



**2016**

CORPORATE RESPONSIBILITY REPORT

*THE VALUE OF PERFORMANCE.*  
***NORTHROP GRUMMAN***

# OUR VALUES

We, the women and men of Northrop Grumman, are guided by the following Values. We want our decisions and actions to demonstrate these Values. We believe that putting our Values into practice creates long-term benefits for shareholders, customers, employees, suppliers and the communities we serve.

## WE TAKE RESPONSIBILITY FOR **QUALITY**

Our products and services are best-in-class in terms of value received for dollars paid. We deliver excellence, strive for continuous improvement and respond vigorously to change. Each of us is responsible for the quality of whatever we do.

## WE DELIVER **CUSTOMER SATISFACTION**

We are dedicated to satisfying our customers. We believe in respecting our customers, listening to their requests and understanding their expectations. We strive to exceed their expectations in affordability, mission capability, quality and on-time delivery.

## WE PROVIDE **LEADERSHIP AS A COMPANY AND AS INDIVIDUALS**

Northrop Grumman's leadership is founded on talented employees effectively applying advanced technology, innovative manufacturing and sound business management. We add more value at lower cost with faster response. We each lead through our competence, creativity and teamwork.

## WE ACT WITH **INTEGRITY IN ALL WE DO**

We are each personally accountable for the highest standards of behavior, including honesty and fairness in all aspects of our work. We fulfill our commitments as responsible citizens and employees. We treat customers and company resources with the respect they deserve. We comply with all applicable laws and regulations.

## WE VALUE **PEOPLE**

We treat one another with respect and take pride in the significant contributions that come from our diversity of individuals and ideas. Our continued success requires us to provide the education and development needed to help our people grow. We are committed to openness and trust in all relationships.

## WE REGARD OUR **SUPPLIERS AS ESSENTIAL TEAM MEMBERS**

We owe our suppliers the same respect we show to our customers. Our suppliers deserve fair and equitable treatment, clear agreements, and honest feedback on performance. We consider our suppliers' needs in conducting our business.



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# 2016 CEO MESSAGE

As we continue to grow as a global security company, we remain committed to delivering sustainable performance for our shareholders, customers and employees. Sustainable performance requires strong operational excellence, leveraging the power of our diversity with a culture of inclusion. It also requires adherence to the values of our company, including high standards of ethics and integrity, as well as managing our company with a commitment to corporate citizenship, effective environmental stewardship and strong corporate governance.

We are proud to provide our customers with products and services that help them meet their critical mission requirements. Our business and corporate responsibility objectives complement each other, and our progress in these endeavors would not be possible without the devotion of our 67,000 employees. Their talent and hard work supports our customers, and their involvement in our communities is the cornerstone of corporate citizenship at Northrop Grumman.

This 2016 Corporate Responsibility Report chronicles the efforts of our employees and corporate engagement with our communities in six areas:

- Leadership
- Our Business
- Governance
- Innovation
- Environment
- People and Culture

## HERE ARE SOME HIGHLIGHTS FROM 2016

- The Dow Jones Sustainability North America Index recognized Northrop Grumman as one of the top aerospace and defense companies for corporate sustainability performance.
- For the past 10 years, our Operation IMPACT (Injured Military Pursuing Assisted Career Transition) program has focused on assisting severely wounded service members as they transition from the military to the private sector.

- We reflected our commitment to ethical business conduct in our supply chain through a new Supplier Standards of Business Conduct.
- We maintained our focus on building the best culture at Northrop Grumman with diversity and inclusion central to that goal.
- In support of global communities where we live and work, Northrop Grumman, the Northrop Grumman Foundation and our employees donated approximately \$48 million, including more than \$19 million invested in science, technology, engineering and mathematics (STEM) programs.
- Our “Ethics: Own It, Live It, Lead It” campaign supported and maintained our reputation as a top performer in our industry. Our employees received training on our refreshed Standards of Business Conduct and other key ethics issues.

