

GENERAL DYNAMICS CORP  
Form 10-K  
February 08, 2016

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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, 2015

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 1-3671

GENERAL DYNAMICS CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	13-1673581
State or other jurisdiction of incorporation or organization	IRS Employer Identification No.

2941 Fairview Park Drive, Suite 100	22042-4513
Falls Church, Virginia	
Address of principal executive offices	Zip code

Registrant's telephone number, including area code:  
(703) 876-3000

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

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

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

None

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

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

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

\_\_\_\_\_  
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§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 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 of this Form 10-K.

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

Large Accelerated Filer  Accelerated Filer  Non-Accelerated Filer  Smaller Reporting Company

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

The aggregate market value of the voting common equity held by non-affiliates of the registrant was \$41,198,779,978 as of July 5, 2015 (based on the closing price of the shares on the New York Stock Exchange).

311,161,810 shares of the registrant's common stock, \$1 par value per share, were outstanding on January 31, 2016.

**DOCUMENTS INCORPORATED BY REFERENCE:**

Part III incorporates by reference information from certain portions of the registrant's definitive proxy statement for the 2016 annual meeting of shareholders to be filed with the Securities and Exchange Commission within 120 days after the close of the fiscal year.

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## PART I

(Dollars in millions, except per-share amounts or unless otherwise noted)

### ITEM 1. BUSINESS

#### BUSINESS OVERVIEW

General Dynamics is a global aerospace and defense company that offers a broad portfolio of products and services in business aviation; combat vehicles, weapons systems and munitions; C4ISR (command, control, communications, computers, intelligence, surveillance and reconnaissance) solutions and information technology (IT) services; and shipbuilding.

Incorporated in Delaware in 1952, General Dynamics grew organically and through acquisitions until the early 1990s when we sold nearly all of our businesses. In the mid-1990s, we began expanding again by acquiring combat vehicle-related businesses, IT product and service companies, additional shipyards and Gulfstream Aerospace Corporation. In the 2000s, we continued to grow organically and acquired companies throughout the portfolio. Today, we are focused on delivering superior products and services to our customers, improving operations, generating cash and increasing return on invested capital.

We operate through four business groups, and each group has several business units. Each of our businesses has responsibility for strategy and execution, providing the flexibility they need to stay close to their customers, perform on programs and remain agile. Our corporate headquarters is responsible for setting the overall direction of the company, the allocation of capital and promoting a culture of ethics and integrity that defines how we operate. Our management team delivers on our commitments to shareholders through disciplined execution of backlog, efficient cash-flow conversion and prudent capital deployment. We manage costs, undertake continuous improvement initiatives and collaborate across our businesses to achieve our goals of maximizing earnings and cash and creating value for our shareholders.

Following is additional information on each of our business groups: Aerospace, Combat Systems, Information Systems and Technology and Marine Systems. For selected financial information, see Note Q to the Consolidated Financial Statements in Item 8.

#### AEROSPACE

Our Aerospace group is at the forefront of the business-jet industry. We deliver a family of Gulfstream aircraft, provide aircraft services and perform completions for aircraft produced by other original equipment manufacturers (OEMs). With more than 50 years of experience, the Aerospace group is known for:

- superior aircraft design, quality, performance, safety and reliability;
- technologically advanced cockpit and cabin systems; and
- industry-leading product service and support.

Gulfstream Aerospace Corporation designs, develops, manufactures, services and supports the world's most technologically advanced business-jet aircraft. Our product line includes aircraft across a spectrum of price and performance options in the large- and mid-cabin business-jet market. The varying ranges, speeds and cabin dimensions are well-suited for the needs of a diverse and global customer base.

In 2015, Gulfstream was awarded the Collier Trophy for the design and development of the G650 business-jet family. This is Gulfstream's third time receiving the National Aeronautic Association's annual award, which recognizes the greatest achievement in U.S. aeronautics or astronautics with respect to

improving performance, efficiency and safety. The G650 family includes the G650 and the extended-range G650ER. The ultra-long-range G650ER flies farther at faster speeds than any other business jet on the market, and can travel 7,500 nautical miles at Mach 0.85. The G650 entered into service in 2012, and the G650ER was introduced and delivered in 2014. In February 2015, the G650ER set two city-pair records while flying around the world with one stop. Together, the G650 and G650ER hold more than 50 world speed records.

We are committed to research and development (R&D) activities to ensure we continue to introduce new products and first-to-market enhancements that broaden customer choice, improve aircraft performance and set new standards for customer safety, comfort and in-flight productivity. In 2014, we also introduced two new large-cabin business jets, the G500 and G600. These clean-sheet next-generation business jets optimize the speed, wide-cabin comfort, efficiency and advanced safety technology of the aircraft. At Mach 0.85, the G500 can fly 5,000 nautical miles, and the G600 can fly 6,200 nautical miles. The G500 completed its first flight in May 2015 and has since completed hundreds of test flight hours at speeds up to Mach 0.995 and altitude over 50,000 feet. The G500 and G600 are expected to enter into service in 2018 and 2019, respectively. These new aircraft demonstrate our consistent and disciplined investment in Gulfstream.

Our product enhancement and development efforts include initiatives in advanced avionics, composites, renewable fuels, flight-control systems, acoustics, cabin technologies and vision systems. A recent example is the Symmetry Flight Deck introduced with the G500 and G600, which includes 10 touchscreens and active control sidesticks. The touchscreens improve how pilots interact with onboard systems, and the sidesticks are digitally linked to allow both pilots to see and feel each other's control inputs, enhancing situational awareness and further improving safety of the flight.

Gulfstream has an ongoing environmental sustainability program, including the use of renewable fuels. In 2015, we finalized an industry-first, three-year agreement that provides Gulfstream with a consistent supply of renewable fuels for daily flight operations from its headquarters in Savannah, Georgia. Each gallon of renewable fuel burned is expected to achieve a more than 50-percent reduction in greenhouse gas emissions on a lifecycle basis, relative to petroleum-based jet fuel.

Gulfstream designs, develops and manufactures aircraft in Savannah, including manufacturing all large-cabin models. The mid-cabin models are constructed by a non-U.S. partner. All models are outfitted in the group's U.S. facilities. In support of Gulfstream's growing aircraft portfolio and international customer base, we have invested in multi-year facilities projects at our Savannah campus, which are scheduled to continue through 2017. This expansion consists of constructing new facilities, including the completed purpose-built G500 and G600 manufacturing facilities, and renovating existing infrastructure. This effort follows earlier projects including a purpose-built G650 manufacturing facility, increased aircraft-service capacity, an improved customer sales and design center and a state-of-the-art paint facility.

The group offers extensive support for the over 2,500 Gulfstream aircraft in service with the largest factory-owned service network in the business aviation industry, including professionals located around the globe. The service network for Gulfstream aircraft continues to evolve to address the demands of the group's growing international customer base. We operate 11 company-owned service centers worldwide and have more than 20 factory-authorized service centers and authorized warranty facilities on six continents. We also operate a 24-hour-per-day/365-day-per-year Customer Contact Center and offer on-call Gulfstream aircraft technicians ready to deploy for urgent customer-service requirements in the Americas. This commitment to superior product support continues to receive industry recognition, including the number-one ranking for the 13th consecutive year in the annual Aviation International News Product Support Survey.

