussed in Note 20 to our Consolidated Financial Statements.

Environmental Remediation We are involved with various environmental remediation activities and have recorded a liability of \$562 million at December 31, 2016 . For additional information, see Note 11 to our Consolidated Financial Statements.

Off-Balance Sheet Arrangements

We are a party to certain off-balance sheet arrangements including certain guarantees. For discussion of these arrangements, see Note 12 to our Consolidated Financial Statements.

Non-GAAP Measures**Core Operating Earnings, Core Operating Margin and Core Earnings Per Share**

Our Consolidated Financial Statements are prepared in accordance with Generally Accepted Accounting Principles in the United States of America (GAAP) which we supplement with certain non-GAAP financial information. These non-GAAP measures should not be considered in isolation or as a substitute for the related GAAP measures, and other companies may define such measures differently. We encourage investors to review our financial statements and publicly-filed reports in their entirety and not to rely on any single financial measure. Core operating earnings, core operating margin and core earnings per share exclude the impact of certain pension and other postretirement benefit expenses that are not allocated to business segments. Pension costs, comprising service and prior service costs computed in accordance with GAAP are allocated to Commercial Airplanes. Pension costs allocated to BDS segments are computed in accordance with U.S. Government Cost Accounting Standards (CAS), which employ different actuarial assumptions and accounting conventions than GAAP. CAS costs are allocable to government contracts. Other postretirement benefit costs are allocated to all business segments based on CAS, which is generally

[Table of Contents](#)

based on benefits paid. The unallocated pension costs recognized in earnings during 2016 was a benefit of \$217 million compared with an expense of \$421 million and \$1,469 million in 2015 and 2014. The 2016 benefit reflects the difference between the higher segment allocation compared to the U.S. GAAP net periodic pension costs recognized in earnings in the current period, as well as lower settlements and curtailments. The 2015 unallocated expense is lower than 2014, primarily due to the lower amortization of pension costs capitalized as inventory in prior years as well as lower settlements and curtailments. For further discussion of pension and other postretirement costs see the Management's Discussion and Analysis on pages 21 and 22 of this Form 10-K and see Note 21 to our Consolidated Financial Statements. Management uses core operating earnings, core operating margin and core earnings per share for purposes of evaluating and forecasting underlying business performance. Management believes these core earnings measures provide investors additional insights into operational performance as unallocated pension and other postretirement benefit cost primarily represent costs driven by market factors and costs not allocable to U.S. government contracts.

Reconciliation of GAAP Measures to Non-GAAP Measures

The table below reconciles the non-GAAP financial measures of core operating earnings, core operating margin and core earnings per share with the most directly comparable GAAP financial measures of earnings from operations, operating margins and diluted earnings per share.

(Dollars in millions, except per share data)

Years ended December 31,	2016	2015	2014
Revenues	\$94,571	\$96,114	\$90,762
Earnings from operations, as reported	\$5,834	\$7,443	\$7,473
Operating margins	6.2%	7.7%	8.2%
Unallocated pension (income)/expense	(\$217)	\$421	\$1,469
Unallocated other postretirement benefit income	(\$153)	(\$123)	(\$82)
Unallocated pension and other postretirement benefit (income)/expense	(\$370)	\$298	\$1,387
Core operating earnings (non-GAAP)	\$5,464	\$7,741	\$8,860
Core operating margins (non-GAAP)	5.8%	8.1%	9.8%
Diluted earnings per share, as reported	\$7.61	\$7.44	\$7.38
Unallocated pension (income)/expense	(\$0.33)	\$0.61	\$1.99
Unallocated other postretirement benefit income	(\$0.24)	(\$0.18)	(\$0.11)
Provision for deferred income taxes on adjustments ⁽¹⁾	\$0.20	(\$0.15)	(\$0.66)
Core earnings per share (non-GAAP)	\$7.24	\$7.72	\$8.60
Weighted average diluted shares (in millions)	643.8	696.1	738.0

⁽¹⁾ The income tax impact is calculated using the tax rate in effect for the non-GAAP adjustments.

Critical Accounting Policies

Contract Accounting

Contract accounting is used to determine revenue, cost of sales, and profit predominantly by our BDS business. Contract accounting involves a judgmental process of estimating the total sales and costs for each contract, which results in the development of estimated cost of sales percentages. For each contract, the amount reported as cost of sales is determined by applying the estimated cost of sales percentage to the amount of revenue recognized.

Due to the size, duration and nature of many of our contracts, the estimation of total sales and costs through completion is complicated and subject to many variables. Total contract sales estimates are based on negotiated contract prices and quantities, modified by our assumptions regarding contract options, change orders, incentive and award provisions associated with technical performance, and price adjustment clauses (such as inflation or index-based clauses). The majority of these contracts are with the U.S. government where the price is generally based on estimated cost to produce the product or service plus profit. Federal Acquisition Regulations provide guidance on the types of cost that will be reimbursed in establishing contract price. Total contract cost estimates are largely based on negotiated or estimated purchase contract terms, historical performance trends, business base and other economic projections. Factors that influence these estimates include inflationary trends, technical and schedule risk, internal and subcontractor performance trends, business volume assumptions, asset utilization, and anticipated labor agreements.

Revenue and cost estimates for all significant contracts are reviewed and reassessed quarterly. Changes in these estimates could result in recognition of cumulative catch-up adjustments to the contract's inception to date revenues, cost of sales and profit, in the period in which such changes are made. Changes in revenue and cost estimates could also result in a reach-forward loss or an adjustment to a reach-forward loss, which would be recorded immediately in earnings. For the years ended December 31, 2016 and 2015, net unfavorable cumulative catch-up adjustments, including reach-forward losses, across all contracts decreased Earnings from operations by \$912 million and \$224 million. For the year ended December 31, 2014 net favorable cumulative catch-up adjustments, including reach-forward losses, across all contracts increased Earnings from operations by \$100 million.

Due to the significance of judgment in the estimation process described above, it is likely that materially different cost of sales amounts could be recorded if we used different assumptions or if the underlying circumstances were to change. Changes in underlying assumptions/estimates, supplier performance, or circumstances may adversely or positively affect financial performance in future periods. If the combined gross margin for all contracts in BDS for all of 2016 had been estimated to be higher or lower by 1%, it would have increased or decreased pre-tax income for the year by approximately \$295 million. In addition, a number of our fixed price development contracts are in a reach-forward loss position. Changes to estimated losses are recorded immediately in earnings.

Program Accounting

Program accounting requires the demonstrated ability to reliably estimate the relationship of sales to costs for the defined program accounting quantity. A program consists of the estimated number of units (accounting quantity) of a product to be produced in a continuing, long-term production effort for delivery under existing and anticipated contracts. The determination of the accounting quantity is limited by the ability to make reasonably dependable estimates of the revenue and cost of existing and anticipated contracts. For each program, the amount reported as cost of sales is determined by applying the estimated cost of sales percentage for the total remaining program to the amount of sales recognized for airplanes delivered and accepted by the customer.

[Table of Contents](#)

Factors that must be estimated include program accounting quantity, sales price, labor and employee benefit costs, material costs, procured part costs, major component costs, overhead costs, program tooling and other non-recurring costs, and warranty costs. Estimation of the accounting quantity for each program takes into account several factors that are indicative of the demand for the particular program, such as firm orders, letters of intent from prospective customers, and market studies. Total estimated program sales are determined by estimating the model mix and sales price for all unsold units within the accounting quantity, added together with the sales prices for all undelivered units under contract. The sales prices for all undelivered units within the accounting quantity include an escalation adjustment for inflation that is updated quarterly. Cost estimates are based largely on negotiated and anticipated contracts with suppliers, historical performance trends, and business base and other economic projections. Factors that influence these estimates include production rates, internal and subcontractor performance trends, customer and/or supplier claims or assertions, asset utilization, anticipated labor agreements, and inflationary or deflationary trends.

To ensure reliability in our estimates, we employ a rigorous estimating process that is reviewed and updated on a quarterly basis. Changes in estimates are normally recognized on a prospective basis; when estimated costs to complete a program exceed estimated revenues from undelivered units in the accounting quantity, a loss provision is recorded in the current period for the estimated loss on all undelivered units in the accounting quantity.

The program method of accounting allocates tooling and other non-recurring and production costs over the accounting quantity for each program. Because of the higher unit production costs experienced at the beginning of a new program and substantial investment required for initial tooling and other non-recurring costs, new commercial aircraft programs, such as the 787 and 777X programs, typically have lower initial margins than established programs. In addition, actual costs incurred for earlier units in excess of the estimated average cost of all units in the program accounting quantity are included within program inventory as deferred production costs. Deferred production, unamortized tooling and other non-recurring costs are expected to be fully recovered when all units in the accounting quantity are delivered as the expected unit cost for later deliveries is below the estimated average cost as learning curve and other improvements are realized.

Due to the significance of judgment in the estimation process described above, it is reasonably possible that changes in underlying circumstances or assumptions could have a material effect on program gross margins. If the combined gross margin percentages for our commercial airplane programs had been estimated to be 1% higher or lower it would have a similar effect on the Commercial Airplane segment's operating margins. For the year ended December 31, 2016, a 1% increase or decrease in operating margins for our Commercial Airplane segment would have a \$650 million impact on operating earnings.

The 747 program was in a reach-forward loss position at December 31, 2016 and 2015. Deliveries of 747s in 2016 were recorded at a zero margin and absent changes in estimated revenues or costs, future 747 deliveries will be recorded at zero margin. Reductions to the estimated loss in subsequent periods are spread over all undelivered units in the accounting quantity, whereas increases to the estimated loss are recorded immediately as an additional reach-forward loss. It is reasonably possible that we could make a decision to terminate the 747 program, which may result in additional reach-forward losses which may be material. The 787 program had near breakeven margins during 2016. If we are unable to mitigate risks associated with the 747 and 787 programs, or if our assumptions with respect to items such as pricing, cost or future production rates were to change, we could be required to record reach-forward losses which could have a material effect on our reported results.

Goodwill and Indefinite-Lived Intangible Impairments

We test goodwill for impairment by performing a qualitative assessment or using a two-step impairment process. If we choose to perform a qualitative assessment, we evaluate economic, industry and company-specific factors as an initial step in assessing the fair value of operations. If we determine it is more likely than not that the carrying value of the net assets is more than the fair value of the related operations, the two-step impairment process is then performed; otherwise, no further testing is required. For operations where the two-step impairment process is used, we first compare the book value of net assets to the fair value of the related operations. If the fair value is determined to be less than book value, a second step is performed to compute the amount of the impairment. In this process, a fair value for goodwill is estimated, based in part on the fair value of the operations, and is compared to its carrying value. The shortfall of the fair value below carrying value represents the amount of goodwill impairment.

We estimate the fair values of the related operations using discounted cash flows. Forecasts of future cash flows are based on our best estimate of future sales and operating costs, based primarily on existing firm orders, expected future orders, contracts with suppliers, labor agreements and general market conditions. Changes in these forecasts could significantly change the amount of impairment recorded, if any.

The cash flow forecasts are adjusted by an appropriate discount rate derived from our market capitalization plus a suitable control premium at the date of evaluation. Therefore, changes in the stock price may also affect the amount of impairment recorded, if any.

We completed our assessment of goodwill as of April 1, 2016 and determined that there is no impairment of goodwill. As of December 31, 2016, we estimated that the fair value of each reporting unit significantly exceeded its corresponding carrying value. Changes in our forecasts, or decreases in the value of our common stock could cause book values of certain operations to exceed their fair values which may result in goodwill impairment charges in future periods.

As of December 31, 2016 and 2015, we had \$490 million of indefinite-lived intangible assets related to the Jeppesen and Aviall brand and trade names acquired in business combinations. We test these intangibles for impairment by comparing their carrying value to current projections of discounted cash flows attributable to the brand and trade names. Any excess carrying value over the amount of discounted cash flows represents the amount of the impairment. A 10% decrease in the discounted cash flows would not impact the carrying value of these indefinite-lived intangible assets.

Pension Plans

The majority of our employees have earned benefits under defined benefit pension plans. Nonunion and the majority of union employees that had participated in defined benefit pension plans transitioned to a company-funded defined contribution retirement savings plan in 2016. Accounting rules require an annual measurement of our projected obligation and plan assets. These measurements are based upon several assumptions, including the discount rate and the expected long-term rate of asset return. Future changes in assumptions or differences between actual and expected outcomes can significantly affect our future annual expense, projected benefit obligation and Shareholders' equity.

[Table of Contents](#)

The following table shows the sensitivity of our pension plan liability and net periodic cost to a 25 basis point change in the discount rate as of December 31, 2016 .

<i>(Dollars in millions)</i>	Change in discount rate Increase 25 bps	Change in discount rate Decrease 25 bps
Pension plans		
Projected benefit obligation	(\$2,218)	\$2,793
Net periodic pension cost	(89)	107

Pension expense is also sensitive to changes in the expected long-term rate of asset return. A decrease or increase of 25 basis points in the expected long-term rate of asset return would have increased or decreased 2016 net periodic pension expense by \$147 million . We expect 2017 net periodic pension cost to decrease by approximately \$214 million and the portion recognized in earnings to decrease by approximately \$1,315 million primarily due to lower service cost and amortization of actuarial losses.

Other

Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012 and Section 13(r) of the Securities Exchange Act of 1934, as amended (the "Act"), require disclosure of certain activities, transactions or dealings relating to Iran that occurred during the period covered by this report. Disclosure is required even if the activities, transactions or dealings were conducted in compliance with applicable law. We have disclosed such activities in our Quarterly Report on Form 10-Q for the first quarter of 2016 and such disclosure is incorporated herein by reference.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk**Interest Rate Risk**

We have financial instruments that are subject to interest rate risk, principally fixed-rate debt obligations, and customer financing assets and liabilities. Additionally, BCC uses interest rate swaps with certain debt obligations to manage exposure to interest rate changes. Historically, we have not experienced material gains or losses on our customer financing assets and liabilities due to interest rate changes. As of December 31, 2016 , the impact over the next 12 months of a 100 basis point rise in interest rates to our pre-tax earnings would not be significant. The investors in our fixed-rate debt obligations do not generally have the right to demand we pay off these obligations prior to maturity. Therefore, exposure to interest rate risk is not believed to be material for our fixed-rate debt.

Foreign Currency Exchange Rate Risk

We are subject to foreign currency exchange rate risk relating to receipts from customers and payments to suppliers in foreign currencies. We use foreign currency forward contracts to hedge the price risk associated with firmly committed and forecasted foreign denominated payments and receipts related to our ongoing business. Foreign currency forward contracts are sensitive to changes in foreign currency exchange rates. At December 31, 2016 , a 10% increase or decrease in the exchange rate in our portfolio of foreign currency contracts would have increased or decreased our unrealized losses by \$226 million . Consistent with the use of these contracts to neutralize the effect of exchange rate fluctuations, such unrealized losses or gains would be offset by corresponding gains or losses, respectively, in the remeasurement of the underlying transactions being hedged. When taken together, these forward currency contracts and the offsetting underlying commitments do not create material market risk.

Item 8. Financial Statements and Supplementary Data

Index to the Consolidated Financial Statements

	Page
Consolidated Statements of Operations	49
Consolidated Statements of Comprehensive Income	50
Consolidated Statements of Financial Position	51
Consolidated Statements of Cash Flows	52
Consolidated Statements of Equity	53
Summary of Business Segment Data	54
Note 1 – Summary of Significant Accounting Policies	55
Note 2 - Goodwill and Acquired Intangibles	67
Note 3 - Earnings Per Share	68
Note 4 - Income Taxes	69
Note 5 - Accounts Receivable	71
Note 6 - Inventories	72
Note 7 - Customer Financing	73
Note 8 - Property, Plant and Equipment	75
Note 9 - Investments	76
Note 10 - Other Assets	77
Note 11 - Liabilities, Commitments and Contingencies	77
Note 12 - Arrangements with Off-Balance Sheet Risk	82
Note 13 - Debt	83
Note 14 - Postretirement Plans	85
Note 15 - Share-Based Compensation and Other Compensation Arrangements	93
Note 16 - Shareholders' Equity	96
Note 17 - Derivative Financial Instruments	98
Note 18 - Significant Group Concentrations of Risk	99
Note 19 - Fair Value Measurements	100
Note 20 - Legal Proceedings	102
Note 21 - Segment Information	102
Note 22 - Quarterly Financial Data	106
Reports of Independent Registered Public Accounting Firm	107

The Boeing Company and Subsidiaries
Consolidated Statements of Operations

(Dollars in millions, except per share data)

Years ended December 31,	2016	2015	2014
Sales of products	\$84,399	\$85,255	\$80,688
Sales of services	10,172	10,859	10,074
Total revenues	94,571	96,114	90,762
Cost of products	(72,713)	(73,446)	(68,551)
Cost of services	(8,018)	(8,578)	(8,132)
Boeing Capital interest expense	(59)	(64)	(69)
Total costs and expenses	(80,790)	(82,088)	(76,752)
	13,781	14,026	14,010
Income from operating investments, net	303	274	287
General and administrative expense	(3,616)	(3,525)	(3,767)
Research and development expense, net	(4,627)	(3,331)	(3,047)
Loss on dispositions, net	(7)	(1)	(10)
Earnings from operations	5,834	7,443	7,473
Other income/(loss), net	40	(13)	(3)
Interest and debt expense	(306)	(275)	(333)
Earnings before income taxes	5,568	7,155	7,137
Income tax expense	(673)	(1,979)	(1,691)
Net earnings	\$4,895	\$5,176	\$5,446
Basic earnings per share	\$7.70	\$7.52	\$7.47
Diluted earnings per share	\$7.61	\$7.44	\$7.38

See Notes to the Consolidated Financial Statements on pages 55 – 106 .

The Boeing Company and Subsidiaries
Consolidated Statements of Comprehensive Income

(Dollars in millions)

Years ended December 31,	2016	2015	2014
Net earnings	\$4,895	\$5,176	\$5,446
Other comprehensive (loss)/income, net of tax:			
Currency translation adjustments	(104)	(92)	(97)
Unrealized (loss)/gain on certain investments, net of tax of \$1, (\$5) and \$0	(2)	8	
Unrealized gain/(loss) on derivative instruments:			
Unrealized (loss) arising during period, net of tax of \$4, \$77, and \$77	(8)	(140)	(137)
Reclassification adjustment for loss included in net earnings, net of tax of (\$43), (\$43) and (\$4)	78	79	7
Total unrealized gain/(loss) on derivative instruments, net of tax	70	(61)	(130)
Defined benefit pension plans & other postretirement benefits:			
Net actuarial (loss) arising during the period, net of tax of \$752, \$402 and \$2,588	(1,365)	(732)	(4,612)
Amortization of actuarial losses included in net periodic pension cost, net of tax of (\$288), (\$570) and (\$367)	524	1,038	661
Settlements and curtailments included in net income, net of tax of (\$7), (\$27) and (\$101)	14	51	180
Pension and postretirement benefit/(cost) related to our equity method investments, net of tax (\$7), (\$2) and \$15	12	3	(27)
Amortization of prior service (credits)/cost included in net periodic pension cost, net of tax of \$31, (\$22) and (\$12)	(57)	38	21
Prior service cost/(credits) arising during the period, net of tax of (\$18), (\$496) and \$3	33	902	(5)
Total defined benefit pension plans & other postretirement benefits, net of tax	(839)	1,300	(3,782)
Other comprehensive (loss)/income, net of tax	(875)	1,155	(4,009)
Comprehensive (loss)/income related to noncontrolling interests	(1)	(3)	10
Comprehensive income, net of tax	\$4,019	\$6,328	\$1,447

See Notes to the Consolidated Financial Statements on pages 55 – 106 .

The Boeing Company and Subsidiaries
Consolidated Statements of Financial Position

(Dollars in millions, except per share data)

December 31,	2016	2015
Assets		
Cash and cash equivalents	\$8,801	\$11,302
Short-term and other investments	1,228	750
Accounts receivable, net	8,832	8,713
Current portion of customer financing, net	428	212
Inventories, net of advances and progress billings	43,199	47,257
Total current assets	62,488	68,234
Customer financing, net	3,773	3,358
Property, plant and equipment, net	12,807	12,076
Goodwill	5,324	5,126
Acquired intangible assets, net	2,540	2,657
Deferred income taxes	332	265
Investments	1,317	1,284
Other assets, net of accumulated amortization of \$497 and \$451	1,416	1,408
Total assets	\$89,997	\$94,408
Liabilities and equity		
Accounts payable	\$11,190	\$10,800
Accrued liabilities	14,691	14,014
Advances and billings in excess of related costs	23,869	24,364
Short-term debt and current portion of long-term debt	384	1,234
Total current liabilities	50,134	50,412
Deferred income taxes	1,338	2,392
Accrued retiree health care	5,916	6,616
Accrued pension plan liability, net	19,943	17,783
Other long-term liabilities	2,221	2,078
Long-term debt	9,568	8,730
Shareholders' equity:		
Common stock, par value \$5.00 – 1,200,000,000 shares authorized; 1,012,261,159 shares issued	5,061	5,061
Additional paid-in capital	4,762	4,834
Treasury stock, at cost	(36,097)	(29,568)
Retained earnings	40,714	38,756
Accumulated other comprehensive loss	(13,623)	(12,748)
Total shareholders' equity	817	6,335
Noncontrolling interests	60	62
Total equity	877	6,397
Total liabilities and equity	\$89,997	\$94,408

See Notes to the Consolidated Financial Statements on pages 55 – 106 .

The Boeing Company and Subsidiaries
Consolidated Statements of Cash Flows

(Dollars in millions)

Years ended December 31,	2016	2015	2014
Cash flows – operating activities:			
Net earnings	\$4,895	\$5,176	\$5,446
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Non-cash items –			
Share-based plans expense	190	189	195
Depreciation and amortization	1,910	1,833	1,906
Investment/asset impairment charges, net	90	167	229
Customer financing valuation benefit	(7)	(5)	(28)
Loss on dispositions, net	7	1	10
Other charges and credits, net	369	364	317
Excess tax benefits from share-based payment arrangements		(157)	(114)
Changes in assets and liabilities –			
Accounts receivable	112	(1,069)	(1,328)
Inventories, net of advances and progress billings	3,755	(1,110)	(4,330)
Accounts payable	622	(238)	1,339
Accrued liabilities	726	2	(1,088)
Advances and billings in excess of related costs	(493)	1,192	3,145
Income taxes receivable, payable and deferred	(810)	477	1,325
Other long-term liabilities	(68)	46	36
Pension and other postretirement plans	153	2,470	1,186
Customer financing, net	(696)	167	578
Other	(256)	(142)	34
Net cash provided by operating activities	10,499	9,363	8,858
Cash flows – investing activities:			
Property, plant and equipment additions	(2,613)	(2,450)	(2,236)
Property, plant and equipment reductions	38	42	34
Acquisitions, net of cash acquired	(297)	(31)	(163)
Contributions to investments	(1,719)	(2,036)	(8,617)
Proceeds from investments	1,209	2,590	13,416
Other	2	39	33
Net cash (used)/provided by investing activities	(3,380)	(1,846)	2,467
Cash flows – financing activities:			
New borrowings	1,325	1,746	962
Debt repayments	(1,359)	(885)	(1,601)
Repayments of distribution rights and other asset financing	(24)		(185)
Stock options exercised	321	399	343
Excess tax benefits from share-based payment arrangements		157	114
Employee taxes on certain share-based payment arrangements	(93)	(96)	(98)
Common shares repurchased	(7,001)	(6,751)	(6,001)
Dividends paid	(2,756)	(2,490)	(2,115)
Other			(12)
Net cash used by financing activities	(9,587)	(7,920)	(8,593)
Effect of exchange rate changes on cash and cash equivalents	(33)	(28)	(87)
Net (decrease)/increase in cash and cash equivalents	(2,501)	(431)	2,645
Cash and cash equivalents at beginning of year	11,302	11,733	9,088
Cash and cash equivalents at end of year	\$8,801	\$11,302	\$11,733

See Notes to the Consolidated Financial Statements on pages 55 – 106 .

The Boeing Company and Subsidiaries
Consolidated Statements of Equity

	Boeing shareholders						Non-controlling Interest	Total
	Common Stock	Additional Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Loss			
<i>(Dollars in millions, except per share data)</i>								
Balance at January 1, 2014	\$5,061	\$4,415	(\$17,671)	\$32,964	(\$9,894)		\$122	\$14,997
Net earnings				5,446			10	5,456
Other comprehensive loss, net of tax of (\$2,199)					(4,009)			(4,009)
Share-based compensation and related dividend equivalents		208		(20)				188
Excess tax pools		114						114
Treasury shares issued for stock options exercised, net		17	326					343
Treasury shares issued for other share-based plans, net		(129)	48					(81)
Common shares repurchased			(6,001)					(6,001)
Cash dividends declared (\$3.10 per share)				(2,210)				(2,210)
Changes in noncontrolling interests							(7)	(7)
Balance at December 31, 2014	\$5,061	\$4,625	(\$23,298)	\$36,180	(\$13,903)		\$125	\$8,790
Net earnings				5,176			(3)	5,173
Other comprehensive income, net of tax of (\$686)					1,155			1,155
Share-based compensation and related dividend equivalents		214		(25)				189
Excess tax pools		158						158
Treasury shares issued for stock options exercised, net		(29)	428					399
Treasury shares issued for other share-based plans, net		(134)	53					(81)
Common shares repurchased			(6,751)					(6,751)
Cash dividends declared (\$3.82 per share)				(2,575)				(2,575)
Changes in noncontrolling interests							(60)	(60)
Balance at December 31, 2015	\$5,061	\$4,834	(\$29,568)	\$38,756	(\$12,748)		\$62	\$6,397
Net earnings				4,895			(1)	4,894
Other comprehensive loss, net of tax of \$425					(875)			(875)
Share-based compensation and related dividend equivalents		244		(35)				209
Excess tax pools		(84)						(84)
Treasury shares issued for stock options exercised, net		(63)	383					320
Treasury shares issued for other share-based plans, net		(169)	89					(80)
Common shares repurchased			(7,001)					(7,001)
Cash dividends declared (\$4.69 per share)				(2,902)				(2,902)
Changes in noncontrolling interests							(1)	(1)
Balance at December 31, 2016	\$5,061	\$4,762	(\$36,097)	\$40,714	(\$13,623)		\$60	\$877

See Notes to the Consolidated Financial Statements on pages 55 – 106 .

The Boeing Company and Subsidiaries
Notes to the Consolidated Financial Statements
Summary of Business Segment Data

(Dollars in millions)

Years ended December 31,	2016	2015	2014
Revenues:			
Commercial Airplanes	\$65,069	\$66,048	\$59,990
Defense, Space & Security:			
Boeing Military Aircraft	12,515	13,424	13,410
Network & Space Systems	7,046	7,751	8,003
Global Services & Support	9,937	9,213	9,468
Total Defense, Space & Security	29,498	30,388	30,881
Boeing Capital	298	413	416
Unallocated items, eliminations and other	(294)	(735)	(525)
Total revenues	\$94,571	\$96,114	\$90,762
Earnings from operations:			
Commercial Airplanes	\$3,130	\$5,157	\$6,411
Defense, Space & Security:			
Boeing Military Aircraft	1,231	1,311	1,294
Network & Space Systems	493	726	698
Global Services & Support	1,284	1,237	1,141
Total Defense, Space & Security	3,008	3,274	3,133
Boeing Capital	59	50	92
Segment operating profit	6,197	8,481	9,636
Unallocated items, eliminations and other	(363)	(1,038)	(2,163)
Earnings from operations	5,834	7,443	7,473
Other income/(loss), net	40	(13)	(3)
Interest and debt expense	(306)	(275)	(333)
Earnings before income taxes	5,568	7,155	7,137
Income tax expense	(673)	(1,979)	(1,691)
Net earnings	\$4,895	\$5,176	\$5,446

This information is an integral part of the Notes to the Consolidated Financial Statements. See Note 21 for further segment results.

The Boeing Company and Subsidiaries
Notes to the Consolidated Financial Statements
Years ended December 31, 2016, 2015 and 2014
(Dollars in millions, except per share data)

Note 1 – Summary of Significant Accounting Policies

Principles of Consolidation and Basis of Presentation

The Consolidated Financial Statements included in this report have been prepared by management of The Boeing Company (herein referred to as “Boeing,” the “Company,” “we,” “us,” or “our”). These statements include the accounts of all majority-owned subsidiaries and variable interest entities that are required to be consolidated. All significant intercompany accounts and transactions have been eliminated. Certain amounts have been reclassified to conform to the current year presentation.

In March 2016, the FASB issued ASU No. 2016-09, *Improvements to Employee Share-Based Payment Accounting*. The new standard is effective for reporting periods beginning after December 15, 2016 and early adoption is permitted. The standard requires excess tax benefits or deficiencies for share-based payments to be recorded in the period shares vest or settle as income tax expense or benefit, rather than within Additional paid-in capital. Cash flows related to excess tax benefits will be included in Net cash provided by operating activities and will no longer be separately classified as a financing activity. The standard also allows us to repurchase more of an employee’s shares for tax withholding purposes and provides an accounting policy election to account for forfeitures as they occur. We have elected to continue to estimate forfeitures and are not planning to change tax withholdings.

The Company prospectively adopted the standard during the second quarter of 2016 effective January 1, 2016. For the year ended December 31, 2016, this resulted in an increase of \$105 to Net earnings and \$0.16 to diluted earnings per share. Adoption also resulted in a \$105 increase in Net cash provided by operating activities and a corresponding \$105 reduction in Net cash used by financing activities for the year ended December 31, 2016.

Standards Issued and Not Yet Implemented

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016 - 02, *Leases (Topic 842)*. The new standard is effective for reporting periods beginning after December 15, 2018 and early adoption is permitted. The standard will require lessees to report most leases as assets and liabilities on the balance sheet, while lessor accounting will remain substantially unchanged. The standard requires a modified retrospective transition approach for existing leases, whereby the new rules will be applied to the earliest year presented. We do not expect the new lease standard to have a material effect on our financial position, results of operations or cash flows.

We plan to implement ASU No. 2014-09, *Revenue from Contracts with Customers* in the first quarter of 2018. This comprehensive new standard will supersede existing revenue recognition guidance and require revenue to be recognized when promised goods or services are transferred to customers in amounts that reflect the consideration to which the company expects to be entitled in exchange for those goods or services. The standard also requires expanded disclosures regarding revenue and contracts with customers. The guidance permits two implementation approaches, one requiring retrospective application of the new standard with restatement of prior years and one requiring prospective application of the new standard with disclosure of results under old standards. The Company plans to adopt the new standard effective January 1, 2018 and apply it retrospectively to all periods presented.

We are analyzing the impact of the new standard on the Company’s revenue contracts, comparing our current accounting policies and practices to the requirements of the new standard, and identifying potential differences that would result from applying the new standard to our contracts. We are also identifying and

implementing changes to the Company's business processes, systems and controls to support adoption of the new standard in 2018 and recasting prior periods' financial information.

We expect adoption of the new standard will have a material impact on our income statement and balance sheet but are unable to quantify those impacts at this time. We currently expect that most of our BDS contracts that currently recognize revenue as deliveries are made or based on the attainment of performance milestones will recognize revenue under the new standard as costs are incurred. Certain military derivative aircraft contracts in our Commercial Airplane business will also recognize revenue as costs are incurred. The new standard will not change the total amount of revenue recognized on these contracts, only accelerate the timing of when the revenue is recognized. We expect a corresponding acceleration in timing of cost of sales recognition for these contracts resulting in a decrease in Inventories from long-term contracts in progress upon adoption of the new standard.

We do not expect the new standard to affect revenue recognition or the use of program accounting for commercial airplane contracts in our Commercial Airplane business. We will continue to recognize revenue for these contracts at the point in time when the customer accepts delivery of the airplane.

From a balance sheet perspective we expect adoption of the new standard will increase Total Assets and Total Liabilities because netting of advances from customers against inventory will no longer be permitted. This will result in an increase in the Advances liability and Inventories from commercial aircraft programs upon adoption of the new standard.

Use of Estimates

Management makes assumptions and estimates to prepare financial statements in conformity with accounting principles generally accepted in the United States of America. Those assumptions and estimates directly affect the amounts reported in the Consolidated Financial Statements. Significant estimates for which changes in the near term are considered reasonably possible and that may have a material impact on the financial statements are disclosed in these Notes to the Consolidated Financial Statements.

Operating Cycle

For classification of certain current assets and liabilities, we use the duration of the related contract or program as our operating cycle, which is generally longer than one year .

Revenue and Related Cost Recognition

Contract Accounting Contract accounting is used for development and production activities predominantly by Defense, Space & Security (BDS). The majority of business conducted by BDS is performed under contracts with the U.S. government and other customers that extend over several years. Contract accounting involves a judgmental process of estimating total sales and costs for each contract resulting in the development of estimated cost of sales percentages. For each contract, the amount reported as cost of sales is determined by applying the estimated cost of sales percentage to the amount of revenue recognized. When the current estimates of total sales and costs for a contract indicate a loss, a provision for the entire loss on the contract is recognized.

Changes in estimated revenues, cost of sales and the related effect on operating income are recognized using a cumulative catch-up adjustment which recognizes in the current period the cumulative effect of the changes on current and prior periods based on a contract's percent complete. In 2016 and 2015 , net unfavorable cumulative catch-up adjustments, including reach-forward losses, across all contracts decreased Earnings from operations by \$912 and \$224 and diluted EPS by \$1.25 and \$0.23 . In 2014 net favorable cumulative catch-up adjustments, including reach-forward losses, across all contracts increased Earnings from operations by \$100 and diluted EPS by \$0.10 . Significant adjustments during the three

years ended December 31, 2016 included reach-forward losses of \$1,128 , \$835 and \$425 on the USAF KC-46A Tanker contract recorded during 2016 , 2015 and 2014 .

We combine contracts for accounting purposes when they are negotiated as a package with an overall profit margin objective. These essentially represent an agreement to do a single project for a single customer, involve interrelated construction activities with substantial common costs, and are performed concurrently or sequentially. When a group of contracts is combined, revenue and profit are earned uniformly over the performance of the combined contracts. Similarly, we may segment a single contract or group of contracts when a clear economic decision has been made during contract negotiations that would produce different rates of profitability for each element or phase of the contract.

Sales related to fixed-price contracts are recognized as deliveries are made, except for certain fixed-price contracts that require substantial performance over an extended period before deliveries begin, for which sales are recorded based on the attainment of performance milestones. Sales related to contracts in which we are reimbursed for costs incurred plus an agreed upon profit are recorded as costs are incurred. The Federal Acquisition Regulations provide guidance on the types of cost that will be reimbursed in establishing contract price. Contracts may contain provisions to earn incentive and award fees if specified targets are achieved. Incentive and award fees that can be reasonably estimated and are probable are recorded over the performance period of the contract. Incentive and award fees that cannot be reasonably estimated are recorded when awarded.

Program Accounting Our Commercial Airplanes segment predominantly uses program accounting to account for cost of sales related to its programs. Program accounting is applicable to products manufactured for delivery under production-type contracts where profitability is realized over multiple contracts and years. Under program accounting, inventoriable production costs, program tooling and other non-recurring costs, and warranty costs are accumulated and charged to cost of sales by program instead of by individual units or contracts. A program consists of the estimated number of units (accounting quantity) of a product to be produced in a continuing, long-term production effort for delivery under existing and anticipated contracts. The determination of the accounting quantity is limited by the ability to make reasonably dependable estimates of the revenue and cost of existing and anticipated contracts. To establish the relationship of sales to cost of sales, program accounting requires estimates of (a) the number of units to be produced and sold in a program, (b) the period over which the units can reasonably be expected to be produced, and (c) the units' expected sales prices, production costs, program tooling and other non-recurring costs, and routine warranty costs for the total program.

We recognize sales for commercial airplane deliveries as each unit is completed and accepted by the customer. Sales recognized represent the price negotiated with the customer, adjusted by an escalation formula as specified in the customer agreement. The amount reported as cost of sales is determined by applying the estimated cost of sales percentage for the total remaining program to the amount of sales recognized for airplanes delivered and accepted by the customer. Changes in estimated revenues, cost of sales and the related effects on program margins are recognized prospectively except in cases where the program is determined to have a reach-forward loss in which case the loss is recognized in the current period. See Note 11 .

Concession Sharing Arrangements We account for sales concessions to our customers in consideration of their purchase of products and services as a reduction to revenue when the related products and services are delivered. The sales concessions incurred may be partially reimbursed by certain suppliers in accordance with concession sharing arrangements. We record these reimbursements, which are presumed to represent reductions in the price of the vendor's products or services, as a reduction in Cost of products.

Spare Parts Revenue We recognize sales of spare parts upon delivery and the amount reported as cost of sales is recorded at average cost.

Service Revenue Service revenue is recognized when the service is performed with the exception of U.S. government service agreements, which are accounted for using contract accounting. Service activities primarily include: support agreements associated with military aircraft and helicopter contracts, space travel on Commercial Crew, ongoing maintenance of International Space Station, and technical and flight operation services for commercial aircraft. Service revenue and associated cost of sales from pay-in-advance subscription fees are deferred and recognized as services are rendered.

Financial Services Revenue We record financial services revenue associated with sales-type/finance leases, operating leases, and notes receivable.

Lease and financing revenue arrangements are included in Sales of services on the Consolidated Statements of Operations. For sales-type/finance leases, we record an asset at lease inception. This asset is recorded at the aggregate future minimum lease payments, estimated residual value of the leased equipment, and deferred incremental direct costs less unearned income. Income is recognized over the life of the lease to approximate a level rate of return on the net investment. Residual values, which are reviewed periodically, represent the estimated amount we expect to receive at lease termination from the disposition of the leased equipment. Actual residual values realized could differ from these estimates. Declines in estimated residual value that are deemed other-than-temporary are recognized in the period in which the declines occur.

For operating leases, revenue on leased aircraft and equipment is recorded on a straight-line basis over the term of the lease. Operating lease assets, included in Customer financing, are recorded at cost and depreciated over the period that we project we will hold the asset to an estimated residual value, using the straight-line method. We periodically review our estimates of residual value and recognize forecasted changes by prospectively adjusting depreciation expense.

For notes receivable, notes are recorded net of any unamortized discounts and deferred incremental direct costs. Interest income and amortization of any discounts are recorded ratably over the related term of the note.

Reinsurance Revenue Our wholly-owned insurance subsidiary, Astro Ltd., participates in a reinsurance pool for workers' compensation. The member agreements and practices of the reinsurance pool minimize any participating members' individual risk. Reinsurance revenues were \$147 , \$136 and \$135 during 2016 , 2015 and 2014 , respectively. Reinsurance costs related to premiums and claims paid to the reinsurance pool were \$139 , \$132 and \$144 during 2016 , 2015 and 2014 , respectively. Revenues and costs are presented net in Cost of sales in the Consolidated Statements of Operations.

Fleet Support

We provide assistance and services to facilitate efficient and safe aircraft operation to the operators of all our commercial airplane models. Collectively known as fleet support services, these activities and services include flight and maintenance training, field service support, engineering services, and technical data and documents. Fleet support activity begins prior to aircraft delivery as the customer receives training, manuals, and technical consulting support. This activity continues throughout the aircraft's operational life. Services provided after delivery include field service support, consulting on maintenance, repair, and operational issues brought forth by the customer or regulators, updating manuals and engineering data, and the issuance of service bulletins that impact the entire model's fleet. Field service support involves our personnel located at customer facilities providing and coordinating fleet support activities and requests. The costs for fleet support are expensed as incurred as Cost of services.

Research and Development

Research and development includes costs incurred for experimentation, design, and testing, as well as bid and proposal efforts related to government products and services which are expensed as incurred unless the costs are related to certain contractual arrangements with customers. Costs that are incurred pursuant to such contractual arrangements are recorded over the period that revenue is recognized, consistent with our contract accounting policy. We have certain research and development arrangements that meet the requirement for best efforts research and development accounting. Accordingly, the amounts funded by the customer are recognized as an offset to our research and development expense rather than as contract revenues. Research and development expense included bid and proposal costs of \$311 , \$286 and \$289 in 2016 , 2015 and 2014 , respectively.

We have established cost sharing arrangements with some suppliers for the 787 program. Our cost sharing arrangements state that the supplier contributions are for reimbursements of costs we incur for experimentation, basic design, and testing activities during the 787 development. In each arrangement, we retain substantial rights to the 787 part or component covered by the arrangement. The amounts received from these cost sharing arrangements are recorded as a reduction to research and development expenses since we have no obligation to refund any amounts received per the arrangements regardless of the outcome of the development efforts. Specifically, under the terms of each agreement, payments received from suppliers for their share of the costs are typically based on milestones and are recognized as earned when we achieve the milestone events and no ongoing obligation on our part exists. In the event we receive a milestone payment prior to the completion of the milestone, the amount is classified in Accrued liabilities until earned.

Share-Based Compensation

We provide various forms of share-based compensation to our employees. For awards settled in shares, we measure compensation expense based on the grant-date fair value net of estimated forfeitures. For awards settled in cash, or that may be settled in cash, we measure compensation expense based on the fair value at each reporting date net of estimated forfeitures. The expense is recognized over the requisite service period, which is generally the vesting period of the award.