We are pleased to provide in this report an overview of the progress we are making in building a company that will perform in a sustainable manner for the long term, and that will continue to create value for all of our stakeholders.

**WES BUSH**  
CHAIRMAN, CEO AND PRESIDENT



# LEADERSHIP

## REPORT PURPOSE

Our report is consistent with the Global Reporting Initiative (GRI), a third-party organization that has developed a widely used environmental, social and governance reporting framework.

We published our first Northrop Grumman Corporate Responsibility Report in 2008, highlighting our environmental and social performance. Transparency and accountability are fundamental to our business and our approach to responsibility reporting. This 2016 Corporate Responsibility Report continues our reporting of those issues important to our internal and external stakeholders, including local communities, customers, employees, government and industry, partners, professional association, scientists, shareholders, policymakers and suppliers. Material aspects, as defined by GRI, are those that "... reflect the organization's significant economic, environmental, and social impacts; or substantively influence the assessments and decisions of stakeholders."

Throughout this report we use the word "material" as defined by GRI, rather than as the term defined by the Securities and Exchange Commission or under securities laws.

We prepared this report using the GRI G4 Sustainability Reporting Guidelines and self-declare the report "in accordance" with those guidelines at the core option. A key step in developing this 2016 Corporate Responsibility Report was ensuring the majority of content reflects the issues material to Northrop Grumman.

Finally, for the sixth consecutive year, we assembled and engaged an independent external review panel to provide feedback and advice from a stakeholder perspective.

## PRIORITIES: CORPORATE RESPONSIBILITY REPORT STAKEHOLDER ENGAGEMENT

Stakeholder engagement is one of the foundations of our successful strategy at Northrop Grumman. Our stakeholders, each with distinct priorities, comprise a broad and vibrant range of audiences. To engage each audience effectively, we aim to provide accurate information regarding our corporate goals and performance. Increasingly, we use many methods to engage with our stakeholders and obtain performance feedback. That feedback allows us to analyze and prioritize corporate responsibility issues as part of our materiality assessment and reporting methodology. In part, this information also informs direct actions and programs we undertake to improve our performance everywhere we operate.

When engaging with stakeholders, we start with prioritizing their concerns. We also evaluate each stakeholder relationship to our business and the importance of the issue being raised. As in previous years, we adapted the content of this report to meet the needs of our stakeholders. Specifically, we evaluated our performance based on input from customers, investors, employees, government and industry, business partners, professional associations and suppliers.

In addition to this printed report we have a Corporate Responsibility microsite available online with additional data and more in-depth explanations.

Visit: [crreport.northropgrumman.com](http://crreport.northropgrumman.com)

## OUR KEY STAKEHOLDERS

Academia, Community, Customers, Employees, Government, Industry, Partners, Policymakers, Professional Associations, Shareholders, Scientists and Suppliers.

## 2016 KEY STAKEHOLDER TOPICS

### ETHICS AND INTEGRITY

- Ensuring compliance with laws, regulations, policies and procedures and acting with the highest standards of integrity and ethical behavior.
- Promoting a “Speak Up” culture and addressing allegations of wrongdoing to ensure corrective action is taken as needed.
- Training our Northrop Grumman employees annually on ethics and compliance awareness.

### DIVERSITY AND INCLUSION

- Evaluating current strategies and developing new approaches to ensure adequate sources of diverse talent for all hiring requirements.
- Analyzing employment and turnover trends of veterans and People with Disabilities to identify programs to improve our reputation as an employer of choice.
- Creating networks for our employees to connect and contribute to our Employee Resource Groups.

### ENVIRONMENTAL, HEALTH AND SAFETY

- Ensuring compliance with all regulations, while reducing the frequency of injuries, by assessing job practices, improving ergonomics and increasing employee awareness.
- Including consideration of customer goals and priorities in establishing Northrop Grumman’s environmental sustainability goals.
- Strategically planning for water conservation with an emphasis on regions with water quality and/or availability risks.