Jet Aviation expands our Aerospace portfolio as a global leader in business aviation services, providing comprehensive services and a network of facilities to aircraft owners and operators. With employees across

more than 25 airport facilities throughout Europe, the Middle East, Asia and North America, our service offerings include maintenance, repair, aircraft management, charter, fixed-base operations (FBO) and staffing services. We recently expanded our service network in Europe and the Bahamas, began construction on a major FBO expansion in Bedford, Massachusetts, and are on schedule to have a new maintenance facility in Macau operational in 2016. In addition to these capabilities, Jet Aviation has nearly 40 years of experience offering custom complex completions for business-jet and single- and double-aisle aircraft from its Basel, Switzerland, and St. Louis, Missouri, operations. To support the increasing demand for corporate and VIP aircraft interiors and our growing backlog, we recently expanded our production capacity at the Basel facility.

As a market leader in the business-aviation industry, the Aerospace group is focused on developing innovative first-to-market technologies and products; providing exemplary and timely service to customers globally; and driving efficiencies and reducing costs in the aircraft production, outfitting and service processes.

Revenue for the Aerospace group was 28 percent of our consolidated revenue in 2015 and 2014 and 26 percent in 2013. Revenue by major products and services was as follows:

Year Ended December 31	2015	2014	2013
Aircraft manufacturing, outfitting and completions	\$7,156	\$6,983	\$6,378
Aircraft services	1,584	1,599	1,530
Pre-owned aircraft	111	67	210
Total Aerospace	\$8,851	\$8,649	\$8,118

#### COMBAT SYSTEMS

Our Combat Systems group offers a full-spectrum of combat vehicles, weapons systems and munitions for the United States and its allies around the world. We take a disciplined systems engineering approach to deliver market-leading design, development, production, modernization and sustainment services. Our extensive, diverse and proven product lines give us the agility to deliver tailored solutions that meet a wide array of customer mission needs. Comprised of three business units, European Land Systems, Land Systems and Ordnance and Tactical Systems, the group's product lines include:

- wheeled combat and tactical vehicles;
- main battle tanks and tracked combat vehicles;
- weapons systems, armament and munitions; and
- maintenance and logistics support and sustainment services.

**Wheeled combat and tactical vehicles:** The eight-wheeled, medium-weight Stryker combat vehicle, which has 10 variants, has proven itself as one of the most versatile vehicles in the U.S. Army's fleet, combining survivability and maneuverability into a deployable and responsive combat support vehicle. The Army is planning to convert all nine of its Stryker Brigade Combat Teams to the double-V-hulled configuration, which significantly improves protection for soldiers from threats such as improvised explosive devices (IEDs). In response to customer needs driven by a dynamic threat environment, we are working with the Army to increase the lethality of the Stryker vehicle with the addition of a 30-millimeter gun system.

The group has a market-leading position in light armored vehicles (LAVs) with more than 10,000 vehicles delivered around the world. We offer advanced technologies combined with combat-proven survivability. We currently have a \$10 billion contract to provide wheeled armored vehicles along with associated logistics support to a Middle Eastern customer through 2028.

We have delivered numerous high-mobility, versatile Pandur and Piranha armored vehicles. The Pandur family of vehicles serves as a common platform for various armament and equipment configurations, and the Piranha is a multi-role vehicle well-suited for a variety of combat operations. In 2015, the Danish Ministry of Defence selected the Piranha as its new armored personnel carrier, and we signed an agreement with the Spanish Ministry of Defense for extensive technological trials of the Piranha 5 vehicle for the Spanish Army's future 8x8 armored infantry fighting vehicle.

Tactical vehicles offered by the group include the lightweight Flyer family of vehicles, a modular vehicle built for speed and mobility that allows access to previously denied terrain in demanding environments. We are delivering the Flyer 60 and Flyer 72 to U.S. Special Operations Command for the Internally Transportable Vehicle (ITV) and Ground Mobility Vehicle (GMV) programs. Outside the United States, the Duro and Eagle tactical vehicle families offer a range of options in the 6- to 15-ton weight class.

The group's family of route clearance vehicles, including the Buffalo, Cougar and RG-31 vehicles, is at the forefront of blast- and ballistic-protected technologies. These vehicles are designed specifically to protect occupants from land mines, hostile fire and IEDs.

Tanks and tracked combat vehicles: Combat Systems' powerful tracked vehicles provide key capabilities to customers around the world. The Abrams main battle tank offers a proven, decisive edge in combat for the U.S. Army, National Guard and Marine Corps. We are upgrading the Army's Abrams tanks with the System Enhancement Package (SEP), which provides a digital platform that includes an enhanced command-and-control system, new power generation and distribution systems, second-generation thermal sights and improved armor. Internationally, the group provides Abrams tanks to several U.S. allies. In 2015, the group received an award to refurbish and upgrade tanks for the Kingdom of Morocco and announced resumed production of M1A1 tank kits for the Egyptian Land Forces.

The ASCOD is a highly versatile tracked combat vehicle with multiple versions, including the Spanish Pizarro and the Austrian Ulan. Currently the group is producing the British Army's next-generation AJAX armoured fighting vehicle, a version of the ASCOD formerly known as the Scout Specialist Vehicle. With six variants, AJAX offers advanced electronic architecture and proven technology for an unparalleled balance of protection, survivability and reliability for a vehicle in its weight class. In addition to production, the group will provide in-service support for the AJAX vehicle fleet through 2024.

With our large installed base of wheeled and tracked vehicles around the world and the expertise gained from our engineering and production programs, we are well-positioned for vehicle modernization programs, support and sustainment services, and future development programs.

Weapons systems, armament and munitions: Complementing these military-vehicle offerings, the group designs, develops and produces a comprehensive array of sophisticated weapons systems. For ground forces, we manufacture M2/M2-A1 heavy machine guns and MK19/MK47 grenade launchers. The group also produces legacy and next-generation weapons systems for shipboard applications, including the Navy's Phalanx Close-In Weapon System (CIWS), multiple subsystems for the Littoral Combat Ship (LCS) and Zumwalt-class (DDG-1000) guided-missile destroyer firepower mission modules. For airborne platforms, we produce weapons for U.S. and non-U.S. fighter aircraft, including high-speed Gatling guns for all U.S. fixed-wing military aircraft. The group is also a significant supplier of composite structures and aircraft components.

Our munitions portfolio covers the full breadth of naval, air and ground forces applications across all calibers and weapons platforms for the U.S. government and its allies. In North America, the group maintains a market-leading position in the supply of Hydra-70 rockets, large-caliber tank ammunition, medium-caliber

ammunition, mortar and artillery projectiles, tactical missile aerostuctures, and high-performance warheads, military propellants and conventional bombs and bomb cases.

The Combat Systems group emphasizes operational execution and continuous process improvements to enhance our productivity. In an environment of uncertain threats and evolving customer needs, the group is focused on innovation, affordability and speed-to-market to deliver increased performance and survivable, mission-effective products.

Revenue for the Combat Systems group was 18 percent of our consolidated revenue in 2015 and 2014 and 19 percent in 2013. Revenue by major products and services was as follows:

Year Ended December 31	2015	2014	2013
Wheeled combat vehicles	\$2,599	\$2,852	\$2,709
Weapons systems and munitions	1,496	1,635	1,761
Tanks and tracked vehicles	816	526	595
Engineering and other services	729	719	767
Total Combat Systems	\$5,640	\$5,732	\$5,832

#### INFORMATION SYSTEMS AND TECHNOLOGY

Our Information Systems and Technology group provides technologies, products and services in support of hundreds of programs for a wide range of military, federal/civilian, state, local and commercial customers. The group's market leadership results from decades of domain expertise, incumbency on high-priority programs and continuous innovation to meet the ever-changing information-systems and mission support needs of our customers. The group's diverse portfolio includes:

IT solutions and mission support services, and mobile communication, command-and-control mission systems, and intelligence, surveillance and reconnaissance (ISR) solutions.

IT solutions and mission support services: We design, build and operate large-scale, secure IT networks and systems and provide professional and technical services. The group has been a trusted systems integrator for more than 50 years.