Income Taxes

Provisions for federal, state, and non-U.S. income taxes are calculated on reported Earnings before income taxes based on current tax law and also include, in the current period, the cumulative effect of any changes in tax rates from those used previously in determining deferred tax assets and liabilities. Such provisions differ from the amounts currently receivable or payable because certain items of income and expense are recognized in different time periods for financial reporting purposes than for income tax purposes. Significant judgment is required in determining income tax provisions and evaluating tax positions.

The accounting for uncertainty in income taxes requires a more-likely-than-not threshold for financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. We record a liability for the difference between the benefit recognized and measured for financial statement purposes and the tax position taken or expected to be taken on our tax return. To the extent that our assessment of such tax positions changes, the change in estimate is recorded in the period in which the determination is made. Tax-related interest and penalties are classified as a component of Income tax expense.

Postretirement Plans

The majority of our employees have earned benefits under defined benefit pension plans. Nonunion and the majority of union employees that had participated in defined benefit pension plans transitioned to a company-funded defined contribution retirement savings plan in 2016. We also provide postretirement benefit plans other than pensions, consisting principally of health care coverage to eligible retirees and qualifying dependents. Benefits under the pension and other postretirement benefit plans are generally based on age at retirement and years of service and, for some pension plans, benefits are also based on the employee's annual earnings. The net periodic cost of our pension and other postretirement plans is determined using the projected unit credit method and several actuarial assumptions, the most significant of which are the discount rate, the long-term rate of asset return, and medical trend (rate of growth for medical costs). A portion of net periodic pension and other postretirement income or expense is not recognized in net earnings in the year incurred because it is allocated to production as product costs, and reflected in inventory at the end of a reporting period. Actuarial gains and losses, which occur when actual experience differs from actuarial assumptions, are reflected in Shareholders' equity (net of taxes). If actuarial gains and losses exceed ten percent of the greater of plan assets or plan liabilities we amortize them over the average future service period of employees. The funded status of our pension and postretirement plans is reflected on the Consolidated Statements of Financial Position.

Postemployment Plans

We record a liability for postemployment benefits, such as severance or job training, when payment is probable, the amount is reasonably estimable, and the obligation relates to rights that have vested or accumulated.

Environmental Remediation

We are subject to federal and state requirements for protection of the environment, including those for discharge of hazardous materials and remediation of contaminated sites. We routinely assess, based on in-depth studies, expert analyses and legal reviews, our contingencies, obligations, and commitments for remediation of contaminated sites, including assessments of ranges and probabilities of recoveries from other responsible parties and/or insurance carriers. Our policy is to accrue and charge to current expense identified exposures related to environmental remediation sites when it is probable that a liability has been incurred and the amount can be reasonably estimated. The amount of the liability is based on our best estimate or the low end of a range of reasonably possible exposure for investigation, cleanup, and monitoring costs to be incurred. Estimated remediation costs are not discounted to present value as the timing of payments cannot be reasonably estimated. We may be able to recover a portion of the remediation costs from insurers or other third parties. Such recoveries are recorded when realization of the claim for recovery is deemed probable.

Cash and Cash Equivalents

Cash and cash equivalents consist of highly liquid instruments, such as commercial paper, time deposits, and other money market instruments, which have original maturities of three months or less. We aggregate our cash balances by bank where conditions for right of set-off are met, and reclassify any negative balances, consisting mainly of uncleared checks, to Accounts payable. Negative balances reclassified to Accounts payable were \$77 and \$163 at December 31, 2016 and 2015 .

Inventories

Inventoried costs on commercial aircraft programs and long-term contracts include direct engineering, production and tooling and other non-recurring costs, and applicable overhead, which includes fringe

benefits, production related indirect and plant management salaries and plant services, not in excess of estimated net realizable value. To the extent a material amount of such costs are related to an abnormal event or are fixed costs not appropriately attributable to our programs or contracts, they are expensed in the current period rather than inventoried. Inventoried costs include amounts relating to programs and contracts with long-term production cycles, a portion of which is not expected to be realized within one year. Included in inventory for federal government contracts is an allocation of allowable costs related to manufacturing process reengineering.

Commercial aircraft programs inventory includes deferred production costs and supplier advances. Deferred production costs represent actual costs incurred for production of early units that exceed the estimated average cost of all units in the program accounting quantity. Higher production costs are experienced at the beginning of a new or derivative airplane program. Units produced early in a program require substantially more effort (labor and other resources) than units produced later in a program because of volume efficiencies and the effects of learning. We expect that these deferred costs will be fully recovered when all units included in the accounting quantity are delivered as the expected unit cost for later deliveries is below the estimated average cost of all units in the program. Supplier advances represent payments for parts we have contracted to receive from suppliers in the future. As parts are received, supplier advances are amortized to work in process.

The determination of net realizable value of long-term contract costs is based upon quarterly reviews that estimate costs to be incurred to complete all contract requirements. When actual contract costs and the estimate to complete exceed total estimated contract revenues, a loss provision is recorded. The determination of net realizable value of commercial aircraft program costs is based upon quarterly program reviews that estimate revenue and cost to be incurred to complete the program accounting quantity. When estimated costs to complete exceed estimated program revenues to go, a program loss provision is recorded in the current period for the estimated loss on all undelivered units in the accounting quantity.

Used aircraft purchased by the Commercial Airplanes segment and general stock materials are stated at cost not in excess of net realizable value. See 'Aircraft Valuation' within this Note for a discussion of our valuation of used aircraft. Spare parts inventory is stated at lower of average unit cost or net realizable value. We review our commercial spare parts and general stock materials quarterly to identify impaired inventory, including excess or obsolete inventory, based on historical sales trends, expected production usage, and the size and age of the aircraft fleet using the part. Impaired inventories are charged to Cost of products in the period the impairment occurs.

Included in inventory for commercial aircraft programs are amounts paid or credited in cash, or other consideration to certain airline customers, that are referred to as early issue sales consideration. Early issue sales consideration is recognized as a reduction to revenue when the delivery of the aircraft under contract occurs. If an airline customer does not perform and take delivery of the contracted aircraft, we believe that we would have the ability to recover amounts paid. However, to the extent early issue sales consideration exceeds advances and is not considered to be otherwise recoverable, it would be written off in the current period.

We net advances and progress billings on long-term contracts against inventory in the Consolidated Statements of Financial Position. Advances and progress billings in excess of related inventory are reported in Advances and billings in excess of related costs.

Precontract Costs

We may, from time to time, incur costs in excess of the amounts required for existing contracts. If we determine the costs are probable of recovery from future orders, then we capitalize the precontract costs we incur, excluding start-up costs which are expensed as incurred. Capitalized precontract costs are included in Inventories, net of advances and progress billings, in the accompanying Consolidated

Statements of Financial Position. Should future orders not materialize or we determine the costs are no longer probable of recovery, the capitalized costs would be written off.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost, including applicable construction-period interest, less accumulated depreciation and are depreciated principally over the following estimated useful lives: new buildings and land improvements, from 10 to 40 years; and new machinery and equipment, from 4 to 20 years. The principal methods of depreciation are as follows: buildings and land improvements, 150% declining balance; and machinery and equipment, sum-of-the-years' digits. Capitalized internal use software is included in Other assets and amortized using the straight line method over 5 years. We periodically evaluate the appropriateness of remaining depreciable lives assigned to long-lived assets, including assets that may be subject to a management plan for disposition.

Long-lived assets held for sale are stated at the lower of cost or fair value less cost to sell. Long-lived assets held for use are subject to an impairment assessment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If the carrying value is no longer recoverable based upon the undiscounted future cash flows of the asset, the amount of the impairment is the difference between the carrying amount and the fair value of the asset.

Asset Retirement Obligations

We record all known asset retirement obligations for which the liability's fair value can be reasonably estimated, including certain asbestos removal, asset decommissioning and contractual lease restoration obligations. Recorded amounts are not material.

We also have known conditional asset retirement obligations, such as certain asbestos remediation and asset decommissioning activities to be performed in the future, that are not reasonably estimable due to insufficient information about the timing and method of settlement of the obligation. Accordingly, these obligations have not been recorded in the Consolidated Financial Statements. A liability for these obligations will be recorded in the period when sufficient information regarding timing and method of settlement becomes available to make a reasonable estimate of the liability's fair value. In addition, there may be conditional asset retirement obligations that we have not yet discovered (e.g., asbestos may exist in certain buildings but we have not become aware of it through the normal course of business), and therefore, these obligations also have not been included in the Consolidated Financial Statements.

Goodwill and Other Acquired Intangibles

Goodwill and other acquired intangible assets with indefinite lives are not amortized, but are tested for impairment annually and when an event occurs or circumstances change such that it is more likely than not that an impairment may exist. Our annual testing date is April 1.

We test goodwill for impairment by performing a qualitative assessment or using a two-step impairment process. If we choose to perform a qualitative assessment and determine it is more likely than not that the carrying value of the net assets is more than the fair value of the related operations, the two-step impairment process is then performed; otherwise, no further testing is required. For operations where the two-step impairment process is used, we first compare the carrying value of net assets to the fair value of the related operations. If the fair value is determined to be less than carrying value, a second step is performed to compute the amount of the impairment. In this process, a fair value for goodwill is estimated, based in part on the fair value of the operations, and is compared to its carrying value. The shortfall of the fair value below carrying value represents the amount of goodwill impairment.

[Table of Contents](#)

Indefinite-lived intangibles consist of brand and trade names acquired in business combinations. We test these intangibles for impairment by comparing their carrying value to current projections of discounted cash flows attributable to the brand and trade names. Any excess carrying value over the amount of discounted cash flows represents the amount of the impairment.

Our finite-lived acquired intangible assets are amortized on a straight-line basis over their estimated useful lives as follows: developed technology, from 4 to 14 years; product know-how, from 3 to 30 years; customer base, from 3 to 17 years; distribution rights, from 3 to 27 years; and other, from 2 to 32 years. We evaluate the potential impairment of finite-lived acquired intangible assets whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If the carrying value is no longer recoverable based upon the undiscounted future cash flows of the asset, the amount of the impairment is the difference between the carrying amount and the fair value of the asset.

Investments

Time deposits are held-to-maturity investments that are carried at cost.

Available-for-sale securities include commercial paper, U.S. treasury and U.S. government agency securities, and corporate debt securities. Available-for-sale securities are recorded at fair value, and unrealized gains and losses are recorded, net of tax, as a component of accumulated other comprehensive income. Realized gains and losses on available-for-sale securities are recognized based on the specific identification method. Available-for-sale securities are assessed for impairment quarterly.

The equity method of accounting is used to account for investments for which we have the ability to exercise significant influence, but not control, over an investee. Significant influence is generally deemed to exist if we have an ownership interest in the voting stock of an investee of between 20% and 50% .

We classify investment income and loss on our Consolidated Statements of Operations based on whether the investment is operating or non-operating in nature. Operating investments align strategically and are integrated with our operations. Earnings from operating investments, including our share of income or loss from equity method investments, dividend income from certain cost method investments, and any impairments or gain/loss on the disposition of these investments, are recorded in Income from operating investments, net. Non-operating investments are those we hold for non-strategic purposes. Earnings from non-operating investments, including interest and dividends on marketable securities, and any impairments or gain/loss on the disposition of these investments are recorded in Other income/(expense), net.

Derivatives

All derivative instruments are recognized in the financial statements and measured at fair value regardless of the purpose or intent of holding them. We use derivative instruments to principally manage a variety of market risks. For derivatives designated as hedges of the exposure to changes in fair value of the recognized asset or liability or a firm commitment (referred to as fair value hedges), the gain or loss is recognized in earnings in the period of change together with the offsetting loss or gain on the hedged item attributable to the risk being hedged. The effect of that accounting is to include in earnings the extent to which the hedge is not effective in achieving offsetting changes in fair value. For our cash flow hedges, the effective portion of the derivative's gain or loss is initially reported in comprehensive income and is subsequently reclassified into earnings in the same period or periods during which the hedged forecasted transaction affects earnings. The ineffective portion of the gain or loss of a cash flow hedge is reported in earnings immediately. We have agreements to purchase and sell aluminum to address long-term strategic sourcing objectives and international business requirements. These agreements are derivatives for accounting purposes but are not designated for hedge accounting treatment. We also hold certain derivative instruments for economic purposes that are not designated for hedge accounting treatment. For these

aluminum agreements and for other derivative instruments not designated for hedge accounting treatment, the changes in their fair value are recorded in earnings immediately.

Aircraft Valuation

Used aircraft under trade-in commitments and aircraft under repurchase commitments In conjunction with signing a definitive agreement for the sale of new aircraft (Sale Aircraft), we have entered into trade-in commitments with certain customers that give them the right to trade in used aircraft at a specified price upon the purchase of Sale Aircraft. Additionally, we have entered into contingent repurchase commitments with certain customers wherein we agree to repurchase the Sale Aircraft at a specified price, generally 10 to 15 years after delivery of the Sale Aircraft. Our repurchase of the Sale Aircraft is contingent upon a future, mutually acceptable agreement for the sale of additional new aircraft. If we execute an agreement for the sale of additional new aircraft, and if the customer exercises its right to sell the Sale Aircraft to us, a contingent repurchase commitment would become a trade-in commitment. Our historical experience is that contingent repurchase commitments infrequently become trade-in commitments.

Exposure related to trade-in commitments may take the form of:

- (1) adjustments to revenue for the difference between the contractual trade-in price in the definitive agreement and our best estimate of the fair value of the trade-in aircraft as of the date of such agreement, which would be recognized upon delivery of the Sale Aircraft, and/or
- (2) charges to cost of products for adverse changes in the fair value of trade-in aircraft that occur subsequent to signing of a definitive agreement for Sale Aircraft but prior to the purchase of the used trade-in aircraft. Estimates based on current aircraft values would be included in Accrued liabilities.

The fair value of trade-in aircraft is determined using aircraft-specific data such as model, age and condition, market conditions for specific aircraft and similar models, and multiple valuation sources. This process uses our assessment of the market for each trade-in aircraft, which in most instances begins years before the return of the aircraft. There are several possible markets in which we continually pursue opportunities to place used aircraft. These markets include, but are not limited to, the resale market, which could potentially include the cost of long-term storage; the leasing market, with the potential for refurbishment costs to meet the leasing customer's requirements; or the scrap market. Trade-in aircraft valuation varies significantly depending on which market we determine is most likely for each aircraft. On a quarterly basis, we update our valuation analysis based on the actual activities associated with placing each aircraft into a market or using current published third-party aircraft valuations based on the type and age of the aircraft, adjusted for individual attributes and known conditions.

Used aircraft acquired by the Commercial Airplanes segment are included in Inventories at the lower of cost or net realizable value as it is our intent to sell these assets. To mitigate costs and enhance marketability, aircraft may be placed on operating lease. While on operating lease, the assets are included in Customer financing.

Customer financing Customer financing includes operating lease equipment, notes receivable, and sales-type/finance leases. Sales-type/finance leases are treated as receivables, and allowances for losses are established as necessary.

We assess the fair value of the assets we own, including equipment under operating leases, assets held for sale or re-lease, and collateral underlying receivables, to determine if their fair values are less than the related assets' carrying values. Differences between carrying values and fair values of sales-type/finance leases and notes and other receivables, as determined by collateral value, are considered in determining the allowance for losses on receivables.

We use a median calculated from published collateral values from multiple third-party aircraft value publications based on the type and age of the aircraft to determine the fair value of aircraft. Under certain circumstances, we apply judgment based on the attributes of the specific aircraft or equipment, usually when the features or use of the aircraft vary significantly from the more generic aircraft attributes covered by outside publications.

Impairment review for assets under operating leases and held for sale or re-lease We evaluate for impairment assets under operating lease or assets held for sale or re-lease when events or changes in circumstances indicate that the expected undiscounted cash flow from the asset may be less than the carrying value. We use various assumptions when determining the expected undiscounted cash flow, including our intentions for how long we will hold an asset subject to operating lease before it is sold, the expected future lease rates, lease terms, residual value of the asset, periods in which the asset may be held in preparation for a follow-on lease, maintenance costs, remarketing costs and the remaining economic life of the asset. We record assets held for sale at the lower of carrying value or fair value less costs to sell.

When we determine that impairment is indicated for an asset, the amount of impairment expense recorded is the excess of the carrying value over the fair value of the asset.

Allowance for losses on customer financing receivables We record the potential impairment of customer financing receivables in a valuation account, the balance of which is an accounting estimate of probable but unconfirmed losses. The allowance for losses on receivables relates to two components of receivables: (a) receivables that are evaluated individually for impairment and (b) all other receivables.

We determine a receivable is impaired when, based on current information and events, it is probable that we will be unable to collect amounts due according to the original contractual terms of the receivable agreement, without regard to any subsequent restructurings. Factors considered in assessing collectability include, but are not limited to, a customer's extended delinquency, requests for restructuring and filings for bankruptcy. We determine a specific impairment allowance based on the difference between the carrying value of the receivable and the estimated fair value of the related collateral we would expect to realize.

We review the adequacy of the allowance attributable to the remaining receivables (after excluding receivables subject to a specific impairment allowance) by assessing both the collateral exposure and the applicable cumulative default rate. Collateral exposure for a particular receivable is the excess of the carrying value of the receivable over the fair value of the related collateral. A receivable with an estimated fair value in excess of the carrying value is considered to have no collateral exposure. The applicable cumulative default rate is determined using two components: customer credit ratings and weighted average remaining contract term. Internally assigned credit ratings, our credit quality indicator, are determined for each customer in the portfolio. Those ratings are updated based upon public information and information obtained directly from our customers.

We have entered into agreements with certain customers that would entitle us to look beyond the specific collateral underlying the receivable for purposes of determining the collateral exposure as described above. Should the proceeds from the sale of the underlying collateral asset resulting from a default condition be insufficient to cover the carrying value of our receivable (creating a shortfall condition), these agreements would, for example, permit us to take the actions necessary to sell or retain certain other assets in which the customer has an equity interest and use the proceeds to cover the shortfall.

Each quarter we review customer credit ratings, published historical credit default rates for different rating categories, and multiple third-party aircraft value publications as a basis to validate the reasonableness of the allowance for losses on receivables. There can be no assurance that actual results will not differ from estimates or that the consideration of these factors in the future will not result in an increase or decrease to the allowance for losses on receivables.

Warranties

In conjunction with certain product sales, we provide warranties that cover factors such as non-conformance to specifications and defects in material and design. The majority of our warranties are issued by our Commercial Airplanes segment. Generally, aircraft sales are accompanied by a three to four -year standard warranty for systems, accessories, equipment, parts, and software manufactured by us or manufactured to certain standards under our authorization. These warranties are included in the programs' estimate at completion. On occasion we have made commitments beyond the standard warranty obligation to correct fleet-wide major issues of a particular model, resulting in additional accrued warranty expense. Warranties issued by our BDS segments principally relate to sales of military aircraft and weapons hardware and are included in the contract cost estimates. These sales are generally accompanied by a six month to two -year warranty period and cover systems, accessories, equipment, parts, and software manufactured by us to certain contractual specifications. Estimated costs related to standard warranties are recorded in the period in which the related product sales occur. The warranty liability recorded at each balance sheet date reflects the estimated number of months of warranty coverage outstanding for products delivered times the average of historical monthly warranty payments, as well as additional amounts for certain major warranty issues that exceed a normal claims level. Estimated costs of these additional warranty issues are considered changes to the initial liability estimate.

We provide guarantees to certain commercial airplane customers which include compensation provisions for failure to meet specified aircraft performance targets. We account for these performance guarantees as warranties. The estimated liability for these warranties is based on known and anticipated operational characteristics and forecasted customer operation of the aircraft relative to contractually specified performance targets, and anticipated settlements when contractual remedies are not specified. Estimated payments are recorded as a reduction of revenue at delivery of the related aircraft. We have agreements that require certain suppliers to compensate us for amounts paid to customers for failure of supplied equipment to meet specified performance targets. Claims against suppliers under these agreements are included in Inventories and recorded as a reduction in Cost of products at delivery of the related aircraft. These performance warranties and claims against suppliers are included in the programs' estimate at completion.

Supplier Penalties

We record an accrual for supplier penalties when an event occurs that makes it probable that a supplier penalty will be incurred and the amount is reasonably estimable. Until an event occurs, we fully anticipate accepting all products procured under production-related contracts.

Guarantees

We record a liability in Accrued liabilities for the fair value of guarantees that are issued or modified after December 31, 2002. For a residual value guarantee where we received a cash premium, the liability is equal to the cash premium received at the guarantee's inception. For credit guarantees, the liability is equal to the present value of the expected loss. We determine the expected loss by multiplying the creditor's default rate by the guarantee amount reduced by the expected recovery, if applicable, for each future period the credit guarantee will be outstanding. If at inception of a guarantee, we determine there is a probable related contingent loss, we will recognize a liability for the greater of (a) the fair value of the guarantee as described above or (b) the probable contingent loss amount.

Note 2 – Goodwill and Acquired Intangibles

Changes in the carrying amount of goodwill by reportable segment for the years ended December 31, 2016 and 2015 were as follows:

	Commercial Airplanes	Boeing Military Aircraft	Network & Space Systems	Global Services & Support	Total
Balance at January 1, 2015	\$2,131	\$961	\$1,566	\$461	\$5,119
Acquisitions	6	15			21
Goodwill adjustments	(14)				(14)
Balance at December 31, 2015	\$2,123	\$976	\$1,566	\$461	\$5,126
Acquisitions ⁽¹⁾		206			206
Goodwill adjustments	(8)				(8)
Balance at December 31, 2016 ⁽¹⁾	\$2,115	\$1,182	\$1,566	\$461	\$5,324

⁽¹⁾ The increase in goodwill is primarily the result of an acquisition in the fourth quarter of 2016. The purchase price allocation for this acquisition is preliminary.

As of December 31, 2016 and 2015, we had indefinite-lived intangible assets with carrying amounts of \$490 relating to trade names.

The gross carrying amounts and accumulated amortization of our acquired finite-lived intangible assets were as follows at December 31:

	2016		2015	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Distribution rights	\$2,281	\$797	\$2,245	\$673
Product know-how	503	271	503	244
Customer base	595	436	600	403
Developed technology	523	376	455	357
Other	194	166	198	157
Total	\$4,096	\$2,046	\$4,001	\$1,834

Amortization expense for acquired finite-lived intangible assets for the years ended December 31, 2016 and 2015 was \$220 and \$224. Estimated amortization expense for the five succeeding years is as follows:

	2017	2018	2019	2020	2021
Estimated amortization expense	\$221	\$210	\$185	\$157	\$147

During 2016 and 2015 we acquired \$113 and \$15 of finite-lived intangible assets, of which \$31 and \$0 related to non-cash investing and financing transactions.

Note 3 – Earnings Per Share

Basic and diluted earnings per share are computed using the two-class method, which is an earnings allocation method that determines earnings per share for common shares and participating securities. The undistributed earnings are allocated between common shares and participating securities as if all earnings had been distributed during the period. Participating securities and common shares have equal rights to undistributed earnings.

Basic earnings per share is calculated by taking net earnings, less earnings available to participating securities, divided by the basic weighted average common shares outstanding.

Diluted earnings per share is calculated by taking net earnings, less earnings available to participating securities, divided by the diluted weighted average common shares outstanding.

The elements used in the computation of basic and diluted earnings per share were as follows:

(In millions - except per share amounts)

Years ended December 31,	2016	2015	2014
Net earnings	\$4,895	\$5,176	\$5,446
Less: earnings available to participating securities	3	4	6
Net earnings available to common shareholders	\$4,892	\$5,172	\$5,440
Basic			
Basic weighted average shares outstanding	636.5	688.0	728.9
Less: participating securities	1.0	1.1	1.3
Basic weighted average common shares outstanding	635.5	686.9	727.6
Diluted			
Basic weighted average shares outstanding	636.5	688.0	728.9
Dilutive potential common shares ⁽¹⁾	7.3	8.1	9.1
Diluted weighted average shares outstanding	643.8	696.1	738.0
Less: participating securities	1.0	1.1	1.3
Diluted weighted average common shares outstanding	642.8	695.0	736.7
Net earnings per share:			
Basic	\$7.70	\$7.52	\$7.47
Diluted	7.61	7.44	7.38

⁽¹⁾ Diluted earnings per share includes any dilutive impact of stock options, restricted stock units, performance-based restricted stock units and performance awards.

The following table includes the number of shares that may be dilutive potential common shares in the future. These shares were not included in the computation of diluted earnings per share because the effect was either antidilutive or the performance condition was not met.

(Shares in millions)

Years ended December 31,	2016	2015	2014
Performance awards	6.5	5.6	5.1
Performance-based restricted stock units	2.5	2.3	1.3

Note 4 – Income Taxes

The components of earnings before income taxes were:

Years ended December 31,	2016	2015	2014
U.S.	\$5,175	\$6,828	\$6,829
Non-U.S.	393	327	308
Total	\$5,568	\$7,155	\$7,137

Income tax expense/(benefit) consisted of the following:

Years ended December 31,	2016	2015	2014
Current tax expense			
U.S. federal	\$1,193	\$2,102	\$676
Non-U.S.	133	122	91
U.S. state	15	21	69
Total current	1,341	2,245	836
Deferred tax expense			
U.S. federal	(618)	(297)	828
Non-U.S.	(4)	4	34
U.S. state	(46)	27	(7)
Total deferred	(668)	(266)	855
Total income tax expense	\$673	\$1,979	\$1,691

Net income tax payments were \$1,460 , \$1,490 and \$355 in 2016, 2015 and 2014 , respectively.

The following is a reconciliation of the U.S. federal statutory tax rate of 35% to our effective income tax rates:

Years ended December 31,	2016	2015	2014
U.S. federal statutory tax	35.0 %	35.0 %	35.0 %
Research and development credits	(5.2)	(3.4)	(2.9)
Tax basis adjustment ⁽¹⁾	(7.9)		(3.6)
U.S. manufacturing activity tax benefit	(3.8)	(2.9)	(1.2)
Tax on international activities	(0.5)	(0.6)	(0.2)
Excess tax benefits ⁽²⁾	(1.9)		
Federal audit settlements ⁽³⁾	(3.2)		(3.6)
Other provision adjustments	(0.4)	(0.4)	0.2
Effective income tax rate	12.1 %	27.7 %	23.7 %

⁽¹⁾ In the third quarter of 2016 and the second quarter of 2014, we recorded incremental tax benefits of \$440 and \$265 related to the application of a 2012 Federal Court of Claims decision which held that the tax basis in certain assets could be increased (tax basis adjustment).

⁽²⁾ Throughout 2016, we recorded tax benefits of \$105 as a result of the adoption of ASU 2016-09 "Improvements to Employee Share-Based Payment Accounting" which required excess tax benefits related to employee share-based payments to be recorded through tax expense.

⁽³⁾ In the third quarter of 2016, a tax benefit of \$177 was recorded as a result of the settlement of the 2011-2012 federal tax audit. In the second quarter of 2014, tax benefits of \$116 and \$143 were recorded as a result of the 2007-2008 and 2009-2010 federal tax audit settlements.

[Table of Contents](#)

Federal income tax audits have been settled for all years prior to 2013. The Internal Revenue Service (IRS) began the 2013-2014 federal tax audit in the fourth quarter of 2016. We are also subject to examination in major state and international jurisdictions for the 2001-2016 tax years. We believe appropriate provisions for all outstanding tax issues have been made for all jurisdictions and all open years.

Significant components of our deferred tax (liabilities)/assets at December 31 were as follows:

	2016	2015
Inventory and long-term contract methods of income recognition	(9,954)	(10,401)
Pension benefits	7,385	6,303
Retiree health care benefits	2,268	2,513
Fixed assets, intangibles and goodwill (net of valuation allowance \$16 and \$16)	(2,007)	(1,837)
Other employee benefits	1,225	1,339
Customer and commercial financing	(730)	(777)
Accrued expenses and reserves	587	609
Net operating loss, credit and capital loss carryovers (net of valuation allowance of \$79 and \$89) ⁽¹⁾	277	216
Other	(57)	(92)
Net deferred tax (liabilities)/assets ⁽²⁾	(\$1,006)	(\$2,127)

⁽¹⁾ Of the deferred tax asset for net operating loss and credit carryovers, \$262 expires on or before December 31, 2036 and \$15 may be carried over indefinitely.

⁽²⁾ Included in the net deferred tax (liabilities)/assets as of December 31, 2016 and 2015 are deferred tax assets in the amounts of \$7,701 and \$7,277 related to Accumulated other comprehensive loss.

Net deferred tax (liabilities)/assets at December 31 were as follows:

	2016	2015
Deferred tax assets	\$13,591	\$13,128
Deferred tax liabilities	(14,502)	(15,150)
Valuation allowance	(95)	(105)
Net deferred tax (liabilities)/assets	(\$1,006)	(\$2,127)

The measurement of deferred tax assets is reduced by a valuation allowance if, based upon available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

We have provided for U.S. deferred income taxes and foreign withholding tax in the amount of \$32 on undistributed earnings not considered indefinitely reinvested in our non-U.S. subsidiaries. We have not provided for U.S. deferred income taxes or foreign withholding tax on the remainder of undistributed earnings from our non-U.S. subsidiaries of approximately \$850 because such earnings are considered to be indefinitely reinvested and it is not practicable to estimate the amount of tax that may be payable upon distribution.

As of December 31, 2016 and 2015, the amounts accrued for the payment of income tax-related interest and penalties included in the Consolidated Statements of Financial Position were not significant. The amounts of interest benefit included in the Consolidated Statements of Operations were not significant for the years ended December 31, 2016, 2015 and 2014.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	2016	2015	2014
Unrecognized tax benefits – January 1	\$1,617	\$1,312	\$1,141
Gross increases – tax positions in prior periods	17	38	403
Gross decreases – tax positions in prior periods	(348)	(25)	(251)
Gross increases – current-period tax positions	344	292	217
Settlements	(73)		(197)
Lapse of statute of limitations			(1)
Unrecognized tax benefits – December 31	\$1,557	\$1,617	\$1,312

As of December 31, 2016, 2015 and 2014, the total amount of unrecognized tax benefits was \$1,557, \$1,617 and \$1,312, respectively, of which \$1,402, \$1,479 and \$1,180 would affect the effective tax rate, if recognized. As of December 31, 2016, these amounts are primarily associated with U.S. federal tax issues such as the amount of research tax credits claimed, the U.S. manufacturing activity tax benefit, tax basis adjustments and U.S. taxation of foreign earnings. Also included in these amounts are accruals for domestic state tax issues such as the allocation of income among various state tax jurisdictions and the amount of state tax credits claimed.

Note 5 – Accounts Receivable, net

Accounts receivable at December 31 consisted of the following:

	2016	2015
U.S. government contracts	\$4,639	\$4,864
Commercial Airplanes	2,432	2,250
Defense, Space & Security customers ⁽¹⁾	733	889
Reinsurance receivables	526	550
Other	567	254
Less valuation allowance	(65)	(94)
Total	\$8,832	\$8,713

⁽¹⁾ Excludes U.S. government contracts

The following table summarizes our accounts receivable under long-term contracts that were unbillable or related to outstanding claims as of December 31:

	Unbillable		Claims	
	2016	2015	2016	2015
Current	\$1,919	\$2,024	\$38	
Expected to be collected after one year	2,011	2,001	\$91	70
Total	\$3,930	\$4,025	\$129	\$70

Under contract accounting unbillable receivables on long-term contracts arise when the sales or revenues based on performance attainment, though appropriately recognized, cannot be billed yet under terms of the contract as of the balance sheet date. Any adjustment for the credit quality of unbillable receivables, if required, would be recorded as a direct reduction of revenue. Factors considered in assessing the collectability of unbillable receivables include, but are not limited to, a customer's extended delinquency, requests for restructuring and filings for bankruptcy. Unbillable receivables related to commercial customers expected to be collected after one year were \$172 and \$178 at December 31, 2016 and 2015. Accounts

[Table of Contents](#)

receivable related to claims are items that we believe are earned, but are subject to uncertainty concerning their determination or ultimate realization.

Accounts receivable, other than those described above, expected to be collected after one year are not material.

Note 6 – Inventories

Inventories at December 31 consisted of the following:

	2016	2015
Long-term contracts in progress	\$12,801	\$13,858
Commercial aircraft programs	52,048	55,230
Commercial spare parts, used aircraft, general stock materials and other	5,446	6,673
Inventory before advances and progress billings	70,295	75,761
Less advances and progress billings	(27,096)	(28,504)
Total	\$43,199	\$47,257

Long-Term Contracts in Progress

Long-term contracts in progress includes Delta launch program inventory that is being sold at cost to United Launch Alliance (ULA) under an inventory supply agreement that terminates on March 31, 2021. At December 31, 2016 and 2015 , the inventory balance was \$120 (net of advances of \$220) and \$120 (net of advances of \$310). See indemnifications to ULA in Note 12 .

Included in inventories are capitalized precontract costs of \$729 and \$732 at December 31, 2016 and 2015 , primarily related to KC-46A Tanker and C-17. See Note 11 .

Commercial Aircraft Programs

At December 31, 2016 and 2015 , commercial aircraft programs inventory included the following amounts related to the 787 program: \$32,501 and \$34,656 of work in process (including deferred production costs of \$27,308 and \$28,510), \$2,398 and \$2,551 of supplier advances, and \$3,625 and \$3,890 of unamortized tooling and other non-recurring costs. At December 31, 2016 , \$23,818 of 787 deferred production costs, unamortized tooling and other non-recurring costs are expected to be recovered from units included in the program accounting quantity that have firm orders and \$7,115 is expected to be recovered from units included in the program accounting quantity that represent expected future orders.

During the second quarter of 2016, we determined that it was unlikely we would receive firm orders for two flight test aircraft that were produced in 2009 and accordingly reclassified associated costs of \$1,235 from 787 program inventory to research and development expense. The reclassification also impacted 787 deferred production costs, reducing the balance by \$1,011 at June 30, 2016.

At December 31, 2016 and 2015 , commercial aircraft programs inventory included the following amounts related to the 747 program: \$35 and \$942 of deferred production costs, net of reach-forward losses, and \$284 and \$377 of unamortized tooling costs. At December 31, 2016 , \$233 of 747 deferred production and unamortized tooling costs are expected to be recovered from units included in the program accounting quantity that have firm orders and \$86 is expected to be recovered from units included in the program accounting quantity that represent expected future orders. At December 31, 2016 and 2015 , work in process inventory included a number of completed 747 aircraft that we expect to recover from future orders.

[Table of Contents](#)

Commercial aircraft programs inventory included amounts credited in cash or other consideration (early issue sales consideration) to airline customers totaling \$3,117 and \$3,166 at December 31, 2016 and 2015 .

Used aircraft in inventories at Commercial Airplanes totaled \$150 and \$267 at December 31, 2016 and 2015 .

Note 7 – Customer Financing

Customer financing primarily relates to the Boeing Capital (BCC) segment and consisted of the following at December 31:

	2016	2015
Financing receivables:		
Investment in sales-type/finance leases	\$1,482	\$1,620
Notes	807	256
Total financing receivables	2,289	1,876
Operating lease equipment, at cost, less accumulated depreciation of \$359 and \$338	1,922	1,710
Gross customer financing	4,211	3,586
Less allowance for losses on receivables	(10)	(16)
Total	\$4,201	\$3,570

The components of investment in sales-type/finance leases at December 31 were as follows:

	2016	2015
Minimum lease payments receivable	\$1,321	\$1,537
Estimated residual value of leased assets	505	530
Unearned income	(344)	(447)
Total	\$1,482	\$1,620

Operating lease equipment primarily includes large commercial jet aircraft and regional jet aircraft. At December 31, 2016 and 2015 , operating lease equipment included \$6 and \$49 available for sale or re-lease. At December 31, 2016 and 2015 , we had firm lease commitments for \$0 and \$15 of this equipment.

Financing receivable balances evaluated for impairment at December 31 were as follows:

	2016	2015
Individually evaluated for impairment	\$55	\$86
Collectively evaluated for impairment	2,234	1,790
Total financing receivables	\$2,289	\$1,876

We determine a receivable is impaired when, based on current information and events, it is probable that we will be unable to collect amounts due according to the original contractual terms. At December 31, 2016 and December 31, 2015 , we individually evaluated for impairment customer financing receivables of \$55 and \$86 , of which \$44 and \$0 were determined to be impaired. We recorded no allowance for losses on these impaired receivables as the collateral values exceeded the carrying values of the receivables.

Income recognition is generally suspended for financing receivables at the date full recovery of income and principal becomes not probable. Income is recognized when financing receivables become contractually current and performance is demonstrated by the customer . The average recorded investment

[Table of Contents](#)

in impaired financing receivables for the year ended December 31, 2016 was \$41 and the related interest income was insignificant.

The change in the allowance for losses on financing receivables for the years ended December 31, 2016, 2015 and 2014 , consisted of the following:

	2016	2015	2014
Beginning balance - January 1	(\$16)	(\$21)	(\$49)
Customer financing valuation benefit	6	5	28
Ending balance - December 31	(\$10)	(\$16)	(\$21)
Collectively evaluated for impairment	(\$10)	(\$16)	(\$21)

The adequacy of the allowance for losses is assessed quarterly. Three primary factors influencing the level of our allowance for losses on customer financing receivables are customer credit ratings, default rates and collateral values. We assign internal credit ratings for all customers and determine the creditworthiness of each customer based upon publicly available information and information obtained directly from our customers. Our rating categories are comparable to those used by the major credit rating agencies.

Our financing receivable balances at December 31 by internal credit rating category are shown below:

Rating categories	2016	2015
BBB	\$1,324	\$973
BB	538	536
B	383	258
CCC	44	23
Other		86
Total carrying value of financing receivables	\$2,289	\$1,876

At December 31, 2016 , our allowance related to receivables with ratings of B, BB and BBB. We applied default rates that averaged 12.7% , 8.8% and 1.1% to the exposure associated with those receivables.

Customer Financing Exposure

Customer financing is collateralized by security in the related asset. The value of the collateral is closely tied to commercial airline performance and overall market conditions and may be subject to reduced valuation with market decline. Declines in collateral values could result in asset impairments, reduced finance lease income, and an increase in the allowance for losses. Our customer financing collateral is concentrated in 747-8 and out-of-production aircraft. Generally, out-of-production aircraft have experienced greater collateral value declines than in-production aircraft.

[Table of Contents](#)

The majority of customer financing carrying values are concentrated in the following aircraft models at December 31:

	2016	2015
717 Aircraft (\$301 and \$372 accounted for as operating leases)	\$1,282	\$1,415
747-8 Aircraft (\$1,086 and \$916 accounted for as operating leases)	1,111	916
MD-80 Aircraft (Accounted for as sales-type finance leases)	259	314
757 Aircraft (\$43 and \$48 accounted for as operating leases)	246	270
767 Aircraft (\$85 and \$84 accounted for as operating leases)	170	185
777 Aircraft (Accounted for as notes)	165	23
747-400 Aircraft (Accounted for as operating leases)	149	122
737 Aircraft (Accounted for as operating leases)	103	115

Charges related to customer financing asset impairment for the years ended December 31 were as follows:

	2016	2015	2014
Boeing Capital	\$45	\$162	\$139
Other Boeing	21		45
Total	\$66	\$162	\$184

Scheduled receipts on customer financing are as follows:

Year	2017	2018	2019	2020	2021	Beyond 2021
Principal payments on notes receivable	\$242	\$105	\$159	\$125	\$176	
Sales-type/finance lease payments receivable	272	220	207	174	114	\$334
Operating lease equipment payments receivable	463	162	147	129	110	587

Note 8 – Property, Plant and Equipment

Property, plant and equipment at December 31 consisted of the following:

	2016	2015
Land	\$535	\$536
Buildings and land improvements	13,796	12,397
Machinery and equipment	13,569	13,187
Construction in progress	1,790	2,242
Gross property, plant and equipment	29,690	28,362
Less accumulated depreciation	(16,883)	(16,286)
Total	\$12,807	\$12,076

Depreciation expense was \$1,418 , \$1,357 and \$1,414 for the years ended December 31, 2016, 2015 and 2014 , respectively. Interest capitalized during the years ended December 31, 2016, 2015 and 2014 totaled \$170 , \$158 and \$102 , respectively.

Rental expense for leased properties was \$287 , \$267 and \$277 , for the years ended December 31, 2016, 2015 and 2014 , respectively. At December 31, 2016 , minimum rental payments under capital leases

[Table of Contents](#)

aggregated \$144 . Minimum rental payments under operating leases with initial or remaining terms of one year or more aggregated \$1,475 , net of sublease payments of \$19 at December 31, 2016 . Payments due under operating and capital leases net of sublease amounts and non-cancellable future rentals during the next five years are as follows:

	2017	2018	2019	2020	2021
Minimum operating lease payments, net of sublease amounts	\$233	\$210	\$182	\$135	\$95
Minimum capital lease payments	60	40	24	10	3

Accounts payable related to purchases of property, plant and equipment were \$292 and \$502 for the years ended December 31, 2016 and 2015 .

Note 9 – Investments

Our investments, which are recorded in Short-term and other investments or Investments, consisted of the following at December 31:

	2016	2015
Equity method investments ⁽¹⁾	\$1,242	\$1,230
Time deposits	665	456
Available-for-sale investments	537	244
Other investments	33	35
Restricted cash & cash equivalents ⁽²⁾	68	69
Total	\$2,545	\$2,034

⁽¹⁾ Dividends received were \$314 and \$239 during 2016 and 2015 . Retained earnings at December 31, 2016 include undistributed earnings from our equity method investments of \$292 .