## SUPPLIER RESPONSIBILITY

- Performance management and compliance to regulatory requirements.
- Developed a new Supplier Standards of Business Conduct which set forth the fundamental requirements that we expect our suppliers to comply with at all tiers.

## CORPORATE CITIZENSHIP

- Collaborating with leadership at each site to develop community outreach plans, which we review regularly.
- Engaging with nonprofit community partners to submit grants for funding using a grants system, which provides ongoing communication to the nonprofit partner throughout the grants process.
- Improving education by creating a diverse pipeline of talent specifically in science, technology, engineering and math (STEM).
- Sustaining our commitment to support active-duty military, veterans and their families.

## METHODS FOR GATHERING FEEDBACK

We use face-to-face meetings, employee surveys and feedback channels, online and social media, e-mail, environmental and regulatory audit processes, government policy and legislative engagement, needs assessment studies, supplier development activities, industry councils and internal working groups.

### Other examples of our activities during 2016 include:

- Hosting bi-weekly environmental sustainability data management team meetings to encourage collaboration and to discuss systems, challenges/opportunities and expectations.
- Hosting monthly Environmental, Health, and Safety (EHS) regulatory update meetings.

- Hosting quarterly EHS Leadership Council meetings to evaluate internal governance programs and strategic plans, track progress, identify future changes to regulatory policy and develop health and safety targets.
- Benchmarking environmental goals and performance by evaluating environmental sustainability goals at our customers, industry peers and best-practice leaders.
- Using diversity conference activities to compile “lessons learned” to share with leadership and employees.
- Consulting our 12 Employee Resource Groups (ERGs), which represent over 200 chapters and 19,000 employees, on numerous issues that may arise as well as collaborate on responses to various industry surveys.
- Hosting industry compliance meetings in conjunction with various non-profit and government organizations including Equal Employment Advisory Council, National Industry Liaison Board, OFCCP Institute and National Labor Exchange.

## ENGAGEMENT FREQUENCY

We met regularly with our various stakeholder groups. Key discussion topics included but are not limited to:

- Primary, secondary, informal and university education.
- Corporate philanthropy.
- Environmental programs in our operating communities.
- Wounded veterans, veteran homelessness and other support to similar programs.
- Programs in our focus areas and non-profit agencies.

## STAYING INFORMED: DIVERSITY AND INCLUSION

Our stakeholder engagement efforts, and frequency of contact, related to our diversity and inclusion efforts included:

- Diversity and Inclusion Leadership Council meetings: monthly.
- Sector Diversity and Inclusion Council meetings: monthly.
- Employee Resource Group meetings: monthly.
- Individual employee and Employee Resource Group collaboration: daily.
- External diversity organizations/partners (Society of Women Engineers, National Society of Black Engineers, US Business Leadership Network, etc.): daily to monthly.
- Monthly, quarterly, and semi-annual Equal Employment Opportunity and diversity metrics reviews with senior management.

## EHS MANAGEMENT

We maintain a proactive approach to stakeholder engagement related to Environmental, Health and Safety (EHS) management across the company. For example, externally, we meet with stakeholders regularly. We engage with internal subject matter experts at least bi-weekly, sector EHS and executive representatives monthly, and at least semi-annually with internal executives, partner organizations and others. Our engagement strategy includes conference briefings, white papers and peer-to-peer collaboration via industry association meetings. We discuss in more detail our regular engagement activities throughout this report.

## PARTNERS AND PROFESSIONAL ASSOCIATIONS

We maintain affiliations with a variety of organizations to enhance business performance, collaboration, community involvement, diversity and inclusion, employee relations, the environment, health and safety, sustainability strategies and initiatives, innovation and supplier relationships. A partial list of these organizations is below.