We support the full enterprise IT lifecycle from designing and integrating to operating and maintaining complex data, voice and multimedia networks. Working closely with our customers, we ensure their network infrastructures are secure, efficient, scalable and cost-effective. We have extensive experience consolidating, building and operating data centers. The group's expertise in building IT and communications networks extends beyond government customers. We engineer, design and install networks for several major commercial fiber-to-the-home providers and wireless carriers.

We are also at the forefront of cloud and virtualization technologies and services. For example, the group is implementing the Department of Defense's (DoD) largest enterprise-wide email infrastructure and a virtual desktop environment for the intelligence community.

As a leading provider in the U.S. healthcare IT market, we support government civilian and military health systems, providing critical services in support of healthcare reform and medical benefits programs. Our offerings include cyber security services, big data analytics, fraud prevention and detection software, process automation and program management solutions for public and commercial health systems. Our Information Technology business unit operates several customer contact centers for the Centers for Medicare



& Medicaid Services, responding to consumer inquiries about key Medicare and Affordable Care Act programs. The group's technical support personnel and domain specialists help customers meet critical planning, staffing, technology and operational needs. We also offer advanced training in military operations, range support, technology-based simulation and professional development.

Mobile communication, command-and-control mission systems and ISR solutions: We design, build, integrate, deploy and support communications, command-and-control and computer mission systems; imagery, signals- and multi-intelligence systems; and cyber security systems for customers in the U.S. defense, intelligence and homeland security communities, and U.S. allies.

The group is a leading integrator and manufacturer of secure communications systems that improve our customers' ability to communicate, collaborate and access vital information, including fixed and mobile ground, radio and satellite communications systems and antenna technologies. For example, we are the prime contractor for Warfighter Information Network-Tactical (WIN-T), the Army's mobile communications network delivering voice, video and data communications to soldiers anywhere on the battlefield. In 2015, we received approval to move forward with full-rate production of the WIN-T Increment 2 system.

We are also developing and deploying the Mobile User Objective System (MUOS) communication waveform and integrated ground segments, which will help provide the satellite link to soldiers on the ground so they can access cell phone-like communications in the most remote locations. We are leading the deployment of the MUOS ground system, which includes four ground stations positioned around the world. Our Manpack radio is the first military radio to successfully connect with the MUOS network.

The Information Systems and Technology group provides many of these capabilities to non-U.S. agencies and commercial customers. For the Canadian Department of National Defence, we developed, deployed and continue to modernize and support the Canadian Army's fully-integrated, secure combat voice and data network. We leveraged this experience to deliver the U.K. Ministry of Defence's Bowman tactical communication system, for which we currently provide ongoing support and capability upgrades.

In command-and-control systems, we have a 50-year legacy of providing advanced fire-control systems for U.S. Navy submarine programs, and we are developing and integrating commercial off-the-shelf software and hardware upgrades to improve the tactical control capabilities for several submarine classes. The group's combat and seaframe control systems serve as the technology backbone for some of the Navy's next-generation surface ships, including the Independence-variant LCS and the Joint High Speed Vessel (JHSV). Our aircraft mission computers are on the Navy's F/A-18 Super Hornet strike fighter and the Marine Corps' AV-8B Harrier II aircraft, giving pilots advanced situational awareness and combat systems control.

The Information Systems and Technology group provides ISR solutions for classified programs. Our expertise includes multi-intelligence ground systems and large-scale, high-performance data and signal processing. We deliver high-reliability, long-life sensors and payloads designed to perform in the most extreme environments, including space payloads and undersea sensor and power systems.

Cyber security solutions are embedded throughout the group's IT and systems engineering programs. We deliver comprehensive, agile cyber security-related products and services to help customers defend and protect their networks from the persistent and growing cyber threat. For example, we continue to evolve our TACLANE family of network encryptors, the most widely-deployed NSA-certified Type 1 encryption device. We deliver technologies that provide access to information at various security levels, accommodating the increased demand for cloud computing and mobility. We offer extensive cyber services to help defend mission-critical national and large-enterprise tactical networks.

Information Systems and Technology's market is competitive, diverse and dynamic. We are focused on maintaining our market-leading position by optimizing the performance and size of the business and developing innovative solutions to meet customer requirements. In 2015, we consolidated two businesses in the group to form General Dynamics Mission Systems to be more efficient and responsive to our customers. The group is well-positioned to continue meeting the needs of our broad customer base.

Revenue for the Information Systems and Technology group was 29 percent of our consolidated revenue in 2015, 30 percent in 2014 and 33 percent in 2013. Revenue by major products and services was as follows:

Year Ended December 31	2015	2014	2013
C4ISR solutions	\$4,571	\$4,610	\$5,534
IT services	4,394	4,549	4,734
Total Information Systems and Technology	\$8,965	\$9,159	\$10,268

#### MARINE SYSTEMS

Our Marine Systems group is a market-leading designer and builder of nuclear-powered submarines, surface combatants and auxiliary and combat-logistics ships for the U.S. Navy, and Jones Act ships for commercial customers. We provide high-value-added engineering, construction and assembly work, as well as lifecycle support. The group's portfolio of platforms and diverse capabilities includes:

- nuclear-powered submarines;
- surface combatants;
- auxiliary and combat-logistics ships;
- commercial product carriers and containerships;
- design and engineering support services; and
- overhaul, repair and lifecycle support services.

We have a long history as one of the primary shipbuilders for the U.S. Navy. We construct and deliver new ships and design and develop the next-generation of platforms for the Navy. More than 90 percent of the group's revenue is for major Navy ship-construction, engineering and lifecycle support programs awarded under large, multi-ship contracts that span several years. These programs include Virginia-class nuclear-powered submarines built by Electric Boat, Arleigh Burke-class (DDG-51) and DDG-1000 guided-missile destroyers manufactured by Bath Iron Works and Expeditionary Mobile Base (ESB) auxiliary support ships produced by NASSCO.

We are the prime contractor for the Virginia-class submarine program. Designed for the full range of global mission requirements, including intelligence gathering, special-operations missions and sea-based missile launch, these stealthy boats excel in littoral and open-ocean environments. We have delivered 12 submarines in conjunction with an industry partner that shares in the construction. In 2015, we completed the ramp-up in construction from one to two Virginia-class submarines per year. The remaining 16 submarines under contract are scheduled for delivery through 2023. We are also developing the Virginia Payload Module (VPM) for the next block of Virginia-class submarines that is expected to start construction in 2019. The VPM is an 80-foot hull section that will add four additional payload tubes, boosting strike capacity by 230 percent and preserving the United States' critical undersea capabilities.

The group is currently performing development work for the replacement of the Navy's Ohio-class ballistic missile submarine fleet, which will reach the end of its service life starting in 2027. These Ohio-class replacement submarines will provide strategic deterrent capabilities for decades to come. The lead ship is slated to start construction in 2021, with delivery to the Navy in 2027. We are preparing our workforce

and facilities for the start of construction for the Ohio-class replacement program. This includes a new 113,000-square-foot automated frame and cylinder facility that we recently built in Quonset Point, Rhode Island, to support the Common Missile Compartment work under joint development for the U.S. Navy and the U.K. Royal Navy.

We are the lead designer and builder of DDG-51 destroyers, managing the design, modernization and lifecycle support of these ships. These highly capable, multi-mission ships provide offensive and defensive capabilities and are capable of simultaneously fighting air, surface and subsurface battles. They can operate independently or as part of carrier strike groups, surface action groups, amphibious ready groups and underway replenishment groups. We currently have construction contracts for seven DDG-51s scheduled for delivery through 2022.