⁽²⁾ Reflects amounts restricted in support of our workers' compensation programs and insurance premiums.

Equity Method Investments

Our equity method investments consisted of the following as of December 31:

	Segment	Ownership Percentages	Investment Balance	
			2016	2015
United Launch Alliance	Network & Space Systems (N&SS)	50%	\$914	\$908
Other	Commercial Airplanes, N&SS and Global Services & Support (GS&S)		328	322
Total equity method investments			\$1,242	\$1,230

Note 10 – Other Assets**Sea Launch**

At December 31, 2016 and 2015, Other assets included \$356 of receivables related to our former investment in the Sea Launch venture which became payable by certain Sea Launch partners following Sea Launch's bankruptcy filing in June 2009. The \$356 includes \$147 related to a payment made by us under a bank guarantee on behalf of Sea Launch and \$209 related to loans (partner loans) we made to Sea Launch. The net amounts owed to Boeing by each of the partners are as follows: S.P. Koroley Rocket and Space Corporation Energia of Russia (RSC Energia) – \$223, PO Yuzhnoye Mashinostroitelny Zavod of Ukraine – \$89 and KB Yuzhnoye of Ukraine – \$44.

On February 1, 2013, we filed an action in the United States District Court for the Central District of California seeking reimbursement from the other Sea Launch partners of the \$147 bank guarantee payment and the \$209 partner loan obligations. On May 12, 2016, the court issued a judgment in favor of Boeing relating to the bank guarantee payment and the partner loan obligations.

In December 2016, we reached an agreement which we believe will enable us to recover the outstanding receivable balance from RSC Energia over the next several years. The agreement is subject to certain contingencies which we expect will be resolved during the first quarter of 2017. We will continue to pursue collection efforts against the former Ukrainian partners in connection with the court judgment and continue to believe the partners have the financial wherewithal to pay and intend to pursue vigorously all of our rights and remedies. In the event we are unable to secure reimbursement from the Sea Launch partners, we could incur additional charges. Our current assessment as to the collectability of these receivables takes into account the current economic conditions in Russia and Ukraine, although we will continue to monitor the situation.

Spirit AeroSystems

As of December 31, 2016 and 2015, Other assets included \$143 and \$140 of receivables related to indemnifications from Spirit AeroSystems, Inc. (Spirit), for costs incurred related to pension and retiree medical obligations of former Boeing employees that were subsequently employed by Spirit. During the fourth quarter of 2014, Boeing filed a complaint against Spirit in Delaware Superior Court seeking to enforce our rights to indemnification and to recover from Spirit amounts incurred by Boeing for pension and retiree medical obligations. We expect to fully recover from Spirit.

Note 11 – Liabilities, Commitments and Contingencies**Accrued Liabilities**

Accrued liabilities at December 31 consisted of the following:

	2016	2015
Accrued compensation and employee benefit costs	\$5,720	\$5,624
Environmental	562	566
Product warranties	1,414	1,485
Forward loss recognition	1,385	757
Dividends payable	866	721
Income Taxes Payable	89	262
Other	4,655	4,599
Total	\$14,691	\$14,014

Environmental

The following table summarizes environmental remediation activity during the years ended December 31, 2016 and 2015 .

	2016	2015
Beginning balance – January 1	\$566	\$601
Reductions for payments made	(47)	(78)
Changes in estimates	43	43
Ending balance – December 31	\$562	\$566

The liabilities recorded represent our best estimate or the low end of a range of reasonably possible costs expected to be incurred to remediate sites, including operation and maintenance over periods of up to 30 years. It is reasonably possible that we may incur charges that exceed these recorded amounts because of regulatory agency orders and directives, changes in laws and/or regulations, higher than expected costs and/or the discovery of new or additional contamination. As part of our estimating process, we develop a range of reasonably possible alternate scenarios that includes the high end of a range of reasonably possible cost estimates for all remediation sites for which we have sufficient information based on our experience and existing laws and regulations. There are some potential remediation obligations where the costs of remediation cannot be reasonably estimated. At December 31, 2016 and 2015 , the high end of the estimated range of reasonably possible remediation costs exceeded our recorded liabilities by \$857 and \$853 .

Product Warranties

The following table summarizes product warranty activity recorded during the years ended December 31, 2016 and 2015 .

	2016	2015
Beginning balance – January 1	\$1,485	\$1,504
Additions for current year deliveries	356	421
Reductions for payments made	(309)	(323)
Changes in estimates	(118)	(117)
Ending balance – December 31	\$1,414	\$1,485

Commercial Aircraft Commitments

In conjunction with signing definitive agreements for the sale of new aircraft (Sale Aircraft), we have entered into trade-in commitments with certain customers that give them the right to trade in used aircraft at a specified price upon the purchase of Sale Aircraft. The probability that trade-in commitments will be exercised is determined by using both quantitative information from valuation sources and qualitative information from other sources. The probability of exercise is assessed quarterly, or as events trigger a change, and takes into consideration the current economic and airline industry environments. Trade-in commitments, which can be terminated by mutual consent with the customer, may be exercised only during the period specified in the agreement, and require advance notice by the customer.

Trade-in commitment agreements at December 31, 2016 have expiration dates from 2017 through 2026 . At December 31, 2016 and 2015 , total contractual trade-in commitments were \$1,485 and \$1,585 . As of December 31, 2016 and 2015 , we estimated that it was probable we would be obligated to perform on certain of these commitments with net amounts payable to customers totaling \$126 and \$240 and the fair value of the related trade-in aircraft was \$126 and \$240 .

Financing Commitments

Financing commitments related to aircraft on order, including options and those proposed in sales campaigns, and refinancing of delivered aircraft, totaled \$14,847 and \$16,283 as of December 31, 2016 and 2015 . The estimated earliest potential funding dates for these commitments as of December 31, 2016 are as follows:

	Total
2017	\$2,432
2018	3,500
2019	3,374
2020	2,022
2021	1,471
Thereafter	2,048
	\$14,847

As of December 31, 2016 , all of these financing commitments related to customers we believe have less than investment-grade credit. We have concluded that no reserve for future potential losses is required for these financing commitments based upon the terms, such as collateralization and interest rates, under which funding would be provided.

Standby Letters of Credit and Surety Bonds

We have entered into standby letters of credit and surety bonds with financial institutions primarily relating to the guarantee of our future performance on certain contracts. Contingent liabilities on outstanding letters of credit agreements and surety bonds aggregated approximately \$4,701 and \$4,968 as of December 31, 2016 and 2015 .

Commitments to ULA

We and Lockheed Martin Corporation have each committed to provide ULA with additional capital contributions in the event ULA does not have sufficient funds to make a required payment to us under an inventory supply agreement. As of December 31, 2016 , ULA's total remaining obligation to Boeing under the inventory supply agreement was \$120 . See Note 6 .

F/A-18

At December 31, 2016 , our backlog included 23 F/A-18 aircraft under contract with the U.S. Navy and funding has been authorized and appropriated for an additional 12 aircraft. In addition, Kuwait has requested up to 40 aircraft. We have begun work or authorized suppliers to begin working on aircraft beyond those already in backlog in anticipation of these future orders. At December 31, 2016, we had \$57 of capitalized precontract costs and \$790 of potential termination liabilities to suppliers associated with F/A-18 aircraft.

Company Owned Life Insurance

McDonnell Douglas Corporation insured its executives with Company Owned Life Insurance (COLI), which are life insurance policies with a cash surrender value. Although we do not use COLI currently, these obligations from the merger with McDonnell Douglas are still a commitment at this time. We have loans in place to cover costs paid or incurred to carry the underlying life insurance policies. As of December 31, 2016 and 2015, the cash surrender value was \$483 and \$487 and the total loans were \$456 and \$456. As we have the right to offset the loans against the cash surrender value of the policies, we present the net asset in Other assets on the Consolidated Statements of Financial Position as of December 31, 2016 and 2015.

United States Government Defense Environment Overview

The new U.S. administration and key members of the 115th Congress have expressed a general desire to reverse the effects of the budgetary reductions of the past several years. However, the Budget Control Act of 2011 (The Act), which mandated limits on U.S. government discretionary spending, remains in effect through the 2021 government fiscal year causing budget uncertainty and continued risk of future sequestration cuts.

In addition, there continues to be uncertainty with respect to program-level appropriations for the U.S. Department of Defense (U.S. DoD) and other government agencies, including the National Aeronautics and Space Administration (NASA), within the overall budgetary framework described above. Future budget cuts or investment priority changes could result in reductions, cancellations and/or delays of existing contracts or programs. Any of these impacts could have a material effect on the results of the Company's operations, financial position and/or cash flows.

Funding timeliness also remains a risk as the federal government is currently operating under a continuing resolution that expires on April 28, 2017. If Congress is unable to pass appropriations bills before the continuing resolution expires, a government shutdown could result which may have impacts above and beyond those resulting from budget cuts, sequestration impacts or program-level appropriations. For example, requirements to furlough employees in the U.S. DoD or other government agencies could result in payment delays, impair our ability to perform work on existing contracts, and/or negatively impact future orders.

BDS Fixed-Price Development Contracts

Fixed-price development work is inherently uncertain and subject to significant variability in estimates of the cost and time required to complete the work. BDS fixed-price contracts with significant development work include Commercial Crew, Saudi F-15, USAF KC-46A Tanker and commercial and military satellites. The operational and technical complexities of these contracts create financial risk, which could trigger termination provisions, order cancellations or other financially significant exposure. Changes to cost and revenue estimates could result in lower margins or material charges for reach-forward losses. For example, during 2016, we have recorded additional reach-forward losses of \$1,128 on the KC-46A Tanker program and a charge of \$162 resulting from a reach-forward loss of \$38 on the Commercial Crew Program. Moreover, both of these programs remain subject to additional reach-forward losses if we experience further technical or quality issues, schedule delays, or increased costs.

KC-46A Tanker

In 2011, we were awarded a contract from the U.S. Air Force (USAF) to design, develop, manufacture and deliver four next generation aerial refueling tankers. This Engineering, Manufacturing and Development (EMD) contract is a fixed-price incentive fee contract valued at \$4.9 billion and involves highly complex designs and systems integration. In August 2016, the USAF authorized LRIP lots for 7 and 12 aircraft valued at \$2.8 billion. At December 31, 2016, we had approximately \$311 of capitalized precontract costs and \$1,016 of potential termination liabilities to suppliers.

Recoverable Costs on Government Contracts

Our final incurred costs for each year are subject to audit and review for allowability by the U.S. government, which can result in payment demands related to costs they believe should be disallowed. We work with the U.S. government to assess the merits of claims and where appropriate reserve for amounts disputed. If we are unable to satisfactorily resolve disputed costs, we could be required to record an earnings charge and/or provide refunds to the U.S. government.

Russia/Ukraine

We continue to monitor political unrest involving Russia and Ukraine, where we and some of our suppliers source titanium products and/or have operations. A number of our commercial customers also have operations in Russia and Ukraine. To date, we have not experienced any significant disruptions to production or deliveries. Should suppliers or customers experience disruption, our production and/or deliveries could be materially impacted.

747 Program

Lower-than-expected demand for large commercial passenger and freighter aircraft and slower-than-expected growth of global freight traffic have continued to drive market uncertainties, pricing pressures and fewer orders than anticipated. As a result, during 2016, we canceled previous plans to return to a production rate of 1.0 aircraft per month beginning in 2019, resulting in a reduction in the program accounting quantity from 1,574 to 1,555 aircraft. This reduction in the program accounting quantity, together with lower anticipated revenues from future sales and higher costs associated with producing fewer airplanes, resulted in a reach-forward loss of \$1,188 in the second quarter. We previously recognized reach-forward losses of \$885 and \$70 during the second half of 2015 and the first quarter of 2016, respectively, related to the prior decision to reduce the production rate to 0.5 per month and lower estimated revenue from future sales due to ongoing pricing and market pressures. We reduced the rate from 1.0 to 0.5 per month in September 2016. The adjusted program accounting quantity includes 26 undelivered aircraft, currently scheduled to be produced through 2019. We continue to have a number of completed aircraft in inventory as well as unsold production positions and we remain focused on obtaining additional orders and implementing cost-reduction efforts. If we are unable to obtain sufficient orders and/or market, production and other risks cannot be mitigated, we could record additional losses that may be material, and it is reasonably possible that we could decide to end production of the 747.

787 Program

The 787 program continued to have near breakeven gross margins. The combination of production challenges, change incorporation on early build aircraft, schedule delays, customer and supplier impacts and changes to price escalation factors has created significant pressure on program profitability. We are continuing to monitor wide-body demand and if sufficient orders do not materialize during the next several quarters we may consider appropriate adjustments to planned production rates. If risks related to these challenges, together with risks associated with planned production rates and productivity improvements,

supply chain management or introducing or manufacturing the 787-10 derivative as scheduled cannot be mitigated, the program could record a reach-forward loss that may be material.

Note 12 – Arrangements with Off-Balance Sheet Risk

We enter into arrangements with off-balance sheet risk in the normal course of business, primarily in the form of guarantees.

The following table provides quantitative data regarding our third party guarantees. The maximum potential payments represent a “worst-case scenario,” and do not necessarily reflect amounts that we expect to pay. Estimated proceeds from collateral and recourse represent the anticipated values of assets we could liquidate or receive from other parties to offset our payments under guarantees. The carrying amount of liabilities represents the amount included in Accrued liabilities.

	Maximum Potential Payments		Estimated Proceeds from Collateral/ Recourse		Carrying Amount of Liabilities	
	2016	2015	2016	2015	2016	2015
December 31,						
Contingent repurchase commitments	\$1,306	\$1,529	\$1,306	\$1,510	\$9	\$7
Indemnifications to ULA:						
Contributed Delta program launch inventory	77	107				
Contract pricing	261	261			7	7
Other Delta contracts	216	231			5	5
Credit guarantees	29	30	27	27	2	2

Contingent Repurchase Commitments The repurchase price specified in contingent repurchase commitments is generally lower than the expected fair value at the specified repurchase date. Estimated proceeds from collateral/recourse in the table above represent the lower of the contracted repurchase price or the expected fair value of each aircraft at the specified repurchase date.

Indemnifications to ULA In 2006, we agreed to indemnify ULA through December 31, 2020 against potential non-recoverability and non-allowability of \$1,360 of Boeing Delta launch program inventory included in contributed assets plus \$1,860 of inventory subject to an inventory supply agreement which ends on March 31, 2021 . Since inception, ULA has consumed \$1,283 of the \$1,360 of inventory that was contributed by us and has yet to consume \$77 . Under the inventory supply agreement, we have recorded revenues and cost of sales of \$1,472 through December 31, 2016 . ULA has made payments of \$1,740 to us under the inventory supply agreement and we have made \$63 of net indemnification payments to ULA.

We agreed to indemnify ULA against potential losses that ULA may incur in the event ULA is unable to obtain certain additional contract pricing from the USAF for four satellite missions. In 2009, ULA filed a complaint before the Armed Services Board of Contract Appeals (ASBCA) for a contract adjustment for the price of two of these missions, followed in 2011 by a subsequent notice of appeal with respect to a third mission. The USAF did not exercise an option for a fourth mission prior to the expiration of the contract. During the second quarter of 2016, the ASBCA ruled that ULA is entitled to additional contract pricing for each of the three missions and remanded to the parties to negotiate appropriate pricing. During the fourth quarter of 2016, the USAF appealed the ASBCA's ruling. If the USAF's appeal of the ASBCA's ruling is successful, and ULA is ultimately unsuccessful in obtaining additional pricing, we may be responsible for an indemnification payment up to \$261 and may record up to \$277 in pre-tax losses associated with the three missions.

Potential payments for Other Delta contracts include \$85 related to deferred support costs and \$91 related to deferred production costs. In June 2011, the Defense Contract Management Agency (DCMA) notified ULA that it had determined that \$271 of deferred support costs are not recoverable under government contracts. In December 2011, the DCMA notified ULA of the potential non-recoverability of an additional \$114 of deferred production costs. ULA and Boeing believe that all costs are recoverable and in November 2011, ULA filed a certified claim with the USAF for collection of deferred support and production costs. The USAF issued a final decision denying ULA's certified claim in May 2012. On June 14, 2012, Boeing and ULA filed a suit in the Court of Federal Claims seeking recovery of the deferred support and production costs from the U.S. government. On November 9, 2012, the U.S. government filed an answer to our claim and asserted a counterclaim for credits that it alleges were offset by deferred support cost invoices. We believe that the U.S. government's counterclaim is without merit, and have filed an answer challenging it on multiple grounds. The litigation is in the discovery phase and the Court has not yet set a trial date. If, contrary to our belief, it is determined that some or all of the deferred support or production costs are not recoverable, we could be required to record pre-tax losses and make indemnification payments to ULA for up to \$317 of the costs questioned by the DCMA.

Other Indemnifications In conjunction with our sales of Electron Dynamic Devices, Inc. and Rocketdyne Propulsion and Power businesses and our Commercial Airplanes facilities in Wichita, Kansas and Tulsa and McAlester, Oklahoma, we agreed to indemnify, for an indefinite period, the buyers for costs relating to pre-closing environmental conditions and certain other items. We are unable to assess the potential number of future claims that may be asserted under these indemnifications, nor the amounts thereof (if any). As a result, we cannot estimate the maximum potential amount of future payments under these indemnities and therefore, no liability has been recorded. To the extent that claims have been made under these indemnities and/or are probable and reasonably estimable, liabilities associated with these indemnities are included in the environmental liability disclosure in Note 11 .

Credit Guarantees We have issued credit guarantees, principally to facilitate the sale and/or financing of commercial aircraft. Under these arrangements, we are obligated to make payments to a guaranteed party in the event that lease or loan payments are not made by the original lessee or debtor or certain specified services are not performed. A substantial portion of these guarantees has been extended on behalf of original lessees or debtors with less than investment-grade credit. Our commercial aircraft credit guarantees are collateralized by the underlying commercial aircraft and certain other assets. Current outstanding credit guarantees expire within the next four years.

Industrial Revenue Bonds

Industrial Revenue Bonds (IRB) issued by the City of Wichita and St. Louis County were used to finance the purchase and/or construction of real and personal property at our Wichita and St. Louis sites. Tax benefits associated with IRBs include a ten-year property tax abatement and a sales tax exemption from the Kansas Department of Revenue, and a twelve-year property tax abatement and sales tax exemption from St. Louis County. We record these properties on our Consolidated Statements of Financial Position. We have also purchased the IRBs and therefore are the bondholders as well as the borrower/lessee of the properties purchased with the IRB proceeds. The liabilities and IRB assets are equal and are reported net in the Consolidated Statements of Financial Position.

During 2016, the City of Wichita IRBs were settled. As of December 31, 2016 and 2015 , the assets and liabilities associated with the IRBs were \$64 and \$584 .

Note 13 – Debt

On May 18, 2016 , we issued \$1,200 of fixed rate senior notes consisting of \$400 due June 15, 2023 that bear an annual interest rate of 1.875% , \$400 due June 15, 2026 that bear an annual interest rate of 2.25% , and \$400 due June 15, 2046 that bear an annual interest rate of 3.375% . The notes are unsecured senior obligations and rank equally in right of payment with our existing and future unsecured and unsubordinated

[Table of Contents](#)

indebtedness. The net proceeds of the issuance totaled \$1,170 , after deducting underwriting discounts, commissions and offering expenses.

Interest incurred, including amounts capitalized, was \$535 , \$497 and \$504 for the years ended December 31, 2016, 2015 and 2014 , respectively. Interest expense recorded by BCC is reflected as Boeing Capital interest expense on our Consolidated Statements of Operations. Total Company interest payments were \$523 , \$488 and \$511 for the years ended December 31, 2016, 2015 and 2014 , respectively.

We have \$5,000 currently available under credit line agreements, of which \$2,480 is a 364-day revolving credit facility expiring in November 2017 , \$2,370 expires in November 2021 , \$90 expires in November 2019 and \$60 expires in November 2017 . The 364-day credit facility has a one-year term out option which allows us to extend the maturity of any borrowings one year beyond the aforementioned expiration date. We continue to be in full compliance with all covenants contained in our debt or credit facility agreements.

Short-term debt and current portion of long-term debt at December 31 consisted of the following:

	2016	2015
Unsecured debt securities	\$255	\$1,004
Non-recourse debt and notes	33	36
Capital lease obligations	57	53
Other notes	39	141
Total	\$384	\$1,234

Debt at December 31 consisted of the following:

	2016	2015
Unsecured debt securities		
Variable rate: 3-month USD LIBOR plus 12.5 basis points due 2017	\$250	\$250
0.95% - 4.88% due through 2046	5,250	5,075
5.88% - 6.88% due through 2043	2,383	2,381
7.25% - 8.75% due through 2043	1,641	1,645
Non-recourse debt and notes		
6.98% - 7.38% notes due through 2021	127	163
Capital lease obligations due through 2024	138	150
Other notes	163	300
Total debt	\$9,952	\$9,964

Total debt is attributable to:

	2016	2015
BCC	\$2,864	\$2,355
Other Boeing	7,088	7,609
Total debt	\$9,952	\$9,964

At December 31, 2016 , \$127 of debt (non-recourse debt, notes and capital lease obligations) was collateralized by customer financing assets totaling \$259 .

Scheduled principal payments for debt and minimum capital lease obligations for the next five years are as follows:

	2017	2018	2019	2020	2021
Scheduled principal payments	\$387	\$714	\$1,261	\$1,134	\$719

Note 14 – Postretirement Plans

The majority of our employees have earned benefits under defined benefit pension plans. Nonunion and the majority of union employees that had participated in defined benefit pension plans transitioned to a company-funded defined contribution retirement savings plan in 2016.

We fund our major pension plans through trusts. Pension assets are placed in trust solely for the benefit of the plans' participants, and are structured to maintain liquidity that is sufficient to pay benefit obligations as well as to keep pace over the long-term with the growth of obligations for future benefit payments.

We also have other postretirement benefits (OPB) other than pensions which consist principally of health care coverage for eligible retirees and qualifying dependents, and to a lesser extent, life insurance to certain groups of retirees. Retiree health care is provided principally until age 65 for approximately half those retirees who are eligible for health care coverage. Certain employee groups, including employees covered by most United Auto Workers bargaining agreements, are provided lifetime health care coverage. The funded status of the plans is measured as the difference between the plan assets at fair value and the projected benefit obligation (PBO). We have recognized the aggregate of all overfunded plans in Other assets, and the aggregate of all underfunded plans in either Accrued retiree health care or Accrued pension plan liability, net. The portion of the amount by which the actuarial present value of benefits included in the PBO exceeds the fair value of plan assets, payable in the next 12 months, is reflected in Accrued liabilities.

The components of net periodic benefit cost were as follows:

Years ended December 31,	2016	Pension		Other Postretirement Benefits		
		2015	2014	2016	2015	2014
Service cost	\$604	\$1,764	\$1,661	\$128	\$140	\$129
Interest cost	3,050	2,990	3,058	262	248	289
Expected return on plan assets	(3,999)	(4,031)	(4,169)	(8)	(8)	(8)
Amortization of prior service costs/(credits)	38	196	177	(126)	(136)	(144)
Recognized net actuarial loss	790	1,577	1,020	22	31	8
Settlement/curtailment/other losses	40	290	461		10	1
Net periodic benefit cost	\$523	\$2,786	\$2,208	\$278	\$285	\$275
Net periodic benefit cost included in Earnings from operations	\$1,979	\$2,366	\$3,215	\$274	\$288	\$287

In 2016, we recorded charges of \$40 related to curtailments and other benefit changes associated with certain of our defined benefit plans.

[Table of Contents](#)

The following tables show changes in the benefit obligation, plan assets and funded status of both pensions and OPB for the years ended December 31, 2016 and 2015. Benefit obligation balances presented below reflect the PBO for our pension plans, and accumulated postretirement benefit obligations (APBO) for our OPB plans.

	Pension		Other Postretirement Benefits	
	2016	2015	2016	2015
Change in benefit obligation				
Beginning balance	\$74,388	\$78,391	\$7,138	\$7,306
Service cost	604	1,764	128	140
Interest cost	3,050	2,990	262	248
Plan participants' contributions	1	5		
Amendments	6	(1,379)	(57)	(19)
Actuarial (gain)/loss	2,669	(3,505)	(612)	(89)
Settlement/curtailment/other	(63)	(457)		10
Gross benefits paid	(3,903)	(3,382)	(469)	(486)
Subsidies			37	43
Exchange rate adjustment	(7)	(39)	4	(15)
Ending balance	\$76,745	\$74,388	\$6,431	\$7,138

Change in plan assets				
Beginning balance at fair value	\$56,514	\$61,119	\$132	\$141
Actual return/(loss) on plan assets	3,885	(701)	7	1
Company contribution	113	59	6	5
Plan participants' contributions	1	5	7	5
Settlement payments	(24)	(649)		
Benefits paid	(3,791)	(3,284)	(18)	(20)
Exchange rate adjustment	(6)	(35)		
Ending balance at fair value	\$56,692	\$56,514	\$134	\$132

Amounts recognized in statement of financial position at December 31 consist of:

Other assets	\$3	\$10		
Other accrued liabilities	(113)	(101)	(\$381)	(\$390)
Accrued retiree health care			(5,916)	(6,616)
Accrued pension plan liability, net	(19,943)	(17,783)		
Net amount recognized	(\$20,053)	(\$17,874)	(\$6,297)	(\$7,006)

Amounts recognized in Accumulated other comprehensive loss at December 31 were as follows:

	Pension		Other Postretirement Benefits	
	2016	2015	2016	2015
Net actuarial loss	\$22,802	\$20,871	\$152	\$781
Prior service (credits)	(1,243)	(1,195)	(328)	(397)
Total recognized in Accumulated other comprehensive loss	\$21,559	\$19,676	(\$176)	\$384

[Table of Contents](#)

The estimated amount that will be amortized from Accumulated other comprehensive loss into net periodic benefit cost during the year ending December 31, 2017 is as follows:

	Pension	Other Postretirement Benefits
Recognized net actuarial loss	\$801	\$10
Amortization of prior service (credits)	(41)	(137)
Total	\$760	(\$127)

The accumulated benefit obligation (ABO) for all pension plans was \$74,240 and \$72,330 at December 31, 2016 and 2015. Key information for our plans with ABO in excess of plan assets as of December 31 was as follows:

	2016	2015
Projected benefit obligation	\$76,586	\$74,188
Accumulated benefit obligation	74,081	72,121
Fair value of plan assets	56,530	56,306

Assumptions

The following assumptions, which are the weighted average for all plans, are used to calculate the benefit obligation at December 31 of each year and the net periodic benefit cost for the subsequent year.

December 31,	2016	2015	2014
Discount rate:			
Pension	4.00%	4.20%	3.90%
Other postretirement benefits	3.70%	3.80%	3.50%
Expected return on plan assets	6.80%	7.00%	7.00%
Rate of compensation increase	4.40%	4.00%	3.80%

The discount rate for each plan is determined based on the plans' expected future benefit payments using a yield curve developed from high quality bonds that are rated as Aa or better by at least half of the four rating agencies utilized as of the measurement date. The yield curve is fitted to yields developed from bonds at various maturity points. Bonds with the ten percent highest and the ten percent lowest yields are omitted. A portfolio of about 400 bonds is used to construct the yield curve. Since corporate bond yields are generally not available at maturities beyond 30 years, it is assumed that spot rates will remain level beyond that 30-year point. The present value of each plan's benefits is calculated by applying the discount rates to projected benefit cash flows. All bonds are U.S. issues, with a minimum outstanding of \$50.

The pension fund's expected return on plan assets assumption is derived from a review of actual historical returns achieved by the pension trust and anticipated future long-term performance of individual asset classes. While consideration is given to recent trust performance and historical returns, the assumption represents a long-term, prospective return. The expected return on plan assets component of the net periodic benefit cost for the upcoming plan year is determined based on the expected return on plan assets assumption and the market-related value of plan assets (MRVA). Since our adoption of the accounting standard for pensions in 1987, we have determined the MRVA based on a five-year moving average of plan assets. As of December 31, 2016, the MRVA was approximately \$2,352 greater than the fair market value of assets.

[Table of Contents](#)

Assumed health care cost trend rates were as follows:

December 31,	2016	2015	2014
Health care cost trend rate assumed next year	6.50%	6.50%	7.00%
Ultimate trend rate	5.00%	5.00%	5.00%
Year that trend reached ultimate rate	2021	2021	2018

Assumed health care cost trend rates have a significant effect on the amounts reported for the health care plans. To determine the health care cost trend rates we look at a combination of information including ongoing claims cost monitoring, annual statistical analyses of claims data, reconciliation of forecast claims against actual claims, review of trend assumptions of other plan sponsors and national health trends, and adjustments for plan design changes, workforce changes, and changes in plan participant behavior. A one-percentage-point change in assumed health care cost trend rates would have the following effect:

	Increase	Decrease
Effect on total of service and interest cost	\$48	(\$40)
Effect on postretirement benefit obligation	586	(496)

Plan Assets

Investment Strategy The overall objective of our pension assets is to earn a rate of return over time to satisfy the benefit obligations of the pension plans and to maintain sufficient liquidity to pay benefits and address other cash requirements of the pension fund. Specific investment objectives for our long-term investment strategy include reducing the volatility of pension assets relative to pension liabilities, achieving a competitive total investment return, achieving diversification between and within asset classes and managing other risks. Investment objectives for each asset class are determined based on specific risks and investment opportunities identified.

We periodically update our long-term, strategic asset allocations. We use various analytics to determine the optimal asset mix and consider plan liability characteristics, liquidity characteristics, funding requirements, expected rates of return and the distribution of returns. We identify investment benchmarks for the asset classes in the strategic asset allocation that are market-based and investable where possible.

Actual allocations to each asset class vary from target allocations due to periodic investment strategy changes, market value fluctuations, the length of time it takes to fully implement investment allocation positions, and the timing of benefit payments and contributions. Short-term investments and exchange-traded derivatives are used to rebalance the actual asset allocation to the target asset allocation. The asset allocation is monitored and rebalanced on a monthly basis.

The actual and target allocations by asset class for the pension assets at December 31 were as follows:

Asset Class	Actual Allocations		Target Allocations	
	2016	2015	2016	2015
Fixed income	48%	48%	47%	47%
Global equity	28	28	29	29
Private equity	5	5	5	5
Real estate and real assets	9	9	9	9
Hedge funds	10	10	10	10
Total	100%	100%	100%	100%

[Table of Contents](#)

Fixed income securities are invested primarily in a diversified portfolio of long duration instruments. Global equity securities are invested in a diversified portfolio of U.S. and non-U.S. companies, across various industries and market capitalizations.

Real estate and real assets include global private investments that may be held through an investment in a limited partnership (LP) or other fund structures and publicly traded investments (such as Real Estate Investment Trusts (REITs) in the case of real estate). Real estate includes, but is not limited to, investments in office, retail, apartment and industrial properties. Real assets include, but are not limited to, investments in natural resources (such as energy, farmland and timber), commodities and infrastructure. Private equity investment vehicles are primarily limited partnerships (LPs) and fund-of-funds that mainly invest in U.S. and non-U.S. leveraged buyout, venture capital and special situation strategies.

Hedge fund investments seek to capitalize on inefficiencies identified across and within different asset classes or markets. Hedge fund strategy types include, but are not limited to directional, event driven, relative value, long-short and multi-strategy.

Investment managers are retained for explicit investment roles specified by contractual investment guidelines. Certain investment managers are authorized to use derivatives, such as equity or bond futures, swaps, options and currency futures or forwards. Derivatives are used to achieve the desired market exposure of a security or an index, transfer value-added performance between asset classes, achieve the desired currency exposure, adjust portfolio duration or rebalance the total portfolio to the target asset allocation.

As a percentage of total pension plan assets, derivative net notional amounts were 6.0% and 13.1% for fixed income, including to-be-announced mortgage-backed securities and treasury forwards, and 1.2% and 4.0% for global equity and commodities at December 31, 2016 and 2015 .

Risk Management In managing the plan assets, we review and manage risk associated with funded status risk, interest rate risk, market risk, counterparty risk, liquidity risk and operational risk. Liability matching and asset class diversification are central to our risk management approach and are integral to the overall investment strategy. Further, asset classes are constructed to achieve diversification by investment strategy, by investment manager, by industry or sector and by holding. Investment manager guidelines for publicly traded assets are specified and are monitored regularly through the custodian. Credit parameters for counterparties have been established for managers permitted to trade over-the-counter derivatives. Valuation is governed through several types of procedures, including reviews of manager valuation policies, custodian valuation processes, pricing vendor practices, pricing reconciliation, and periodic, security-specific valuation testing .

Fair Value Measurements The following table presents our plan assets using the fair value hierarchy as of December 31, 2016 and 2015 . The fair value hierarchy has three levels based on the reliability of the inputs used to determine fair value. Level 1 refers to fair values determined based on quoted prices in active markets for identical assets. Level 2 refers to fair values estimated using significant other observable inputs, and Level 3 includes fair values estimated using significant unobservable inputs.

	December 31, 2016				December 31, 2015			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Fixed income securities:								
Corporate	\$16,730		\$16,723	\$7	\$16,339		\$16,336	\$3
U.S. government and agencies	4,876		4,875	1	4,801		4,800	1
Mortgage backed and asset backed	706		370	336	830		382	448
Municipal	1,398		1,398		1,475		1,475	
Sovereign	782		782		907		907	
Other	74	\$9	65		83	\$9	74	
Derivatives:								
Assets	40		40		25		25	
Liabilities	(38)		(38)		(67)		(67)	
Cash equivalents and other short-term investments								
	1,037		1,037		1,015		1,015	
Equity securities:								
U.S. common and preferred stock	5,374	5,373		1	5,165	5,164		1
Non-U.S. common and preferred stock	5,746	5,746			5,712	5,710		2
Derivatives:								
Assets	6		6		11		11	
Liabilities	(8)		(8)		(3)		(3)	
Private equity	—				3			3
Real estate and real assets:								
Real estate	468	468			447	447		
Real assets	672	372	295	5	632	351	275	6
Derivatives:								
Assets	4		4		3		3	
Liabilities	(1)		(1)		(2)		(2)	
Total	\$37,866	\$11,968	\$25,548	\$350	\$37,376	\$11,681	\$25,231	\$464
Fixed income common/collective/pooled funds								
	\$1,625				\$1,753			
Fixed income other	227				247			
Equity common/collective pooled funds	4,962				4,948			
Private equity	2,639				2,611			
Real estate and real assets	3,625				3,637			
Hedge funds	5,441				5,478			
Total investments measured at NAV as a practical expedient	\$18,519				\$18,674			
Cash	\$160				\$162			
Receivables	374				435			
Payables	(227)				(133)			
Total	\$56,692				\$56,514			

[Table of Contents](#)

Fixed income securities are primarily valued upon a market approach, using matrix pricing and considering a security's relationship to other securities for which quoted prices in an active market may be available, or an income approach, converting future cash flows to a single present value amount. Inputs used in developing fair value estimates include reported trades, broker quotes, benchmark yields, and base spreads.

Common/collective/pooled funds are typically common or collective trusts valued at their NAVs that are calculated by the investment manager or sponsor of the fund and have daily or monthly liquidity. Derivatives included in the table above are over-the-counter and are primarily valued using an income approach with inputs that include benchmark yields, swap curves, cash flow analysis, rating agency data and interdealer broker rates. Exchange-traded derivative positions are reported in accordance with changes in daily variation margin which is settled daily and therefore reflected in the payables and receivables portion of the table.

Cash equivalents and other short-term investments (which are used to pay benefits) are held in a separate account which consists of a commingled fund (with daily liquidity) and separately held short-term securities and cash equivalents. All of the investments in this cash vehicle are valued daily using a market approach with inputs that include quoted market prices for similar instruments. In the event a market price is not available for instruments with an original maturity of one year or less, amortized cost is used as a proxy for fair value. Common and preferred stock equity securities are primarily valued using a market approach based on the quoted market prices of identical instruments.

Private equity and private debt NAV valuations are based on the valuation of the underlying investments, which include inputs such as cost, operating results, discounted future cash flows and market based comparable data. For those investments reported on a one-quarter lagged basis (primarily LPs) we use NAVs, adjusted for subsequent cash flows and significant events.

Real estate and real asset NAV valuations are based on valuation of the underlying investments, which include inputs such as cost, discounted future cash flows, independent appraisals and market based comparable data. For those investments reported on a one-quarter lagged basis (primarily LPs) NAVs are adjusted for subsequent cash flows and significant events. Publicly traded REITs and infrastructure stocks are valued using a market approach based on quoted market prices of identical instruments. Exchange-traded commodities futures positions are reported in accordance with changes in daily variation margin which is settled daily and therefore reflected in the payables and receivables portion of the table.

Hedge funds consist of direct hedge funds and fund-of-fund limited liability company (LLC) structures. For direct hedge funds the NAVs are generally based on valuation of the underlying investments. This is primarily done by applying a market or income valuation methodology depending on the specific type of security or instrument held. The NAVs of the fund-of-funds are based on the NAVs of the underlying hedge funds as well as any cash and accruals held at the fund-of-fund level. Redemptions in hedge funds are based on specific terms and conditions of the individual funds.

Investments in private equity, private debt, real estate, real assets, and hedge funds are primarily calculated and reported by the General Partner (GP), fund manager or third party administrator. Additionally, some investments in fixed income and equity are made via commingled vehicles and are valued in a similar fashion. Pension assets invested in commingled and limited partnership structures rely on the NAV of these investments as the practical expedient for the valuations.

[Table of Contents](#)

The following tables present a reconciliation of Level 3 assets (excluding investments which are valued using NAVs as a practical expedient) held during the years ended December 31, 2016 and 2015. Transfers into and out of Level 3 are reported at the beginning-of-year values.

	January 1 2016 Balance	Net Realized and Unrealized Gains/(Losses)	Net Purchases, Issuances and Settlements	Net Transfers (Out of) Level 3	December 31 2016 Balance
Fixed income securities:					
Corporate ⁽¹⁾	\$11		(\$1)	(\$3)	\$7
U.S. government and agencies	1				1
Mortgage backed and asset backed ⁽¹⁾	440	\$7	(93)	(18)	336
Equity securities:					
U.S. common and preferred stock	1				1
Non-U.S. common and preferred stock	2		(2)		—
Private equity	3	(3)			—
Real assets	6		(1)		5
Total	\$464	\$4	(\$97)	(\$21)	\$350

	January 1 2015 Balance	Net Realized and Unrealized (Losses)	Net Purchases, Issuances and Settlements	Net Transfers Into Level 3	December 31 2015 Balance
Fixed income securities:					
Corporate ⁽²⁾	\$1		\$1	\$1	\$3
U.S. government and agencies ⁽²⁾	1				\$1
Mortgage backed and asset backed ⁽²⁾	611	(\$9)	(157)	3	448
Other		(3)	3		—
Equity securities:					
U.S. common and preferred stock				1	1
Non-U.S. common and preferred stock	1		(2)	3	2
Private equity	3				3
Real assets	4		2		6
Total	\$621	(\$12)	(\$153)	\$8	\$464

⁽¹⁾ Certain fixed income securities were reclassified from mortgage backed and asset backed to corporate on January 1, 2016.

⁽²⁾ Certain fixed income securities were reclassified from corporate and mortgage backed and asset backed to U.S. government and agencies on January 1, 2015.

[Table of Contents](#)

The changes in unrealized gains/(losses) for Level 3 mortgage backed and asset backed fixed income securities still held at December 31, 2016 and 2015 were \$4 and (\$10) .

OPB Plan Assets The majority of OPB plan assets are invested in a balanced index fund which is comprised of approximately 60% equities and 40% debt securities. The index fund is valued using a market approach based on the quoted market price of an identical instrument (Level 1). The expected rate of return on these assets does not have a material effect on the net periodic benefit cost.

Cash Flows

Contributions Required pension contributions under the Employee Retirement Income Security Act (ERISA), as well as rules governing funding of our non-U.S. pension plans, are expected to be \$200 in 2017 . In 2017 we expect to make contributions to our pension plans of approximately \$500 .

Estimated Future Benefit Payments The table below reflects the total pension benefits expected to be paid from the plans or from our assets, including both our share of the benefit cost and the participants' share of the cost, which is funded by participant contributions. OPB payments reflect our portion only.

Year(s)	2017	2018	2019	2020	2021	2022-2026
Pensions	\$4,558	\$4,622	\$4,611	\$4,662	\$4,637	\$23,108
Other postretirement benefits:						
Gross benefits paid	498	515	530	548	553	2,654
Subsidies	(32)	(31)	(31)	(31)	(30)	(143)
Net other postretirement benefits	\$466	\$484	\$499	\$517	\$523	\$2,511

Termination Provisions

Certain of the pension plans provide that, in the event there is a change in control of the Company which is not approved by the Board of Directors and the plans are terminated within five years thereafter, the assets in the plan first will be used to provide the level of retirement benefits required by ERISA , and then any surplus will be used to fund a trust to continue present and future payments under the postretirement medical and life insurance benefits in our group insurance benefit programs.

Should we terminate certain pension plans under conditions in which the plan's assets exceed that plan's obligations, the U.S. government will be entitled to a fair allocation of any of the plan's assets based on plan contributions that were reimbursed under U.S. government contracts.