- AbilityOne.
- Aerospace Industries Association.
- American Bar Foundation (ABF) Center on Diversity.
- American Indian Science and Engineering Society.
- Asian American Engineer of the Year.
- Asian Business Association.
- Association of Climate Change Officers.
- Association of Corporate Contributions Professionals.
- Black Business Association.
- Black Engineer of the Year.
- Boston College Center for Corporate Citizenship.
- Capital Area Gay and Lesbian Chamber of Commerce.
- Conservational International Business and Sustainability Council.
- Corporate Counsel Women of Color 13th Annual Career Strategies Conference.
- Corporate EcoForum.
- Corporate Environmental Enforcement Council.
- Department of Veterans Affairs Center for Verification and Evaluation.
- Equal Justice Works.
- Great Minds in STEM.
- Institute for Supply Management.
- International Aerospace Environmental Group.
- International Audit Protocol Consortium.
- Latin Business Association.
- Legal Aid Society.
- Military Spouse Employment Partnership.
- Minority Corporate Counsel Association.
- National Association of Asian American Professionals.
- National Association of Environmental Management.
- National Association of Women Business Owners.
- National Center for American Indian Enterprise Development.
- National Minority Supplier Development Council.
- National Society of Black Engineers.
- ORC Health, Safety and Environmental Strategies.
- Out and Equal Workplace Summit.
- Small Business Innovation Research and Small Business Technology Transfer programs.
- Society of Hispanic Professional Engineers.
- Society of Women Engineers.
- South Asian Bar Association.
- U.S. Hispanic Chamber of Commerce.
- U.S. Business Leadership Network.
- Women of Color in Technology.

## TRANSPARENCY AND DISCLOSURE

The Dow Jones Sustainability North America Index, a highly regarded standard for corporate sustainability, recognized Northrop Grumman as one of the top companies for environmental, social and governance performance.

We received an “A-” performance rating from the CDP Climate Change Program, maintaining for the fifth year our leadership position for the company’s strong performance in awareness, disclosure and management of climate change and greenhouse gas emissions.

For the second year Northrop Grumman received a “green” rating for disclosing GHG emissions, establishing a GHG emissions target and disclosing climate change risks on the Federal Supplier Greenhouse Gas Management Scorecard published by the Council on Environmental Quality.

## ORGANIZATIONAL CHANGES/LEADERSHIP ALIGNMENT

Effective January 1, 2016, we restructured our business sectors from four to three:

- Aerospace Systems.
- Missions Systems.
- Technology Services.

These changes enhance innovation within Northrop Grumman and better align our company business with the evolving needs of our customers.



## REPORT STRUCTURE AND MATERIAL ASPECTS

In accordance with the Global Reporting Initiative (GRI) G4 guidelines, we used our 2015 materiality assessment to inform this report. The materiality assessment (see graphic at right) allows us to achieve our goal of identifying aspects that are important to our company and our stakeholders.