Bath Iron Works is one of the Navy's contractors involved in the development and construction of the DDG-1000 platform, the Navy's next-generation guided-missile destroyer. These ships are equipped with numerous technological enhancements, including a low radar profile, an integrated power system and a software environment that ties together nearly every system on the ship. DDG-1000s will provide independent forward presence and deterrence, support special operations forces, and operate as an integral part of joint and combined expeditionary forces. Deliveries of the three ships in the program are scheduled through 2019. In December 2015, the first ship successfully completed its first set of at-sea builders tests and trials.

We are delivering ESB auxiliary support ships, a second variant of the original Expeditionary Support Dock (ESD) ships, which serve as floating transfer stations that improve the Navy's ability to deliver large-scale equipment to areas without adequate port access. The ESBs, equipped with a 52,000-square-foot flight deck and accommodations for up to 250 personnel, are capable of supporting a variety of missions, including airborne mine countermeasure, maritime security operations and disaster relief missions. The group has delivered the first three ships in the program, and construction is underway on the fourth ship, scheduled for delivery in 2018.

Our Marine Systems group provides comprehensive ship and submarine overhaul, repair and lifecycle support services to extend the service life and maximize the value of these ships. We conduct surface-ship repair operations in four locations with full-service maintenance and repair shipyards on both U.S. coasts. We also provide extensive submarine repair services in a variety of U.S. locations and are converting two decommissioned submarines to moored training ships. In support of allied navies, we offer program management, planning, engineering and design support for submarine and surface-ship construction programs.

Beyond its work for the Navy, the Marine Systems group has extensive experience in all phases of ship construction for commercial customers, designing and building oil tankers and dry cargo carriers for commercial markets since the 1970s. Our ships help our commercial customers satisfy the Jones Act requirement that ships carrying cargo between U.S. ports be built in U.S. shipyards. The group has advanced commercial shipbuilding technology with NASSCO's design and delivery of the world's first liquefied natural gas (LNG)-powered containership, using green ship technology to dramatically decrease emissions while increasing fuel efficiency. We are also designing and producing LNG-conversion-ready ships for commercial customers. Currently, we have construction contracts for eight ships scheduled for delivery through 2017. With the age of the Jones Act fleet and environmental regulations that impose more stringent emission control limits, we anticipate additional commercial shipbuilding opportunities.

To further the group's goals of operating efficiency, innovation and affordability for the customer, we make strategic investments in our business, often in cooperation with the Navy. In addition, the Marine Systems group leverages its design and engineering expertise across its shipyards to improve program

execution and generate cost savings. This knowledge sharing enables the group to use resources more efficiently and drive process improvements. We are well-positioned to continue to fulfill the ship-construction and support requirements of our customers.

Revenue for the Marine Systems group was 25 percent of our consolidated revenue in 2015, 24 percent in 2014 and 22 percent in 2013. Revenue by major products and services was as follows:

Year Ended December 31	2015	2014	2013
Nuclear-powered submarines	\$5,003	\$4,310	\$3,697
Surface combatants	1,049	1,084	1,139
Auxiliary and commercial ships	692	640	499
Repair and other services	1,269	1,278	1,377
Total Marine Systems	\$8,013	\$7,312	\$6,712

#### CUSTOMERS

In 2015, 57 percent of our revenue was from the U.S. government, 17 percent was from U.S. commercial customers, 13 percent was from non-U.S. commercial customers and the remaining 13 percent was from non-U.S. government customers.

#### U.S. GOVERNMENT

Our primary customer is the DoD. We also contract with other U.S. government customers, including the intelligence community, the Departments of Homeland Security and Health and Human Services and first-responder agencies. Our revenue from the U.S. government was as follows:

Year Ended December 31	2015	2014	2013
DoD	\$14,699	\$14,516	\$15,441
Non-DoD	2,830	2,750	2,790
Foreign Military Sales (FMS)*	452	689	1,032
Total U.S. government	\$17,981	\$17,955	\$19,263
Percent of total revenue	57	% 58	% 62

\* In addition to our direct non-U.S. sales, we sell to non-U.S. governments through the FMS program. Under the FMS program, we contract with and are paid by the U.S. government, and the U.S. government assumes the risk of collection from the non-U.S. government customer.

Our U.S. government businesses operate under fixed-price, cost-reimbursement and time-and-materials contracts. Our production contracts are primarily fixed-price. Under these contracts, we agree to perform a specific scope of work for a fixed amount. Contracts for research, engineering, repair and maintenance, and other services are typically cost-reimbursement or time-and-materials. Under cost-reimbursement contracts, the customer reimburses contract costs and pays a fixed, incentive or award-based fee. These fees are determined by our ability to achieve targets set in the contract, such as cost, quality, schedule and performance. Under time-and-materials contracts, the customer pays a fixed hourly rate for direct labor and generally reimburses us for the cost of materials.

In our U.S. government business, fixed-price contracts accounted for 54 percent in 2015, 53 percent in 2014 and 54 percent in 2013; cost-reimbursement contracts accounted for 42 percent in 2015, 43 percent in 2014 and 42 percent in 2013; and time-and-materials contracts accounted for 4 percent in 2015, 2014 and 2013.

Each of these contract types presents advantages and disadvantages. Typically, we assume more risk with fixed-price contracts. However, these types of contracts offer additional profits when we complete the

work for less than the contract amount. Cost-reimbursement contracts generally subject us to lower risk. Accordingly, the associated fees are usually lower than fees earned on fixed-price contracts. Additionally, some costs are unallowable under these types of contracts, and the government reviews the costs we charge. Under time-and-materials contracts, our profit may vary if actual labor-hour costs vary significantly from the negotiated rates. Also, because these contracts can provide little or no fee for managing material costs, the content mix can impact margin rates.

#### U.S. COMMERCIAL

Our U.S. commercial revenue was \$5.3 billion in 2015 and 2014 and \$5.4 billion in 2013. This represented approximately 17 percent of our consolidated revenue in 2015 and 2014 and 18 percent in 2013. The majority of this revenue is for business-jet aircraft and related services where our customer base consists of individuals and public and privately held companies across a wide range of industries.

#### NON-U.S.

Our revenue from non-U.S. government and commercial customers was \$8.2 billion in 2015, \$7.6 billion in 2014 and \$6.3 billion in 2013. This represented approximately 26 percent of our consolidated revenue in 2015, 25 percent in 2014 and 20 percent in 2013.

We conduct business with customers around the world, providing a broad portfolio of products and services. Our non-U.S. defense subsidiaries are committed to maintaining long-term relationships with their respective governments and have established themselves as principal regional suppliers and employers.

Our non-U.S. commercial business consists primarily of business-jet aircraft exports and worldwide aircraft services. The market for business-jet aircraft and related services outside North America has expanded significantly in recent years. While the installed base of aircraft is concentrated in North America, orders from non-U.S. customers represent a significant segment of our aircraft business with approximately 55 percent of the Aerospace group's total backlog on December 31, 2015.

#### COMPETITION

Several factors determine our ability to compete successfully in the defense and business-aviation markets. While customers' evaluation criteria vary, the principal competitive elements include:

- the technical excellence, reliability, safety and cost competitiveness of our products and services;
- our ability to innovate and develop new products and technologies that improve mission performance and adapt to dynamic threats;
- successful program execution and on-time delivery of complex, integrated systems;
- our global footprint and accessibility to customers;
- the reputation and customer confidence derived from past performance; and
- the successful management of customer relationships.