Defined Contribution Plans

We provide certain defined contribution plans to all eligible employees. The principal plans are the Company-sponsored 401(k) plans. The expense for these defined contribution plans was \$1,413 , \$768 and \$764 in 2016, 2015 and 2014 , respectively.

Note 15 – Share-Based Compensation and Other Compensation Arrangements

Share-Based Compensation

Our 2003 Incentive Stock Plan, as amended and restated, permits awards of incentive and non-qualified stock options, stock appreciation rights, restricted stock or units, performance shares, performance restricted stock or units, performance units and other stock and cash-based awards to our employees, officers, directors, consultants, and independent contractors. The aggregate number of shares of our stock authorized for issuance under the plan is 87,000,000 .

[Table of Contents](#)

Shares issued as a result of stock option exercises or conversion of stock unit awards will be funded out of treasury shares, except to the extent there are insufficient treasury shares, in which case new shares will be issued. We believe we currently have adequate treasury shares to satisfy these issuances during 2017 .

Share-based plans expense is primarily included in General and administrative expense since it is incentive compensation issued primarily to our executives. The share-based plans expense and related income tax benefit were as follows:

Years ended December 31,	2016	2015	2014
Stock options	\$4	\$30	\$62
Restricted stock units and other awards	189	160	133
Share-based plans expense	\$193	\$190	\$195
Income tax benefit	\$69	\$68	\$70

Stock Options

We discontinued granting options in 2014, replacing them with performance-based restricted stock units. Options granted through January 2014 had an exercise price equal to the fair market value of our stock on the date of grant and expire ten years after the date of grant. The stock options vest over a period of three years and were fully vested at December 31, 2016 , except for 6,221 shares which vested in January 2017.

Stock option activity for the year ended December 31, 2016 is as follows:

	Shares	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Number of shares under option:				
Outstanding at beginning of year	12,925,944	\$73.44		
Exercised	(4,270,336)	75.04		
Forfeited	(6,270)	84.20		
Expired	(2,726)	74.43		
Outstanding at end of year	8,646,612	\$72.64	4.67	\$718
Exercisable at end of year	8,640,391	\$72.60	4.67	\$718

The total intrinsic value of options exercised during the years ended December 31, 2016, 2015 and 2014 was \$265 , \$385 and \$250 , respectively. Cash received from options exercised during the years ended December 31, 2016, 2015 and 2014 was \$321 , \$399 and \$343 with a related tax benefit of \$94 , \$135 and \$87 , respectively, derived from the compensation deductions resulting from these option exercises. The grant date fair value of stock options vested during the years ended December 31, 2016, 2015 and 2014 was \$27 , \$56 and \$87 , respectively.

Restricted Stock Units

In February 2016, 2015 and 2014 , we granted to our executives 777,837 , 590,778 and 695,651 restricted stock units (RSUs) as part of our long-term incentive program with grant date fair values of \$117.50 , \$154.64 and \$129.58 per unit, respectively. The RSUs granted under this program will vest and settle in common stock (on a one-for-one basis) on the third anniversary of the grant date. If an executive terminates employment because of retirement, involuntary layoff, disability, or death, the employee (or beneficiary)

[Table of Contents](#)

will receive a proration of stock units based on active employment during the three-year service period. In all other cases, the RSUs will not vest and all rights to the stock units will terminate. In addition to RSUs awarded under our long-term incentive program, we grant RSUs to certain executives and employees to encourage retention or to reward various achievements. These RSUs are labeled other RSUs in the table below. The fair values of all RSUs are estimated using the average of the high and low stock prices on the date of grant.

RSU activity for the year ended December 31, 2016 was as follows:

	Long-Term Incentive Program	Other
Number of units:		
Outstanding at beginning of year	2,346,640	1,121,001
Granted	811,317	391,961
Dividends	66,609	35,848
Forfeited	(165,111)	(46,115)
Distributed	(1,244,811)	(424,775)
Outstanding at end of year	1,814,644	1,077,920
Unrecognized compensation cost	\$92	\$58
Weighted average remaining contractual life (years)	1.8	3.8

The number of vested but undistributed RSUs at December 31, 2016 was not significant.

Performance-Based Restricted Stock Units

Performance-Based Restricted Stock Units (PBRsUs) are stock units that pay out based on the Company's total shareholder return as compared to a group of peer companies over a three-year period. The award payout can range from 0% to 200% of the initial PBRsU grant, but will not exceed 400% of the initial value (excluding dividend equivalent credits). The PBRsUs granted under this program will vest at the payout amount and settle in common stock (on a one-for-one basis) on the third anniversary of the grant date. If an executive terminates employment because of retirement, involuntary layoff, disability, or death, the employee (or beneficiary) remains eligible under the award and, if the award is earned, will receive a proration of stock units based on active employment during the three-year service period. In all other cases, the PBRsUs will not vest and all rights to the stock units will terminate.

In February 2016, 2015 and 2014, we granted to our executives 721,176, 556,203 and 662,215 PBRsUs as part of our long-term incentive program. Compensation expense for the award is recognized over the three-year performance period based upon the grant date fair value. The grant date fair values were estimated using a Monte-Carlo simulation model with the assumptions presented below. The model includes no expected dividend yield as the units earn dividend equivalents.

Grant Year	Grant Date	Performance Period	Expected Volatility	Risk Free Interest		Grant Date Fair Value
				Rate		
2016	2/22/2016	3 years	22.44%	0.92%		126.74
2015	2/23/2015	3 years	20.35%	1.03%		164.26
2014	2/24/2014	3 years	24.2%	0.72%		136.12

PBRSU activity for the year ended December 31, 2016 was as follows:

	Long-Term Incentive Program
Number of units:	
Outstanding at beginning of year	1,123,035
Granted	721,176
Dividends	52,540
Forfeited	(150,240)
Outstanding at end of year	1,746,511
Unrecognized compensation cost	\$86
Weighted average remaining contractual life (years)	1.8

Other Compensation Arrangements

Performance Awards

Performance Awards are cash units that pay out based on the achievement of long-term financial goals at the end of a three-year period. Each unit has an initial value of \$100 dollars. The amount payable at the end of the three-year performance period may be anywhere from \$0 to \$200 dollars per unit, depending on the Company's performance against plan for a three-year period. The Compensation Committee has the discretion to pay these awards in cash, stock, or a combination of both after the three-year performance period. Compensation expense, based on the estimated performance payout, is recognized ratably over the performance period.

During 2016, 2015 and 2014, we granted Performance Awards to our executives as part of our long-term incentive program with the payout based on the achievement of financial goals for each three-year period following the grant date. The minimum payout amount is \$0 and the maximum amount we could be required to pay out for the 2016, 2015 and 2014 Performance Awards is \$338, \$322 and \$315, respectively. The 2014 grant is expected to be paid out in cash in March 2017.

Deferred Compensation

The Company has a deferred compensation plan which permits executives to defer receipt of a portion of their salary, bonus, and certain other incentive awards. Participants can diversify deferred compensation among 23 investment funds including a Boeing stock unit account.

Total expense related to deferred compensation was \$46, \$63 and \$44 in 2016, 2015 and 2014, respectively. As of December 31, 2016 and 2015, the deferred compensation liability which is being marked to market was \$1,126 and \$1,191.

Note 16 – Shareholders' Equity

On December 12, 2016, the Board approved a new repurchase plan for up to \$14,000 of common stock, replacing the previously authorized program. The program will expire when we have used all authorized funds or is otherwise terminated.

As of December 31, 2016 and 2015, there were 1,200,000,000 shares of common stock and 20,000,000 shares of preferred stock authorized. No preferred stock has been issued.

Changes in Share Balances

The following table shows changes in each class of shares:

	Common Stock	Treasury Stock
Balance at January 1, 2014	1,012,261,159	264,882,461
Issued		(6,719,270)
Acquired		47,370,415
Balance at December 31, 2014	1,012,261,159	305,533,606
Issued		(7,288,113)
Acquired		47,391,861
Balance at December 31, 2015	1,012,261,159	345,637,354
Issued		(6,376,868)
Acquired		55,849,082
Balance at December 31, 2016	1,012,261,159	395,109,568

Accumulated Other Comprehensive Loss

Changes in Accumulated other comprehensive income/(loss) (AOCI) by component for the years ended December 31, 2016 , 2015 and 2014 were as follows:

	Currency Translation Adjustments	Unrealized Gains and Losses on Certain Investments	Unrealized Gains and Losses on Derivative Instruments	Defined Benefit Pension Plans & Other Postretirement Benefits	Total ⁽¹⁾
Balance at January 1, 2014	\$150	(\$8)	(\$6)	(\$10,030)	(\$9,894)
Other comprehensive income/(loss) before reclassifications	(97)		(137)	(4,644)	(4,878)
Amounts reclassified from AOCI			7	862 ⁽²⁾	869
Net current period Other comprehensive income/(loss)	(97)		(130)	(3,782)	(4,009)
Balance at December 31, 2014	\$53	(\$8)	(\$136)	(\$13,812)	(\$13,903)
Other comprehensive income/(loss) before reclassifications	(92)	8	(140)	173	(51)
Amounts reclassified from AOCI			79	1,127 ⁽²⁾	1,206
Net current period Other comprehensive income/(loss)	(92)	8	(61)	1,300	1,155
Balance at December 31, 2015	(\$39)	\$—	(\$197)	(\$12,512)	(\$12,748)
Other comprehensive income/(loss) before reclassifications	(104)	(\$2)	(8)	(1,320)	(1,434)
Amounts reclassified from AOCI			78	481 ⁽²⁾	559
Net current period Other comprehensive income/(loss)	(104)	(2)	70	(839)	(875)
Balance at December 31, 2016	(\$143)	(\$2)	(\$127)	(\$13,351)	(\$13,623)

⁽¹⁾ Net of tax.

⁽²⁾ Primarily relates to amortization of actuarial losses for the years ended December 31, 2016 , 2015 , and 2014 totaling \$524 , \$1,038 , and \$661 (net of tax of (\$288) , (\$570) , and (\$367)), respectively. These are included in the net periodic pension cost of which a portion is allocated to production as inventoried costs. See Note 14 .

Note 17 – Derivative Financial Instruments**Cash Flow Hedges**

Our cash flow hedges include foreign currency forward contracts, commodity swaps, and commodity purchase contracts. We use foreign currency forward contracts to manage currency risk associated with certain transactions, specifically forecasted sales and purchases made in foreign currencies. Our foreign currency contracts hedge forecasted transactions through 2022. We use commodity derivatives, such as swaps and fixed-price purchase commitments to hedge against potentially unfavorable price changes for items used in production. Our commodity contracts hedge forecasted transactions through 2020.

Fair Value Hedges

Interest rate swaps under which we agree to pay variable rates of interest are designated as fair value hedges of fixed-rate debt. The net change in fair value of the derivatives and the hedged items is reported in Boeing Capital interest expense.

Derivative Instruments Not Receiving Hedge Accounting Treatment

We have entered into agreements to purchase and sell aluminum to address long-term strategic sourcing objectives and international business requirements. These agreements are derivative instruments for accounting purposes. The quantities of aluminum in these agreements offset and are priced at prevailing market prices. We also hold certain foreign currency forward contracts which do not qualify for hedge accounting treatment.

Notional Amounts and Fair Values

The notional amounts and fair values of derivative instruments in the Consolidated Statements of Financial Position as of December 31 were as follows:

	Notional amounts ⁽¹⁾		Other assets		Accrued liabilities	
	2016	2015	2016	2015	2016	2015
Derivatives designated as hedging instruments:						
Foreign exchange contracts	\$2,584	\$2,727	\$34	\$23	(\$225)	(\$304)
Interest rate contracts	125	125	6	9		
Commodity contracts	53	40	7	2	(5)	(13)
Derivatives not receiving hedge accounting treatment:						
Foreign exchange contracts	465	436	21	4	(17)	(11)
Commodity contracts	648	725				
Total derivatives	\$3,875	\$4,053	68	38	(247)	(328)
Netting arrangements			(45)	(23)	45	23
Net recorded balance			\$23	\$15	(\$202)	(\$305)

⁽¹⁾ Notional amounts represent the gross contract/notional amount of the derivatives outstanding.

[Table of Contents](#)

Gains/(losses) associated with our cash flow and undesignated hedging transactions and their effect on Other comprehensive income/(loss) and Net earnings were as follows:

Years ended December 31,	2016	2015
Effective portion recognized in Other comprehensive income/(loss), net of taxes:		
Foreign exchange contracts	(\$9)	(\$136)
Commodity contracts	1	(4)
Effective portion reclassified out of Accumulated other comprehensive loss into earnings, net of taxes:		
Foreign exchange contracts	(70)	(67)
Commodity contracts	(8)	(12)
Forward points recognized in Other income, net:		
Foreign exchange contracts	13	12
Undesignated derivatives recognized in Other income, net:		
Foreign exchange contracts	(2)	(1)

Based on our portfolio of cash flow hedges, we expect to reclassify losses of \$101 (pre-tax) out of Accumulated other comprehensive loss into earnings during the next 12 months. Ineffectiveness related to our hedges recognized in Other income was insignificant for the years ended December 31, 2016 and 2015 .

We have derivative instruments with credit-risk-related contingent features. For foreign exchange contracts with original maturities of at least five years, our derivative counterparties could require settlement if we default on our five-year credit facility. For certain commodity contracts, our counterparties could require collateral posted in an amount determined by our credit ratings. The fair value of foreign exchange and commodity contracts that have credit-risk-related contingent features that are in a net liability position at December 31, 2016 was \$46 . At December 31, 2016 , there was no collateral posted related to our derivatives.

Note 18 – Significant Group Concentrations of Risk

Credit Risk

Financial instruments involving potential credit risk are predominantly with commercial aircraft customers and the U.S. government. Of the \$13,108 in gross accounts receivable and gross customer financing included in the Consolidated Statements of Financial Position as of December 31, 2016 , \$6,380 related predominantly to commercial aircraft customers (\$2,175 of accounts receivable and \$4,205 of customer financing) and \$4,639 related to the U.S. government.

Of the \$4,211 in gross customer financing, \$2,760 related to customers we believe have less than investment-grade credit including Volga Dnepr Affiliates, Silk Way Airlines and American Airlines who were associated with 18% , 9% and 6% , respectively, of our financing portfolio. Financing for aircraft is collateralized by security in the related asset and in some instances security in other assets as well.

Other Risk

As of December 31, 2016 , approximately 38% of our total workforce was represented by collective bargaining agreements.

Note 19 – Fair Value Measurements

The fair value hierarchy has three levels based on the reliability of the inputs used to determine fair value. Level 1 refers to fair values determined based on quoted prices in active markets for identical assets. Level 2 refers to fair values estimated using significant other observable inputs and Level 3 includes fair values estimated using significant unobservable inputs. The following table presents our assets and liabilities that are measured at fair value on a recurring basis and are categorized using the fair value hierarchy.

	December 31, 2016			December 31, 2015		
	Total	Level 1	Level 2	Total	Level 1	Level 2
Assets						
Money market funds	\$2,858	\$2,858		\$4,504	\$4,504	
Available-for-sale investments:						
Commercial paper	162		162	87		87
Corporate notes	271		271	79		79
U.S. government agencies	63		63	83		83
Other	46	46		20	20	
Derivatives	23		23	15		\$15
Total assets	\$3,423	\$2,904	\$519	\$4,788	\$4,524	\$264
Liabilities						
Derivatives	(\$202)		(\$202)	(\$305)		(\$305)
Total liabilities	(\$202)		(\$202)	(\$305)		(\$305)

Money market funds, available-for-sale debt investments and equity securities are valued using a market approach based on the quoted market prices or broker/dealer quotes of identical or comparable instruments.

Derivatives include foreign currency, commodity and interest rate contracts. Our foreign currency forward contracts are valued using an income approach based on the present value of the forward rate less the contract rate multiplied by the notional amount. Commodity derivatives are valued using an income approach based on the present value of the commodity index prices less the contract rate multiplied by the notional amount. The fair value of our interest rate swaps is derived from a discounted cash flow analysis based on the terms of the contract and the interest rate curve.

Certain assets have been measured at fair value on a nonrecurring basis using significant unobservable inputs (Level 3). The following table presents the nonrecurring losses recognized for the years ended December 31 due to long-lived asset impairment, and the fair value and asset classification of the related assets as of the impairment date:

	2016		2015	
	Fair Value	Total Losses	Fair Value	Total Losses
Operating lease equipment	\$84	(\$52)	\$270	(\$159)
Property, plant and equipment	10	(9)	8	(6)
Other assets and Acquired intangible assets	12	(10)		
Total	\$106	(\$71)	\$278	(\$165)

The fair value of the impaired operating lease equipment is derived by calculating a median collateral value from a consistent group of third party aircraft value publications. The values provided by the third party

[Table of Contents](#)

aircraft publications are derived from their knowledge of market trades and other market factors. Management reviews the publications quarterly to assess the continued appropriateness and consistency with market trends. Under certain circumstances, we adjust values based on the attributes and condition of the specific aircraft or equipment, usually when the features or use of the aircraft vary significantly from the more generic aircraft attributes covered by third party publications, or on the expected net sales price for the aircraft. Property, plant and equipment and Acquired intangible assets were primarily valued using an income approach based on the discounted cash flows associated with the underlying assets.

For Level 3 assets that were measured at fair value on a nonrecurring basis during the year ended December 31, 2016, the following table presents the fair value of those assets as of the measurement date, valuation techniques and related unobservable inputs of those assets.

	Fair Value	Valuation Technique(s)	Unobservable Input	Range Median or Average
Operating lease equipment	\$84	Market approach	Aircraft value publications Aircraft condition adjustments	\$158 - \$264 ⁽¹⁾ Median \$212 (\$128) - \$0 ⁽²⁾ Net (\$128)

(1) The range represents the sum of the highest and lowest values for all aircraft subject to fair value measurement, according to the third party aircraft valuation publications that we use in our valuation process.

(2) The negative amount represents the sum, for all aircraft subject to fair value measurement, of all downward adjustments based on consideration of individual aircraft attributes and condition. The positive amount represents the sum of all such upward adjustments.

Fair Value Disclosures

The fair values and related carrying values of financial instruments that are not required to be remeasured at fair value on the Consolidated Statements of Financial Position at December 31 were as follows:

December 31, 2016					
	Carrying Amount	Total Fair Value	Level 1	Level 2	Level 3
Assets					
Accounts receivable, net	\$8,832	\$8,830		\$8,830	
Notes receivable, net	807	803		803	
Liabilities					
Debt, excluding capital lease obligations	(9,815)	(11,209)		(11,078)	(\$131)

December 31, 2015					
	Carrying Amount	Total Fair Value	Level 1	Level 2	Level 3
Assets					
Accounts receivable, net	\$8,713	\$8,705		\$8,705	
Notes receivable, net	255	273		273	
Liabilities					
Debt, excluding capital lease obligations	(9,814)	(11,292)		(11,123)	(\$169)

The fair value of Accounts receivable is based on current market rates for loans of the same risk and maturities. The fair values of notes receivable are estimated with discounted cash flow analysis using interest rates currently offered on loans with similar terms to borrowers of similar credit quality. The fair value of our debt that is traded in the secondary market is classified as Level 2 and is based on current market yields. For our debt that is not traded in the secondary market, the fair value is classified as Level 2 and is based on our indicative borrowing cost derived from dealer quotes or discounted cash flows. The fair values of our debt classified as Level 3 are based on discounted cash flow models using the implied yield from similar securities. With regard to other financial instruments with off-balance sheet risk, it is not practicable to estimate the fair value of our indemnifications and financing commitments because the amount and timing of those arrangements are uncertain. Items not included in the above disclosures include cash, restricted cash, time deposits and other deposits, commercial paper, money market funds, Accounts payable and long-term payables. The carrying values of those items, as reflected in the Consolidated Statements of Financial Position, approximate their fair value at December 31, 2016 and 2015. The fair value of assets and liabilities whose carrying value approximates fair value is determined using Level 2 inputs, with the exception of cash (Level 1).

Note 20 – Legal Proceedings

Various legal proceedings, claims and investigations related to products, contracts, employment and other matters are pending against us.

In addition, we are subject to various U.S. government inquiries and investigations from which civil, criminal or administrative proceedings could result or have resulted in the past. Such proceedings involve or could involve claims by the government for fines, penalties, compensatory and treble damages, restitution and/or forfeitures. Under government regulations, a company, or one or more of its operating divisions or subdivisions, can also be suspended or debarred from government contracts, or lose its export privileges, based on the results of investigations. We believe, based upon current information, that the outcome of any such legal proceeding, claim, or government dispute and investigation will not have a material effect on our financial position, results of operations, or cash flows.

Note 21 – Segment Information

We operate in five principal segments: Commercial Airplanes; Boeing Military Aircraft (BMA), Network & Space Systems (N&SS), and Global Services & Support (GS&S), collectively Defense, Space & Security ; and Boeing Capital (BCC). All other activities fall within Unallocated items, eliminations and other. See page 54 for the Summary of Business Segment Data, which is an integral part of this note.

The Commercial Airplanes segment develops, produces and markets commercial jet aircraft and provides related support services, principally to the commercial airline industry worldwide.

Our BMA segment is engaged in the research, development, production and modification of manned and unmanned military aircraft and weapons systems for global strike, including fighter aircraft and missile systems; vertical lift including rotorcraft and tilt-rotor aircraft; mobility, surveillance and engagement, including battle management, airborne, anti-submarine, transport and tanker aircraft.

Our N&SS segment is engaged in the research, development, production and modification of the following products and related services: strategic defense and intelligence systems, including strategic missile and defense systems, command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR), cyber and information solutions, and intelligence systems; satellite systems, including government and commercial satellites and space exploration.

Our GS&S segment provides customers with mission readiness through total support solutions. Our global services business sustains aircraft and systems with a full spectrum of products and services through integrated logistics, including supply chain management and engineering support; maintenance,

modification and upgrades for aircraft; and training systems and government services, including pilot and maintenance training.

Our BCC segment facilitates, arranges, structures and provides selective financing solutions for our Boeing customers.

Unallocated items, eliminations and other include common internal services that support Boeing's global business operations, as well as technical and functional capabilities, including information technology, research and development, test and evaluation, technology strategy development, environmental remediation management and intellectual property management. It also includes intercompany guarantees provided to BCC and eliminations of certain sales between BCA, BCC and BDS.

In November 2016, we announced plans for the formation of Boeing Global Services (BGS), which will bring together certain Commercial Aviation Services businesses, currently included in the Commercial Airplanes segment, and certain BDS businesses (primarily those currently included in the GS&S segment). We expect Boeing Global Services to be operational during the second half of 2017. We will continue to report using the existing segment structure until BGS is operational and has discrete financial information that is being provided to the Chief Operating Decision Maker.

While our principal operations are in the United States, Canada and Australia, some key suppliers and subcontractors are located in Europe and Japan. Revenues, including foreign military sales, are reported by customer location and consisted of the following:

Years ended December 31,	2016	2015	2014
Asia, other than China	\$10,553	\$13,433	\$11,900
Europe	13,790	12,248	11,898
China	10,312	12,556	11,029
Middle East	13,297	10,846	9,243
Oceania	1,843	2,601	1,757
Canada	2,076	1,870	1,901
Africa	1,999	1,398	2,596
Latin America, Caribbean and other	1,936	1,875	2,596
Total non-U.S. revenues	55,806	56,827	52,920
United States	38,765	39,287	37,842
Total revenues	\$94,571	\$96,114	\$90,762

Revenues from the U.S. government (including foreign military sales through the U.S. government), primarily recorded at BDS, represented 23% , 27% and 30% of consolidated revenues for 2016 , 2015 and 2014 , respectively. Approximately 4% of operating assets were located outside the United States as of December 31, 2016 and 2015 . The information in the following tables is derived directly from the segments' internal financial reporting used for corporate management purposes.

Depreciation and Amortization

Years ended December 31,	2016	2015	2014
Commercial Airplanes	\$682	\$625	\$674
Defense, Space & Security:			
Boeing Military Aircraft	113	142	164
Network & Space Systems	106	106	114
Global Services & Support	73	80	75
Total Defense, Space & Security	292	328	353
Boeing Capital Corporation	83	87	97
Unallocated items, eliminations and other	853	793	782
Total	\$1,910	\$1,833	\$1,906

Capital Expenditures

Years ended December 31,	2016	2015	2014
Commercial Airplanes	\$993	\$889	\$698
Defense, Space & Security:			
Boeing Military Aircraft	161	128	175
Network & Space Systems	63	98	93
Global Services & Support	112	62	68
Total Defense, Space & Security	336	288	336
Unallocated items, eliminations and other	1,284	1,273	1,202
Total	\$2,613	\$2,450	\$2,236

Unallocated capital expenditures relate primarily to assets managed centrally on behalf of the five principal segments.

We recorded Earnings from operations associated with our cost and equity method investments of \$46 , \$64 and \$58 in our Commercial Airplanes segment and \$257 , \$210 and \$229 in BDS, primarily in our N&SS segment, for the years ended December 31, 2016 , 2015 and 2014 , respectively.

For segment reporting purposes, we record Commercial Airplanes segment revenues and cost of sales for airplanes transferred to other segments. Such transfers may include airplanes accounted for as operating leases and considered transferred to the BCC segment and airplanes transferred to the BDS segment for further modification prior to delivery to the customer. The revenues and cost of sales for these transfers are eliminated in the Unallocated items and eliminations caption. For segment reporting purposes, we record BDS revenues and cost of sales for the modification performed on airplanes received from Commercial Airplanes when the airplane is delivered to the customer or at the attainment of performance milestones.

Intersegment revenues, eliminated in Unallocated items, eliminations and other, are shown in the following table.

Years ended December 31,	2016	2015	2014
Commercial Airplanes	\$2,142	\$1,831	\$1,822
Boeing Capital	16	15	19
Total	\$2,158	\$1,846	\$1,841

Unallocated Items, Eliminations and other

Unallocated items, eliminations and other includes costs not attributable to business segments as well as intercompany profit eliminations. We generally allocate costs to business segments based on the U.S. federal cost accounting standards. Components of Unallocated items, eliminations and other are shown in the following table.

Years ended December 31,	2016	2015	2014
Share-based plans	(\$66)	(\$76)	(\$67)
Deferred compensation	(46)	(63)	(44)
Amortization of previously capitalized interest	(94)	(90)	(72)
Eliminations and other unallocated items	(527)	(511)	(593)
Sub-total	(733)	(740)	(776)
Pension	217	(421)	(1,469)
Postretirement	153	123	82
Pension and Postretirement	370	(298)	(1,387)
Total	(\$363)	(\$1,038)	(\$2,163)

Unallocated Pension and Other Postretirement Benefit Expense

Unallocated pension and other postretirement benefit expense represents the portion of pension and other postretirement benefit costs that are not recognized by business segments for segment reporting purposes. Pension costs, comprising Generally Accepted Accounting Principles in the United States of America (GAAP) service and prior service costs, are allocated to Commercial Airplanes. Pension costs are allocated to BDS using U.S. Government Cost Accounting Standards (CAS), which employ different actuarial assumptions and accounting conventions than GAAP . These costs are allocable to government contracts. Other postretirement benefit costs are allocated to business segments based on CAS , which is generally based on benefits paid.

Assets

Segment assets are summarized in the table below.

December 31,	2016	2015
Commercial Airplanes	\$55,527	\$57,253
Defense, Space & Security:		
Boeing Military Aircraft	6,698	6,793
Network & Space Systems	6,113	6,307
Global Services & Support	4,020	4,567
Total Defense, Space & Security	16,831	17,667
Boeing Capital	4,139	3,492
Unallocated items, eliminations and other	13,500	15,996
Total	\$89,997	\$94,408

Assets included in Unallocated items, eliminations and other primarily consist of Cash and cash equivalents, Short-term and other investments, Deferred tax assets, capitalized interest and assets held centrally as well as intercompany eliminations.

Note 22 – Quarterly Financial Data (Unaudited)

	2016				2015			
	4th	3rd	2nd	1st	4th	3rd	2nd	1st
Total revenues	\$23,286	\$23,898	\$24,755	\$22,632	\$23,573	\$25,849	\$24,543	\$22,149
Total costs and expenses	(19,464)	(19,904)	(22,325)	(19,097)	(20,642)	(21,600)	(21,350)	(18,496)
Earnings from operations	2,183	2,282	(419)	1,788	1,161	2,580	1,683	2,019
Net earnings/(loss)	1,631	2,279	(234)	1,219	1,026	1,704	1,110	1,336
Basic earnings per share	2.63	3.64	(0.37)	1.85	1.52	2.50	1.61	1.89
Diluted earnings per share	2.59	3.60	(0.37)	1.83	1.51	2.47	1.59	1.87
Cash dividends declared per share	2.51		2.18		2.00		1.82	
Common stock sales price per share:								
High	160.07	139.45	137.89	141.70	150.59	149.18	155.50	158.83
Low	130.74	123.96	122.35	102.10	128.56	115.14	138.44	126.18
Quarter end	155.68	131.74	129.87	126.94	144.59	130.95	138.72	150.08

Gross profit is calculated as Total revenues minus Total costs and expenses. Total costs and expenses includes Cost of products, Cost of services and Boeing Capital interest expense.

During the second quarter of 2016, first quarter of 2016 and fourth quarter of 2015, we recorded reach-forward losses of \$1,188 , \$70 and \$885 , respectively, on the 747 program.

During the second quarter of 2016, we determined that the fourth and fifth flight test aircraft for the 787 program are not commercially saleable, and we reclassified costs of \$1,235 associated with these aircraft from 787 program inventory to research and development expense.

During the fourth quarter of 2016, second quarter of 2016, first quarter of 2016, and second quarter of 2015, higher estimated costs to complete the KC-46A Tanker contract for the U.S. Air Force resulted in reach-forward losses of \$312 , \$573 , \$243 and \$835 , respectively.

During the third quarter of 2016, delays in completion of engineering and supply chain activities for the Commercial Crew program resulted in a charge of \$162 .

In the fourth quarter of 2015, we recorded an income tax benefit of \$235 related to the reinstatement of the research tax credit for 2015.

During the third quarter of 2016, we recorded an incremental tax benefit of \$440 that related to the application of a 2012 Federal Court of Claims decision. We also recorded a tax benefit of \$177 as a result of the 2011-2012 federal tax audit settlements.

We increased our quarterly dividend from \$0.91 to \$1.09 in December 2015 and to \$1.42 in December 2016.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
The Boeing Company
Chicago, Illinois

We have audited the accompanying consolidated statements of financial position of The Boeing Company and subsidiaries (the "Company") as of December 31, 2016 and 2015 , and the related consolidated statements of operations, comprehensive income, equity, and cash flows for each of the three years in the period ended December 31, 2016 . The financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of The Boeing Company and subsidiaries as of December 31, 2016 and 2015 , and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 , in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016 , based on the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 8, 2017 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ Deloitte & Touche LLP

Chicago, Illinois
February 8, 2017

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
The Boeing Company
Chicago, Illinois

We have audited the internal control over financial reporting of The Boeing Company and subsidiaries (the "Company") as of December 31, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2016 of the Company and our report dated February 8, 2017 expressed an unqualified opinion on those financial statements.

/s/ Deloitte & Touche LLP

Chicago, Illinois
February 8, 2017

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

None.

Item 9A. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures.

Our Chief Executive Officer and Chief Financial Officer have evaluated our disclosure controls and procedures as of December 31, 2016 and have concluded that these disclosure controls and procedures are effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and is accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

(b) Management's Report on Internal Control Over Financial Reporting.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f). Our management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation under the framework in Internal Control – Integrated Framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2016 .

Our internal control over financial reporting as of December 31, 2016 , has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is included in Item 8 of this report and is incorporated by reference herein.

(c) Changes in Internal Controls Over Financial Reporting.

There were no changes in our internal control over financial reporting that occurred during the fourth quarter of 2016 that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

Item 9B. Other Information

None.

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

Our executive officers and their ages as of February 1, 2017, are as follows:

Name	Age	Principal Occupation or Employment/Other Business Affiliations
Bertrand-Marc Allen	43	Senior Vice President, President of Boeing International since February 2015. Mr. Allen previously served as President of Boeing Capital Corporation from March 2014 to February 2015; Corporate Vice President, Boeing International and Chairman and President of Boeing (China) Co., Ltd. from March 2011 to March 2014; and Vice President, Global Law Affairs from May 2007 to March 2011.
Heidi B. Capozzi	47	Senior Vice President, Human Resources since March 2016. Ms. Capozzi previously served as Vice President of Leadership Development, Talent Management and Organization Effectiveness from April 2013 to March 2016; Director of Human Resources for the Airplane Programs division of Commercial Airplanes from April 2011 to April 2013; and Director of Human Resources for the Surveillance and Engagement division of Boeing Military Aircraft from May 2009 to April 2011.
Leanne G. Caret	50	Executive Vice President, President and Chief Executive Officer of Boeing Defense, Space & Security (BDS) since March 2016. Ms. Caret joined Boeing in 1988, and her previous positions include President of Global Services & Support from February 2015 to March 2016; Chief Financial Officer and Vice President, Finance, for BDS from March 2014 to February 2015; Vice President and General Manager, Vertical Lift from November 2012 to February 2014; and Vice President and Program Manager, Chinook from November 2009 to October 2012.
Theodore Colbert III	43	Chief Information Officer and Senior Vice President, Information & Analytics since April 2016. Mr. Colbert previously served as Chief Information Officer and Vice President of Information Technology from November 2013 to April 2016; Vice President of Information Technology Infrastructure from December 2011 to November 2013; and Vice President of IT Business Systems from September 2010 to December 2011.
Raymond L. Conner	61	Vice Chairman since November 2016. Mr. Conner joined Boeing in 1977, and his previous positions include Vice Chairman, President and Chief Executive Officer of Commercial Airplanes from December 2013 to November 2016; Executive Vice President, President and Chief Executive Officer of Commercial Airplanes from June 2012 to December 2013; Senior Vice President of Sales and Customer Support of Commercial Airplanes from August 2011 to June 2012; Vice President and General Manager, Supply Chain Management and Operations of Commercial Airplanes from December 2008 to August 2011; Vice President of Sales, Commercial Airplanes from December 2007 to December 2008; and Vice President and General Manager of the 777 Program. Mr. Conner serves on the board of Adient plc.

Name	Age	Principal Occupation or Employment/Other Business Affiliations
Stanley A. Deal	52	Executive Vice President, President and Chief Executive Officer, Boeing Global Services since November 2016. Mr. Deal joined Boeing in 1986, and his previous positions include Senior Vice President of Commercial Aviation Services from March 2014 to November 2016; Vice President and General Manager of Supply Chain Management and Operations for Commercial Airplanes from September 2011 to February 2014; Vice President of Asia Pacific Sales from December 2006 to January 2010; and Vice President of Supplier Management from February 2010 to August 2011.
Thomas J. Downey	52	Senior Vice President, Communications since January 2007. Mr. Downey joined Boeing in 1986, and his previous positions include Vice President, Corporate Communications; Vice President, Commercial Airplanes Communications; Corporate Vice President, Internal and Executive Communications; and General Manager of Communications and Community Relations for Military Aircraft and Missile Systems unit.
Scott A. Fancher	58	Senior Vice President, Program Management, Integration & Development Programs since April 2016. Mr. Fancher previously served as Senior Vice President and General Manager of Airplane Development from November 2012 to April 2016; Vice President and General Manager of the 777 and 777X programs from February 2012 to November 2012; and Vice President and General Manager of the 787 Dreamliner program from December 2008 to February 2012.
Gregory L. Hyslop	58	Chief Technology Officer, Senior Vice President, Boeing Engineering, Test & Technology since July 2016. Mr. Hyslop was named Senior Vice President, Boeing Engineering, Test & Technology in March 2016, and his previous positions include Vice President and General Manager of Boeing Research & Technology from February 2013 to March 2016 and Vice President and General Manager of Boeing Strategic Missile & Defense Systems from March 2009 to February 2013.
Timothy J. Keating	55	Senior Vice President, Government Operations since joining Boeing in June 2008. Mr. Keating served as Senior Vice President, Global Government Relations at Honeywell International Inc. from October 2002 to May 2008. Prior thereto, Mr. Keating was Chairman of the Board and Managing Partner of Timmons and Company (a Washington, D.C. lobbying firm).
J. Michael Luttig	62	Executive Vice President, General Counsel since April 2009. Mr. Luttig joined Boeing in May 2006 as Senior Vice President, General Counsel. From October 1991 to May 2006, he served on the United States Court of Appeals for the Fourth Circuit. Mr. Luttig previously served as Assistant Attorney General of the United States, Counselor to the Attorney General at the Department of Justice and Principal Deputy Assistant Attorney General at the Department of Justice and was associated with Davis Polk & Wardwell LLP. Mr. Luttig serves as Director, Franklin Templeton Mutual Funds.
Kevin G. McAllister	53	Executive Vice President, President and Chief Executive Officer, Boeing Commercial Airplanes since November 2016. Mr. McAllister served as President and Chief Executive Officer of GE Aviation Services from January 2014 to November 2016 and Vice President, Global Sales and Marketing of GE Aviation Services from June 2008 to January 2014.

Name	Age	Principal Occupation or Employment/Other Business Affiliations
Dennis A. Muilenburg	53	Chairman, President and Chief Executive Officer since March 2016. Mr. Muilenburg was named President and Chief Executive Officer in July 2015. He joined Boeing in 1985, and his previous positions include Vice Chairman, President and Chief Operating Officer from December 2013 to July 2015; Executive Vice President, President and Chief Executive Officer of BDS from September 2009 to December 2013; President of Global Services & Support from February 2008 to August 2009; Vice President and General Manager of Combat Systems from May 2006 to February 2008; and Vice President and Program Manager for Future Combat Systems. Mr. Muilenburg also serves on the board of Caterpillar Inc.
Diana L. Sands	51	Senior Vice President, Office of Internal Governance and Administration since March 2016. Ms. Sands previously served as Senior Vice President, Office of Internal Governance from April 2014 to March 2016; Vice President of Finance and Corporate Controller from February 2012 to April 2014 and Vice President of Investor Relations, Financial Planning & Analysis from February 2010 to February 2012. Prior to that, she held positions in Investor Relations, Financial Planning and in Corporate Treasury.
Patrick M. Shanahan	54	Senior Vice President, Supply Chain & Operations since April 2016. Mr. Shanahan's previous positions include Senior Vice President of Airplane Programs from December 2008 to April 2016; Vice President and General Manager of the 787 Dreamliner program from October 2007 to December 2008; and Vice President and General Manager of Boeing Missile Defense Systems from December 2004 to October 2007.
Gregory D. Smith	50	Chief Financial Officer, Executive Vice President, Corporate Development and Strategy since February 2015. Mr. Smith previously served as Executive Vice President, Chief Financial Officer from February 2012 to February 2015; Vice President of Finance and Corporate Controller from February 2010 to February 2012; and Vice President of Financial Planning & Analysis from June 2008 to February 2010. From August 2004 until June 2008, he served as Vice President of Global Investor Relations at Raytheon Company. Prior to that, he held a number of positions at Boeing including CFO, Shared Services Group; Controller, Shared Services Group; Senior Director, Internal Audit; and leadership roles in supply chain, factory operations and program management.

Information relating to our directors and nominees will be included under the caption "Election of Directors" in the 2017 Proxy Statement for our Annual Shareholders Meeting scheduled to be held on May 1, 2017 and is incorporated by reference herein. The information required by Items 405, 407(d)(4) and 407(d)(5) of Regulation S-K will be included under the captions "Stock Ownership Information – Section 16(a) Beneficial Ownership Reporting Compliance" and "Board Committees" in the 2017 Proxy Statement, and that information is incorporated by reference herein.

Codes of Ethics. We have adopted (1) The Boeing Company Code of Ethical Business Conduct for the Board of Directors; (2) The Boeing Company Code of Conduct for Finance Employees which is applicable to our Chief Executive Officer (CEO), Chief Financial Officer (CFO), Controller and all finance employees; and (3) The Boeing Code of Conduct that applies to all employees, including our CEO (collectively, the Codes of Conduct). The Codes of Conduct are posted on our website, www.boeing.com, and printed copies may be obtained, without charge, by contacting the Office of Internal Governance, The Boeing Company,

[Table of Contents](#)

100 N. Riverside Plaza, Chicago, IL 60606. We intend to disclose promptly on our website any amendments to, or waivers of, the Codes of Conduct covering our CEO, CFO and/or Controller.

No family relationships exist among any of the executive officers, directors or director nominees.

Item 11. Executive Compensation

The information required by Item 402 of Regulation S-K will be included under the captions “Compensation Discussion and Analysis,” “Compensation of Executive Officers,” and “Compensation of Directors” in the 2017 Proxy Statement, and that information is incorporated by reference herein. The information required by Item 407(e)(4) and 407(e)(5) of Regulation S-K will be included under the captions “Compensation Committee Interlocks and Insider Participation” and “Compensation Committee Report” in the 2017 Proxy Statement, and that information is incorporated by reference herein.

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

The information required by Item 403 of Regulation S-K will be included under the caption “Stock Ownership Information” in the 2017 Proxy Statement, and that information is incorporated by reference herein.