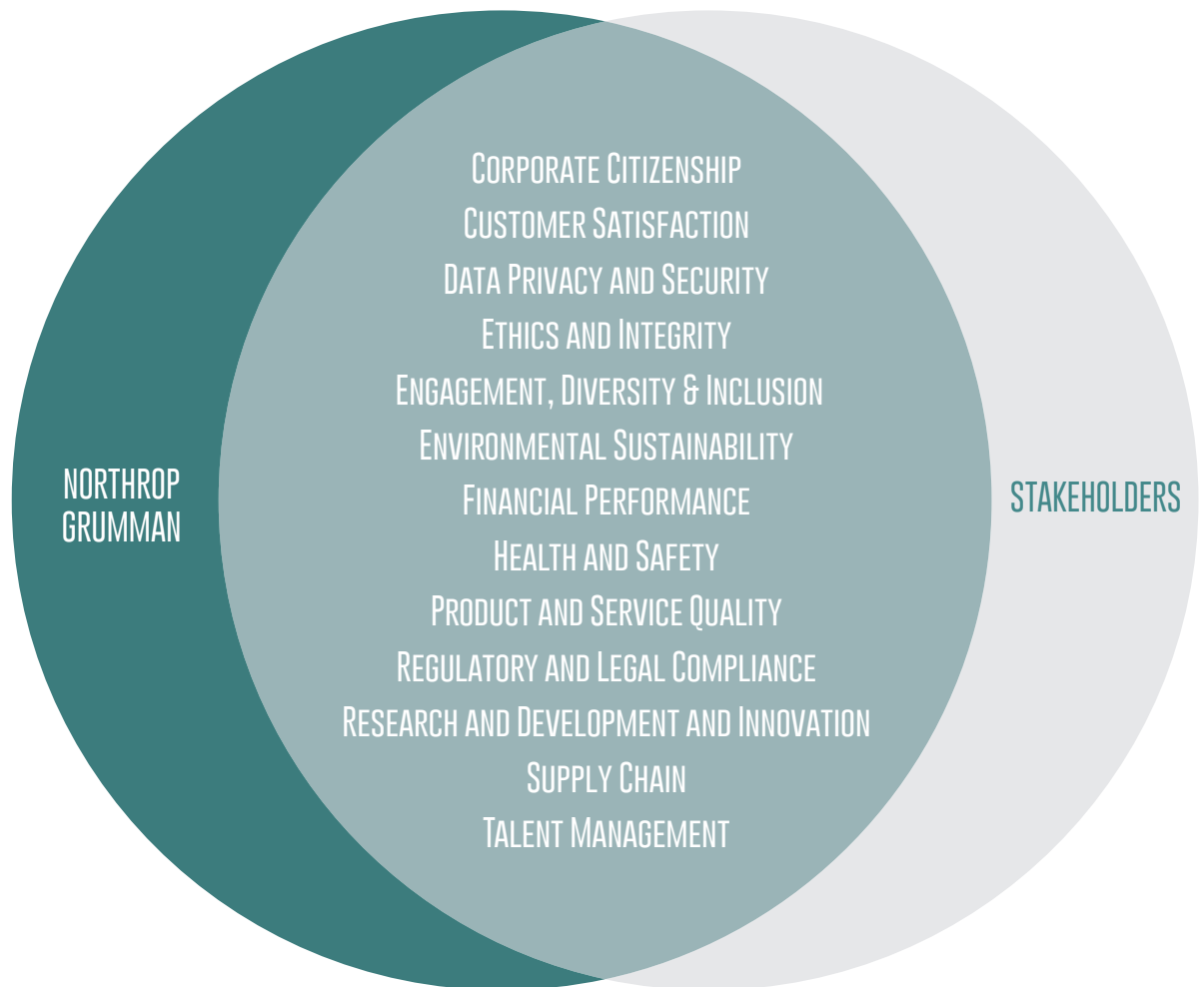
With the goal of conducting a thorough review of our 2015 Corporate Responsibility Report and identifying opportunities for improvement, we engaged a consultant to review the report and benchmark the reports of leading industry peers. Recommendations for improvement, which we have considered in our 2016 Corporate Responsibility Report, include:

- Continue to find opportunities to connect sustainability initiatives to business value and priorities.
- Continue to work on material issues that were identified in 2015 by engaging with external and internal stakeholders, including employees.
- Consider the goal structure of the Environment section to be a best practice for incorporation in other sustainability areas.
- Find greater content balance across material issues.
- Use strong infographics and imagery.
- Continue to engage an external review panel to provide feedback on material issues and the overall report.

This report reflects G4 methodology, and we will continue to revisit our materiality assessment regularly with stakeholders to ensure that our efforts reflect environmental, social and governance priorities at Northrop Grumman.

*Per the GRI, material aspects are those that reflect significant economic, environmental and social impacts to Northrop Grumman, or substantively influence the assessments and decisions of stakeholders.*

## OUR MATERIALITY ASSESSMENT RESULTS





# OUR BUSINESS

## GLOBAL BUSINESS AND ENVIRONMENTAL SUSTAINABILITY

As a global security company, we seek to support our customer priorities and strategic objectives. In fulfilling that role, we act to conserve environmental resources. Further, we regularly interact with many scientists and policymakers to support the generation of key decision-making data.