#### DEFENSE MARKET COMPETITION

The U.S. government contracts with numerous domestic and non-U.S. companies for products and services. We compete against other large platform- and system-integration contractors as well as smaller companies that specialize in a particular technology or capability. Outside the United States, we compete with global defense contractors' exports and the offerings of private and state-owned defense manufacturers. Our Combat Systems group competes with a large number of domestic and non-U.S. businesses. Our Information Systems and Technology group competes with many companies, from large defense companies to small niche competitors with specialized technologies or expertise. Our Marine Systems group has one primary

competitor with which it also partners on the Virginia-class submarine program. The operating cycle of many of our major platform programs can result in sustained periods of program continuity when we perform successfully. We are involved in teaming and subcontracting relationships with some of our competitors. Competitions for major defense programs often require companies to form teams to bring together a spectrum of capabilities to meet the customer's requirements. Opportunities associated with these programs include roles as the program's integrator, overseeing and coordinating the efforts of all participants on a team, or as a provider of a specific component or subsystem.

#### BUSINESS-JET AIRCRAFT MARKET COMPETITION

The Aerospace group has several competitors for each of its Gulfstream products. Key competitive factors include aircraft safety, reliability and performance; comfort and in-flight productivity; service quality, global footprint and responsiveness; technological and new-product innovation; and price. We believe that Gulfstream competes effectively in all of these areas.

The Aerospace group competes worldwide in the business-jet aircraft services market primarily on the basis of price, quality and timeliness. In our maintenance, repair and FBO businesses, the group competes with several other large companies as well as a number of smaller companies, particularly in the maintenance business. In our completions business, the group competes with other OEMs, as well as several third-party providers.

#### BACKLOG

Our total backlog represents the estimated remaining value of work to be performed under firm contracts and includes funded and unfunded portions. For additional discussion of backlog, see Management's Discussion and Analysis of Financial Condition and Results of Operations in Item 7.

Summary backlog information for each of our business groups follows:

December 31	2015			2014			2015 Total Backlog Not Expected to Be Completed in 2016
	Funded	Unfunded	Total	Funded	Unfunded	Total	
Aerospace	\$13,292	\$106	\$13,398	\$13,115	\$117	\$13,232	\$7,851
Combat Systems	18,398	597	18,995	19,292	506	19,798	14,221
Information Systems and Technology	6,827	1,755	8,582	7,070	1,539	8,609	2,071
Marine Systems	13,266	11,879	25,145	13,452	17,319	30,771	17,855
Total backlog	\$51,783	\$14,337	\$66,120	\$52,929	\$19,481	\$72,410	\$41,998

#### RESEARCH AND DEVELOPMENT

To foster innovative product development and evolution, we conduct sustained R&D activities as part of our normal business operations. In the commercial sector, most of our Aerospace group's R&D activities support Gulfstream's product enhancement and development programs. In our U.S. defense businesses, we conduct customer-sponsored R&D activities under government contracts and company-sponsored R&D, investing in technologies and capabilities that provide solutions for our customers. In accordance with

government regulations, we recover a portion of company-sponsored R&D expenditures through overhead charges to U.S. government contracts. For more information on our company-sponsored R&D activities, including our expenditures for the past three years, see Note A to the Consolidated Financial Statements in Item 8.

#### INTELLECTUAL PROPERTY

We develop technology, manufacturing processes and systems-integration practices. In addition to owning a large portfolio of proprietary intellectual property, we license some intellectual property rights to and from others. The U.S. government holds licenses to many of our patents developed in the performance of U.S. government contracts, and it may use or authorize others to use the inventions covered by these patents. Although these intellectual property rights are important to the operation of our business, no existing patent, license or other intellectual property right is of such importance that its loss or termination would have a material impact on our business.

#### EMPLOYEES

On December 31, 2015, our subsidiaries had 99,900 employees, approximately one-fifth of whom work under collective agreements with various labor unions and worker representatives. Agreements covering approximately 6 percent of total employees are due to expire in 2016. Historically, we have renegotiated these labor agreements without any significant disruption to operating activities.

#### RAW MATERIALS, SUPPLIERS AND SEASONALITY

We depend on suppliers and subcontractors for raw materials, components and subsystems. Our U.S. government customer is a supplier on some of our programs. These supply networks can experience price fluctuations and capacity constraints, which can put pressure on our costs. Effective management and oversight of suppliers and subcontractors is an important element of our successful performance. We attempt to mitigate these risks with our suppliers by entering into long-term agreements and leveraging company-wide agreements to achieve economies of scale, and by negotiating flexible pricing terms in our customer contracts. We have not experienced, and do not foresee, significant difficulties in obtaining the materials, components or supplies necessary for our business operations.

Our business is not seasonal in nature. The receipt of contract awards, the availability of funding from the customer, the incurrence of contract costs and unit deliveries are all factors that influence the timing of our revenue. In the United States, these factors are influenced by the federal government's budget cycle based on its October-to-September fiscal year.

#### REGULATORY MATTERS

##### U.S. GOVERNMENT CONTRACTS

U.S. government contracts are subject to procurement laws and regulations. The Federal Acquisition Regulation (FAR) and the Cost Accounting Standards (CAS) govern the majority of our contracts. The FAR mandates uniform policies and procedures for U.S. government acquisitions and purchased services. Also, individual agencies can have acquisition regulations that provide implementing language for the FAR or that supplement the FAR. For example, the DoD implements the FAR through the Defense Federal

Acquisition Regulation Supplement (DFARS). For all federal government entities, the FAR regulates the phases of any product or service acquisition, including:

- acquisition planning,
- competition requirements,
- contractor qualifications,
- protection of source selection and vendor information, and
- acquisition procedures.

In addition, the FAR addresses the allowability of our costs, while the CAS address how those costs should be allocated to contracts. The FAR subjects us to audits and other government reviews covering issues such as cost, performance, internal controls and accounting practices relating to our contracts.

#### NON-U.S. REGULATORY

Our non-U.S. revenue is subject to the applicable foreign government regulations and procurement policies and practices, as well as U.S. policies and regulations. We are also subject to regulations governing investments, exchange controls, repatriation of earnings and import-export control.

#### BUSINESS-JET AIRCRAFT

The Aerospace group is subject to Federal Aviation Administration (FAA) regulation in the U.S. and other similar aviation regulatory authorities internationally, including the Civil Aviation Administration of Israel (CAAI), the European Aviation Safety Agency (EASA) and the Civil Aviation Administration of China (CAAC). For an aircraft to be manufactured and sold, the model must receive a type certificate from the appropriate aviation authority, and each aircraft must receive a certificate of airworthiness. Aircraft outfitting and completions also require approval by the appropriate aviation authority, which often is accomplished through a supplemental type certificate. Aviation authorities can require changes to a specific aircraft or model type before granting approval. Maintenance facilities and charter operations must be licensed by aviation authorities as well.

#### ENVIRONMENTAL

We are subject to a variety of federal, state, local and foreign environmental laws and regulations. These laws and regulations cover the discharge, treatment, storage, disposal, investigation and remediation of materials, substances and wastes identified in the laws and regulations. We are directly or indirectly involved in environmental investigations or remediation at some of our current and former facilities and at third-party sites that we do not own but where we have been designated a Potentially Responsible Party (PRP) by the U.S. Environmental Protection Agency or a state environmental agency. As a PRP, we are potentially liable to the government or third parties for the cost of remediating contamination. In cases where we have been designated a PRP, generally we seek to mitigate these environmental liabilities through available insurance coverage and by pursuing appropriate cost-recovery actions. In the unlikely event we are required to fully fund the remediation of a site, the current statutory framework would allow us to pursue contributions from other PRPs. We regularly assess our compliance status and management of environmental matters.