Equity Compensation Plan Information

We currently maintain two equity compensation plans that provide for the issuance of common stock to officers and other employees, directors and consultants. Each of these compensation plans was approved by our shareholders. The following table sets forth information regarding outstanding options and shares available for future issuance under these plans as of December 31, 2016 :

Plan Category	Number of shares to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding shares reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by shareholders			
Stock options	8,646,612	\$72.64	
Deferred compensation	2,543,172		
Other stock units ⁽¹⁾	6,385,586		
Equity compensation plans not approved by shareholders			
	None	None	None
Total ⁽²⁾	17,575,370	\$72.64	15,178,605

⁽¹⁾ Includes 3,493,022 shares issuable in respect of PBRSUs subject to the satisfaction of performance criteria and assumes payout at maximum levels.

⁽²⁾ Excludes the potential performance awards which the Compensation Committee has the discretion to pay in cash, stock or a combination of both after the three-year performance periods which end in 2016 , 2017 and 2018 .

For further information, see Note 15 to our Consolidated Financial Statements.

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

The information required by Item 404 of Regulation S-K will be included under the caption “Related Person Transactions” in the 2017 Proxy Statement, and that information is incorporated by reference herein.

The information required by Item 407(a) of Regulation S-K will be included under the caption “Director Independence” in the 2017 Proxy Statement, and that information is incorporated by reference herein.

Item 14. Principal Accounting Fees and Services

The information required by this Item will be included under the caption “Principal Accountant Fees and Services” in the 2017 Proxy Statement, and that information is incorporated by reference herein.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) List of documents filed as part of this report:

1. Financial Statements

Our consolidated financial statements are as set forth under Item 8 of this report on Form 10-K.

2. Financial Statement Schedules

All schedules are omitted because they are not applicable, not required, or the information is included in the consolidated financial statements.

3. Exhibits

(3) Articles of Incorporation and By-Laws.

- (i) Amended and Restated Certificate of Incorporation of The Boeing Company dated May 5, 2006 (Exhibit 3.1 to the Company’s Current Report on Form 8-K dated May 1, 2006).
- (ii) By-Laws of The Boeing Company, as amended and restated October 14, 2016 (Exhibit 3.2 to the Company’s Current Report on Form 8-K dated October 14, 2016).

(10)Material Contracts.

Bank Credit Agreements

- (i) 364-Day Credit Agreement, dated as of November 2, 2016, among The Boeing Company, the Lenders party thereto, Citigroup Global Markets Inc. and J.P. Morgan Bank N.A. as joint lead arrangers and joint book managers, JPMorgan Chase Bank, N.A. as syndication agent and Citibank, N.A. as administrative agent (Exhibit 10.1 to the Company’s Current Report on Form 8-K dated November 2, 2016).
- (ii) Five-Year Credit Agreement, dated as of November 10, 2011, among The Boeing Company, the Lenders party thereto, Citigroup Global Markets Inc. and J.P. Morgan Securities LLC as joint lead arrangers and joint book managers, JPMorgan Chase Bank, N.A. as syndication agent and Citibank, N.A. as administrative agent (Exhibit 10.2 to the Company’s Current Report on Form 8-K dated November 10, 2011).

- (iii) Amendment No. 1 dated as of October 9, 2014 to the Five-Year Credit Agreement, dated as of November 10, 2011, among The Boeing Company, the Lenders party thereto, Citigroup Global Markets Inc. and J.P. Morgan Securities LLC as joint lead arrangers and joint book managers, JPMorgan Chase Bank, N.A. as syndication agent and Citibank, N.A. as administrative agent (Exhibit 10.2 to the Company's Current Report on Form 8-K dated October 14, 2014).
- (iv) Amendment No. 2 dated as of November 4, 2015 to the Five-Year Credit Agreement, dated as of November 10, 2011, among The Boeing Company, the Lenders party thereto, Citigroup Global Markets Inc. and J.P. Morgan Securities LLC as joint lead arrangers and joint book managers, JPMorgan Chase Bank, N.A. as syndication agent and Citibank, N.A. as administrative agent (Exhibit 10.2 to the Company's Current Report on Form 8-K dated November 4, 2015).
- (v) Amendment No. 3 dated as of November 2, 2016 to the Five-Year Credit Agreement, dated as of November 10, 2011, among The Boeing Company, the Lenders party thereto, Citigroup Global Markets Inc. and JPMorgan Chase Bank, N.A. as joint lead arrangers and joint book managers, JPMorgan Chase Bank, N.A. as syndication agent and Citibank, N.A. as administrative agent (Exhibit 10.2 to the Company's Current Report on Form 8-K dated November 2, 2016).

Business Acquisition Agreements

- (vi) Joint Venture Master Agreement, dated as of May 2, 2005, by and among Lockheed Martin Corporation, The Boeing Company and United Launch Alliance, L.L.C. (Exhibit (10)(i) to the Company's Form 10-Q for the quarter ended June 30, 2005).
- (vii) Delta Inventory Supply Agreement, dated as of December 1, 2006, by and between United Launch Alliance, L.L.C. and The Boeing Company (Exhibit (10)(vi) to the Company's Form 10-K for the year ended December 31, 2006).

Management Contracts and Compensatory Plans

- (viii) Summary of Non-Employee Director Compensation (Exhibit 10 to the Company's Form 10-Q for the quarter ended September 30, 2016).
- (ix) Deferred Compensation Plan for Directors of The Boeing Company, as amended and restated effective January 1, 2008 (Exhibit 10.2 to the Company's Current Report on Form 8-K dated October 28, 2007).
- (x) Deferred Compensation Plan for Employees of The Boeing Company, as amended and restated on January 1, 2008 (Exhibit 10.1 to the Company's Current Report on Form 8-K dated October 28, 2007).
- (xi) Incentive Compensation Plan for Employees of The Boeing Company and Subsidiaries, as amended and restated effective October 31, 2016.
- (xii) The Boeing Company Elected Officer Annual Incentive Plan, as amended and restated effective October 31, 2016.
- (xiii) The Boeing Company 1997 Incentive Stock Plan, as amended effective May 1, 2000 and further amended effective January 1, 2008 (Exhibit 10.5 to the Company's Current Report on Form 8-K dated October 28, 2007).
- (xiv) Transition and Retirement Agreement dated June 22, 2015 (Exhibit 10.1 to the Company's Current Report on Form 8-K dated June 22, 2015).
- (xv) Supplemental Pension Agreement between The Boeing Company and J. Michael Luttig dated January 25, 2007, as amended on November 14, 2007 (Exhibit (10)(xxx) to the Company's Form 10-K for the year ended December 31, 2007).

- (xvi) Supplemental Benefit Plan for Employees of The Boeing Company, as amended and restated effective January 1, 2016.
- (xvii) Supplemental Executive Retirement Plan for Employees of The Boeing Company, as amended and restated as of January 1, 2016 (Exhibit (10)(xvi) to the Company's Form 10-K for the year ended December 31, 2015).
- (xviii) The Boeing Company Executive Layoff Benefits Plan, as amended and restated effective January 1, 2017.
- (xix) The Boeing Company 2003 Incentive Stock Plan.
 - (a) Plan, as amended and restated effective October 31, 2016.
 - (b) Form of Non-Qualified Stock Option Grant Notice of Terms (Exhibit (10)(xvii)(b) to the Company's Form 10-K for the year ended December 31, 2010).
 - (c) Form of Notice of Terms of Performance-Based Restricted Stock Units (Exhibit (10)(xviii)(c) to the Company's Form 10-K for the year ended December 31, 2016).
 - (d) Form of Performance Award Notice (Exhibit (10)(xviii)(d) to the Company's Form 10-K for the year ended December 31, 2016).
 - (e) Form of Notice of Terms of Restricted Stock Units (Exhibit (10)(xviii)(e) to the Company's Form 10-K for the year ended December 31, 2016).
 - (f) Form of Notice of Terms of Supplemental Restricted Stock Units (Exhibit 10.1 to the Company's Current Report on Form 8-K dated February 18, 2016).
 - (g) Form of Notice of Terms of Restricted Stock Units dated February 24, 2014 (Exhibit 10.1 to the Company's Current Report on Form 8-K dated February 24, 2014).
 - (h) Form of Notice of Terms of Restricted Stock Units dated February 23, 2015. (Exhibit (10)(xviii)(i) to the Company's Form 10-K for the year ended December 31, 2015).
 - (i) Notice of Terms of Restricted Stock Units (Exhibit 10.2 to the Company's Current Report on Form 8-K dated June 22, 2015).
- (12) Computation of Ratio of Earnings to Fixed Charges.
- (14) Codes of Ethics.
 - (i) The Boeing Company Code of Ethical Business Conduct for Members of the Board of Directors (www.boeing.com/resources/boeingdotcom/company/general_info/pdf/conduct_for_directors.pdf).
 - (ii) The Boeing Company Code of Conduct for Finance Employees (www.boeing.com/resources/boeingdotcom/company/general_info/pdf/code-of-conduct-for-finance.pdf).
 - (iii) The Boeing Company Code of Conduct (www.boeing.com/resources/boeingdotcom/principles/ethics_and_compliance/pdf/english.pdf).
- (21) List of Company Subsidiaries.
- (23) Consent of Independent Registered Public Accounting Firm.

[Table of Contents](#)

- (31) Section 302 Certifications.
 - (i) Certification of Chief Executive Officer pursuant to Section 302 of Sarbanes-Oxley Act of 2002.
 - (ii) Certification of Chief Financial Officer pursuant to Section 302 of Sarbanes-Oxley Act of 2002.
- (32) Section 906 Certifications.
 - (i) Certification of Chief Executive Officer pursuant to Section 906 of Sarbanes-Oxley Act of 2002.
 - (ii) Certification of Chief Financial Officer pursuant to Section 906 of Sarbanes-Oxley Act of 2002.
- (99) Additional Exhibits.
 - 1 Commercial Program Method of Accounting (Exhibit (99)(i) to the 1997 Form 10-K).
- (101) Interactive Data Files.
 - (101.INS) XBRL Instance Document
 - (101.SCH) XBRL Taxonomy Extension Schema Document
 - (101.CAL) XBRL Taxonomy Extension Calculation Linkbase Document
 - (101.DEF) XBRL Taxonomy Extension Definition Linkbase Document
 - (101.LAB) XBRL Taxonomy Extension Label Linkbase Document
 - (101.PRE) XBRL Taxonomy Extension Presentation Linkbase Document

In accordance with Item 601(b)(4)(iii)(A) of Regulation S-K, copies of certain instruments defining the rights of holders of long-term debt of the Company are not filed herewith. Pursuant to this regulation, we hereby agree to furnish a copy of any such instrument to the SEC upon request.

Signatures

Pursuant to the requirements of Section 13 of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 8, 2017 .

THE BOEING COMPANY

(Registrant)

/s/ Robert E. Verbeck

By:

Robert E. Verbeck – Senior Vice President, Finance and Corporate
Controller

[Table of Contents](#)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on February 8, 2017 .

/s/ Dennis A. Muilenburg

Dennis A. Muilenburg – Chairman, President and Chief Executive Officer
(Principal Executive Officer)

/s/ Lynn J. Good

Lynn J. Good – Director

/s/ Gregory D. Smith

Gregory D. Smith – Chief Financial Officer and Executive Vice President, Corporate Development and Strategy
(Principal Financial Officer)

/s/ Lawrence W. Kellner

Lawrence W. Kellner – Director

/s/ Robert E. Verbeck

Robert E. Verbeck – Senior Vice President, Finance and Corporate Controller
(Principal Accounting Officer)

/s/ Edward M. Liddy

Edward M. Liddy – Director

/s/ Robert A. Bradway

Robert A. Bradway – Director

/s/ Susan C. Schwab

Susan C. Schwab – Director

/s/ David L. Calhoun

David L. Calhoun – Director

/s/ Randall L. Stephenson

Randall L. Stephenson – Director

/s/ Arthur D. Collins, Jr.

Arthur D. Collins, Jr. – Director

/s/ Ronald A. Williams

Ronald A. Williams – Director

/s/ Kenneth M. Duberstein

Kenneth M. Duberstein – Director

/s/ Mike S. Zafirovski

Mike S. Zafirovski – Director

/s/ Edmund P. Giambastiani, Jr.

Edmund P. Giambastiani, Jr. – Director

**INCENTIVE COMPENSATION PLAN FOR EMPLOYEES
OF THE BOEING COMPANY AND SUBSIDIARIES
(As Amended and Restated October 31, 2016)**

1. Definitions

As used in this plan (the “Plan”), the following terms have the meanings set forth below:

“Board of Directors” means the Board of Directors of The Boeing Company;

“Code” means the Internal Revenue Code of 1986, as amended.

“Company” means The Boeing Company;

“Committee” means the Compensation Committee of the Board of Directors;

“Section 162(m)” means Code Section 162(m), including any proposed and final regulations and other guidance issued thereunder by the Department of the Treasury and/or the Internal Revenue Service.

“Section 409A” means Code Section 409A, including any proposed and final regulations and other guidance issued thereunder by the Department of the Treasury and/or the Internal Revenue Service.

“Subsidiary” means any corporation or association more than 50% of the voting securities of which are owned directly or indirectly by the Company or by one or more of its other Subsidiaries and the accounts of which are customarily consolidated with those of the Company for the purpose of reporting to stockholders.

2. Committee

The Committee shall have full power and authority to administer the Plan, and to construe and interpret its terms and provisions. Decisions of the Committee shall be final and binding upon all parties.

3. Eligibility

3.1 Certain Employees. Officers and employees of the Company and its Subsidiaries who hold executive, administrative, managerial, supervisory, technical or other key positions shall be eligible for participation under the Plan, and participants shall for the most part be selected from among members of this group. None of the members of the Committee and no director of the Company or of a Subsidiary who is not also an officer or employee of the Company or of a Subsidiary shall be eligible for participation under the Plan.

3.2 Special Contributors; Former Employees. Awards may also be made under the Plan to employees not holding executive, administrative, supervisory, technical or other key positions who have, nevertheless, made a substantial contribution to the success of the Company and its Subsidiaries. In addition, a former employee who has either

(a) retired under the employee retirement plan of the Company or of a Subsidiary or

(b) left the service of the Company or of a Subsidiary to enter the armed services or for such other reasons as may be determined by the Committee

and who would have been eligible for an award but for such retirement or termination of service, may be eligible for an award for the year in which such employee retires or so leaves the service of

the Company or of a Subsidiary. In the case of a former employee who would have been eligible for an award but for death, an award may be granted to the surviving spouse or children or to the estate of such former employee, as the Committee may determine in its sole discretion.

3.3 Covered Employees . In no event shall any individual who is a “covered employee” (as defined in Section 162(m)) be eligible to receive an award under the Plan that is intended to meet the qualification requirements of Section 162(m).

4. Making Awards

4.1 Committee Authority. The Committee shall make awards, subject to the limitations herein, to such individuals within the eligible group and in such amounts and at such times as, in the Committee’s judgment, shall best serve the interest of the Company and its Subsidiaries at that time, taking into account each individual’s job performance and contributions to the success of the Company and its Subsidiaries.

Except as provided in Section 4.2, the Committee shall have complete discretion in determining to whom awards under the Plan shall be made; provided, however, in making awards the Committee shall request and consider the recommendations of the Chief Executive Officer of the Company and others whom it may designate.

4.2 Delegation of Award-Making Authority and Award Recommendations. The Committee may, at such time or times as it may elect, authorize the Chief Executive Officer of the Company who in turn may authorize other executives of the Company to make additional awards subject to the limitations herein provided, in amounts not exceeding an aggregate amount and under conditions determined by the Committee. In making recommendations to the Committee and in making awards authorized by the Committee, the Chief Executive Officer of the Company shall request and consider the recommendations of other officers and supervisory employees of the Company and its Subsidiaries.

4.3 Forms of Awards. Awards under this Plan will be made entirely in cash.

4.4 Boeing Stock Units . Boeing Stock Units granted under the Plan prior to the May 1, 2006 shall continue to be subject to the provisions of the Plan as in effect immediately prior to such date.

4.5 Limits on Awards. Unless approved by two-thirds of the members of the Board of Directors, no participant shall receive an award under the Plan in any one calendar year that has a maximum target of more than two (2) times the participant’s base salary for the year for which the award is made, and a maximum payout of more than two (2) times the target established by the Committee for the year for which the award is made.

5. Distribution of Awards

5.1 Terms; Timing. Distribution of awards shall be governed by the terms and conditions applicable to such awards, as determined by the Committee or its delegate. Notwithstanding the foregoing, with respect to any award intended to be exempt from the requirements of Section 409A which is to be paid out when vested and qualify for the short-term deferral exemption to Section 409A, such payment shall be made as soon as administratively feasible after the award became vested, but in no event shall such payment be made later than 2-1/2 months after the end of the calendar year in which the award became vested unless (i) deferred pursuant to Section 5.2 or (ii) otherwise permitted under the exemption provisions of Section 409A.

- 5.2. Deferred Payment** . Notwithstanding the provisions of Section 5.1, the Committee may permit or require a participant to defer receipt of the payment of an award to the extent provided under any deferred compensation plan of the Company or pursuant to the terms of an employment agreement, either of which satisfies the requirements for exemption from or complies with Section 409A.
- 5.3 Deductions.** The Company shall deduct from the payment of each award any withholdings required by law; and the Company may deduct any amounts due from the recipient to the Company or a Subsidiary.
- 5.4 Notice; Distribution Date.** The Committee or its delegates shall advise participants of their awards under the Plan, and shall fix the distribution date or dates for such awards. Awards shall be paid on the distribution date or as soon thereafter as reasonably possible.
- 6. Repeal; Amendments.** The Plan and any and all provisions hereof may be repealed or amended by the affirmative vote of a majority of the Board of Directors at any meeting if the notice of such meetings sets forth the form of the proposal for such repeal or amendment or a summary thereof. No repeal or amendment of the Plan shall operate to annul or modify any award previously made under the Plan.
- 7. Nonassignability.** No awards authorized or made pursuant to the Plan shall be subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, charge, execution, attachment, garnishment or any other legal process, and any attempt to subject an award to any of the foregoing shall be void.
- 8. Compliance with Section 409A.** Notwithstanding the provisions of Section 5.2 to the contrary, it is the Company's intention that any and all compensation payable under the Plan shall satisfy the requirements for exemption under Section 409A, and all terms and provisions shall be interpreted to satisfy such requirements.
- 9. Clawbacks.** Awards under the Plan are subject to the Clawback Policy as adopted by the Board of Directors and as amended from time to time. In addition, subject to applicable local law, awards under the Plan with respect to performance years 2017 or later shall be subject to clawback and forfeiture, in the event a participant or former Participant engages in any of the following conduct, as determined by the Company or its delegate in its sole discretion, prior to the second anniversary of the later of the vesting or receipt of payment of the award: the participant (i) is convicted of a felony involving theft, fraud, embezzlement, or other similar unlawful acts against the Company or against the Company's interests; (ii) directly or indirectly engages in competition with any significant aspect of Company business; (iii) induces or attempts to induce, directly or indirectly, any of the Company's employees, representatives or consultants to terminate, discontinue or cease working with or for the Company, or to breach any contract with the Company, in order to work with or for, or enter into a contract with, the participant or any third party; (iv) disparages the Company, its products or employees; or (v) uses or discloses Company proprietary or confidential information. Nothing in this Section 9 will apply to legally protected communications to government agencies or statements made in the course of sworn testimony in administrative, judicial or arbitral proceedings.
- 10. No Individual Rights.** No individual shall have any claim to be granted any award under the Plan, and the Company has no obligation for uniformity of treatment of participants under the Plan. Furthermore, nothing in the Plan or any award granted under the Plan shall be deemed to constitute an employment contract or confer or be deemed to confer on any participant any right to continue in the employ of, or to continue any other relationship with, the Company or any
-

Subsidiary or limit in any way the right of the Company or any Subsidiary to terminate a participant's employment or other relationship at any time, with or without cause.

- 11. No Trust or Fund** . The Plan is intended to constitute an "unfunded" plan. Nothing contained herein shall require the Company to segregate any monies or other property or shares of Common Stock, or to create any trusts, or make any special deposits for any immediate or deferred amounts payable to any participant, and no participant shall have any rights that are greater than those of a general unsecured creditor of the Company.
- 12. Successors** . All obligations of the Company under the Plan with respect to awards shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all the business and/or assets of the Company.
- 13. Severability** . If any provision of the Plan or any award is determined to be invalid, illegal or unenforceable in any jurisdiction, or as to any person, or would disqualify the Plan or any award under any law deemed applicable by the Committee, such provision shall be construed or deemed amended to conform to applicable laws, or, if it cannot be so construed or deemed amended without, in the Committee's determination, materially altering the intent of the Plan or the award, such provision shall be stricken as to such jurisdiction, person or award, and the remainder of the Plan and any such award shall remain in full force and effect.

The Boeing Company Elected Officer Annual Incentive Plan
(As Amended and Restated October 31, 2016)

The Board of Directors of The Boeing Company (the “Company”) has adopted this Elected Officer Annual Incentive Plan (the “Plan”).

1. PURPOSE

The purpose of the Plan is two-fold: first, to enhance the ability of the Company and its affiliates to attract, motivate and retain executives and thereby promote the sustained progress, growth and profitability of the Company; and second, to obtain for federal income tax purposes the deductibility of bonus awards made under the Plan. Accordingly, the bonus awards are intended to constitute “qualified performance-based compensation” within the meaning of Section 162(m) of the Internal Revenue Code.

2. DEFINITIONS

“ **Adjusted Operating Cash Flow** ” means the net cash provided by operating activities of the Company as reported in the Company’s consolidated statement of cash flows included in its Annual Report on Form 10-K, adjusted to eliminate the effect on operating cash flows of net customer financing cash flows, as reported in the Company’s consolidated statement of cash flows included in its Annual Report on Form 10-K.

“ **Award** ” means the amount granted to a Participant by the Committee for a Performance Period.

“ **Board** ” means the Board of Directors of the Company.

“ **Code** ” means the Internal Revenue Code of 1986, as amended.

“ **Committee** ” means the Compensation Committee of the Board, which shall be comprised of at least three members of the Board who are “outside directors” within the meaning of Section 162(m).

“ **Exchange Act** ” means the Securities Exchange Act of 1934, as amended.

“ **Officer** ” means any elected “officer” of the Company as the term “officer” is defined for purposes of Section 16(a) of the Exchange Act.

“ **Participant** ” means, for each Performance Period, each Officer who is a “covered employee” (as defined in Section 162(m)) for that Performance Period, unless otherwise determined by the Committee in its sole discretion.

“ **Performance Period** ” means the period with respect to which the Awards are to be measured. Each Performance Period shall consist of one fiscal year of the Company or any shorter period designated by the Committee with respect to which an Award may be granted.

“ **Plan** ” means The Boeing Company Elected Officer Annual Incentive Plan, as amended from time to time.

“ **Related Company** ” means any corporation in which the Company owns, directly or indirectly, at least 50% of the total combined voting power of all classes of stock, or any other entity (including, but not

limited to, partnerships and joint ventures) in which the Company owns, directly or indirectly, at least 50% of the combined equity thereof.

“ **Section 162(m)** ” means Code Section 162(m), including any proposed and final regulations and other guidance issued thereunder by the Department of the Treasury and/or the Internal Revenue Service.

“ **Section 409A** ” means Code Section 409A, including any proposed and final regulations and other guidance issued thereunder by the Department of the Treasury and/or the Internal Revenue Service.

“ **Stock Plans** ” means The Boeing Company 2003 Incentive Stock Plan and any successor stock plans adopted or assumed by the Company.

3. ADMINISTRATION

The Plan shall be administered by the Committee. Except for the terms and conditions explicitly set forth in the Plan, the Committee shall have full power and exclusive authority, subject to such orders or resolutions not inconsistent with the provisions of the Plan as may from time to time be adopted by the Board, to (a) select Participants; (b) determine the maximum Awards and the amounts of any Awards; (c) determine the terms and conditions of any Awards granted under the Plan; (d) approve the forms of agreements, if any, for use under the Plan; (e) determine whether, to what extent and under what circumstances Awards may be settled in cash, shares of Common Stock or other property or canceled or suspended; (f) determine whether, to what extent and under what circumstances cash, shares of Common Stock, other property and other amounts payable with respect to an Award shall be deferred either automatically or at the election of the Participant; (g) interpret and administer the Plan and any instrument or agreement entered into under the Plan; (h) establish such rules and regulations and appoint such agents as it shall deem appropriate for the proper administration of the Plan; (i) delegate ministerial duties to such of the Company’s officers as it so determines; and (j) make any other determination and take any other action that the Committee deems necessary or desirable for administration of the Plan. Decisions of the Committee shall be final, conclusive and binding on all persons, including the Company, any Participant, any shareholder and any Officer, former Officer and their respective successors and assigns.

4. PERFORMANCE GOAL; MAXIMUM AWARDS

The performance goal for a Performance Period shall require positive Adjusted Operating Cash Flow. The maximum Award for an individual Participant for a Performance Period shall not exceed (a) 0.40% of the Adjusted Operating Cash Flow for the specific Performance Period for which the Award is granted for a Participant who is the Company’s Chief Executive Officer and (b) 0.15% of the Adjusted Operating Cash Flow for the specific Performance Period for which the Award is granted for any other Participant. The Committee may decrease, but shall not increase, such maximum Award pursuant to Section 5.

5. COMMITTEE CERTIFICATION

After completion of each Performance Period, the Committee shall determine, in accordance with the terms of Section 4 and Company and individual performance and competitive pay levels, the amounts to be awarded to each Participant under the Plan for the Performance Period. The Committee’s determinations shall be final and binding on the Company and all Participants, and their respective successors and beneficiaries. These determinations must be certified in writing before Awards for such period are paid, which requirement may be satisfied by approved minutes of the Committee meeting or

such other document prepared by the secretary of the meeting. The Committee shall have the discretion to pay less, but shall not have discretion to pay more, than the maximum Award specified under Section 4.

6. PAYMENT OF AWARDS

(a) Form and Timing. As soon as administratively feasible after the certification pursuant to Section 5, each Participant will receive payment (i) in cash, (ii) in an award of stock, restricted stock rights, stock options, other stock-based or stock-denominated units granted under the Stock Plans, or (iii) in any combination thereof as determined by the Committee in its sole discretion. In no event shall the payments or awards made under this Section 6(a) that are intended to be exempt from the requirements of Section 409A be made later than 2-1/2 months after the end of the calendar year in which the award became vested unless (i) deferred pursuant to Section 6(b) or (ii) otherwise permitted under the exemption provisions of Section 409A.

(b) Deferral Opportunity. Notwithstanding the provisions of Section 6(a), the Committee may permit or require a Participant to defer receipt of the payment of an Award to the extent provided under any deferred compensation plan of the Company or pursuant to the terms of an employment agreement, either of which satisfies the requirements for exemption from or complies with Section 409A.

7. AMENDMENTS

The Board may amend the Plan at any time in accordance with applicable law; provided, however, that to the extent it would cause the Plan to fail to constitute “qualified performance-based compensation” under Section 162(m) with respect to any Participant, the Committee shall not have the power to change the material terms of the performance goals unless (a) the modified performance goals are established by the Committee no later than the deadline established under Section 162(m) and (b) no Awards are paid under the modified performance goals until after the material terms of the modified performance goals are disclosed to and approved by the Company’s shareholders to the extent required by Section 162(m). No amendment that adversely affects a Participant’s right to or interest in an Award granted by the Committee prior to the date of the amendment shall be effective unless the Participant agrees to the amendment in writing.

8. TERMINATION

The Board may terminate this Plan at any time and for any reason in accordance with applicable law. In no event shall the termination of the Plan adversely affect the rights of any Participant to deferred amounts previously awarded such Participant, plus any earnings thereon. Participants shall be provided with written notice of the Plan’s termination as soon as practicable following such termination.

9. GENERAL PROVISIONS

(a) Clawbacks . All Awards under the Plan shall be subject to the Clawback Policy as adopted by the Board and as amended from time to time. In addition, Awards under the Plan with respect to performance years 2017 or later shall be subject to clawback and forfeiture, in the event a Participant or former Participant engages in any of the following conduct, as determined by the Company or its delegate in its sole discretion, prior to the second anniversary of the later of the vesting or receipt of payment of the Award: the Participant (i) is convicted of a felony involving theft, fraud, embezzlement, or other similar unlawful acts against the Company or against the Company’s interests; (ii) directly or indirectly engages in competition with any significant aspect of Company business; (iii) induces or attempts to induce,

directly or indirectly, any of the Company's employees, representatives or consultants to terminate, discontinue or cease working with or for the Company, or to breach any contract with the Company, in order to work with or for, or enter into a contract with, the Participant or any third party; (iv) disparages the Company, its products or employees; or (v) uses or discloses Company proprietary or confidential information. Nothing in this Section 9(a) will apply to legally protected communications to government agencies or statements made in the course of sworn testimony in administrative, judicial or arbitral proceedings.

(b) No Individual Rights. No individual or Participant shall have any claim to be granted any Award under the Plan, and the Company has no obligation for uniformity of treatment of Participants under the Plan.

Furthermore, nothing in the Plan or any Award granted under the Plan shall be deemed to constitute an employment contract or confer or be deemed to confer on any Participant any right to continue in the employ of, or to continue any other relationship with, the Company or any Related Company or limit in any way the right of the Company or any Related Company to terminate a Participant's employment or other relationship at any time, with or without cause.

(c) No Rights as a Shareholder. Unless otherwise provided by the Committee or in the instrument evidencing the Award or in a written employment or services agreement, no Award shall entitle the Participant to any dividend, voting or other right of a shareholder.

(d) Tax Withholding. The Company shall have the right to withhold from the payment of any Award under the Plan any federal, state or local taxes in accordance with applicable law.

(e) Other Plans. Nothing contained in the Plan shall prevent the Company or any Related Company from making awards or payments to a Participant under any other incentive plan or arrangement, whether generally or specifically applicable to such Participant, including any award or payment that does not qualify as performance-based compensation under Section 162(m).

(f) Indemnification. Each person who is or shall have been a member of the Board or the Committee shall be indemnified and held harmless by the Company against and from any loss, cost, liability or expense that may be imposed upon or reasonably incurred by him or her in connection with or resulting from any claim, action, suit or proceeding to which he or she may be a party or in which he or she may be involved by reason of any action taken or failure to act under the Plan and against and from any and all amounts paid by him or her in settlement thereof, with the Company's approval, or paid by him or her in satisfaction of any judgment in any such claim, action, suit or proceeding against him or her; provided, however, that he or she shall give the Company an opportunity, at its own expense, to handle and defend the same before he or she undertakes to handle and defend it on his or her own behalf, unless such loss, cost, liability or expense is a result of his or her own willful misconduct or except as expressly provided by statute.

The foregoing right of indemnification shall not be exclusive of any other rights of indemnification to which such persons may be entitled under the Company's certificate of incorporation or by-laws, as a matter of law, or otherwise, or of any power that the Company may have to indemnify them or hold them harmless.

(g) Compliance With Section 409A. Notwithstanding the provisions of Section 6(b) to the contrary, it is the Company's intention that any and all compensation payable under the Plan shall satisfy the requirements for exemption under Section 409A, and all terms and provisions shall be interpreted to satisfy such requirements.

(h) No Trust or Fund. The Plan is intended to constitute an "unfunded" plan. Nothing contained herein shall require the Company to segregate any monies or other property, or shares of common stock of the Company, or to create any trusts, or to make any special deposits for any immediate or deferred amounts payable to any Participant, and no Participant shall have any rights that are greater than those of a general unsecured creditor of the Company.

(i) Successors. All obligations of the Company under the Plan with respect to Awards shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all the business and/or assets of the Company.

(j) Severability. If any provision of the Plan or any Award is determined to be invalid, illegal or unenforceable in any jurisdiction, or as to any person, or would disqualify the Plan or any Award under any law deemed applicable by the Committee, such provision shall be construed or deemed amended to conform to applicable laws, or, if it cannot be so construed or deemed amended without, in the Committee's determination, materially altering the intent of the Plan or the Award, such provision shall be stricken as to such jurisdiction, person or Award, and the remainder of the Plan and any such Award shall remain in full force and effect.

(k) Choice of Law. The Plan, all Awards granted under the Plan and all determinations made and actions taken pursuant to the Plan, to the extent not otherwise governed by the laws of the United States, shall be governed by the laws of the State of Illinois without giving effect to principles of conflicts of law.

10. RESTATEMENT EFFECTIVE DATE

The Plan is amended and restated effective October 31, 2016.

**SUPPLEMENTAL BENEFIT PLAN
FOR EMPLOYEES OF
THE BOEING COMPANY**

**AS AMENDED AND RESTATED ON OCTOBER 30, 2016
EFFECTIVE JANUARY 1, 2016**

TABLE OF CONTENTS

Article I Introduction	1
Article II Definitions	2
2.1 Account	2
2.2 Affiliate or Subsidiary	2
2.3 Authorized Period of Absence	2
2.4 Base Salary	2
2.5 Beneficiary	2
2.6 BCERP	2
2.7 Board of Directors	2
2.8 BSS Plan	2
2.9 Code	2
2.10 Committee	3
2.11 Company	3
2.12 Company Matching Contribution	3
2.13 Compensation	3
2.14 Contribution Credit	3
2.15 DC SERP Benefit	3
2.16 Deferral Contribution	3
2.17 Deferral Election	3
2.18 Deferred Compensation Plan	3
2.19 E-Series Payroll	4
2.20 Earnings Credits	4
2.21 Eligible Employee	4
2.22 Employee	4
2.23 Executive SBP+ Company Contribution	4
2.24 Executive Incentive Pay	4
2.25 FSP	5
2.26 Layoff Period	5
2.27 Participant	5
2.28 Plan	5
2.29 Plan Year	5
2.30 PVP	5
2.31 Restoration Benefit	5
2.32 SBP+ Company Contribution	5
2.33 Separation from Service	5
2.34 SERP	6
2.35 Service	6
2.36 Specified Employee	6
2.37 Unforeseeable Emergency	6
2.38 VIP	6
Article III Restoration Benefit Eligibility and Benefits	7
3.1 Restoration Benefit Eligibility	7
3.2 Restoration Benefit Participation	8
3.3 Deferral Contributions	9
3.4 Company Matching Contributions	9

3.5	SBP+ Company Contributions	9
3.6	Vesting	10
3.7	Cancellation of Deferral Election Due to Unforeseeable Emergency	10
Article IV Executive SBP+ Company Contribution Eligibility and Benefits		11
4.1	Executive SBP+ Company Contribution Eligibility	11
4.2	Executive SBP+ Company Contribution Participation	11
4.3	Executive SBP+ Company Contribution Benefits	11
4.4	Executive SBP+ Company Contribution Vesting	11
4.5	Executive SBP+ Company Contribution Forfeiture Rules	12
Article V DC SERP Eligibility and Benefits		14
5.1	DC SERP Eligibility	14
5.2	DC SERP Participation	14
5.3	DC SERP Benefits	14
5.4	DC SERP Vesting	17
5.5	DC SERP Forfeiture Rules	20
Article VI Distributions		22
6.1	Form and Timing of Distribution	22
6.2	Death Benefits	25
6.3	Rehires and Authorized Periods of Absence/Reduced Level of Services	26
Article VII Accounts		29
7.1	Participant Accounts	29
7.2	Earnings Credits	29
7.3	Investment Election Changes and Restrictions	30
7.4	Missing Participants and Improper Credits	31
Article VIII Administration		32
8.1	Plan Administration	32
8.2	Claims Procedure	32
Article IX Amendment and Termination		33
Article X Miscellaneous		34
10.1	No Employment Rights	34
10.2	Anti-Assignment	34
10.3	Unfunded Status of Plan	34
10.4	Delays in Payment	34
10.5	Involuntary Inclusion in Income	34
10.6	Compliance with Code Section 409A	34
10.7	Construction	35
10.8	Legal Action	35
APPENDIX A Plan Provisions Prior To January 1, 1999		A-1
A1.1	Eligibility and Benefits for FSP Participants	A-1
APPENDIX B List of Excluded Entities		B-1

ARTICLE I
Introduction

The Supplemental Benefit Plan for Employees of The Boeing Company (Plan) was originally established effective January 1, 1978, by The Boeing Company. The Plan was amended and restated effective January 1, 2008, to comply with section 409A of the Internal Revenue Code of 1986, as amended (Code). The Plan was subsequently amended and restated as of January 1, 2009, for the purpose of expanding the Restoration Benefit, and for the purpose of adding an Executive SBP+ Company Contribution and a DC SERP benefit. The Plan is again being amended and restated on October [], effective as of January 1, 2016, for the purpose of making clarifying changes to the Plan, eliminating certain provisions that are no longer applicable, and adding a new Appendix B to the Plan to list the entities whose employees are excluded from Plan participation.

The Plan provides three separate benefits:

- (i) the Restoration Benefit, the purpose of which is to restore the benefits of certain employees under The Boeing Company Voluntary Investment Plan, to the extent that these qualified plan benefits are limited by sections 415 and 401(a)(17) of the Code;
- (ii) the Executive SBP+ Company Contribution, the purpose of which is to provide an additional contribution to this Plan, equal to a percentage of the annual incentive plan payments for a select group of management or highly compensated employees, in lieu of a portion of the VIP+ Company Contribution under the VIP; and
- (iii) the DC SERP Benefit, the purpose of which is to provide a supplemental retirement benefit for a select group of management or highly compensated employees at level E-1 through E-3 who are hired or rehired on or after January 1, 2009, and for a select group of management and highly compensated employees who were hired or rehired before January 1, 2009.

For periods prior to January 1, 1999, the Plan also restored participants' benefits under The Boeing Company Employee Retirement Plan and The Boeing Company Employee Financial Security Plan, to the extent these benefits were limited by sections 415 and 401(a)(17) of the Code. For the period January 1, 1987 through May 31, 1987, the Plan also restored benefits reduced by the limitation on elective deferrals imposed by section 402(g)(1) of the Code.

It is intended that the Plan shall be an excess benefit plan as defined in section 3(36) of the Employee Retirement Income Security Act of 1974, as amended (ERISA), to the extent benefits are paid in excess of the limits imposed by section 415 of the Code. To the extent any part of the Plan is not an excess benefit plan, it is intended that the Plan is an unfunded plan maintained primarily for the purpose of providing deferred compensation to a select group of management or highly compensated employees under sections 201(2), 301(a)(3), and 401(a)(1) of ERISA.

ARTICLE II
Definitions

2.1 Account

“Account” means the recordkeeping account established for each Participant in the Plan, for purposes of accounting for Restoration Benefits (Deferral Contributions, Company Matching Contributions, and SBP+ Company Contributions), Executive SBP+ Company Contributions, DC SERP Benefits, and the Earnings Credits thereon.

2.2 Affiliate or Subsidiary

“Affiliate or Subsidiary” means a member of a controlled group of corporations (as defined in Code section 1563(a), determined without regard to Code sections 1563(a)(4) and (e)(3)(c)), a group of trades or businesses (whether incorporated or not) which are under common control within the meaning of Code section 414(c), or an affiliated service group (as defined in Code sections 414(m) or 414(o)) of which The Boeing Company is a part.

2.3 Authorized Period of Absence

“Authorized Period of Absence” means a leave of absence approved by the Company.

2.4 Base Salary

“Base Salary” means an Employee’s annual base rate of pay from the Company.

2.5 Beneficiary

“Beneficiary” means the person or persons designated by a Participant under the VIP to receive any benefit payable from the VIP upon the death of the Participant. If no designation is filed under the VIP, or if the designated beneficiary does not survive the Participant, the default beneficiary rules stated in the VIP will apply.

2.6 BCERP

“BCERP” means The Boeing Company Employee Retirement Plan, as amended.

2.7 Board of Directors

“Board of Directors” means the board of directors of The Boeing Company.

2.8 BSS Plan

“BSS Plan” means the BSS Retirement Plan, as amended.

2.9 Code

“Code” means the Internal Revenue Code of 1986, as amended.

2.10 Committee

“Committee” means the Employee Benefit Plans Committee of The Boeing Company.

2.11 Company

“Company” means The Boeing Company, its successors in interest, and its Affiliates and Subsidiaries.

2.12 Company Matching Contribution

“Company Matching Contribution” means the amount credited to a Participant’s Account under Section 3.4.

2.13 Compensation

“Compensation” means a Participant’s Compensation as defined under the VIP, but determined without regard to the limitation on Compensation under Code section 401(a)(17). In no event will Compensation include payments under any incentive compensation plan, without regard to whether they are included in compensation under the VIP.

2.14 Contribution Credit

“Contribution Credit” means the applicable percentage used to compute an eligible Participant’s DC SERP Benefit under Article V.

2.15 DC SERP Benefit

“DC SERP Benefit” means the benefit provided under Article V, and Earnings Credits thereon.

2.16 Deferral Contribution

“Deferral Contribution” means the portion of a Participant’s Compensation, if any, that he or she elects to defer on a pre-tax basis under this Plan in accordance with Section 3.3.

2.17 Deferral Election

“Deferral Election” means the election made by an Eligible Employee to defer a portion of his or her Compensation in accordance with Section 3.2.

2.18 Deferred Compensation Plan

“Deferred Compensation Plan” means the Deferred Compensation Plan for Employees of The Boeing Company, as amended.

2.19 E-Series Payroll

“E-Series Payroll” means the executive designation of level E1 to E5 at the Company.