For more than 25 years, Northrop Grumman satellites, airborne platforms, sensor technologies and modeling systems have provided, among other uses, climate monitoring and measurement data from air and space to land and sea. Our technology supports critical applications and provides data for understanding climate science. In turn, we help inform policymakers about climate-related environmental risks and impacts to adaptation and resiliency plans.

## OUR MISSION

**GOAL** Provide high-quality, innovative and affordable products and systems to support the U.S. military and allies in successful missions around the world, with a focus on: Autonomous Systems; Cyber; Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR); Strike; and Logistics and Modernization.

**PERFORMANCE** Throughout 2016, our team delivered another year of strong performance. We continued to embrace our partnership with U.S. and allied defense and security partners to provide high-quality, affordable products and systems through a robust mission-assurance process that emphasizes our company-wide focus on quality, innovation and superior program performance. We are excited about our many future opportunities and remain committed to generating value through sustainable top performance.

**GOAL** Lead the defense industry in sustainable, top performance; generate value for our shareholders, customers and employees; and maintain strong, enduring values.

**PERFORMANCE** We use specific metrics to measure our success in meeting our stakeholder goals. In 2016, we met or exceeded three of our four objectives for shareholders, and, in aggregate, met the company's non-financial goals for customers and employees.

## MISSION

Northrop Grumman is a publicly traded company headquartered in Falls Church, Virginia. As of January 26, 2017, there were 24,427 Northrop Grumman common stockholders.

We are a leading global security company providing innovative systems, products and solutions in autonomous systems, cyber, C4ISR, strike, and logistics and modernization to customers worldwide.

As a prime contractor, principal subcontractor, partner and preferred supplier, we participate in many high-priority defense and government programs globally.

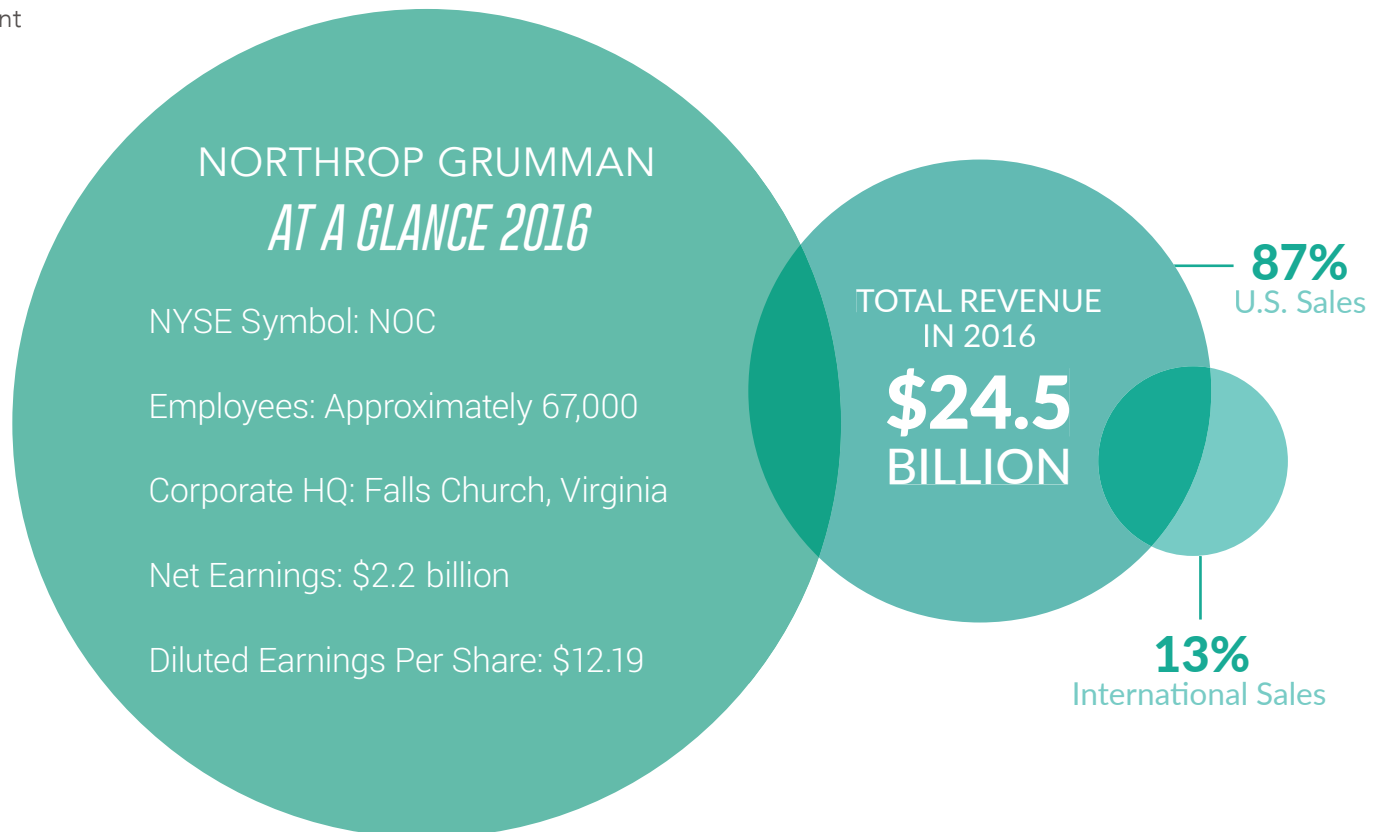
We conduct most of our business with the U.S. federal government, principally the Department of Defense (DOD) and the U.S. intelligence community. We also conduct business with foreign, state and local governments.