Operating and maintenance costs associated with environmental compliance and management of contaminated sites are a normal, recurring part of our operations. Historically, these costs have not been material. Environmental costs often are recoverable under our contracts with the U.S. government. Based on information currently available and current U.S. government policies relating to cost recovery, we do not expect continued compliance with environmental regulations to have a material impact on our results of operations, financial condition or cash flows. For additional information relating to the impact of environmental matters, see Note N to the Consolidated Financial Statements in Item 8.



## AVAILABLE INFORMATION

We file reports and other information with the Securities and Exchange Commission (SEC) pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended. These reports and information include an annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and proxy statements. Free copies of these items are made available on our website ([www.generaldynamics.com](http://www.generaldynamics.com)) as soon as practicable and through the General Dynamics investor relations office at (703) 876-3583. The SEC maintains a website ([www.sec.gov](http://www.sec.gov)) that contains reports, proxy and information statements and other information. These items also can be read and copied at the SEC's Public Reference Room at 100 F Street, N.E., Washington, DC 20549. Information on the operation of the Public Reference Room is available by calling the SEC at (800) SEC-0330.

## ITEM 1A. RISK FACTORS

An investment in our common stock or debt securities is subject to risks and uncertainties. Investors should consider the following factors, in addition to the other information contained in this Annual Report on Form 10-K, before deciding whether to purchase our securities.

Investment risks can be market-wide as well as unique to a specific industry or company. The market risks faced by an investor in our stock are similar to the uncertainties faced by investors in a broad range of industries. There are some risks that apply more specifically to our business.

Our revenue is concentrated with the U.S. government. This customer relationship involves some specific risks. In addition, our sales to non-U.S. customers expose us to different financial and legal risks. Despite the varying nature of our U.S. and non-U.S. defense and business-aviation operations and the markets they serve, each group shares some common risks, such as the ongoing development of high-technology products and the price, availability and quality of commodities and subsystems.

The U.S. government provides a significant portion of our revenue. Approximately 55 percent of our revenue is from the U.S. government. Levels of U.S. defense spending are driven by threats to national security. Competing demands for federal funds pressure various areas of spending, and defense investment accounts (budgets for procurement and research and development) remain under pressure. Decreases in U.S. government defense spending, including investment accounts, or changes in spending allocation or priorities could result in one or more of our programs being reduced, delayed or terminated, which could impact our financial performance.

For additional information relating to the U.S. defense budget, see the Business Environment section of Management's Discussion and Analysis of Financial Condition and Results of Operations in Item 7.

U.S. government contracts are not always fully funded at inception, and any funding is subject to disruption or delay. Our U.S. government revenue is funded by agency budgets that operate on an October-to-September fiscal year. Early each calendar year, the President of the United States presents to the Congress the budget for the upcoming fiscal year. This budget proposes funding levels for every federal agency and is the result of months of policy and program reviews throughout the Executive branch. For the remainder of the year, the appropriations and authorization committees of the Congress review the President's budget proposals and establish the funding levels for the upcoming fiscal year. Once these levels are enacted into law, the Executive Office of the President administers the funds to the agencies.

There are two primary risks associated with the U.S. government budget cycle. First, the annual process may be delayed or disrupted, which has occurred in recent years. For example, changes in congressional

schedules due to elections or other legislative priorities, or negotiations for program funding levels can interrupt the process. If the annual budget is not approved by the beginning of the government fiscal year, portions of the U.S. government can shut down or operate under a continuing resolution that maintains spending at prior-year levels, which can impact funding for our programs and timing of new awards. Second, the Congress typically appropriates funds on a fiscal-year basis, even though contract performance may extend over many years. Future revenue under existing multi-year contracts is conditioned on the continuing availability of congressional appropriations. Changes in appropriations in subsequent years may impact the funding available for these programs. Delays or changes in funding can impact the timing of available funds or lead to changes in program content.

Our U.S. government contracts are subject to termination rights by the customer. U.S. government contracts generally permit the government to terminate a contract, in whole or in part, for convenience. If a contract is terminated for convenience, a contractor usually is entitled to receive payments for its allowable costs incurred and the proportionate share of fees or earnings for the work performed. The government may also terminate a contract for default in the event of a breach by the contractor. If a contract is terminated for default, the government in most cases pays only for the work it has accepted. The termination of multiple or large programs could have a material adverse effect on our future revenue and earnings.

Government contractors are subject to audit by the U.S. government. Numerous U.S. government agencies routinely audit and review government contractors. These agencies review a contractor's performance under its contracts and compliance with applicable laws, regulations and standards. The U.S. government also reviews the adequacy of, and compliance with, internal control systems and policies, including the contractor's purchasing, property, estimating, material, earned value management and accounting systems. In some cases, audits may result in delayed payments or contractor costs not being reimbursed or subject to repayment. If an audit or investigation were to result in allegations against a contractor of improper or illegal activities, civil or criminal penalties and administrative sanctions could result, including termination of contracts, forfeiture of profits, suspension of payments, fines and suspension or prohibition from doing business with the U.S. government. In addition, reputational harm could result if allegations of impropriety were made. In some cases, audits may result in disputes with the respective government agency that can result in negotiated settlements, arbitration or litigation.

Our Aerospace group is subject to changing customer demand for business aircraft. The business-jet market is driven by the demand for business-aviation products and services by business, individual and government customers in the United States and around the world. The Aerospace group's results also depend on other factors, including general economic conditions, the availability of credit, pricing pressures and trends in capital goods markets. In addition, if customers default on existing contracts and the contracts are not replaced, the group's anticipated revenue and profitability could be reduced materially as a result.

Earnings and margin depend on our ability to perform on our contracts. When agreeing to contractual terms, our management team makes assumptions and projections about future conditions and events. The accounting for our contracts and programs requires assumptions and estimates about these conditions and events. These projections and estimates assess:

- the productivity and availability of labor,
- the complexity of the work to be performed,
- the cost and availability of materials and components, and
- schedule requirements.

If there is a significant change in one or more of these circumstances, estimates or assumptions, or if the risks under our contracts are not managed adequately, the profitability of contracts could be adversely affected. This could affect earnings and margin materially.

Earnings and margin depend in part on subcontractor and vendor performance. We rely on other companies to provide materials, components and subsystems for our products. Subcontractors also perform some of the services that we provide to our customers. We depend on these subcontractors and vendors to meet our contractual obligations in full compliance with customer requirements and applicable law. Misconduct by subcontractors, such as a failure to comply with procurement regulations or engaging in unauthorized activities, may harm our future revenue and earnings. We manage our supplier base carefully to avoid customer issues. We sometimes rely on only one or two sources of supply that, if disrupted, could have an adverse effect on our ability to meet our customer commitments. Our ability to perform our obligations may be materially adversely affected if one or more of these suppliers is unable to provide the agreed-upon supplies, perform the agreed-upon services in a timely and cost-effective manner or engages in misconduct or other improper activities.

Sales and operations outside the United States are subject to different risks that may be associated with doing business in foreign countries. In some countries there is increased chance for economic, legal or political changes, and procurement procedures may be less robust or mature, which may complicate the contracting process. Our non-U.S. business may be sensitive to changes in a foreign government's budgets, leadership and national priorities, which may occur suddenly. Non-U.S. transactions can involve increased financial and legal risks arising from foreign exchange-rate variability and differing legal systems. Our non-U.S. business is subject to U.S. and foreign laws and regulations, including laws and regulations relating to import-export controls, technology transfers, the Foreign Corrupt Practices Act and other anti-corruption laws, and the International Traffic in Arms Regulations (ITAR). An unfavorable event or trend in any one or more of these factors or a failure to comply with U.S. or foreign laws could result in administrative, civil or criminal liabilities, including suspension or debarment from government contracts or suspension of our export privileges and could materially adversely affect revenue and earnings associated with our non-U.S. business.