2.20 Earnings Credits

“Earnings Credits” means the adjustment to a Participant’s Account under Section 7.2.

2.21 Eligible Employee

“Eligible Employee” means, with respect to any Plan Year, an Employee who has satisfied the requirements of one or more of the following: Section 3.1 with regard to the Restoration Benefit, Section 4.1 with regard to the Executive SBP+ Company Contribution, or Section 5.1 with regard to the DC SERP Benefit. Notwithstanding the foregoing, an Employee shall not be considered an Eligible Employee hereunder if the Committee has excluded his or her employer from participation in the Plan. A list of excluded entities, as updated from time to time by the Committee, is attached hereto as Appendix B.

2.22 Employee

“Employee” means any person who is employed by any member of the Company and designated as a common law employee on such member’s payroll.

2.23 Executive SBP+ Company Contribution

“Executive SBP+ Company Contribution” means the benefit provided under Article IV.

2.24 Executive Incentive Pay

“Executive Incentive Pay” means the amount awarded to the Participant under The Boeing Company Elected Officer Annual Incentive Plan or the Incentive Compensation Plan for Employees of The Boeing Company and Subsidiaries, or an award made in lieu of awards under either of the foregoing plans.

Executive Incentive Pay deferred by the Participant under the Deferred Compensation Plan will be deemed to have been paid as if those amounts had not been deferred, for purposes of this Plan.

Executive Incentive Pay that is paid after a Participant’s termination of employment from the Company is not counted for purposes of the Executive SBP+ Company Contribution benefit described in Article IV. Executive Incentive Pay that is paid after a Participant’s termination of employment from the Company and before such Participant receives his or her final regular paycheck is counted for purposes of the DC SERP benefit described in Article V.

2.25 FSP

“FSP” means The Boeing Company Employee Financial Security Plan, as amended.

2.26 Layoff Period

“Layoff Period” means the period beginning on the date a Participant is laid off from employment with the Company and ending on the sixth anniversary of such layoff.

2.27 Participant

“Participant” means an Eligible Employee who has elected to defer Compensation or receive SBP+ Company Contributions under the Plan in accordance with Article III, who is eligible to receive an Executive SBP+ Company Contribution under Article IV, who is eligible to accrue benefits under the DC SERP under Article V, or for purposes of Articles VI through X, an Employee or former Employee who has amounts credited to his or her Account.

2.28 Plan

“Plan” means this Supplemental Benefit Plan for Employees of The Boeing Company as herein set forth, together with any amendments that may be adopted.

2.29 Plan Year

“Plan Year” means the calendar year.

2.30 PVP

“PVP” means The Pension Value Plan for Employees of The Boeing Company, as amended.

2.31 Restoration Benefit

“Restoration Benefit” means the benefit provided under Article III, comprised of Deferral Contributions, Company Matching Contributions and SBP+ Company Contributions, as applicable, and Earnings Credits thereon.

2.32 SBP+ Company Contribution

“SBP+ Company Contribution” means the benefit provided under Section 3.5.

2.33 Separation from Service

“Separation from Service” or “Separates from Service” means an Employee’s death, retirement or termination of employment from the Company within the meaning of Code section 409A. For purposes of determining whether a Separation from Service has occurred, Affiliates and Subsidiaries are defined by using the language “at least 80

percent” to define the controlled group under Code section 1563(a) in lieu of the 50 percent default rule stated in Treasury Regulation section 1.409A-1(h)(3).

A Separation from Service is deemed to include a reasonably anticipated permanent reduction in the level of services performed by an Employee, to less than 50 percent of the average level of services performed by the Employee during the immediately preceding 36-month period.

2.34 SERP

“SERP” means the Supplemental Executive Retirement Plan for Employees of The Boeing Company, as amended.

2.35 Service

“Service” means the Participant’s years of service with the Company, determined in the same manner as the service time calculation under the Boeing Service Awards Program procedure, in completed whole years.

2.36 Specified Employee

“Specified Employee” means an Employee who is a “specified employee” within the meaning of Code section 409A. Specified Employee status is determined on the last day of the prior Plan Year, to take effect as of April 1 of the Plan Year for a 12-month period. Notwithstanding the foregoing, Specified Employees shall be determined by including the employees whom the Company reasonably determines to be the 75 top-paid officers of the Company rather than the 50 top-paid officers as provided under Code section 416(i)(1)(A), to the extent permitted under Code section 409A.

2.37 Unforeseeable Emergency

“Unforeseeable Emergency” means “unforeseeable emergency” within the meaning of Code section 409A, as determined by the Committee.

2.38 VIP

“VIP” means The Boeing Company Voluntary Investment Plan, as amended.

ARTICLE III
Restoration Benefit
Eligibility and Benefits

3.1 Restoration Benefit Eligibility

An Employee is eligible to participate in the Restoration Benefit program for a Plan Year for so long as he or she satisfies each of the conditions described in (A)-(C) below:

- (A) The Employee is eligible to participate in the VIP during such Plan Year.
- (B) The Employee is, during the Plan Year, a salaried Employee of the Company who either is (i) not represented by a collective bargaining agent or (ii) represented by a collective bargaining agent where the terms of the collective bargaining agreement covering such Employee specifically provide for coverage under the Plan.
- (C) As of October 1st of the prior Plan Year, the Employee's Base Salary for the prior Plan Year equaled or exceeded the amount calculated as follows (rounded down to the nearest \$1,000 increment):

The dollar limit imposed by section 415(c) of the Code for the prior Plan Year, divided by the percentage equal to the sum of (i), (ii), and (iii), as applicable.

- (i) The maximum percentage that an Employee can elect to contribute on a pre-tax, after-tax and/or Roth basis under the VIP, for the prior Plan Year (or such other rate approved by the Committee by October 1st to take effect under the VIP as of the following January).
- (ii) The maximum percentage that an Employee can receive as an Employer Matching Contribution under the VIP, for the prior Plan Year (or such other rate approved by the Committee by October 1st to take effect under the VIP as of the following January).
- (iii) The maximum percentage that the Employee can receive as a VIP+ Company Contribution under the VIP, for the prior Plan Year (or such other rate approved by the Committee by October 1st to take effect under the VIP as of the following January), based on the Employee's anticipated age at the end of the Plan Year of participation.

In addition, in order for an Employee to be eligible to make a Deferral Election or SBP+ Company Contribution Election (as further described in Section 3.2) for a Plan Year, the Employee must also satisfy the requirements of clauses (A) and (B) as of October 1st of the prior plan year.

3.2 Restoration Benefit Participation

An Eligible Employee will become a Participant in the Restoration Benefit program when he or she elects to defer Compensation for a Plan Year, by executing and delivering a timely Deferral Election in accordance with subsections (A)-(C) below. Deferral Contributions and Company Matching Contributions are described in Sections 3.3 and 3.4 below.

An Eligible Employee who receives a VIP+ Company Contribution under the VIP will also, to the extent eligible, become a Participant in the Restoration Benefit program when he or she elects to receive an SBP+ Company Contribution for a Plan Year, by executing and delivering a timely SBP+ Company Contribution Election in accordance with subsections (A)-(C) below. SBP+ Company Contributions are described in section 3.5 below.

(A) Elections

A Participant's Deferral Election or SBP+ Company Contribution Election must be executed and delivered to the Company in accordance with rules established by the Committee.

(B) Timing of Elections

In general, the Deferral Election or SBP+ Company Contribution Election must be filed during the election period established by the Committee.

This election will become irrevocable as of the end of the election period, but in no event later than December 31 of the Plan Year in which the election is made. Each election will apply solely to the Compensation payable in the succeeding Plan Year, but only for so long as the individual satisfies the requirements of Sections 3.1(A) and (B) during such Plan Year.

Participants must execute a new Deferral Election to defer Compensation payable in each succeeding Plan Year. Participants must execute a new SBP+ Company Contribution Election to receive an SBP+ Company Contribution payable in each succeeding Plan Year.

Elections generally may not be modified during the Plan Year. Likewise, an Employee eligible for any portion of the Restoration Benefit provided under this Article III remains subject to restrictions on mid-year contribution election changes under the VIP, in accordance with the terms of the VIP.

See Section 3.7 for a limited exception to the general rule on the irrevocability of Deferral Elections, in the event of Unforeseeable Emergency.

(C) No Mid-Year Elections

An Employee who becomes an Eligible Employee during a Plan Year (as a new hire, rehire or due to raise or promotion) will not be eligible to make Deferral Contributions or to receive SBP+ Company Contributions under the Restoration Benefit program during such Plan Year.

3.3 Deferral Contributions

An Eligible Employee may elect to defer a percentage of his or her Compensation otherwise payable by the Company for a Plan Year by executing and delivering a Deferral Election, as described in Section 3.2 above. This percentage is limited to the maximum percentage described in Section 3.1(C)(i), as applicable to the Eligible Employee.

Deferral Contributions will be made from the Participant's Compensation only to the extent that either: (i) Compensation for the applicable Plan Year exceeds the limitation under Code section 401(a)(17), as indexed, or (ii) the Participant's annual additions under the VIP for the applicable Plan Year reach the dollar limitation of Code section 415(c), as indexed.

Deferral Contributions will be credited to the Participant's Account on the date the Compensation would otherwise be payable, or as soon thereafter as administratively feasible.

3.4 Company Matching Contributions

A Participant in the Restoration Benefit program who defers Compensation under Section 3.3 will be credited with a Company Matching Contribution from the Company. This Company Matching Contribution will equal a percentage (determined based on the matching contribution formula applicable to the Participant under the VIP for the Plan Year) of the Participant's Deferral Contributions for the Plan Year, subject to a limit on the Participant's Compensation from which Deferral Contributions are made under this Restoration Benefit program for the Plan Year. This percentage is limited, however, to the maximum percentage described in Section 3.1(C)(ii), as applicable to the Participant.

Company Matching Contributions will be credited to the Participant's Account on the date that the underlying Deferral Contribution is credited to the Participant's Account.

3.5 SBP+ Company Contributions

An Eligible Employee who receives a VIP+ Company Contribution under the VIP may elect to receive an SBP+ Company Contribution for a Plan Year, if eligible, by executing and delivering an SBP+ Company Contribution Election, as described in Section 3.2 above.

An SBP+ Company Contribution will be credited to the Participant's Account on the date the underlying Compensation is payable, or as soon thereafter as administratively feasible.

An SBP+ Company Contribution will be made by the Company on behalf of an eligible Participant during the Plan Year only to the extent that either: (a) the Participant's Compensation for such Plan Year exceeds the limitation under Code section 401(a)(17), as indexed, or (b) the Participant's annual additions under the VIP for such Plan Year reach the dollar limitation of Code section 415(c), as indexed.

The SBP+ Company Contribution for a Plan Year will equal a percentage of the Participant's Compensation during the applicable pay periods within such Plan Year. This percentage will be equal to the VIP+ Company Contribution percentage for which the Participant is eligible for such pay period under the VIP.

3.6 Vesting

A Participant's interest in his or her Account attributable to Restoration Benefits generally will be 100% vested at all times.

See Section 7.4 regarding missing participants and improper credits, Section 10.2 regarding anti-assignment, and Section 10.3 regarding the unfunded nature of this Plan.

3.7 Cancellation of Deferral Election Due to Unforeseeable Emergency

Notwithstanding the election procedures described in Section 3.3, a Participant in the Restoration Benefit program will be permitted to cancel an existing Deferral Election with regard to a Plan Year during that Plan Year, if the Participant incurs an Unforeseeable Emergency, as determined by the Committee.

If a Participant has elected and received a distribution due to an Unforeseeable Emergency under Section 6.1(H), the Participant will be deemed to have elected to cancel his or her Deferral Election for the remainder of the applicable Plan Year.

ARTICLE IV
Executive SBP+ Company Contribution
Eligibility and Benefits

4.1 Executive SBP+ Company Contribution Eligibility

An Employee is eligible to receive Executive SBP+ Company Contributions for a Plan Year for so long as he or she satisfies each of the conditions described in (A)-(C) below:

- (A) The Employee is not eligible to accrue benefits under any defined benefit plan maintained by the Company.
- (B) The Employee is eligible to receive a VIP+ Company Contribution under the VIP during the Plan Year.
- (C) The Employee is entitled to payment of Executive Incentive Pay during the Plan Year. Executive Incentive Pay is not counted for this purpose if paid following the Employee's termination of employment from the Company.

4.2 Executive SBP+ Company Contribution Participation

An Eligible Employee will become a Participant eligible to receive Executive SBP+ Company Contributions on the date the Employee satisfies the eligibility conditions in Section 4.1.

A rehired Employee who previously participated in the Plan will become a Participant again on the date the Employee satisfies the eligibility conditions in Section 4.1 again after rehire.

4.3 Executive SBP+ Company Contribution Benefits

An Executive SBP+ Company Contribution will be credited to the Participant's Account at the time the Executive Incentive Pay otherwise would be payable, or as soon thereafter as administratively feasible.

The Executive SBP+ Company Contribution for a Plan Year will equal a percentage of the Participant's Executive Incentive Pay payable during the Plan Year. This percentage will be equal to the VIP+ Company Contribution percentage for which the Participant is eligible at the time the Executive Incentive Pay otherwise would be payable.

4.4 Executive SBP+ Company Contribution Vesting

A Participant's interest in his or her Account attributable to Executive SBP+ Company Contributions generally will be 100% vested at all times.

See Section 7.4 regarding missing participants and improper credits, Section 10.2 regarding anti-assignment, and Section 10.3 regarding the unfunded nature of this Plan.

4.5 Executive SBP+ Company Contribution Forfeiture Rules

The Committee may determine, in its sole discretion, that a Participant will forfeit any part or all of the portion of his or her Executive SBP+ Company Contribution Benefit that is attributable to Executive SBP+ Company Contributions made on and after January 1, 2017, if any of the following circumstances occur while employed by the Company or within five (5) years after termination of such employment:

- (A) The Participant is convicted of a felony involving theft, fraud, embezzlement, or other similar unlawful acts against the Company or against the Company's interests. For purposes of this Plan, "other similar unlawful acts against the Company or against the Company's interests" shall include any other unlawful act (i) committed against the Company, or the interests of the Company, including, but not limited to, a governmental agency or instrumentality which conducts business with the Company, or a customer of the Company, or (ii) affecting the Company or the interests of the Company, in such a manner that is determined to be detrimental to, prejudicial to or in conflict with the Company or the interests of the Company, as determined by the Committee in its sole discretion.
- (B) The Participant, directly or indirectly, engages in any activity, whether individually or as an employee, consultant or otherwise, which the Committee determines, in its sole discretion, to be an activity in which the Participant is "engaging in competition" with any significant aspect of Company business. For purposes of this Plan, "engaging in competition" shall include but is not limited to representing, providing services to, or being an employee of or associated in a business capacity with, any person or entity that is engaged, directly or indirectly, in competition with any Company business or that takes a position adverse to any Company business, regardless of the position or duties the Participant takes, in such a manner that is determined to be detrimental to, prejudicial to or in conflict with the interests of the Company, all as determined by the Committee in its sole discretion.
- (C) The Participant, without the advance approval of The Boeing Company's Senior Vice President of Human Resources (or successor position thereto), induces or attempts to induce, directly or indirectly, any of the Company's employees, representatives or consultants to terminate, discontinue or cease working with or for the Company, or to breach any contract with the Company, in order to work with or for, or enter into a contract with, the Participant or any third party.
- (D) The Participant disparages or otherwise makes any statements about the Company, its products, or its employees that could be in any way viewed as negative or critical. Nothing in this paragraph will apply to legally protected communications to government agencies or statements made in the course of sworn testimony in administrative, judicial, or arbitral proceedings.

- (E) The Participant uses or discloses proprietary or confidential information, including but not limited to trade secrets, of the Company. Nothing in this paragraph will apply to legally protected communications to government agencies or statements made in the course of sworn testimony in administrative, judicial, or arbitral proceedings.

To the extent the Participant has already received or commenced payment of such portion of his or her Executive SBP+ Company Contribution Benefit, the Committee will be entitled to pursue any and all legal and equitable relief against the Participant to enforce the forfeiture of and recover such Executive SBP+ Company Contribution Benefit. The forfeiture provisions will continue to apply unless and to the extent modified by a court of competent jurisdiction. However, if any portion of these forfeiture provisions is held by such a court to be unenforceable, these provisions shall be deemed amended to limit their scope to the broadest scope that such authority determines is enforceable, and as so amended shall continue in effect.

In addition, the Committee will, in all appropriate circumstances, require reimbursement of any Executive SBP+ Company Contribution Benefit attributable to Executive SBP+ Company Contributions made on and after January 1, 2017, which are attributable to an incentive award that the Company seeks to recover under the clawback provision of any plan providing Executive Incentive Pay.

ARTICLE V
DC SERP
Eligibility and Benefits

5.1 DC SERP Eligibility

An Employee is eligible to participate in the DC SERP for a Plan Year for so long as he or she is on the E-Series Payroll and satisfies the conditions in either (A) or (B) below:

For purposes of determining eligibility for the DC SERP, the term “hired” has the meaning assigned in the VIP for purposes of determining eligibility for Company Contributions thereunder, regardless of the date on which the Employee joins the E-Series Payroll.

(A) Hired On or After January 1, 2009

An Employee satisfies the conditions in this subsection (A) if:

- (i) The Employee is hired on or after January 1, 2009,
- (ii) The Employee is ineligible to accrue benefits under any defined benefit plan maintained by the Company, and
- (iii) The Employee is on the E-Series Payroll with a level of E-1 through E-3.

(B) Hired Before January 1, 2009

An Employee satisfies the conditions in this subsection (B) if the Employee was hired before January 1, 2009.

In the event that an Employee subsequently terminates employment and is “hired” on or after January 1, 2016, as defined in the VIP for purposes of determining eligibility for Company Contributions thereunder, such Participant will be reclassified as hired on or after January 1, 2009 under subsection (A) above.

5.2 DC SERP Participation

An Eligible Employee will become a Participant in the DC SERP on the date the Employee satisfies the eligibility conditions in Section 5.1.

A rehired Employee who previously participated in the Plan will become a Participant again on the date the Employee satisfies the eligibility conditions in Section 5.1 again after rehire.

5.3 DC SERP Benefits

Each Participant in the DC SERP shall be entitled to benefits under this Plan as described below.

(A) Payroll Contributions

Contributions will be credited to the Participant's Account on the date the Compensation and Executive Incentive Pay otherwise would be payable, or as soon thereafter as administratively feasible.

(i) Hired On or After 2009

A Participant described in Section 5.1(A) (Hired On or After 2009) will receive a DC SERP contribution equal to a Contribution Credit times the sum of the Participant's Compensation and Executive Incentive Pay, for each applicable pay period. The Contribution Credit for a pay period is determined by the Participant's level as of such pay period as follows:

- (a) 2%, for a Participant at level E-2 through E-3.
- (b) 4%, for a Participant at level E-1.

If a Participant changes levels during a pay period, the Participant's level as in effect on the last day of the pay period will apply. For purposes of calculating the DC SERP contribution, a Participant's Compensation and Executive Incentive Pay will be counted solely to the extent that (i) the Participant is on the E-Series Payroll during the applicable pay period or (ii) such Executive Incentive Pay is paid after a Participant's termination of employment from the Company but on or before such Participant receives his or her final regular paycheck.

(ii) Hired Before 2009

A Participant described in Section 5.1(B) (Hired Before 2009) will receive a DC SERP contribution equal to a Contribution Credit times the sum of the Participant's Compensation and Executive Incentive Pay, for each applicable pay period. For purposes of calculating the DC SERP contribution, a Participant's Compensation and Executive Incentive Pay will be counted solely to the extent that (i) the Participant is on the E-Series Payroll during the applicable pay period or (ii) such Executive Incentive Pay is paid after a Participant's termination of employment from the Company but on or before such Participant receives his or her final regular paycheck

The Contribution Credit will equal the sum of (a) and, if applicable, (b):

- (a) 5%
- (b) For a Participant who has attained age 55 (or will attain age 55 by the end of a Plan Year), 0.5% times the Participant's whole years of Benefit Service (as defined under the PVP and/or BSS Plan, as applicable, and determined as of January 1, 2016), subject to the limitation herein. The supplemental percentage credited under this subsection (b) will be contributed for a period not to exceed seven years. This seven-year period will commence on January 1, 2016 (or on January 1 of the year in which the Participant attains age 55, or on the date of promotion to the E-Series Payroll, whichever is latest) and will be measured in the aggregate over a Participant's lifetime (i.e., regardless of whether the Participant has multiple periods of employment with the Company).

(iii) Rules Applicable to Rehires

In the event that an eligible Participant described in subsection (A)(ii) (Hired Before 2009) subsequently terminates employment and is "hired" on or after January 1, 2016, as defined in the VIP for purposes of determining eligibility for Company Contributions thereunder, such Participant will become eligible thereafter for the DC SERP contribution described in subsection (A)(i), but only if the Participant otherwise satisfies the eligibility requirements for such benefit, and will no longer be eligible for the DC SERP contribution under subsection (A)(ii).

(B) One-Time Contribution

An Employee who satisfies the requirements described in Section 5.1(A) (Hired On or After January 1, 2009), and who is first promoted to a level of E-1 through E-3 (from a position at the Company below a level of E-3) during the Plan Year, will receive a one-time additional contribution equal to the product of (i), (ii) and (iii) below.

- (i) 2%
- (ii) The sum of:
 - (a) the Participant's Base Salary in effect immediately following the promotion, and
 - (b) his or her Executive Incentive Pay target percentage multiplied by the Base Salary, both as in effect immediately following the promotion.

- (iii) The Participant's whole years of Service as of the date of first promotion to a level of E-1 through E-3 (from a position at the Company below a level of E-3); provided that, for such purpose, a Participant's years of Service will be limited to Service earned since his or her most recent hire date.

This amount will be credited to the Participant's Account as of the date of first promotion to a level of E-1 through E-3, or as soon thereafter as administratively feasible.

A Participant who has received a one-time contribution under this Section upon promotion to a level of E-1 through E-3 will be ineligible for any further contributions under this subsection (B).

A Participant described in Section 5.1(B) (Hired Before 2009) will not be eligible to receive a one-time DC SERP contribution under this subsection (B), unless and until reclassified upon rehire as described in Section 5.1(B).

5.4 DC SERP Vesting

No DC SERP Benefit shall be payable to a Participant or Beneficiary except to the extent such Participant is vested in the DC SERP Benefit.

(A) General DC SERP Vesting Rule for Participants Hired On or After January 1, 2009

A Participant described in Section 5.1(A) (Hired On or After January 1, 2009) will vest 100% in his or her DC SERP Benefit component(s) covered under this subsection (A) on the date the Participant satisfies the conditions in any of (i), (ii) or (iii) below.

- (i) The Participant has been on the E-Series Payroll at a level of E-1 through E-3 for a period of 36 consecutive months. (For Participants with prior periods of employment, a period of consecutive months before January 1, 2009 on the E-Series Payroll at a level of E-1 through E-3 will be counted for purposes of determining whether this 36 consecutive month requirement has been satisfied.)
- (ii) The Participant dies while an Employee.
- (iii) The Participant is laid off from a position at level E-1 through E-3 and is eligible for benefits under The Boeing Company Executive Layoff Benefits Plan.

See Section 5.4(C) below for additional vesting rules for these Participants based on age and Service.

(B) General DC SERP Vesting Rule for Participants Hired Before January 1, 2009

A Participant described in Section 5.1(B) (Hired Before January 1, 2009) will vest 100% in his or her DC SERP Benefit component covered under this subsection (B) on the date the Participant satisfies the conditions in any of (i), (ii) or (iii) below.

- (i) The Participant has been on the E-Series Payroll for a period of 36 consecutive months. For a Participant on the E-Series Payroll as of January 1, 2016, a period of consecutive months before January 1, 2016 on the E-Series Payroll will be counted for purposes of determining whether this 36 consecutive month requirement has been satisfied.
- (ii) The Participant is fully vested under the PVP and/or BSS Plan, as applicable, and dies while an Employee before his or her DC SERP Benefit commences under this Plan.
- (iii) The Participant is laid off from an E-Series position and is eligible for benefits under The Boeing Company Executive Layoff Benefits Plan.

(C) Special Vesting Rules for Participants Hired On or After January 1, 2009 with 55/10 or 62/1

Special vesting rules apply for a Participant described in Section 5.1(A) (Hired On or After 2009) who has attained either (i) or (ii) while employed by the Company.

- (i) Age 55 with 10 years of Service, or
- (ii) Age 62 with one year of Service.

This Participant will be 100% vested in the portion of his or her DC SERP Benefit described in Section 5.3(A) (Payroll Contributions) after he or she has been on the E-Series Payroll for a period of 36 consecutive months.

This Participant will vest ratably in the portion of his or her DC SERP Benefit described in Section 5.3(B) (One-Time Contribution), if any, at the rate of 1/36 for each consecutive month that the Participant is on the E-Series Payroll at a level of E-1 through E-3, starting with the date on which the Participant was first promoted to the E-Series Payroll at a level of E-1 through E-3. This pro rata vesting rule is not intended to preclude the acceleration of vesting under subsections (A)(ii) (death) or (iii) (layoff) above, if applicable.

(D) Authorized Period of Absence

For purposes of this Section, an Authorized Period of Absence from the E-Series Payroll will count as a period on the E-Series Payroll, and an Authorized Period

of Absence from a position at level E-1 through E-3 will count as a period at these levels.

If an Employee ceases to be at the applicable level for any reason other than an Authorized Period of Absence, and the Employee later returns to a position at the applicable level, these non-consecutive periods of service will not be aggregated for purposes of determining whether the 36-consecutive month requirement has been met.

(E) Transfers to and from ULA and USA

For purposes of computing vesting for a Participant who transfers employment directly from the Company to ULA or USA, uninterrupted service at ULA or USA as an executive in a position at a comparable level will be credited toward the 36 consecutive months requirements described herein, provided that the Participant transfers directly from the E-Series Payroll (or a position at level E-1 through E-3 if applicable) at the Company to comparable executive status at ULA or USA, as applicable. ULA and USA service will not be credited toward vesting under this Plan for any period following the Participant's removal from this executive status. For purposes of computing vesting for a participant who transfers employment directly from ULA or USA to the Company, uninterrupted service at ULA or USA as an executive at a position comparable to the E-Series Payroll (or a position at level E-1 through E-3, if applicable) will be credited toward the 36 consecutive months requirements described herein, provided that the Participant transfers directly from this executive status at ULA or USA to a position at a comparable level at the Company. ULA and USA service will not be credited toward vesting under this Plan for any period prior to the Participant's attainment of this executive status at ULA or USA, as applicable.

(F) Impact of Separation from Service/Transfer

- (i) Payroll Contributions. If a Participant Separates from Service (other than due to an Authorized Period of Absence) or transfers off of the E-Series Payroll (or a position at level E-1 through E-3, if applicable) *before* becoming 100% vested in the payroll contribution portion of his or her DC SERP Benefit described in Section 5.3(A)(i) and/or (A)(ii), as applicable, the Participant will forfeit all rights to the nonvested portion of his or her DC SERP Benefit attributable to the period prior to his or her Separation from Service or transfer. To the extent any benefit under this Plan becomes vested during an Authorized Period of Absence that continues after a deemed Separation from Service, it will remain subject to the payment timing rules under Section 6.1.
- (ii) One-Time Contributions. If a Participant stops accruing service toward satisfaction of applicable vesting requirements (such as due to a Separation from Service) after becoming partially vested in the one-time

contribution portion of the DC SERP Benefit, under subsection (C) above, and the Participant subsequently resumes accruing service toward satisfaction of applicable vesting requirements, the DC SERP Benefit accrued after such resumption will not be vested until the Participant satisfies the requirements of subsection (A) or (C) above following such resumption.

- (iii) Multiple DC SERP Benefits. Separate vesting requirements apply to each component of a Participant's DC SERP Benefit described in Sections 5.3(A)(i), (A)(ii), and (B). This means that a Participant who has accrued more than one DC SERP Benefit component (such as, due to a Separation from Service and subsequent rehire) must satisfy the vesting requirements applicable to each such component. If a Participant Separates from Service *after* becoming 100% vested in a particular DC SERP Benefit component, the Participant will be fully vested in any additional accruals under the *same* DC SERP Benefit component following rehire or return (even if the Participant fails to be at the applicable pay level for 36 consecutive months following rehire or return). The Participant will not, however, be fully vested in any amounts accrued under a *different* DC SERP Benefit component described in Sections 5.3(A)(i), (A)(ii), and (B), unless and until the corresponding applicable vesting requirements under this Section 5.4 otherwise have been satisfied.

See Section 7.4 regarding missing participants and improper credits, Section 10.2 regarding anti-assignment, and Section 10.3 regarding the unfunded nature of this Plan.

5.5 DC SERP Forfeiture Rules

The Committee may determine, in its sole discretion, that a Participant will forfeit any part or all of his or her DC SERP Benefit (whether or not vested) if any of the following circumstances occur while employed by the Company or within five (5) years after termination of such employment:

- (A) The Participant is convicted of a felony involving theft, fraud, embezzlement, or other similar unlawful acts against the Company or against the Company's interests. For purposes of this Plan, "other similar unlawful acts against the Company or against the Company's interests" shall include any other unlawful act (i) committed against the Company, or the interests of the Company, including, but not limited to, a governmental agency or instrumentality which conducts business with the Company, or a customer of the Company, or (ii) affecting the Company or the interests of the Company, in such a manner that is determined to be detrimental to, prejudicial to or in conflict with the Company or the interests of the Company, as determined by the Committee in its sole discretion.
- (B) The Participant, directly or indirectly, engages in any activity, whether individually or as an employee, consultant or otherwise, which the Committee

determines, in its sole discretion, to be an activity in which the Participant is “engaging in competition” with any significant aspect of Company business. For purposes of this Plan, “engaging in competition” shall include but is not limited to representing, providing services to, or being an employee of or associated in a business capacity with, any person or entity that is engaged, directly or indirectly, in competition with any Company business or that takes a position adverse to any Company business, regardless of the position or duties the Participant takes, in such a manner that is determined to be detrimental to, prejudicial to or in conflict with the interests of the Company, all as determined by the Committee in its sole discretion.

- (C) The Participant, without the advance approval of The Boeing Company’s Senior Vice President of Human Resources (or equivalent but for title), induces or attempts to induce, directly or indirectly, any of the Company’s employees, representatives or consultants to terminate, discontinue or cease working with or for the Company, or to breach any contract with the Company, in order to work with or for, or enter into a contract with, the Participant or any third party.
- (D) The Participant disparages or otherwise makes any statements about the Company, its products, or its employees that could be in any way viewed as negative or critical. Nothing in this paragraph will apply to legally protected communications to government agencies or statements made in the course of sworn testimony in administrative, judicial, or arbitral proceedings.
- (E) With respect to contributions made to the Plan on and after January 1, 2017, the Participant uses or discloses proprietary or confidential information, including but not limited to trade secrets, of the Company. Nothing in this paragraph will apply to legally protected communications to government agencies or statements made in the course of sworn testimony in administrative, judicial, or arbitral proceedings.

To the extent the Participant has already received or commenced payment of his or her DC SERP Benefit, the Committee will be entitled to pursue any and all legal and equitable relief against the Participant to enforce the forfeiture of and recover such DC SERP Benefit. The forfeiture provisions will continue to apply unless and to the extent modified by a court of competent jurisdiction. However, if any portion of these forfeiture provisions is held by such a court to be unenforceable, these provisions shall be deemed amended to limit their scope to the broadest scope that such authority determines is enforceable, and as so amended shall continue in effect.

In addition, the Committee will, in all appropriate circumstances, require reimbursement of any DC SERP Benefit attributable to an incentive award that the Company seeks to recover under the clawback provision of any plan providing Executive Incentive Pay.

ARTICLE VI
Distributions

6.1 Form and Timing of Distribution

(A) Restoration Benefit

A Participant may elect the form and timing of distribution with regard to his or her Restoration Benefit (including future Deferral Contributions, Company Matching Contributions, SBP+ Company Contributions, and Earnings Credits thereon) as described below, subject to the cashout rule in subsection (D) below. This distribution election must be made at the same time the Participant makes his or her first Deferral Election (or first SBP+ Company Contribution Election, if earlier). Any election made as to the form and timing of distribution will apply to the Participant's entire Restoration Benefit (including Deferral Contributions, Company Matching Contributions, any SBP+ Company Contributions, and Earnings Credits thereon). If a Participant fails to make an election with regard to the *timing* of payment of the Restoration Benefit, then the Participant will be deemed to have elected to receive payment in January of the first Plan Year following the Participant's Separation from Service. If a Participant fails to make an election with regard to the *form* of payment of the Restoration Benefit, then the Participant will be deemed to have elected to receive payment in a lump sum.

A Participant may change a distribution election (or deemed election) with respect to his or her entire Restoration Benefit after the initial distribution election is made (or deemed made), to the extent permitted and in accordance with the conditions stated under subsection (E) below.

(B) Executive SBP+ Company Contribution Benefit and DC SERP Benefit

No initial distribution elections are permitted or required with regard to a Participant's Executive SBP+ Company Contribution or DC SERP Benefit. Rather, a Participant will be deemed to have elected to receive his or her Executive SBP+ Company Contribution and DC SERP Benefit in a lump sum, payable in January of the first Plan Year following Separation from Service.

A Participant may change his or her deemed distribution election with respect to his or her combined DC SERP Benefit and Executive SBP+ Company Contributions (if any), to the extent permitted and in accordance with the conditions stated under subsection (E) below.

(C) Timing and Form of Distribution

(i) Lump Sum Distribution

The lump sum distribution option is a single lump sum payment that will be made in the later of: (i) January of the first Plan Year following Separation from Service, or (ii) January of the first Plan Year following the Participant's attainment of a specified age (subject to (F) below), as elected by the Participant under this Section 6.1. The amount of such distribution will be based on the value of the Participant's Account determined as of the date of payment.

(ii) Installment Payment

The installment payment option is a series of annual installment payments for a period between 2 and 15 years, as elected by the Participant under this Section 6.1. The amount payable to the Participant each year generally shall be computed by multiplying the balance in the Account (or the applicable portion of the Account) as of the date payment is made by a fraction, the numerator of which is one and the denominator of which is the number of years remaining in the distribution period on the first day of January of such year. See Section 6.1(D) below for application of the cashout rule to installment payments.

Annual installment payments, if elected, will begin in the later of: (i) January of the first Plan Year following Separation from Service, or (ii) January of the first Plan Year following the Participant's attainment of a specified age (subject to (F) below), as elected by the Participant under this Section 6.1. Payments will continue to be made each January thereafter until the full amount of the benefit has been paid.

The Plan will respect previous distribution elections made by certain Participants who are former participants in the Excess Benefit Plan for the BSS Retirement Plan, as amended ("BSS Excess Plan"). For these Participants, any distribution election made prior to April 4, 2003 under section 3(b)(5) of the BSS Excess Plan will apply, unless the Participant elects otherwise under this Article VI.

(D) Cashouts

Notwithstanding the foregoing, the following rules shall apply, subject to the six-month delay in payment for Specified Employees under subsection (G):

- (i) If the balance in the Participant's Account is \$10,000 or less in January of the first Plan Year following Separation from Service, the entire balance will be paid in the form of a single lump sum at that time.
- (ii) If a Participant has elected to receive installments and his or her remaining Account balance is \$10,000 or less upon any scheduled payment date, the entire remaining balance will be paid in the form of a single lump sum at

that time. This paragraph (ii) will not apply to any Participant whose installment payments commenced prior to January 1, 2008.

(E) Changes to Distribution Election or Deemed Election

A Participant may change a distribution election (or deemed election) with regard to his or her entire Restoration Benefit only once after the initial distribution election is made (or deemed made). A Participant also may change his or her deemed distribution election once with regard to his or her combined DC SERP Benefit and Executive SBP+ Company Contributions (if any).

Such election must change the time of payment (consistent with the requirement of clause (iii) below) and may change the form of payment (from lump sum to installments, or vice versa).

To the extent any such changes would defer commencement of any portion of the Participant's Account beyond both age 70½ and Separation from Service, the changes will not be effective with respect to such portion.

- (i) A new distribution election must be submitted to the Committee at least 12 months before the existing scheduled distribution date, and during the annual election period established by the Committee.
- (ii) The revised distribution election must not take effect for at least 12 months after it is made.
- (iii) The new distribution election must provide for an additional deferral period of at least 5 years beyond the original distribution date.

In no event can installment payments be revoked once they have begun. In all cases, payments will be made in January.

(F) Distributions At Age 70½

Payment of benefits under this Plan will begin no later than the first January following the calendar year in which the Participant both attains (or would have attained) age 70½ and is Separated from Service. Payment of benefits for Participants actively employed beyond age 70½ will begin no later than the first January following the calendar year in which the Participant Separates from Service. Subject to subsection (E), any election made by a Participant to the contrary will be deemed to be automatically revised to elect the distribution date described herein.

(G) Specified Employees

Notwithstanding anything to the contrary under this Article VI, a Specified Employee will not receive any distribution under this Plan during the six-month period immediately following his or her Separation from Service.

Subject to subsection (E) above, the Account of a Specified Employee will be distributed in the form elected (or deemed elected) under subsection (A) or (B) above, as applicable. This distribution will commence as of the later of:

- (i) the time elected (or deemed elected) under subsection (A) or (B), as applicable,
- (ii) the first day of the month following completion of the six-month waiting period (for Specified Employees who Separate from Service between July 1 and December 31), and
- (iii) January of the first Plan Year following Separation from Service (for Specified Employees who Separate from Service between January 1 and June 30).

If a Participant has elected installments, subsequent installment payments will be made in January of each successive year until the Account is exhausted.

In the event of a Specified Employee's death during the six-month waiting period, the waiting period will cease to apply. The Specified Employee's benefits will be distributed in accordance with Section 6.2 (Death Benefits) below.

(H) Distribution Due to Unforeseeable Emergency

A Participant or Beneficiary may elect to receive a distribution of all or a portion of his or her Restoration Benefit and his or her Executive SBP+ Company Contribution benefit immediately, regardless of whether benefit payments have commenced, to the extent that the Participant or Beneficiary incurs an Unforeseeable Emergency. A Participant or Beneficiary may not receive a distribution of his or her DC SERP Benefit solely in the event of an Unforeseeable Emergency, even if fully vested.

The amount of the distribution will be limited to the amount reasonably necessary to satisfy the emergency need, including any taxes or penalties reasonably anticipated to result from the distribution, as determined by the Committee.

6.2 Death Benefits

If a Participant dies before his or her entire Restoration Benefit has been distributed, the remaining Restoration Benefit will be distributed to his or her Beneficiary in accordance with the Participant's election as to form and timing filed with the Committee with regard

to the Restoration Benefit. Distributions to the Beneficiary will be made at the same time and in the same form as the payment that otherwise would have been made to the Participant. To the extent no distribution election has been filed with regard to the Restoration Benefit, the remaining Restoration Benefit will be paid to the Beneficiary in a single sum in January of the calendar year following the Participant's death.

If a Participant dies before his or her entire Executive SBP+ Company Contribution benefit and his or her entire DC SERP Benefit have been distributed, the remaining benefits will be paid to his or her Beneficiary in accordance with any change to the form and timing of payment elected by the Participant under Section 6.1(E) with regard to the Executive SBP+ Company Contribution and the DC SERP Benefit. If no change has been elected, the remaining benefits will be distributed to the Participant's Beneficiary in a single sum in January of the calendar year following the Participant's death.

If a Beneficiary dies after the Participant, but before receiving the payment of all amounts due hereunder, then the unpaid amounts will be paid to the individual(s) designated (in accordance with the rules established by the Committee) by the Beneficiary as his or her beneficiary(ies), or if no such designation has been made (or if such individual(s) do(es) not survive to receive payment), then such unpaid amounts will be paid to the Beneficiary's estate, in a single lump sum, as soon as practicable after the Beneficiary's death.

6.3 Rehires and Authorized Periods of Absence/Reduced Level of Services

This Section 6.3 addresses the form and timing of payment for a Participant who is rehired by the Company following a Separation from Service, or who remains employed after a Separation from Service has occurred (for example, due to an extended Authorized Period of Absence or due to reduced level of services).

In the event that a Participant forfeits a nonvested DC SERP Benefit upon a Separation from Service, this benefit will not be restored upon rehire. This rule applies regardless of whether the Participant satisfies the vesting criteria under Section 5.4 following rehire.

(A) After Commencing Benefits

This subsection (A) applies to a Participant who has received or begun receiving benefits under the Plan because he or she has experienced a Separation from Service and has attained the specified age (if applicable).

- (i) Rehires. Installment payments that commenced prior to the Participant's rehire with respect to Deferral Contributions made and contributions received before the Participant's Separation from Service ("Old Benefits") will not be suspended by reason of the Participant's rehire. These Old Benefits will continue to be paid until exhausted, without regard to the period of rehire.

Deferral Contributions made and contributions received attributable to periods after the date of rehire (“New Benefits”) will remain subject to the Participant’s earlier distribution election or deemed election as to the timing and form of payment under Section 6.1(C) (subject to the change rules in Section 6.1(E)), without regard to any Separation from Service that occurred prior to rehire. As a result, New Benefits (to the extent vested) will be distributed in January following the Participant’s Separation from Service after rehire, in the form selected under the original distribution election or deemed election. This is because the Participant already has attained the specified age under Section 6.1(C) but has not yet experienced a Separation from Service attributable to the New Benefits.