## PERFORMANCE HIGHLIGHTS

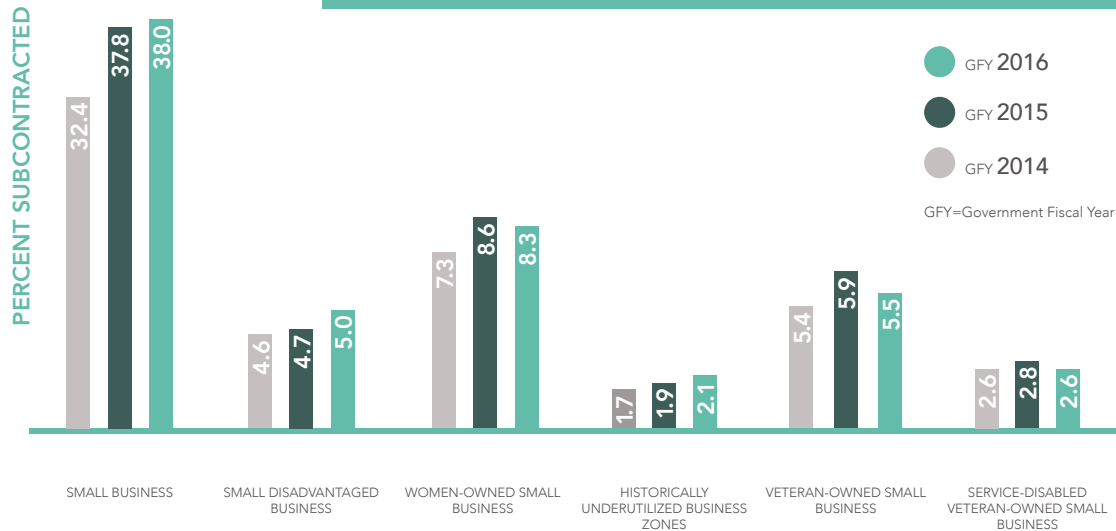
As a public company, we communicate regularly with our shareholders, including through our quarterly financial reports and other filings with the Securities and Exchange Commission, postings on the Investor Relations section of our website, regular public announcements and meetings.