In addition, some non-U.S. government customers require contractors to enter into letters of credit, performance or surety bonds, bank guarantees and other similar financial arrangements. We may also be required to agree to specific in-country purchases, manufacturing agreements or financial support arrangements, known as offsets, that require us to satisfy investment or other requirements or face penalties. Offset requirements may extend over several years and could require us to team with local companies to fulfill these requirements. If we do not satisfy these financial or offset requirements, our future revenue and earnings may be materially adversely affected.

Our future success depends in part on our ability to develop new products and technologies and maintain a qualified workforce to meet the needs of our customers. Many of the products and services we provide involve sophisticated technologies and engineering, with related complex manufacturing and system-integration processes. Our customers' requirements change and evolve regularly. Accordingly, our future performance depends in part on our ability to continue to develop, manufacture and provide innovative products and services and bring those offerings to market quickly at cost-effective prices. Some new products, particularly in our Aerospace group, must meet extensive and time-consuming regulatory requirements that are often outside our control. Additionally, due to the highly specialized nature of our business, we must hire and retain the skilled and qualified personnel necessary to perform the services required by our customers. If we were unable to develop new products that meet customers' changing needs

and satisfy regulatory requirements in a timely manner or successfully attract and retain qualified personnel, our future revenue and earnings may be materially adversely affected.

We have made and expect to continue to make investments, including acquisitions and joint ventures, that involve risks and uncertainties. When evaluating potential acquisitions and joint ventures, we make judgments regarding the value of business opportunities, technologies, and other assets and the risks and costs of potential liabilities based on information available to us at the time of the transaction. Whether we realize the anticipated benefits from these transactions depends on multiple factors, including our integration of the businesses involved, the performance of the underlying products, capabilities or technologies, market conditions following the acquisition and acquired liabilities, including some that may not have been identified prior to the acquisition. These factors could materially adversely affect our financial results.

Changes in business conditions may cause goodwill and other intangible assets to become impaired. Goodwill represents the purchase price paid in excess of the fair value of net tangible and intangible assets acquired in a business combination. Goodwill is not amortized and remains on our balance sheet indefinitely unless there is an impairment or a sale of a portion of the business. Goodwill is subject to an impairment test on an annual basis and when circumstances indicate that an impairment is more likely than not. Such circumstances include a significant adverse change in the business climate for one of our business groups or a decision to dispose of a business group or a significant portion of a business group. We face some uncertainty in our business environment due to a variety of challenges, including changes in defense spending. We may experience unforeseen circumstances that adversely affect the value of our goodwill or intangible assets and trigger an evaluation of the amount of the recorded goodwill and intangible assets. Future write-offs of goodwill or other intangible assets as a result of an impairment in the business could materially adversely affect our results of operations and financial condition.

Our business could be negatively impacted by cyber security events and other disruptions. We face various cyber security threats, including threats to our information technology infrastructure and attempts to gain access to our proprietary or classified information, denial-of-service attacks, as well as threats to the physical security of our facilities and employees, and threats from terrorist acts. We also design and manage information technology systems and products that contain information technology systems for various customers. We generally face the same security threats for these systems as for our own. In addition, we face cyber threats from entities that may seek to target us through our customers, vendors and subcontractors. Accordingly, we maintain information security policies and procedures for managing all systems and conduct employee training on cyber security. We have experienced cyber security threats to our information technology infrastructure and attempts to gain access to our sensitive information, including viruses and attacks by hackers. Such prior events have not had a material impact on our financial condition, results of operations or liquidity. However, future threats could cause harm to our business and our reputation and challenge our eligibility for future work on sensitive or classified systems for government customers, as well as impact our results of operations materially. Our insurance coverage may not be adequate to cover all the costs related to cyber security attacks or disruptions resulting from such events.

## FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements that are based on management's expectations, estimates, projections and assumptions. Words such as "expects," "anticipates," "plans," "believes," "scheduled," "outlook," "estimates," "should" and variations of these words and similar expressions are intended to identify forward-looking statements. Examples include projections of revenue, earnings, operating margin, segment performance, cash flows, contract awards, aircraft production, deliveries and backlog. In making these statements we rely on assumptions and analyses based on our experience and perception of historical trends, current conditions and expected future developments as well as other factors we consider appropriate under the circumstances. We believe our estimates and judgments are reasonable based on information available to us at the time. Forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, as amended. These statements are not guarantees of future performance and involve risks and uncertainties that are difficult to predict. Therefore, actual future results and trends may differ materially from what is forecast in forward-looking statements due to a variety of factors, including, without limitation, the risk factors discussed in this Form 10-K.

All forward-looking statements speak only as of the date of this report or, in the case of any document incorporated by reference, the date of that document. All subsequent written and oral forward-looking statements attributable to General Dynamics or any person acting on our behalf are qualified by the cautionary statements in this section. We do not undertake any obligation to update or publicly release any revisions to forward-looking statements to reflect events, circumstances or changes in expectations after the date of this report. These factors may be revised or supplemented in subsequent reports on SEC Forms 10-Q and 8-K.

## ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

## ITEM 2. PROPERTIES

We operate in a number of offices, manufacturing plants, laboratories, warehouses and other facilities in the United States and abroad. We believe our facilities are adequate for our present needs and, given planned improvements and construction, expect them to remain adequate for the foreseeable future.

On December 31, 2015, our business groups had primary operations at the following locations:

Aerospace – Lincoln and Long Beach, California; West Palm Beach, Florida; Brunswick and Savannah, Georgia; Cahokia, Illinois; Bedford and Westfield, Massachusetts; Las Vegas, Nevada; Teterboro, New Jersey; Dallas and Houston, Texas; Appleton, Wisconsin; Vienna, Austria; Sorocaba, Brazil; Beijing and Hong Kong, China; Berlin, Dusseldorf and Munich, Germany; Mexicali, Mexico; Moscow, Russia; Singapore; Basel, Geneva and Zurich, Switzerland; Dubai, United Arab Emirates; Luton, United Kingdom.

Combat Systems – Anniston, Alabama; East Camden and Hampton, Arkansas; Crawfordsville, St. Petersburg and Tallahassee, Florida; Marion, Illinois; Saco, Maine; Shelby Township and Sterling Heights, Michigan; Joplin, Missouri; Lincoln, Nebraska; Lima and Springboro, Ohio; Eynon, Red Lion and Scranton, Pennsylvania; Ladson, South Carolina; Garland, Texas; Williston, Vermont; Marion, Virginia; Auburn and Sumner, Washington; Vienna, Austria; Edmonton, La Gardeur, London, St.

Augustin and Valleyfield, Canada; Kaiserslautern, Germany; Granada, Madrid, Sevilla and Trubia, Spain; Kreuzlingen, Switzerland; Oakdale and Merthyr Tydfil, United Kingdom.

Information Systems and Technology – Cullman, Alabama; Phoenix and Scottsdale, Arizona; Santa Clara, California; Lynn Haven and Riverview, Florida; Coralville and West Des Moines, Iowa; Lawrence, Kansas; Annapolis Junction and Towson, Maryland; Dedham, Pittsfield, Taunton and Westwood, Massachusetts; Bloomington, Minnesota; Hattiesburg, Mississippi; Conover, Greensboro and Newton, North Carolina; Kilgore and Wortham, Texas; Sandy, Utah; Chantilly, Chesapeake, Chester, Fairfax, Herndon, Springfield and Sterling, Virginia; Spokane Valley, Washington; Calgary and Ottawa, Canada; Tallinn, Estonia; Oakdale and St. Leonards, United Kingdom. Marine Systems – San Diego, California; Groton and New London, Connecticut; Jacksonville, Florida; Bath and Brunswick, Maine; North Kingstown, Rhode Island; Norfolk and Portsmouth, Virginia; Bremerton, Washington; Mexicali, Mexico.