- (ii) Authorized Period of Absence/Reduced Level of Services. To the extent a Participant made additional Deferral Contributions or received additional contributions while on an Authorized Period of Absence or during a period of a reduced level of services that constituted a Separation from Service under Code section 409A, such Deferral Contributions made and contributions received (to the extent vested) will be distributed in January of the first Plan Year following the year in which they are made, in accordance with the Participant’s earlier distribution election or deemed election. This is because the Participant has already satisfied the conditions for payment under Section 6.1(C); namely, he or she has attained the specified age and has experienced a Separation from Service attributable to such Deferral Contributions made and contributions received.

The same rule will apply where the portion of a Participant’s DC SERP Benefit attributable to one-time contributions vests ratably during an Authorized Period of Absence, under Sections 5.4(C) and (D). Such newly vested benefits will be distributed in January of the first Plan Year following the year in which they vest, in accordance with the Participant’s earlier distribution election or deemed election.

(B) Before Commencing Benefits

This subsection (B) applies to a Participant who has not begun receiving benefits under the Plan.

- (i) Rehires. The rehired Participant’s Old Benefits, to the extent vested, will be distributed in accordance with the Participant’s earlier distribution election or deemed election as to the timing and form of payment under Section 6.1(C) (subject to the change rules in Section 6.1(E)). This means that, for example, if the Participant’s original distribution election selected benefits in the form of a lump sum (or installments) payable in January following attainment of a specified age under Section 6.1(C), then the

Participant's Old Benefits, to the extent vested, will be payable as a lump sum (or installments, if so elected) in January following the year in which he or she attains the specified age, even if the Participant has not had a subsequent Separation from Service after rehire. This result will not change in the event that the Participant attains the specified age after the initial Separation from Service, but is rehired before benefits actually begin.

The Participant's New Benefits will remain subject to the Participant's earlier distribution election or deemed election as to the timing and form of payment under Section 6.1(C) (subject to the change rules in Section 6.1(E)), without regard to any Separation from Service that occurred prior to rehire, as described in Section 6.3(A) above. As a result, New Benefits (to the extent vested) will be distributed either (i) in January following the Participant's Separation from Service *after rehire*, or (ii) in January following both the Participant's Separation from Service *after rehire* and after attainment of the specified age, in accordance with the original distribution election or deemed election. This is because the Participant has not yet experienced a Separation from Service attributable to the New Benefits.

- (ii) Authorized Period of Absence/Reduced Level of Services. Any Deferral Contributions made or contributions received during an Authorized Period of Absence or a period of a reduced level of services (to the extent vested), and any DC SERP one-time contributions that vest during such period, will be distributed in accordance with the Participant's earlier distribution election or deemed election as to the timing and form of payment under Section 6.1(C) (subject to the change rules in Section 6.1(E)). This means that, for example, if the Participant's original distribution election selected benefits in the form of a lump sum (or installments) payable in January following attainment of a specified age under Section 6.1(C), then any Deferral Contributions made and contributions received during an Authorized Period of Absence or a period of a reduced level of services (to the extent vested), and any DC SERP one-time contributions vested during such period, will be payable as a lump sum (or installments, if so elected) in January following the year in which he or she attains the specified age. This result will not change in the event that the Participant attains the specified age while on an Authorized Period of Absence or during a period of a reduced level of services, but resumes (or increases his or her level of) services before benefits actually begin.

ARTICLE VII

Accounts

7.1 Participant Accounts

The Committee will establish and maintain an Account for each Participant, for each period of employment. Solely for this purpose, a period of employment will be treated as commencing upon a Participant's eligibility for the Plan (following hire or rehire as applicable) and ending with his or her Separation from Service.

Each Account will be credited with Deferral Contributions, Company Matching Contributions, SBP+ Company Contributions, Executive SBP+ Company Contributions, and DC SERP Benefits, as applicable for the relevant period of employment, as well as Earnings Credits described in Section 7.2 below. Each Account will be reduced as payments are made.

For Heritage BSS Participants, the Accounts shall also include any account as of April 3, 2003 under the BSS Excess Plan, as adjusted after April 3, 2003 for earnings, losses and expenses. As of April 4, 2003, all accounts of Heritage BSS Participants under the BSS Excess Plan were transferred to this Plan. For purposes of this Section, "Heritage BSS Participant" means any Participant in this Plan having a prior benefit under the BSS Excess Plan based on his or her participation in the BSS Voluntary Savings Plan.

7.2 Earnings Credits

A Participant's Account(s) will be credited, at the Participant's election, with earnings under one or more of the following, as the Participant elects and subject to any rules or limitations as may be imposed by the Committee: (i) the Interest Fund method, (ii) the Boeing Stock Fund method, or (iii) the Other Investment Funds method, each as described below. In the absence of an election the Interest Fund method will be used. A Participant may elect a different earnings method as to each Account.

(A) Interest Fund Method

Under this method, a Participant's Interest Fund method sub-account shall be adjusted daily in accordance with changes in the unit value of the sub-account to reflect interest, based on the Participant's sub-account balance.

Interest will be calculated for each Plan Year as the mean between the high and low (during the first eleven months of the preceding Plan Year) of yields on AA-rated industrial bonds as reported by Moody's Investors Service, Inc., rounded to the nearest 1/4th of one percent. The Company will notify Participants annually of the established interest rate.

(B) Boeing Stock Fund Method

Under this method, a Participant's Boeing Stock Fund sub-account shall be credited with the number of shares of the Company's common stock that could be purchased with the amount credited to such sub-account, based on the Fair Market Value of the Company's common stock on the day the sub-account is so credited (or on the next business day on which the New York Stock Exchange (the "Exchange") is open, if the Exchange is closed on the day the sub-account is credited) excluding commissions, taxes, and other charges. Such number shall be recorded as stock units in the Participant's sub-account, for bookkeeping purposes only. For purposes of the Plan, "Fair Market Value" means the mean of the high and low per share trading prices for the common stock of the Company as reported for the "New York Stock Exchange - Composite Transactions" for a single trading day. The number of stock units in a sub-account shall be appropriately adjusted to reflect stock splits, stock dividends, and other like adjustments in the Company's common stock.

Each Participant's Boeing Stock Fund sub-account periodically shall be credited with the number of shares of the Company's common stock that could be purchased, as set forth in the preceding paragraph, with an amount equal to the cash dividends that would be payable on the number of shares of the Company's common stock that equals the number of stock units in a Participant's sub-account. The Company will notify Participants annually of the number of stock units, and the dividend equivalents, credited to their sub-account.

(C) Other Investment Funds Method

Under this method, a Participant may choose to diversify his or her Other Investment Funds sub-account by electing that it be credited (or charged) with the expenses, income, gains and losses on investment funds similar to those offered under the VIP (excluding the Boeing Stock Fund and Stable Value Fund offered thereunder) as designated by the Committee from time to time, pursuant to an election by the Participant to have the Participant's sub-account credited as though the Participant had elected to invest in such funds in such increments as the Participant will direct in accordance with rules established by the Committee or its delegates; provided that the Committee may disregard such elections in its discretion.

7.3 Investment Election Changes and Restrictions

A Participant may change how future additions to his or her Accounts are deemed invested anytime during the Plan Year. The Participant may also transfer any portion of his or her sub-accounts from one fund method to another on a daily basis, provided that a Participant may not transfer funds from one method (or investment fund under such method) to another and back on the same day.

In addition, transfers cannot be made into the Boeing Stock Fund method for 30 calendar days after transferring funds out of the Boeing Stock Fund method. This restriction applies regardless of the number of units or the dollar value of the transfer. However, the Participant may continue to direct future additions into the Boeing Stock Fund method and make transfers out of this fund method at any time, subject to insider trading rules.

7.4 Missing Participants and Improper Credits

A Participant's Account may be forfeited or reduced upon the occurrence of one of the following events, even if 100% vested:

- (A) The Committee is unable to locate a Participant or Beneficiary to distribute amounts from his or her Account (a "missing participant").
- (B) The Committee recaptures amounts improperly credited to a Participant's Account.

See also Section 10.2 regarding anti-assignment and Section 10.3 regarding the unfunded nature of this Plan.

ARTICLE VIII
Administration

8.1 Plan Administration

The Plan shall be administered by the Committee. The Committee shall make such rules, interpretations, determinations of fact and computations as it may deem appropriate. Any decision of the Committee with respect to the Plan, including (without limitation) any determination of eligibility to participate in the Plan and any calculation of Plan benefits, shall be conclusive and binding on all persons. The Committee shall submit to the Compensation Committee of the Board of Directors periodic reports covering the operation of the Plan.

8.2 Claims Procedure

The procedures for making claims for benefits under the Plan and for having the denial of a benefits claim reviewed shall be the same as those procedures set forth in the VIP.

See Section 10.8 regarding limitations on subsequent legal action.

ARTICLE IX
Amendment and Termination

The Board of Directors shall have the authority to amend or terminate the Plan at any time. The Board of Directors may delegate its authority to amend the Plan at any time, in its sole discretion. In the event of Plan amendment or termination, a Participant's benefits under the Plan shall not be less than the Plan benefits to which the Participant would be entitled if the Participant had terminated employment immediately prior to such amendment or termination of the Plan.

In general, upon the termination of the Plan with respect to any Participant, the affected Participants will not be entitled to receive a distribution until the time specified in Article VI. Notwithstanding the foregoing, The Boeing Company may, in its discretion, terminate the entire Plan and pay each Participant a single lump-sum distribution of his or her entire accrued benefit to the extent permitted under conditions set forth in Code section 409A and any IRS or Treasury guidance thereunder.

ARTICLE X
Miscellaneous

10.1 No Employment Rights

Nothing in the Plan shall be deemed to give any person any right to remain in the employ of the Company or affect any right of the Company to terminate a person's employment with or without cause.

10.2 Anti-Assignment

No benefit under the Plan shall be subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, charge, execution, attachment, garnishment, or any other legal process. Any attempt to take such action shall be void and shall authorize the Committee, in its sole and absolute discretion, to forfeit all further right and interest in any benefit under this Plan. In addition, a Participant's Account may be reduced by the amount of any tax obligation paid by the Company on behalf of a Participant, Beneficiary or any other person, if such individual fails to reimburse the Company for such obligation.

10.3 Unfunded Status of Plan

No funds shall be segregated or earmarked for any current or former Participant, Beneficiary or other person under the Plan. However, the Company may establish one or more trusts to assist in meeting its obligations under the Plan, the assets of which shall be subject to the claims of the Company's general creditors. No current or former Participant, Beneficiary or other person, individually or as a member of a group, shall have any right, title or interest in any account, fund, grantor trust, or any asset that may be acquired by the Company in respect of its obligations under the Plan (other than as a general creditor of the Company with an unsecured claim against its general assets).

10.4 Delays in Payment

Payment of benefits under this Plan may be delayed to the extent permitted by Code section 409A, as determined by the Committee.

10.5 Involuntary Inclusion in Income

If a determination is made that the Account of any Participant (or his or her Beneficiary) is subject to current income taxation under Code section 409A, then the taxable portion of such Account will be immediately distributed to the Participant (or his or her Beneficiary), notwithstanding the general timing rules described in Article V above.

10.6 Compliance with Code Section 409A

It is intended that amounts deferred under this Plan will not be taxable under section 409A of the Code with respect to any individual. All provisions of this Plan shall be construed in a manner consistent with this intent.

10.7 Construction

The validity of the Plan or any of its provisions will be determined under and will be construed according to federal law and, to the extent permissible, according to the internal laws of the state of Illinois. If any provision of the Plan is held illegal or invalid for any reason, such determination will not affect the remaining provisions of the Plan and the Plan will be construed and enforced as if said illegal or invalid provision had never been included.

10.8 Legal Action

No legal action may be brought in court on a claim for benefits under the Plan after 180 days following the decision on appeal (or 180 days following the expiration of the time to make an appeal if no appeal is made).

10.9 Tax Withholding

The Company has the right to deduct any federal, state, local or foreign taxes that are required to be withheld from any payments made hereunder. In addition, if prior to the date of payment of any amount hereunder, the Federal Insurance Contributions Act (FICA) tax imposed under Code Sections 3101, 3121(a) and 3121(v)(2), where applicable, becomes due, then the Company shall have the right to deduct such tax from any other payments made to the Participant by the Company or direct that the Participant's Account be reduced by the amount needed to pay the Participant's portion of such tax, plus an amount equal to the withholding taxes due under federal, state or local law resulting from the payment of such FICA tax, and an additional amount to pay the additional income tax at source on wages attributable to the pyramiding of the Code Section 3401 wages and taxes, but no greater than the aggregate of the FICA tax amount and the income tax withholding related to such FICA tax amount.

APPENDIX A
Plan Provisions Prior To January 1, 1999

A1.1 Eligibility and Benefits for FSP Participants

Prior to January 1, 1999, salaried employees who were not represented by a collective bargaining agent were eligible to participate in the FSP. Accordingly, participants in the FSP were eligible to participate in this Plan prior to that date, to the extent that their FSP benefits were limited by Code sections 415 and 401(a)(17).

The benefits under this Plan with respect to a particular year were the additional benefits that would have been payable under the FSP if the reduction on contributions and other additions had not been made. All amounts deferred under this Plan were credited to the Accounts of Participants at the time such amounts would otherwise have been credited to their accounts under the FSP.

A Participant's Account is credited with earnings in accordance with the method elected by the Participant under Section 7.2 (Earnings Credits).

The benefits payable under this Plan with respect to the FSP will be payable to the Participant in accordance with the distribution rules under Article VI.

APPENDIX B
List of Excluded Entities

As of January 1, 2017, Employees of the following entities are not eligible to participate in the Supplemental Benefit Plan for Employees of The Boeing Company:

Aviall, Inc.
Inventory Locator Service, LLC

This Appendix B may be updated by the Committee from time to time without the need for a formal amendment to the Plan.

THE BOEING COMPANY
EXECUTIVE LAYOFF BENEFITS PLAN

AS AMENDED AND RESTATED ON OCTOBER 30, 2016
EFFECTIVE JANUARY 1, 2017

TABLE OF CONTENTS

Page

ARTICLE 1--PURPOSE 1

ARTICLE 2--DEFINITIONS1

- 2.1 Affiliate or Subsidiary 1
- 2.2 Base Salary 1
- 2.3 Code 1
- 2.4 Committee 1
- 2.5 Company 1
- 2.6 Compensation Committee 1
- 2.7 Employee 1
- 2.8 Equivalent Employment 1
- 2.9 ERISA 2
- 2.10 E-Series Payroll Employee 2
- 2.11 Incentive Plan 2
- 2.12 Involuntary Layoff 2
- 2.13 Layoff Benefit 2
- 2.14 Layoff Event 2
- 2.15 Plan 2
- 2.16 Plan Year 2
- 2.17 Service 2
- 2.18 Specified Employee 2

ARTICLE 3--ELIGIBILITY AND LAYOFF EVENT3

- 3.1 Eligibility 3
- 3.2 Participating Groups 3
- 3.3 Layoff Events 3

ARTICLE 4--LAYOFF BENEFIT4

- 4.1 Layoff Benefit 4
- 4.2 Timing of Payment 4
- 4.3 Limit on Payment 5
- 4.4 Recovery of Payment 5
- 4.5 Recovery of Debt 5
- 4.6 Waiver of Claims 5
- 4.7 Death Benefit 5
- 4.8 Forfeiture 5

ARTICLE 5--ADMINISTRATION6

- 5.1 Plan Administration 6
- 5.2 Rules and Procedures 7
- 5.3 Committee Liability 7
- 5.4 Claim Procedure 7

ARTICLE 6--GENERAL PROVISIONS7

- 6.1 Plan Amendment and Termination 7
 - 6.2 Funding 7
-

6.3	Benefit Plan Application	7
6.4	Provision Against Anticipation	7
6.5	Employment Status	8
6.6	Facility of Payment	8
6.7	Construction	8
6.8	Legal Actions	8
6.9	Compliance With Code Section 409A	8

ARTICLE 1
PURPOSE

The Boeing Company established The Boeing Company Executive Layoff Benefits Plan to provide for lump sum payments as layoff benefits for its executive employees effective August 1, 1997. This document is an amendment and complete restatement of the Plan and is effective for Layoff Events occurring on or after January 1, 2017.

It is intended that this Plan constitute a welfare benefit severance pay plan under ERISA and that any and all amounts payable under this Plan satisfy the requirements for exemption from Code Section 409A. The Plan shall be construed and interpreted in a manner consistent with such intentions.

ARTICLE 2
DEFINITIONS

- 2.1 Affiliate or Subsidiary means a member (other than The Boeing Company) of a controlled group of corporations (as defined in Code Section 1563(a) determined without regard to Code Sections 1563(a)(4) and (e)(3)(c)), a group of trades or businesses (whether incorporated or not) which are under common control within the meaning of Code Section 414(c), or an affiliated service group (as defined in Code Section 414(m) or 414(o)) of which The Boeing Company is a part.
- 2.2 Base Salary means annual salary excluding bonuses and incentive payments, fringe benefits, and other perquisites.
- 2.3 Code means the Internal Revenue Code of 1986, as amended.
- 2.4 Committee means the Employee Benefit Plans Committee (or its successor) appointed by the Board of Directors of The Boeing Company.
- 2.5 Company means The Boeing Company and any Affiliate or Subsidiary which has adopted the Plan by action of its Board of Directors.
- 2.6 Compensation Committee means the Compensation Committee of the Board of Directors of The Boeing Company.
- 2.7 Employee means a person who is employed by the Company on its U.S. payroll including a person on an approved leave of absence.
- 2.8 Equivalent Employment means an employment offer made prior to a Layoff Event:
- a) at an annual base salary equal to no less than 90% of the Employee's Base Salary at the time of the offer;

- b) if the Employee is eligible for incentive compensation, with a target under the applicable incentive compensation plan which is no less than 90% of the Employee's target at the time of the offer; and
- c) for a job which is located within 70 miles of the normal location of the Employee's employment at the time of the offer.

- 2.9 ERISA means the Employee Retirement Income Security Act of 1974, as amended.
- 2.10 E-Series Payroll Employees means Employees with an executive designation of level E1 to E5.
- 2.11 Incentive Plan means The Boeing Company Elected Officer Annual Incentive Plan or the Incentive Compensation Plan for Employees of the Boeing Company and Subsidiaries, as applicable.
- 2.12 Involuntary Layoff means that an Employee's position has been eliminated by the Company.
- 2.13 Layoff Benefit is defined in Article 4.
- 2.14 Layoff Event is defined in Section 3.3.
- 2.15 Plan means The Boeing Company Executive Layoff Benefits Plan.
- 2.16 Plan Year means the calendar year.
- 2.17 Service shall be determined in the same manner as the service time calculation under the Company Service Awards Program procedure.
- 2.18 Specified Employee means an Employee who is a "specified employee" within the meaning of Code Section 409A. Specified Employee status is determined on the last day of the prior Plan Year, to take effect as of April 1 of the Plan Year for a 12-month period. Notwithstanding the foregoing, Specified Employees shall be determined by including the employees whom the Company reasonably determines to be the 75 top-paid officers of the Company rather than the 50 top-paid officers as provided under Code Section 416(i)(1)(A), to the extent permitted under Code Section 409A.

ARTICLE 3
ELIGIBILITY AND LAYOFF EVENT

- 3.1 Eligibility. In order to be eligible for a Layoff Benefit, an Employee must meet the following requirements as of the date of the Layoff Event:
- a) The Employee must be a member of a participating group of Employees in accordance with Section 3.2;
 - b) The Employee must have at least one year of Service; and
 - c) A Layoff Event must occur with respect to the Employee.
- 3.2 Participating Groups. Employees of the Company who are E-Series Payroll Employees shall participate in the Plan. The Compensation Committee may, by written resolution, provide for participation of other Employees as of an effective date specified in the resolution.
- 3.3 Layoff Events. A Layoff Event is an Involuntary Layoff from employment with the Company, but does not include a layoff if:
- a) The Employee becomes employed by the Company or any Affiliate or Subsidiary of the Company within 90 days of the layoff or refuses an offer of employment by the Company or any Affiliate or Subsidiary of the Company as an E-Series Payroll Employee;
 - b) The layoff occurs (i) because of a merger, sale, spin-off, reorganization, or similar transfer of assets or stock, or because of a change in the operator of a facility or a party to a contract, or because of an outsourcing of work, and (ii) the Employee either continues in Equivalent Employment (in the case of a stock sale or similar transaction), or the Employee is offered Equivalent Employment with the new employer, operator or contractor (or an affiliated business enterprise);
 - c) The layoff occurs because of an act of God, natural disaster or national emergency;
 - d) The layoff occurs because of a strike, picketing of the Company's premises, work stoppage or any similar action that would interrupt or interfere with any operation of the Company; or
 - e) The termination of employment of the Employee is for any reason other than Involuntary Layoff, such as voluntary or temporary layoff, completion of a temporary assignment, resignation, dismissal, retirement, death or leave of absence.

ARTICLE 4
LAYOFF BENEFIT

- 4.1 Layoff Benefit. The Layoff Benefit for an Employee who incurs a Layoff Event on or after January 1, 2010 is equal to:
- a) One year of Base Salary (as in effect immediately prior to the Layoff Event), plus
 - b) The Employee's annual target incentive under the Incentive Plan multiplied by the Company performance score applicable to the Employee under the Incentive Plan for the year during which the Layoff Event occurs, limited to the actual payout under the Incentive Plan, if any, for such year for an active Employee with the same target incentive (and an individual performance score of 1.0) and determined as though the Employee were employed by the same business unit throughout such year as he or she is employed by on the date of the Layoff Event, less
 - c) If applicable, the total of all payments made, or to be made, pursuant to any individual employment, separation or severance agreement.

Incentive pay will not include any portion of an incentive award that the Company seeks to recover under the clawback provision of the Incentive Plan.

- 4.2 Timing of Payment. An Employee will receive the portion of the Layoff Benefit described in Section 4.1(a) (as adjusted by Section 4.1(c)) in a lump sum within a reasonable period of time following the Layoff Event, but in no event later than 2-1/2 months after the end of the calendar year in which occurs the Layoff Event. An Employee will receive the portion, if any, of the Layoff Benefit described in Section 4.1(b) (as adjusted by Section 4.1(c)) in a lump sum in the year following the year of the Layoff Event, but in no event later than 2-1/2 months after the end of the year following the year in which occurs the Layoff Event.

It is intended all amounts payable under this Plan shall satisfy the requirements for exemption under Code Section 409A, and all terms and provisions shall be interpreted to satisfy such requirements. Specifically, it is intended that an amount payable under this Plan qualify as a short-term deferral (as described in Treas. Reg. § 1.409A-1(b)(4)) and, to the extent not a short-term deferral, as a separation payment due to an involuntary separation from service (as described in Treas. Reg. § 1.409A-1(b)(9)(iii)). However, in the unlikely event that a portion of a Layoff Benefit payable to a Specified Employee is not exempt from the requirements of Code Section 409A (a "Non-Exempt Amount"), such Non-Exempt Amount will be paid to the Specified Employee as soon as practicable on or after the later of (i) the first day of the seventh month following the Specified Employee's Layoff Event, or (ii) the time specified in the paragraph above.

All payments under this Plan shall be net of any and all applicable withholding taxes, and interest shall not accrue on any portion of the Layoff Benefit, regardless of the time of payment.

- 4.3 Limit on Payment. No Employee shall be paid more than one Layoff Benefit under this Plan.
- 4.4 Recovery of Payment. If a Layoff Benefit is paid to an Employee and the Committee determines that all or part of such payment was not owed under the terms of the Plan, the Company reserves the right to recover such payment, including deducting such amounts from any sums due the Employee.
- 4.5 Recovery of Debt. If an Employee owes the Company an acknowledged debt, including, but not limited to, loans, relocation fees, and travel advances, such debt may be deducted from the Layoff Benefit, subject to applicable state laws.
- 4.6 Waiver of Claims. As a condition to receiving the Layoff Benefit described in Section 4.2, the Employee must execute a release of all claims by submitting to the Company a Waiver and Release form in a form provided by the Company.
- 4.7 Death Benefit. No Layoff Benefits are due under the Plan with respect to an Employee to the extent not received by the Employee prior to his or her death.
- 4.8 Forfeiture. Notwithstanding anything in this Plan to the contrary, the Committee may determine, in its sole discretion, that an Employee will forfeit any part or all of his or her Layoff Benefit if any of the following circumstances occur while employed by the Company or within five (5) years after termination of such employment:
1. The Employee is convicted of a felony involving theft, fraud, embezzlement, or other similar unlawful acts against the Company or against the Company's interests. For purposes of this Plan, "other similar unlawful acts against the Company or against the Company's interests" shall include any other unlawful act (i) committed against the Company, or the interests of the Company, including, but not limited to, a governmental agency or instrumentality which conducts business with the Company, or a customer of the Company, or (ii) affecting the Company or the interests of the Company, in such a manner that is determined to be detrimental to, prejudicial to or in conflict with the Company or the interests of the Company, as determined by the Committee in its sole discretion.
 2. The Employee, directly or indirectly, engages in any activity, whether individually or as an employee, consultant or otherwise, which the Committee determines, in its sole discretion, to be an activity in which the Employee is "engaging in competition" with any significant aspect of Company business. For purposes of this Plan, "engaging in competition" shall include but is not limited to representing, providing services to, or being an employee of or associated in a business capacity with, any person or entity that is engaged, directly or indirectly, in competition with any Company business or that takes a position adverse to any Company business, regardless of the position or duties the Employee takes, in such a manner that is

determined to be detrimental to, prejudicial to or in conflict with the interests of the Company, all as determined by the Committee in its sole discretion.

3. The Employee, without the advance approval of The Boeing Company's Senior Vice President of Human Resources (or equivalent but for title), induces or attempts to induce, directly or indirectly, any of the Company's employees, representatives or consultants to terminate, discontinue or cease working with or for the Company, or to breach any contract with the Company, in order to work with or for, or enter into a contract with, the Employee or any third party.
4. The Employee disparages or otherwise makes any statements about the Company, its products, or its employees that could be in any way viewed as negative or critical. Nothing in this paragraph will apply to legally protected communications to government agencies or statements made in the course of sworn testimony in administrative, judicial, or arbitral proceedings.
5. The Employee uses or discloses proprietary or confidential information, including but not limited to trade secrets, of the Company. Nothing in this paragraph will apply to legally protected communications to government agencies or statements made in the course of sworn testimony in administrative, judicial, or arbitral proceedings.

To the extent the Employee has already commenced payment of his or her Layoff Benefit, the Committee will be entitled to pursue any and all legal and equitable relief against the Employee to enforce the forfeiture of and recover such Layoff Benefit. The forfeiture provisions will continue to apply unless and to the extent modified by a court of competent jurisdiction. However, if any portion of these forfeiture provisions is held by such a court to be unenforceable, these provisions shall be deemed amended to limit their scope to the broadest scope that such authority determines is enforceable, and as so amended shall continue in effect.

In addition, the Committee will, in all appropriate circumstances, require reimbursement of any Layoff Benefit attributable to an incentive award that the Company seeks to recover under the clawback provision of the Incentive Plan.

ARTICLE 5

ADMINISTRATION

- 5.1 Plan Administration. The Committee will serve as the Plan administrator and named fiduciary pursuant to ERISA. The Committee will have complete control of the administration of the Plan, subject to the provisions hereof, with all powers necessary to enable it to carry out its duties properly in that respect. Not in limitation, but in amplification of the foregoing, it will have the power to interpret the Plan, to apply its discretion, and to determine all questions that may arise hereunder, including all questions

relating to the eligibility of Employees to participate in the Plan and the amount of benefit to which any Employee may become entitled. Its decisions upon all matters within the scope of its authority will be final and binding.

- 5.2 Rules and Procedures. The Committee will establish rules and procedures to be followed by Employees in filing applications for benefits and in other matters required to administer the Plan.
- 5.3 Committee Liability. The members of the Committee shall use ordinary care and diligence in the performance of their duties, but no member shall be personally liable by virtue of any contract, agreement, or other instrument made or executed by a member of the Committee, nor for any mistake or judgment made by such member or by any other member. No member of the Committee will be liable for the neglect, omission or wrongdoing of any other member or of the agents or counsel of the Committee. The Company shall indemnify each member of the Committee against, and hold each member harmless from any and all expenses and liabilities arising out of, any act or omission to act as a member of the Committee, to the fullest extent permitted under the by-laws of the Company.
- 5.4 Claim Procedure. The Committee shall adopt procedures for the presentation of claims for benefits and for the review of the denial of such claims by the Committee. The decision of the Committee upon such review shall be final, subject to appeal rights provided by law.

ARTICLE 6

GENERAL PROVISIONS

- 6.1 Plan Amendment and Termination. The Company, acting through the Compensation Committee, may amend or terminate the Plan in whole or in part at any time. Such amendments may include any remedial retroactive changes to comply with the requirements of any law or regulation issued by any government agency to which the Company is subject.
- 6.2 Funding. The Plan shall be unfunded, and Layoff Benefits shall be paid from the general assets of the Company.
- 6.3 Benefit Plan Application. Layoff Benefits and periods for which an Employee receives a Layoff Benefit shall not be considered as compensation or service under any employee benefit plan or program and shall not be counted toward Service under this Plan. Layoff Benefits may not be deferred into the Voluntary Investment Plan or any other cash or deferred arrangement.
- 6.4 Provision Against Anticipation. No benefit under the Plan shall be subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, charge, or other legal process, and any attempt to do so shall be void.

- 6.5 Employment Status. Nothing contained in the Plan will be deemed to give any Employee the right to be retained in, or recalled to, the employ of the Company or to interfere with the rights of the Company to discharge any Employee at any time.
- 6.6 Facility of Payment. If any Employee is physically or mentally incapable of giving a valid receipt for any payment due and no legal representative has been appointed for such Employee, the Committee may make such payment to any person or institution maintaining such Employee and the release of such person or institution will be a valid and complete discharge for such payment. Any final payment or distribution to any Employee or the legal representative of the Employee in accordance with the provisions herein will be in full satisfaction of all claims against the Plan, the Committee, and the Company arising under or by virtue of the Plan.
- 6.7 Construction. The validity of the Plan or any of its provisions will be determined under and will be construed according to federal law and, to the extent not preempted thereby or inconsistent therewith, according to the internal laws of the state of Illinois. If any provision of the Plan is held illegal or invalid for any reason, such determination will not affect the remaining provisions of the Plan and the Plan will be construed and enforced as if said illegal or invalid provision had never been included.
- 6.8 Legal Actions. No legal action may be brought in court on a claim for benefits under the Plan after 180 days following the decision on appeal (or 180 days following the expiration of the time to make an appeal if no appeal is made).
- 6.9 Compliance With Code Section 409A. Notwithstanding anything contained in the Plan to the contrary, the Employee's rights under this Plan with respect to any Non-Exempt Amount (as defined in Section 4.2) and the provisions of this Plan relating to such Non-Exempt Amount will be deemed modified in order to comply with the requirements of Code Section 409A to the extent determined by the Committee.

The Boeing Company 2003 Incentive Stock Plan

(As Amended and Restated Effective October 31, 2016)

Section 1. Purpose of the Plan

The purpose of The Boeing Company 2003 Incentive Stock Plan, as amended and restated (the “Plan”), is to attract, retain and motivate employees, officers, directors, consultants, agents, advisors and independent contractors of The Boeing Company (the “Company”) and to align their interests and efforts to the long-term interests of the Company’s shareholders.

Section 2. Definitions

As used in the Plan,

“ **Adjusted Operating Cash Flow** ” means the net cash provided by operating activities of the Company as reported in the Company’s consolidated statements of cash flows included in its Annual Report on Form 10-K, adjusted to eliminate the effect on operating cash flows of net customer financing cash flows, as reported in the Company’s consolidated statements of cash flows included in its Annual Report on Form 10-K.

“ **Authorized Officer** ” means the Company’s senior vice president of human resources, the Company’s vice president of compensation and benefits or any other officer of the Company as may be designated by the Committee.

“ **Award** ” means an award or grant made to a Participant under Sections 7, 8, 9, 10, 11 and/or 12 of the Plan, including awards or grants made prior to the Shareholder Approval Effective Date.

“ **Board** ” means the Board of Directors of the Company.

“ **Corporate Transaction** ” has the meaning set forth in Section 15.3.

“ **Corporate Transaction Price** ” has the meaning set forth in Section 15.3.

“ **Code** ” means the Internal Revenue Code of 1986, as amended from time to time.

“ **Committee** ” has the meaning set forth in Section 3.2.

“ **Common Stock** ” means the common stock, par value \$5.00 per share, of the Company.

“ **Covered Employee** ” means a “covered employee” as that term is defined in Section 162(m)(3) of the Code or any successor provision.

“ **Disability** ” means “Disability” as defined by the Committee or an Authorized Officer for purposes of the Plan or an Award or in the instrument evidencing the Award or in a written employment or services agreement between the Participant and the Company or a Related Company.

“ **Exchange Act** ” means the Securities Exchange Act of 1934, as amended from time to time.

“ **Fair Market Value** ” means the average of the high and low per share trading prices (or the average of the opening and closing prices, or the closing price, if so determined by the Committee) for the Common Stock on the New York Stock Exchange during regular session trading as reported by The Wall Street Journal or such other source the Committee deems reliable for a single trading day. The Committee may vary its determination of the Fair Market Value as provided in this Section 2 depending on whether Fair Market Value is in reference to the grant, exercise, vesting, settlement or payout of an Award and, for Awards subject to Section 409A, as provided in Section 409A.

“ **Grant Date** ” means the date on which the Committee completes the corporate action authorizing the grant of an Award or such later date specified by the Committee, provided that conditions to the exercisability or vesting of Awards shall not defer the Grant Date.

“ **Incentive Stock Option** ” means an Option granted with the intention that it qualify as an “incentive stock option” as that term is defined in Section 422 of the Code or any successor provision.

“ **Layoff** ” means “Layoff” as defined by the Committee or an Authorized Officer for purposes of the Plan or an Award or in the instrument evidencing the Award or in a written employment or services agreement between the Participant and the Company or a Related Company.

“ **Nonqualified Stock Option** ” means an Option other than an Incentive Stock Option.

“ **Nonrecurring Items** ” means nonrecurring items deemed not reflective of the Company’s core operating performance, including, but not limited to, exogenous events, acquisitions, divestitures, changes in accounting principles or “extraordinary items” determined under generally accepted accounting principles.

“ **Old Plan** ” means The Boeing Company 1997 Incentive Stock Plan, as amended effective May 1, 2000 and as further amended effective January 1, 2008.

“ **Option** ” means a right to purchase Common Stock granted under Section 7.

“ **Other Cash-Based Award** ” means an Award granted pursuant to Section 12 and payable in cash at such time or times and subject to such terms and conditions as determined by the Committee in its sole discretion.

“ **Participant** ” means any eligible person as set forth in Section 5 to whom an Award is granted.

“ **Performance-Based Compensation** ” means any Award that is intended to constitute “performance-based compensation” within the meaning of Section 162(m)(4)(C).

“ **Performance Criteria** ” has the meaning set forth in Section 11.2.

“ **Performance Goals** ” has the meaning set forth in Section 11.1.

“ **Performance Period** ” means any period of at least 12 consecutive months as determined by the Committee in its sole discretion. The Committee may establish different Performance Periods for different Participants, and the Committee may establish concurrent or overlapping Performance Periods.

“ **Performance Share**, ” “ **Performance Restricted Stock** ” or “ **Performance Restricted Stock Unit** ” has the meaning set forth in Section 10.1.

“ **Performance Unit** ” has the meaning set forth in Section 10.2.

“ **Related Company** ” means any corporation in which the Company owns, directly or indirectly, at least 50% of the total combined voting power of all classes of stock, or any other entity (including, but not limited to, partnerships and joint ventures) in which the Company owns, directly or indirectly, at least 50% of the combined equity thereof. Notwithstanding the foregoing, for purposes of determining whether any individual may be a Participant for purposes of any grant of Incentive Stock Options, the term “Related Company” shall have the meaning ascribed to the term “subsidiary” in Section 424(f) of the Code, and for purposes of determining whether any individual may be a Participant for purposes of any grant of Options or Stock Appreciation Rights, the term “Related Company” shall mean any “Service Recipient” as that term is defined for purposes of Section 409A.

“ **Restricted Stock** ” means an Award of shares of Common Stock granted under Section 9, the rights of ownership of which may be subject to restrictions prescribed by the Committee.

“ **Retirement** ” means “Retirement” as defined by the Committee or an Authorized Officer for purposes of the Plan or an Award or in the instrument evidencing the Award or in a written employment or services agreement between the Participant and the Company or a Related Company.

“ **Section 162(m)** ” means Section 162(m) of the Code, or any successor provision, including any proposed and final regulations and other guidance issued thereunder by the Department of the Treasury and/or the Internal Revenue Service.

“ **Section 409A** ” means Section 409A of the Code, or any successor provision, including any proposed and final regulations and other guidance issued thereunder by the Department of the Treasury and/or the Internal Revenue Service.

“ **Securities Act** ” means the Securities Act of 1933, as amended from time to time.

“Shareholder Approval **Effective Date** ” means April 28, 2014, the date the Plan was approved by the holders of shares of Common Stock entitled to vote at the 2014 annual meeting of shareholders of the Company.

“ **Stock Appreciation Right** ” or “ **SAR** ” has the meaning set forth in Section 8.1.

“ **Stock Unit** ” means an Award granted under Section 9 denominated in units of Common Stock.

“ **Substitute Awards** ” means Awards granted or shares of Common Stock issued by the Company in assumption of, or in substitution or exchange for, awards previously granted by a company acquired by the Company or any Related Company or with which the Company or any Related Company combines.

“ **Termination of Service** ,” unless otherwise defined by the Committee, an Authorized Officer or in the instrument evidencing the Award or in a written employment or services agreement between the Participant and the Company or a Related Company, means a termination of employment or service relationship with the Company or a Related Company for any reason, whether voluntary or involuntary, including by reason of death, Disability, Retirement or Layoff. Any question as to whether and when there has been a Termination of Service for the purposes of an Award and the cause of such Termination of Service shall be determined by an Authorized Officer or by the Committee with respect to officers subject to the reporting requirements of Section 16(a) of the Exchange Act, and any such determination shall be final. Transfer of a Participant’s employment or service relationship between wholly owned subsidiaries of the Company, or between the Company and any wholly owned subsidiary of the Company, shall not be considered a Termination of Service for purposes of an Award. Unless the Committee determines otherwise, a Termination of Service shall be deemed to occur if the Participant’s employment or service relationship is with an entity that has ceased to be a Related Company.

Section 3. Administration

3.1 Administration of the Plan

The Plan shall be administered by the Compensation Committee of the Board; provided, however, that with respect to nonemployee directors, the Plan shall be administered by the Governance, Organization and Nominating Committee of the Board unless otherwise determined by the Board. Each such committee shall be comprised of at least three directors, each of whom shall qualify as an “outside director” as defined by Section 162(m), an “independent director” as defined under the New York Stock Exchange listing standards and a “nonemployee director” as defined in Rule 16b-3 promulgated under the Exchange Act. However, the fact that a Committee member shall fail to qualify under the foregoing requirements shall not invalidate any Award made by the Committee which is otherwise validly made under the Plan.

3.2 Delegation by Committee

Notwithstanding the foregoing, the Board or the Committee may delegate responsibility for administering the Plan with respect to designated classes of eligible persons to different committees consisting of one or more members of the Board, subject to such limitations as the Board or the Compensation Committee deems appropriate, except with respect to benefits to nonemployee directors and to officers subject to Section 16 of the Exchange Act or officers who are or may be Covered Employees. Members of any committee shall serve for such term as the Board may determine, subject to removal by the Board at any time. To the extent consistent with applicable law, the Board or the Committee may authorize one or more officers of the Company to grant Awards to designated classes of eligible persons, within limits specifically prescribed by the Board or the Committee; provided, however, that no such officer shall have or obtain authority to grant Awards to himself or herself or to any officer subject to Section 16 of the Exchange Act. All references in the Plan to the "Committee" shall be, as applicable, to the Compensation Committee, the Governance, Organization and Nominating Committee or any other committee or any officer to whom the Board or the Compensation Committee has delegated authority to administer the Plan.

3.3 Administration and Interpretation by Committee

Except for the terms and conditions explicitly set forth in the Plan, the Committee shall have full power and exclusive authority, subject to such orders or resolutions not inconsistent with the provisions of the Plan as may from time to time be adopted by the Board, to (a) select the eligible persons as set forth in Section 5 to whom Awards may from time to time be granted under the Plan; (b) determine the type or types of Award to be granted under the Plan; (c) determine the number of shares of Common Stock to be covered by each Award granted under the Plan; (d) determine the terms and conditions of any Award granted under the Plan; (e) approve the forms of agreements for use under the Plan; (f) determine whether, to what extent and under what circumstances Awards may be settled in cash, shares of Common Stock or other property or canceled or suspended; (g) determine whether, to what extent and under what circumstances cash, shares of Common Stock, other property and other amounts payable with respect to an Award shall be deferred either automatically or at the election of the Participant, subject to Section 409A and in accordance with Section 6.3; (h) interpret and administer the Plan and any instrument or agreement entered into under the Plan; (i) establish such rules and regulations and appoint such agents as it shall deem appropriate for the proper administration of the Plan; (j) delegate ministerial duties to such of the Company's officers as it so determines; (k) amend Section 17.1 in order to comply with Section 10D of the Exchange Act (as determined by the applicable rules and regulations promulgated thereunder from time to time by the U.S. Securities and Exchange Commission); and (l) make any other determination and take any other action that the Committee deems necessary or desirable for administration of the Plan. Decisions of the Committee shall be final, conclusive and binding on all persons, including the Company, any Participant, any shareholder and any eligible person. A majority of the members of the Committee may determine its actions and fix the time and place of its meetings.