A summary of floor space by business group on December 31, 2015, follows:

(Square feet in millions)	Company-owned Facilities	Leased Facilities	Government-owned Facilities	Total
Aerospace	5.9	6.8	—	12.7
Combat Systems	7.7	3.4	5.6	16.7
Information Systems and Technology	2.6	8.8	0.9	12.3
Marine Systems	8.1	2.5	—	10.6
Total	24.3	21.5	6.5	52.3

### ITEM 3. LEGAL PROCEEDINGS

For information relating to legal proceedings, see Note N to the Consolidated Financial Statements in Item 8.

### ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

#### EXECUTIVE OFFICERS OF THE COMPANY

All of our executive officers are appointed annually. None of our executive officers were selected pursuant to any arrangement or understanding between the officer and any other person. The name, age, offices and positions of our executives held for at least the past five years as of February 8, 2016, were as follows (references are to positions with General Dynamics Corporation, unless otherwise noted):

Name, Position and Office	Age
Jason W. Aiken - Senior Vice President and Chief Financial Officer since January 2014; Vice President of the company and Chief Financial Officer of Gulfstream Aerospace Corporation, September 2011 - December 2013; Vice President and Controller, April 2010 - August 2011; Staff Vice President, Accounting, July 2006 - March 2010	43

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Mark L. Burns - Vice President of the company and President of Gulfstream Aerospace Corporation since July 2015; Vice President of the company since February 2014; President, Product Support of Gulfstream Aerospace Corporation, June 2008 - June 2015 56

John P. Casey - Executive Vice President, Marine Systems, since May 2012; Vice President of the company and President of Electric Boat Corporation, October 2003 - May 2012; Vice President of Electric Boat Corporation, October 1996 - October 2003 61

Gregory S. Gallopoulos - Senior Vice President, General Counsel and Secretary since January 2010; Vice President and Deputy General Counsel, July 2008 - January 2010; Managing Partner of Jenner & Block LLP, January 2005 - June 2008 56

Jeffrey S. Geiger - Vice President of the company and President of Electric Boat Corporation since November 2013; Vice President of the company and President of Bath Iron Works Corporation, April 2009 - November 2013; Senior Vice President, Operations and Engineering of Bath Iron Works Corporation, March 2008 - March 2009 54

M. Amy Gilliland - Senior Vice President, Human Resources and Administration since April 2015; Vice President, Human Resources, February 2014 - March 2015; Staff Vice President, Strategic Planning, March 2013 - February 2014; Staff Vice President, Investor Relations, June 2008 - March 2013 41

Robert W. Helm - Senior Vice President, Planning and Development since May 2010; Vice President, Government Relations, of Northrop Grumman Corporation, August 1989 - April 2010 64

S. Daniel Johnson - Executive Vice President, Information Systems and Technology, and President of General Dynamics Information Technology since January 2015; Vice President of the company and President of General Dynamics Information Technology, April 2008 - December 2014; Executive Vice President of General Dynamics Information Technology, July 2006 - March 2008 68

Kimberly A. Kuryea - Vice President and Controller since September 2011; Chief Financial Officer of General Dynamics Advanced Information Systems, November 2007 - August 2011; Staff Vice President, Internal Audit, March 2004 - October 2007 48

Christopher Marzilli - Vice President of the company and President of General Dynamics Mission Systems since January 2015; Vice President of the company and President of General Dynamics C4 Systems, January 2006 - December 2014; Senior Vice President and Deputy General Manager of General Dynamics C4 Systems, November 2003 - January 2006 56

Phebe N. Novakovic - Chairman and Chief Executive Officer since January 2013; President and Chief Operating Officer, May 2012 - December 2012; Executive Vice President, Marine Systems, May 2010 - May 2012; Senior Vice President, Planning and Development, July 2005 - May 2010; Vice President, Strategic Planning, October 2002 - July 2005 58

Mark C. Roualet - Executive Vice President, Combat Systems, since March 2013; Vice President of the company and President of General Dynamics Land Systems, October 2008 - March 2013; Senior Vice President and Chief Operating Officer of General Dynamics Land Systems, July 2007 - October 2008 57

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Gary L. Whited - Vice President of the company and President of General Dynamics Land Systems since March 2013; Senior Vice President of General Dynamics Land Systems, September 2011 - March 2013; Vice President and Chief Financial Officer of General Dynamics Land Systems, June 2006 - September 2011

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## PART II

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

Our common stock is listed on the New York Stock Exchange.

The high and low sales prices of our common stock and the cash dividends declared on our common stock for each quarter of 2014 and 2015 are included in the Supplementary Data contained in Item 8.

On January 31, 2016, there were approximately 13,000 holders of record of our common stock.

For information regarding securities authorized for issuance under our equity compensation plans, see Note O to the Consolidated Financial Statements contained in Item 8.

We did not make any unregistered sales of equity securities in 2015.

The following table provides information about our fourth-quarter repurchases of equity securities that are registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program*	Maximum Number of Shares That May Yet Be Purchased Under the Program*
Pursuant to Share Buyback Program				
10/5/15-11/1/15	305,000	\$ 148.91	305,000	2,806,468
11/2/15-11/29/15	2,002,000	\$ 144.90	2,002,000	804,468
11/30/15-12/31/15	1,200,000	\$ 140.56	1,200,000	9,604,468
Total	3,507,000	\$ 143.76		

\* On December 2, 2015, the board of directors authorized management to repurchase 10 million additional shares of common stock.

For additional information relating to our repurchases of common stock during the past three years, see Financial Condition, Liquidity and Capital Resources - Financing Activities - Share Repurchases contained in Item 7.

The following performance graph compares the cumulative total return to shareholders on our common stock, assuming reinvestment of dividends, with similar returns for the Standard & Poor's® 500 Index and the Standard & Poor's® Aerospace & Defense Index, both of which include General Dynamics.

Cumulative Total Return  
Based on Investments of \$100 Beginning December 31, 2010  
(Assumes Reinvestment of Dividends)

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## ITEM 6. SELECTED FINANCIAL DATA

The following table presents selected historical financial data derived from the Consolidated Financial Statements and other company information for each of the five years presented. This information should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and the Consolidated Financial Statements and the Notes thereto.

(Dollars and shares in millions, except per-share and employee amounts)

	2015	2014	2013	2012	2011	
Summary of Operations						
Revenue	\$31,469	\$30,852	\$30,930	\$30,992	\$32,122	
Operating earnings	4,178	3,889	3,689	765	3,747	
Operating margin	13.3	% 12.6	% 11.9	% 2.5%	11.7	%
Interest, net	(83	) (86	) (86	) (156	) (141	)
Provision for income tax, net	1,137	1,129	1,125	854	1,139	
Earnings (loss) from continuing operations	2,965	2,673	2,486	(381	) 2,500	
Return on sales (a)	9.4	% 8.7	% 8.0	% (1.2	)% 7.8	%
Discontinued operations, net of tax	—	(140	) (129	) 49	26	
Net earnings (loss)	2,965	2,533	2,357	(332	) 2,526	
Diluted earnings (loss) per share:						
Continuing operations (b)	9.08	7.83	7.03	(1.08	) 6.80	
Net earnings (loss) (b)	9.08	7.42	6.67	(0.94	) 6.87	
Cash Flows						
Net cash provided by operating activities	\$2,499	\$3,728	\$3,111	\$2,606	\$3,150	
Net cash provided (used) by investing activities	200	(1,102	) (363	) (642	) (1,961	)
Net cash used by financing activities	(4,259	)				