Section 4. Shares Subject to the Plan

4.1 Authorized Number of Shares

(a) The aggregate number of shares of Common Stock in respect of which Awards (or dividends or dividend equivalents pursuant to Awards) may be granted or paid out under the Plan, subject to adjustment as provided in Section 4.2 and Section 15, shall not exceed 80.0 million shares, plus the aggregate number of shares of Common Stock described in Section 4.1(b).

(b) Shares of Common Stock that as of the Shareholder Approval Effective Date have not been issued under the Old Plan, and are not covered by outstanding awards under such plan granted on or before the Shareholder Approval Effective Date, shall be available for Awards under the Plan in an amount not to exceed 7.0 million shares of Common Stock in the aggregate.

(c) Common Stock which may be issued under the Plan may be either authorized and unissued shares or issued shares which have been reacquired by the Company (in the open-market or in private transactions) and which are being held as treasury shares. No fractional shares of Common Stock shall be issued under the Plan, and the Committee shall determine the manner in which fractional share value shall be treated.

(d) In the event of a change in the Common Stock of the Company that is limited to a change in the designation thereof to "Capital Stock" or other similar designation, or to a change in the par value thereof, or from par value to no par value, without increase or decrease in the number of issued shares, the shares resulting from any such change shall be deemed to be Common Stock for purposes of the Plan.

4.2 Share Usage

(a) Shares of Common Stock covered by an Award shall not be counted as used unless and until they are actually issued and delivered to a Participant. Any shares of Common Stock that are subject to Awards that expire or lapse or are forfeited, surrendered, cancelled, terminated, settled in cash in lieu of Common Stock or are issued and thereafter reacquired by the Company shall again be available for Awards under the Plan, to the extent of such expiration, lapse, forfeiture, surrender, cancellation, termination, settlement or reacquisition of such Awards (as may be adjusted pursuant to Section 15). The following shares of Common Stock shall not be treated as having been issued under the Plan: (i) shares tendered by a Participant or retained by the Company as full or partial payment to the Company for the purchase price of an Award or to satisfy any minimum statutorily required taxes that the Company is required by applicable federal, state, local or foreign law to withhold with respect to the grant, vesting or exercise of an Award ("tax withholding obligations"), (ii) shares covered by an Award that is settled in cash, (iii) the number of shares subject to a SAR in excess of the number of shares that are delivered to the Participant upon exercise of the SAR, or (iv) shares issued pursuant to Substitute Awards.

(b) The Committee shall have the authority to grant Awards as an alternative to or as the form of payment for grants or rights earned or due under other compensation plans or arrangements of the Company.

4.3 Maximum Awards

The maximum Common Stock amounts in this Section 4.3 are subject to adjustment under Section 15 and are subject to the Plan maximum set forth in Section 4.1.

(a) Options and Stock Appreciation Rights. The aggregate number of shares of Common Stock that may be subject to Options or Stock Appreciation Rights granted to any Participant in any calendar year under the Plan shall not exceed 2.0 million shares of Common Stock.

(b) Performance Shares and Performance Restricted Stock or Units; Performance Units. The aggregate number of shares of Common Stock that may be subject to Performance Shares, Performance Restricted Stock, Performance Restricted Stock Units or Performance Units intended in each case to be Performance-Based Compensation granted to any Participant in any calendar year shall not exceed 1.0 million shares of Common Stock.

(c) Performance Units and Other Cash-Based Awards. The aggregate cash amount that may be paid under any Performance Unit or Other Cash-Based Award intended in each case to be Performance-Based Compensation to any Participant for any calendar year shall not exceed (i) 0.50% of the cumulative Adjusted Operating Cash Flow for the specific Performance Period for which the Award is granted for a Participant who is the Company's Chief Executive Officer or (ii) 0.20% of the cumulative Adjusted Operating Cash Flow for the specific Performance Period for which the Award is granted for any other Participant.

(d) Limits on Awards to Nonemployee Directors. The aggregate grant date fair value (computed as of the date of grant in accordance with applicable financial accounting rules) of all Awards granted to any nonemployee director in any calendar year (excluding Awards made pursuant to deferred compensation arrangements in lieu of all or a portion of cash retainers) shall not exceed \$1.0 million.

(e) Awards with No Restrictions. The aggregate number of shares of Common Stock that may be issued pursuant to Awards granted under the Plan (other than Awards of Options or Stock Appreciation Rights or dividends or dividend equivalents credited in connection with vested Awards) that contain no restrictions or restrictions based solely on continuous employment or services for less than three years (except where Termination of Service occurs by reason of death, Retirement, Disability or Layoff) shall not exceed 4.0 million shares of Common Stock.

(f) Incentive Stock Options. The aggregate number of shares of Common Stock that may be subject to Incentive Stock Options granted under the Plan shall not exceed 2.0 million shares of Common Stock.

Section 5. Eligibility

An Award may be granted to any employee, officer or director of the Company or a Related Company whom the Committee from time to time selects. An Award may also be granted to any consultant, agent, advisor or independent contractor who is a natural person and who provides bona fide services to the Company or any Related Company. The above are "eligible persons."

Section 6. Awards

6.1 Form and Grant of Awards

The Committee shall have the authority, in its sole discretion, to determine the type or types of Awards to be granted under the Plan. Such Awards may be granted either alone, in addition to or in tandem with any other type of Award.

6.2 Evidence of Awards

Awards granted under the Plan shall be evidenced by a written instrument that shall contain such terms, conditions, limitations and restrictions as the Committee shall deem advisable and that are not inconsistent with the Plan.

6.3 Deferrals

The Committee may permit a Participant to defer receipt of the payment of any Award. If any such deferral election is permitted, the Committee, in its sole discretion, shall establish rules and procedures for such payment deferrals, which may include the grant of additional Awards or provisions for the payment or crediting of interest or dividend equivalents, including converting such credits to deferred stock unit equivalents. The value of the payment so deferred may be allocated to a deferred account established for a Participant under any deferred compensation plan of the Company designated by the Committee. Notwithstanding the foregoing, any deferral made under this Section 6.3 will be made under a deferred compensation plan of the Company or pursuant to the terms of an employment agreement, either of which satisfies the requirements for exemption from or complies with Section 409A.

6.4 Dividends and Distributions

Participants holding Awards may, if the Committee so determines, be credited with dividends paid with respect to the underlying shares or dividend equivalents while the Awards are so held in a manner determined by the Committee in its sole discretion. The Committee may apply any restrictions to the dividends or dividend equivalents that the Committee deems appropriate. The Committee, in its sole discretion, may determine the form of payment of dividends or dividend equivalents, including cash, shares of Common Stock, Restricted Stock or Stock Units. Dividends and dividend equivalents that may be paid under any awards outstanding under the Old Plan as of the Shareholder Approval Effective Date shall be granted pursuant to Section 12 below. Notwithstanding the foregoing, (a) the right to any dividends or dividend equivalents declared and paid on the number of shares underlying an Option or a Stock Appreciation Right may not be contingent, directly or

indirectly on the exercise of the Option or a Stock Appreciation Right, and an Award providing a right to dividends or dividend equivalents declared and paid on the number of shares underlying an Option or a Stock Appreciation Right, the payment of which is not contingent upon, or otherwise payable on, the exercise of the Option or a Stock Appreciation Right, must comply with or qualify for an exemption under Section 409A and (b) dividend equivalents credited in connection with an Award that vests based on the achievement of Performance Goals shall be subject to restrictions and risk of forfeiture to the same extent as the Award with respect to which such dividend equivalents have been credited.

Section 7. Options

7.1 Grant of Options

The Committee may grant Options designated as Incentive Stock Options or Nonqualified Stock Options.

7.2 Option Exercise Price; Repricing Prohibition

The exercise price for shares purchased under an Option shall be as determined by the Committee, but shall not be less than 100% of the Fair Market Value of the Common Stock for the Grant Date, except in the case of Substitute Awards. In no event shall the Committee, without the prior approval of the Company's shareholders, (a) cancel any outstanding Option for the purpose of reissuing the Option to the Participant at a lower exercise price, (b) exchange any outstanding Option for cash, another Award, or an Option or Stock Appreciation Right with an exercise or grant price that is less than the exercise price of the cancelled Option, (c) reduce the exercise price of an outstanding Option, or (d) take any other action that would be a "repricing" of the Option.

7.3 Term of Options

Subject to earlier termination in accordance with the terms of the Plan and the instrument evidencing the Option, the maximum term of an Option shall be ten years from the Grant Date.

7.4 Exercise of Options

The Committee shall establish and set forth in each instrument that evidences an Option the time at which, or the installments in which, the Option shall vest and become exercisable, any of which provisions may be waived or modified by the Committee at any time.

To the extent an Option has vested and become exercisable, the Option may be exercised in whole or from time to time in part by delivery as directed by the Company to the Company or a brokerage firm designated or approved by the Company of a written stock option exercise agreement or notice, in a form and in accordance with procedures established by the Committee, setting forth the number of shares with respect to which the Option is being exercised, the restrictions imposed on the shares purchased under such exercise agreement, if any, and such representations and agreements as may be required by the Committee, accompanied by payment in full as described in Section 7.5. An Option may be exercised only for whole shares and may not be exercised for less than a reasonable number of shares at any one time, as determined by the Committee.

7.5 Payment of Exercise Price

The exercise price for shares purchased under an Option shall be paid in full as directed by the Company to the Company or a brokerage firm designated or approved by the Company by delivery of consideration equal to the product of the Option exercise price and the number of shares purchased. Such consideration must be paid before the Company will issue the shares being purchased and must be in a form or a combination of forms acceptable to the Committee for that purchase, which forms may include: (a) check; (b) wire transfer; (c) tendering by attestation shares of Common Stock already owned by the Participant that on the day prior to the exercise date have a Fair Market Value equal to the aggregate exercise price of the shares being purchased under the Option; (d) to the extent permitted by applicable law, delivery of a properly executed exercise notice, together with irrevocable instructions to a brokerage firm designated or approved by the Company to deliver promptly to the Company the aggregate amount of sale or loan proceeds to pay the Option exercise price and any tax withholding obligations that may arise in connection with the exercise, all in accordance with the regulations of the Federal Reserve Board; or (e) such other consideration as the Committee may permit in its sole discretion.

7.6 Post-Termination Exercise

The Committee shall establish and set forth in each instrument that evidences an Option whether the Option shall continue to be exercisable, and the terms and conditions of such exercise, after a Termination of Service, any of which provisions may be waived or modified by the Committee at any time, provided that any such waiver or modification shall satisfy the requirements for exemption under Section 409A.

7.7 Incentive Stock Options

The terms of any Incentive Stock Options shall comply in all respects with the provisions of Section 422 of the Code, or any successor provision, and any regulations promulgated thereunder. Individuals who are not employees of the Company or one of its parent or subsidiary corporations (as such terms are defined for purposes of Section 422 of the Code) may not be granted Incentive Stock Options. To the extent that the aggregate Fair Market Value of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by a Participant during any calendar year exceeds \$100,000 or, if different, the maximum limitation in effect at the time of grant under the Code (the Fair Market Value being determined as of the Grant Date for the Option), such portion in excess of \$100,000 shall be treated as Nonqualified Stock Options. No Incentive Stock Options may be granted more than ten years after the adoption in February 2014 of this amended and restated Plan by the Board.

Section 8. Stock Appreciation Rights

8.1 Grant of Stock Appreciation Rights; SAR Grant Price

The Committee may grant stock appreciation rights (“Stock Appreciation Rights” or “SARs”). A SAR may be granted in tandem with an Option or alone (“freestanding”). The grant price of a tandem SAR shall be equal to the exercise price of the related Option, and the grant price of a freestanding SAR shall be equal to the Fair Market Value of the Common Stock for the Grant Date, except for Substitute Awards. A SAR may be exercised upon such terms and conditions and for the term as the Committee determines in its sole discretion; provided, however, that, subject to earlier termination in accordance with the terms of the Plan and the instrument evidencing the SAR, the term of a freestanding SAR shall be a term not to exceed ten years from the Grant Date as established for that SAR by the Committee or, if not so established, shall be ten years, and in the case of a tandem SAR, (a) the term shall not exceed the term of the related Option and (b) the tandem SAR may be exercised for all or part of the shares subject to the related Option upon the surrender of the right to exercise the equivalent portion of the related Option, except that the tandem SAR may be exercised only with respect to the shares for which its related Option is then exercisable.

8.2 Payment of SAR Amount

Upon the exercise of a SAR, a Participant shall be entitled to receive payment from the Company in an amount determined by multiplying (a) the difference between the Fair Market Value of the Common Stock for the date of exercise over the grant price by (b) the number of shares with respect to which the SAR is exercised. At the discretion of the Committee, the payment upon exercise of a SAR may be in cash, in shares of equivalent value, in some combination thereof or in any other manner approved by the Committee in its sole discretion.

8.3 Post-Termination Exercise

The Committee shall establish and set forth in each instrument that evidences a freestanding SAR whether the SAR shall continue to be exercisable, and the terms and conditions of such exercise, after a Termination of Service, any of which provisions may be waived or modified by the Committee at any time, provided that any such waiver or modification shall satisfy the requirements for exemption under Section 409A.

8.4 Repricing Prohibition

In no event shall the Committee, without the prior approval of the Company’s shareholders, (a) cancel any outstanding SAR for the purpose of reissuing the SAR to the Participant at a lower grant price, (b) exchange any outstanding SAR for cash, another Award, or an Option or Stock Appreciation Right with an exercise or grant price that is less than the grant price of the cancelled SAR, (c) reduce the grant price of an outstanding SAR, or (d) take any other action that would be a “repricing” of the SAR.

Section 9. Restricted Stock and Stock Units

9.1 Grant of Restricted Stock and Stock Units

The Committee may grant Restricted Stock and Stock Units on such terms and conditions and subject to such forfeiture restrictions, if any (which may be based on continuous service with the Company or a Related Company or the achievement of any Performance Goals), as the Committee shall determine in its sole discretion, which terms, conditions and restrictions shall be set forth in the instrument evidencing the Award.

9.2 Issuance of Shares

Upon the satisfaction of any terms, conditions and restrictions prescribed with respect to Restricted Stock or Stock Units, or upon a Participant’s release from any terms, conditions and restrictions of Restricted Stock or Stock Units, as determined by the Committee, (a) the shares of Restricted Stock covered by each Award of Restricted Stock shall become freely transferable by the Participant, and (b) Stock Units shall be paid in cash, shares of Common Stock or a combination of cash and shares of Common Stock as the Committee shall determine in its sole discretion.

9.3 Waiver of Restrictions

Notwithstanding any other provisions of the Plan, the Committee, in its sole discretion, may waive the repurchase or forfeiture period and any other terms, conditions or restrictions on any Restricted Stock or Stock Unit under such circumstances and subject to such terms and conditions as the Committee shall deem appropriate.

Section 10. Performance Shares, Performance Restricted Stock or Units, and Performance Units

10.1 Grant of Performance Shares and Performance Restricted Stock or Units

The Committee may grant Awards of performance shares, performance restricted stock and performance restricted stock units (“Performance Shares,” “Performance Restricted Stock” or “Performance Restricted Stock Units”, as the case may be) and designate the Participants to whom Performance Shares or Performance Restricted Stock or Units are to be awarded and determine the number of Performance Shares or Performance Restricted Stock or Units, the length of the Performance Period and the other terms and conditions of each such Award. Each Award of Performance Shares or Performance Restricted Stock or Units shall entitle the Participant to a payment in the form of shares of Common Stock upon the achievement of Performance Goals and other terms and conditions specified by the Committee. Notwithstanding the achievement of any Performance Goals, the number of shares issued under an Award of Performance Shares or Performance Restricted Stock or Units may be adjusted on the basis of such further consideration as the Committee shall determine in its sole discretion. The Committee, in

its sole discretion, may make a cash payment equal to the Fair Market Value of the Common Stock otherwise required to be issued to a Participant pursuant to an Award of Performance Shares or Performance Restricted Stock or Units.

10.2 Grant of Performance Units

The Committee may grant Awards of performance units (“Performance Units”) and designate the Participants to whom Performance Units are to be awarded and determine the number of Performance Units, the length of the Performance Period and the other terms and conditions of each such Award. Each Award of Performance Units shall entitle the Participant to a payment in cash upon the achievement of Performance Goals and other terms and conditions specified by the Committee. Notwithstanding the achievement of any Performance Goals, the amount to be paid under an Award of Performance Units may be adjusted on the basis of such further consideration as the Committee shall determine in its sole discretion. The Committee, in its sole discretion, may substitute shares of Common Stock for the cash payment otherwise required to be made to a Participant pursuant to a Performance Unit.

Section 11. Section 162(m) Awards

11.1 Terms of Section 162(m) Awards Generally

In addition to any other Awards under the Plan, the Committee may, at the time of grant of an Award (other than an Option or a Stock Appreciation Right) to a Participant who is then a Covered Employee or is likely to be a Covered Employee as of the end of the tax year in which the Company would claim a tax deduction in connection with such Award, specify that all or any portion of such Award is intended to be Performance-Based Compensation. With respect to each such Award, the Committee shall establish, in writing, that the vesting and/or payment pursuant to the Award shall be conditioned on the achievement for the specified Performance Period of specified performance targets or goals (“Performance Goals”) related to designated Performance Criteria for such period selected by the Committee. Such action shall be taken no later than the earlier of (a) the date 90 days after the commencement of the applicable Performance Period or (b) the date on which 25% of the Performance Period has elapsed and, in any event, at a time when the outcome of the Performance Goals remains substantially uncertain.

11.2 Performance Criteria

The term “Performance Criteria” shall mean Adjusted Operating Cash Flow or any one or more of the following performance criteria: profits (including, but not limited to, profit growth, net operating profit or economic profit); profit-related return ratios; return measures (including, but not limited to, return on assets, capital, equity or sales); cash flow (including, but not limited to, operating cash flow, free cash flow or cash flow return on capital); earnings (including, but not limited to, net earnings, earnings per share, or earnings before or after taxes); net sales growth; net income (before or after taxes, interest, depreciation and/or amortization); gross or operating margins; productivity ratios; share price (including, but not limited to, growth measures and total shareholder return); expense targets; margins; operating efficiency; customer satisfaction; and working capital targets.

11.3 Use and Calculation of Performance Criteria and Performance Goals

Any Performance Criteria and Performance Goals may be used to measure the performance of the Company as a whole or with respect to one or more business units, divisions, acquired businesses, minority investments, partnerships or joint ventures. Performance Criteria and Performance Goals may be stated in absolute terms or relative to comparison companies or indices to be achieved during a period of time. Performance Criteria and Performance Goals shall be calculated in accordance with the Company’s financial statements or generally accepted accounting principles, or under a methodology established by the Committee prior to the issuance of an Award that is consistently applied. The Committee shall have the right to specify, at the time the Performance Criteria and Performance Goals are established in accordance with this Section 11, that any Performance Criteria and Performance Goals may be adjusted to exclude the impact of any Nonrecurring Item.

11.4 Committee Certification and Authority

After the completion of each Performance Period, the Committee shall certify the extent to which any Performance Goal has been achieved, and the amount payable as a result thereof, prior to payment, settlement or vesting of any Award subject to this Section 11. Notwithstanding any provision of the Plan other than Section 11, with respect to any Award subject to this Section 11, the Committee may adjust downwards, but not upwards, the amount payable pursuant to such Award.

The Committee shall have the power to impose such other restrictions on Awards subject to this Section 11 as it may deem necessary or appropriate to ensure that such Awards satisfy all requirements for “performance-based compensation” within the meaning of Section 162(m).

Section 12. Other Stock or Cash-Based Awards

In addition to the Awards described in Sections 7 through 11, and subject to the terms of the Plan, the Committee may grant other incentives payable in cash or in shares of Common Stock under the Plan as it determines to be in the best interests of the Company and subject to such other terms and conditions as it deems appropriate, including dividends and dividend equivalents that may be paid under any awards outstanding under the Old Plan as of the Shareholder Approval Effective Date.

Section 13. Withholding

The Company may require a Participant to pay to the Company the amount of (a) any tax withholding obligations and (b) any amounts due from the Participant to the Company or to any Related Company (“other obligations”). The Company shall not be required to issue any shares of Common Stock under the Plan until such tax withholding obligations and other obligations are satisfied.

The Committee may permit or require a Participant to satisfy all or part of his or her tax withholding obligations and other obligations by (a) paying cash to the Company, (b) having the Company withhold an amount from any cash amounts otherwise due or to become due from the

Company to the Participant, (c) having the Company withhold a number of shares of Common Stock that would otherwise be issued to the Participant (or become vested in the case of Restricted Stock or Performance Restricted Stock) having a Fair Market Value equal to the tax withholding obligations and other obligations, or (d) surrendering a number of shares of Common Stock the Participant already owns having a value equal to the tax withholding obligations and other obligations.

Section 14. Assignability

No Award or Award agreement, and no rights or interests herein or therein, shall or may be assigned, transferred, sold, exchanged, encumbered, pledged, or otherwise hypothecated or disposed of by a Participant or any beneficiary(ies) of any Participant, except (a) by testamentary disposition by the Participant or the laws of intestate succession and (b) that to the extent permitted by the Committee, in its sole discretion, a Participant may designate one or more beneficiaries on a Company-approved form who may receive payment under an Award after the Participant's death. No such interest shall be subject to execution, attachment or similar legal process, including, without limitation, seizure for the payment of the Participant's debts, judgments, alimony, or separate maintenance. Except as provided in this Section 14, during the lifetime of a Participant, Awards are exercisable only by the Participant or his or her legal representative in the case of physical or mental incapacitation of the Participant as evidenced by legal order.

Section 15. Adjustments

15.1 No Corporate Action Restriction

The existence of the Plan, any Award agreement and/or the Awards granted hereunder shall not limit, affect or restrict in any way the right or power of the Board or the shareholders of the Company to make or authorize (a) any adjustment, recapitalization, reorganization or other change in the Company's or any subsidiary's capital structure or its business, (b) any merger, consolidation or change in the ownership of the Company or any subsidiary, (c) any issue of bonds, debentures, capital, preferred or prior preference stocks ahead of or affecting the Company's or any subsidiary's capital stock or the rights thereof, (d) any dissolution or liquidation of the Company or any subsidiary, (e) any sale or transfer of all or any part of the Company's or any subsidiary's assets or business, or (f) any other corporate act or proceeding by the Company or any subsidiary. No Participant, beneficiary or any other person shall have any claim against any member of the Board or the Committee, the Company or any subsidiary, or any employees, officers, shareholders or agents of the Company or any subsidiary, as a result of any such action.

15.2 Recapitalization Adjustments

In the event of a dividend or other distribution (whether in the form of cash, Common Stock, other securities, or other property) other than regular cash dividends, recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, change in control or exchange of Common Stock or other securities of the Company, or other corporate transaction or event affects the Common Stock such that an adjustment is necessary or appropriate in order to prevent dilution or enlargement of benefits or potential benefits intended to be made available under the Plan, the Board shall equitably adjust (a) the number of shares of Common Stock or other securities of the Company (or number and kind of other securities or property) with respect to which Awards may be granted, (b) the maximum share limitation applicable to each type of Award that may be granted to any individual Participant in any calendar year, (c) the number of shares of Common Stock or other securities of the Company (or number and kind of other securities or property) subject to outstanding Awards, and (d) the exercise price with respect to any Option or the grant price with respect to any Stock Appreciation Right.

15.3 Corporate Transactions

If the Company enters into or is involved in any Corporate Transaction, the Board may, prior to such Corporate Transaction and effective upon such Corporate Transaction, take such action as it deems appropriate, including, but not limited to, replacing outstanding Awards with Substitute Awards in respect of the shares, other securities or other property of the surviving corporation or any affiliate of the surviving corporation on such terms and conditions, as to the number of shares, pricing and otherwise, which shall substantially preserve the value, rights and benefits of any affected Awards granted hereunder as of the date of the consummation of the Corporate Transaction. Notwithstanding anything to the contrary in the Plan, if any Corporate Transaction occurs, the Company shall have the right, but not the obligation, to cancel each Participant's Options and/or Stock Appreciation Rights and to pay to each affected Participant in connection with the cancellation of such Participant's Options and/or Stock Appreciation Rights, an amount equal to the excess (if any) of the Corporate Transaction Price (as defined below), as determined by the Board, of the Common Stock underlying any unexercised Options or Stock Appreciation Rights (whether then exercisable or not) over the aggregate exercise price of such unexercised Options and/or Stock Appreciation Rights, and make additional adjustments and/or settlements of other outstanding Awards as it determines to be fair and equitable to affected Participants. Upon receipt by any affected Participant of any such Substitute Award (or payment) as a result of any such Corporate Transaction, such Participant's affected Awards for which such Substitute Awards (or payment) were received shall be thereupon cancelled without the need for obtaining the consent of any such affected Participant.

Subject to the provisions of the preceding paragraph, the Board shall not take any further action that causes any Awards, which are not then exercisable and vested, to automatically become vested and exercisable in connection with a Corporate Transaction under this Section 15.3.

For purposes of the Plan,

(a) "Corporate Transaction" means the occurrence of any of the following events: (i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "beneficial owner" (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the total voting power represented by the Company's then-outstanding voting securities; (ii) the consummation of the sale or disposition by the Company of all or substantially all of the Company's assets; (iii) the consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding

or by being converted into voting securities of the surviving entity or its parent) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation or (iv) individuals who, as of the date hereof, constitute the Board (the "Incumbent Board") cease for any reason to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least a majority of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents by or on behalf of a person other than the Board.

(b) "Corporate Transaction Price" means the highest price per share of Common Stock paid in any transaction related to a Corporate Transaction. To the extent that the consideration paid in any Corporate Transaction consists all or in part of securities or other non-cash consideration, the value of such securities or other non-cash consideration shall be determined in the good-faith discretion of the Board consistent with provisions of Section 409A and/or other applicable law.

Section 16. Amendment and Termination

16.1 Amendment, Suspension or Termination of the Plan

The Board or the Committee may amend, suspend or terminate the Plan or any portion of the Plan at any time and in such respects as it shall deem advisable; provided, however, that, to the extent required by applicable law, regulation or stock exchange rule, shareholder approval shall be required for any amendment to the Plan.

Notwithstanding the foregoing, an amendment that constitutes a "material revision," as defined by the rules of the New York Stock Exchange shall be submitted to the Company's shareholders for approval. In addition, any revision that deletes or limits the scope of the provisions in Sections 7.2 and 8.4 prohibiting repricing of Options or SARs without shareholder approval and any revision that increases the number of shares stated in Section 4.1 as available for issuance under the Plan shall be considered material revisions that require shareholder approval.

16.2 Term of the Plan

Unless sooner terminated as provided herein, the Plan shall terminate ten years from the Shareholder Approval Effective Date. After the Plan is terminated, no future Awards may be granted, but Awards previously granted shall remain outstanding in accordance with their applicable terms and conditions and the Plan's terms and conditions.

Notwithstanding the foregoing, no Incentive Stock Options may be granted more than ten years after the adoption in February 2014 of this amended and restated Plan by the Board.

16.3 Consent of Participant

The amendment, suspension or termination of the Plan or a portion thereof or the amendment of an outstanding Award shall not, without the Participant's consent, materially adversely affect any rights under any Award theretofore granted to the Participant under the Plan. Any change or adjustment to an outstanding Incentive Stock Option shall not, without the consent of the Participant, be made in a manner so as to constitute a "modification" that would cause such Incentive Stock Option to fail to continue to qualify as an Incentive Stock Option. Notwithstanding the foregoing, any adjustments made pursuant to Section 15 shall not be subject to these restrictions.

Section 17. General

17.1 Clawbacks

Awards under the Plan shall be subject to the Clawback Policy as adopted by the Board and as amended from time to time. In addition, subject to applicable local law, Awards granted under the Plan on or after February 1, 2017 shall be subject to clawback and forfeiture in the event a Participant or former Participant engages in any of the following conduct, as determined by the Company or its delegate in its sole discretion, prior to the second anniversary of the later of the vesting or receipt of payment of the Award: the Participant (i) is convicted of a felony involving theft, fraud, embezzlement, or other similar unlawful acts against the Company or against the Company's interests; (ii) directly or indirectly engages in competition with any significant aspect of Company business; (iii) induces or attempts to induce, directly or indirectly, any of the Company's employees, representatives or consultants to terminate, discontinue or cease working with or for the Company, or to breach any contract with the Company, in order to work with or for, or enter into a contract with, the Participant or any third party; (iv) disparages the Company or its products or employees; or (v) uses or discloses Company proprietary or confidential information. Nothing in this Section 17.1 will apply to legally protected communications to government agencies or statements made in the course of sworn testimony in administrative, judicial or arbitral proceedings.

17.2 No Individual Rights

No individual or Participant shall have any claim to be granted any Award under the Plan, and the Company has no obligation for uniformity of treatment of Participants under the Plan.

Furthermore, nothing in the Plan or any Award granted under the Plan shall be deemed to constitute an employment contract or confer or be deemed to confer on any Participant any right to continue in the employ of, or to continue any other relationship with, the Company or any Related Company or limit in any way the right of the Company or any Related Company to terminate a Participant's employment or other relationship at any time, with or without cause.

17.3 Issuance of Shares

Notwithstanding any other provision of the Plan, the Company shall have no obligation to issue or deliver any shares of Common Stock under the Plan or make any other distribution of benefits under the Plan unless, in the opinion of the Company's counsel, such issuance,

delivery or distribution would comply with all applicable laws (including, without limitation, the requirements of the Securities Act or the laws of any state or foreign jurisdiction) and the applicable requirements of any securities exchange or similar entity.

The Company shall be under no obligation to any Participant to register for offering or resale or to qualify for exemption under the Securities Act, or to register or qualify under the laws of any state or foreign jurisdiction, any shares of Common Stock, security or interest in a security paid or issued under, or created by, the Plan, or to continue in effect any such registrations or qualifications if made. The Company may issue certificates for shares with such legends and subject to such restrictions on transfer and stop-transfer instructions as counsel for the Company deems necessary or desirable for compliance by the Company with federal, state and foreign securities laws. The Company may also require such other action or agreement by the Participants as may from time to time be necessary to comply with applicable securities laws.

To the extent the Plan or any instrument evidencing an Award provides for issuance of stock certificates to reflect the issuance of shares of Common Stock, the issuance may be effected on a noncertificated basis, to the extent not prohibited by applicable law or the applicable rules of any stock exchange.

17.4 Indemnification

Each person who is or shall have been a member of the Board, or a committee appointed by the Board, or an officer of the Company to whom authority was delegated in accordance with Section 3 shall be indemnified and held harmless by the Company against and from any loss, cost, liability or expense that may be imposed upon or reasonably incurred by him or her in connection with or resulting from any claim, action, suit or proceeding to which he or she may be a party or in which he or she may be involved by reason of any action taken or failure to act under the Plan and against and from any and all amounts paid by him or her in settlement thereof, with the Company's approval, or paid by him or her in satisfaction of any judgment in any such claim, action, suit or proceeding against him or her; provided, however, that he or she shall give the Company an opportunity, at its own expense, to handle and defend such claim, action, suit or proceeding before he or she undertakes to handle and defend the same on his or her own behalf, unless such loss, cost, liability or expense is a result of his or her own willful misconduct or except as expressly provided by statute.

The foregoing right of indemnification shall not be exclusive of any other rights of indemnification to which such persons may be entitled under the Company's certificate of incorporation or bylaws, as a matter of law, or otherwise, or of any power that the Company may have to indemnify them or hold them harmless.

17.5 No Rights as a Shareholder

Unless otherwise provided by the Committee or in the instrument evidencing the Award or in a written employment or services agreement, no Option or Award denominated in units shall entitle the Participant to any cash dividend, voting or other right of a shareholder unless and until the date of issuance under the Plan of the shares that are the subject of such Award.

17.6 Compliance With Laws and Regulations

Notwithstanding anything in the Plan to the contrary, the Committee, in its sole discretion, may bifurcate the Plan so as to restrict, limit or condition the use of any provision of the Plan to Participants who are officers or directors subject to Section 16 of the Exchange Act without so restricting, limiting or conditioning the Plan with respect to other Participants. With respect to officers and directors subject to Section 16 of the Exchange Act, transactions under the Plan are intended to comply with all applicable conditions of Rule 16b-3 promulgated under the Exchange Act.

Additionally, in interpreting and applying the provisions of the Plan, any Option granted as an Incentive Stock Option pursuant to the Plan shall, to the extent permitted by law, be construed as an "incentive stock option" within the meaning of Section 422 of the Code or any successor provision.

Additionally, notwithstanding anything contained in the Plan to the contrary, it is the Company's intention that any and all Awards and compensation payable under the Plan shall satisfy the requirements for exemption under Section 409A and that all terms and provisions shall be interpreted to satisfy such requirements. If the Committee determines that an Award, payment, distribution, deferral election, transaction or any other action or arrangement contemplated by the provisions of the Plan would, if undertaken, cause a Participant to become subject to Section 409A, the Committee, to the extent it deems necessary or advisable in its sole discretion, reserves the right, but shall not be required, to unilaterally amend or modify the Plan and any Award granted under the Plan so that the Award qualifies for exemption from or compliance with Section 409A. Awards not deferred under Section 6.3 and not otherwise exempt from the requirements of Section 409A are intended to qualify for the short-term deferral exemption to Section 409A, and payment shall be made as soon as administratively feasible after the Award became vested, but in no event shall such payment be made later than 2-1/2 months after the end of the calendar year in which the Award became vested unless otherwise permitted under the exemption provisions of Section 409A. Notwithstanding the foregoing, with respect to any Award made under the Plan that is determined to be "deferred compensation" (within the meaning of Section 409A), (a) references to Termination of Service will mean the Participant's "separation from service" (within the meaning of Section 409A) with the Company or any applicable Related Company, and (b) any payment to be made with respect to such Award in connection with the Participant's Termination of Service that would be subject to the limitations in Section 409A(a)(2)(b) of the Code shall be delayed until six months after the Participant's separation from service (or earlier death) in accordance with the requirements of Section 409A.

17.7 Participants in Other Countries

The Committee shall have the authority to adopt such modifications, procedures and subplans as may be necessary or desirable to comply with provisions of the laws of other countries in which the Company or any Related Company may operate to ensure the viability of the benefits from Awards granted to Participants employed in such countries, to comply with applicable foreign laws and to meet the objectives of the Plan.

Notwithstanding the provisions of Sections 7.2 and 8.1, where applicable foreign law requires that compensatory stock right be priced based upon a specific price averaging method and period, a stock right granted in accordance with such applicable foreign law will be treated as meeting the requirements of Sections 7.2 or 8.1, provided that the averaging period does not exceed 30 days.

17.8 No Trust or Fund

The Plan is intended to constitute an “unfunded” plan. Nothing contained herein shall require the Company to segregate any monies or other property, or shares of Common Stock, or to create any trusts, or to make any special deposits for any immediate or deferred amounts payable to any Participant, and no Participant shall have any rights that are greater than those of a general unsecured creditor of the Company.

17.9 Successors

All obligations of the Company under the Plan with respect to Awards shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all the business and/or assets of the Company.

17.10 Severability

If any provision of the Plan or any Award is determined to be invalid, illegal or unenforceable in any jurisdiction, or as to any person, or would disqualify the Plan or any Award under any law deemed applicable by the Committee, such provision shall be construed or deemed amended to conform to applicable laws, or, if it cannot be so construed or deemed amended without, in the Committee’s determination, materially altering the intent of the Plan or the Award, such provision shall be stricken as to such jurisdiction, person or Award, and the remainder of the Plan and any such Award shall remain in full force and effect.

17.11 Choice of Law

The Plan, all Awards granted thereunder and all determinations made and actions taken pursuant thereto, to the extent not otherwise governed by the laws of the United States, shall be governed by and construed in accordance with the laws of the State of Delaware, without reference to the principles of conflict of laws thereof.

Section 18. Restatement Effective Date

This amendment and restatement of the Plan shall be effective October 31, 2016.

Computation of Ratio of Earnings to Fixed Charges
The Boeing Company and Subsidiaries
(Dollars in millions)

	Years ended December 31,				
	2016	2015	2014	2013	2012
Earnings before income taxes	\$5,568	\$7,155	\$7,137	\$6,232	\$5,910
Fixed charges excluding capitalized interest	422	391	455	514	603
Amortization of previously capitalized interest	94	90	72	74	75
Net adjustment for earnings from affiliates	11	(34)	7	13	69
Earnings available for fixed charges	\$6,095	\$7,602	\$7,671	\$6,833	\$6,657
Fixed charges:					
Interest and debt expense ⁽¹⁾	\$365	\$339	\$402	\$461	\$551
Interest capitalized during the period	170	158	102	87	74
Rentals deemed representative of an interest factor	57	52	53	53	52
Total fixed charges	\$592	\$549	\$557	\$601	\$677
Ratio of earnings to fixed charges	10.3	13.8	13.8	11.4	9.8

⁽¹⁾ Amount does not include tax-related interest expense which is reported as a component of Income tax expense in our Condensed Consolidated Statements of Operations .

The Boeing Company Subsidiaries

Name	Place of Incorporation
Astro Limited	Bermuda
Aviall Services, Inc.	Delaware
Aviall UK, Inc.	Delaware
Aviall, Inc.	Delaware
BCC Equipment Leasing Corporation	Delaware
Boeing Aerospace Operations, Inc.	Delaware
Boeing Aerostructures Australia Pty Limited	Australia
Boeing Aircraft Holding Company	Delaware
Boeing Australia Holdings Proprietary Limited	Australia
Boeing Canada Operations Ltd.	Canada
Boeing Capital Corporation	Delaware
Boeing CAS Holding GmbH	Germany
Boeing Commercial Aviation Services Europe Limited	United Kingdom
Boeing Defence Australia Ltd	Australia
Boeing European Holdings Limited	United Kingdom
Boeing Global Holdings Corporation	Delaware
Boeing Intellectual Property Licensing Company	Delaware
Boeing International B.V.	Netherlands
Boeing International Logistics Spares, Inc.	Delaware
Boeing Logistics Spares, Inc.	Delaware
Boeing Netherlands B.V.	Netherlands
Boeing Netherlands C.V.	Netherlands
Boeing Operations International, Incorporated	Delaware
Insitu, Inc.	Washington
Jeppesen DataPlan, Inc.	Delaware
Jeppesen GmbH	Germany
Jeppesen Sanderson, Inc.	Delaware

In accordance with Item 601(b)(21) of Regulation S-K, the company has omitted from this Exhibit the names of its subsidiaries which, considered in the aggregate or as a single subsidiary, do not constitute a significant subsidiary as defined in Rule 1-02(w) of Regulation S-X.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 33-25332, 33-31434, 33-43854, 33-58798, 33-52773, 333-16363, 333-26867, 333-32461, 333-32491, 333-32499, 333-32567, 333-41920, 333-54234, 333-73252, 333-107677, 333-140837, 333-156403, 333-160752, 333-163637, and 333-195777 on Form S-8 and Registration Statement No. 333-202311 on Form S-3 of our reports dated February 8, 2017 , relating to the consolidated financial statements of The Boeing Company and subsidiaries (the "Company"), and the effectiveness of the Company's internal control over financial reporting, appearing in this Annual Report on Form 10-K of the Company, for the year ended December 31, 2016 .

/s/ Deloitte & Touche LLP

Chicago, Illinois

February 8, 2017

**CERTIFICATION PURSUANT TO
RULE 13a-14 OF THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Dennis A. Muilenburg , certify that:

1. I have reviewed this annual report on Form 10-K of The Boeing Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 8, 2017

/s/ Dennis A. Muilenburg

Dennis A. Muilenburg
Chairman, President and Chief Executive Officer

**CERTIFICATION PURSUANT TO
RULE 13a-14 OF THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Gregory D. Smith, certify that:

1. I have reviewed this annual report on Form 10-K of The Boeing Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 8, 2017

/s/ Gregory D. Smith

Gregory D. Smith

Chief Financial Officer and Executive Vice President, Corporate Development and Strategy

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of The Boeing Company (the "Company") on Form 10-K for the period ending December 31, 2016 , as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Dennis A. Muilenburg , Chairman, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Dennis A. Muilenburg

Dennis A. Muilenburg
Chairman, President and Chief Executive Officer

February 8, 2017

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of The Boeing Company (the "Company") on Form 10-K for the period ending December 31, 2016 , as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Gregory D. Smith , Chief Financial Officer and Executive Vice President, Corporate Development and Strategy of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Gregory D. Smith

Gregory D. Smith
Chief Financial Officer and Executive Vice President, Corporate Development and Strategy

February 8, 2017