We measure our performance against financial and non-financial metrics of importance to our shareholders, customers and employees. These metrics also factor into executive compensation. Our 2016 financial performance metrics were measures of operating margin rate, cash from operations conversion, net income growth and awards. Our non-financial metrics were quality, customer satisfaction, environmental sustainability, employee engagement and inclusion, diversity and safety.

*We apply our core competencies and capabilities to address the diverse and complex issues facing our customers.*



## DIVERSE SUPPLIER SPEND



## CORPORATE RESPONSIBILITY AND GLOBAL SECURITY

We remain committed to corporate social responsibility and environmental sustainability. Northrop Grumman does not currently manufacture cluster munitions, depleted-uranium munitions, chemical or biological weapons. Our team designs and manufactures launchers and provides sustainment support services for nuclear submarine-launched missile systems. We provide program management support, engineering services and emergency response for the U.S. Air Force's Minuteman III ICBM Ground Subsystems.

Our focus globally is on doing business in a manner consistent with our values and a commitment to sustainability. We work to incorporate social responsibility and customer support into decision making, including the products we design, develop, manufacture and sustain.

*During government fiscal year 2016, we subcontracted more than \$7 billion to a broad base of approximately 9,500 suppliers*

## GLOBAL SUPPLY CHAIN

### OUR SUPPLIERS ARE ESSENTIAL TEAM MEMBERS:

As part of our company values, suppliers receive the same respect we show to our customers, including fair and equitable treatment, clear agreements and honest feedback on performance. As teammates, we consider the needs of our suppliers in conducting our business.

### SMALL BUSINESS PERFORMANCE:

We embrace supplier diversity and inclusion and view it as a business imperative. During government fiscal year 2016, we subcontracted more than \$7 billion to a broad base of suppliers. We subcontracted 38 percent, or \$2.88 billion, to small business suppliers. As a company, Northrop Grumman has exceeded the 23 percent U.S. government small business statutory goal for more than 11 consecutive years. Numerous organizations have recognized the company with awards for the success of our global supplier diversity programs.

### WE EMBRACE SUPPLIER RESPONSIBILITY AND DIVERSITY:

At Northrop Grumman, our vision is to be the leader in delivering integrated supply chain solutions, by harmonizing and leveraging shared strategy, processes, people and systems to generate value.

To help align goals with our values, all employees with procurement authority are required to complete annual specialized ethics training and courses. Our employees are also required to certify annually their understanding of, and compliance with, our Standards of Business Conduct and to disclose any known or potential conflicts of interest.

### SUPPLIER ALIGNMENT WITH NORTHROP GRUMMAN VALUES:

In 2016 we developed new Supplier Standards of Business Conduct that reflect our commitment to ethical conduct at all tiers of our supply base. Our supplier standards are based, in part, on the supplier codes from the Defense Industry Initiative (DII) as well as the International Forum on Business Ethical Conduct (IFBEC). Further defining our commitment to ethical principles and practices, suppliers annually receive notification about our policies and values. Without exception, a strict adherence to ethical practices is a priority at Northrop Grumman and an essential element of our supplier relationships.

We regularly communicate our commitments to our suppliers regarding social responsibility and regulatory areas including: Equal Employment Opportunity, Affirmative Action, Conflict Mineral, Counterfeit Parts, and Anti-Human Trafficking.

## CENTERS OF EXCELLENCE (COE) AND COMMUNITIES OF PRACTICE (COP)

To effectively integrate supply chain activities across the company, we utilize an enterprise COE and COP construct. Each COE and COP defines and executes initiatives to optimize and harmonize cross-company efforts.

### OPERATIONAL EXCELLENCE COE

- Focus: Connect, integrate and enable people, processes and automation with a strategic focus on customer needs and integrated systems.
- Action: Assessed spending data in 2016 to identify opportunities for cost efficiencies and leverage supplier relationships.
- Action: Identified opportunities for small business participation strategies.

### ORGANIZATIONAL DEVELOPMENT COP

- Focus: Expand and enhance organizational talent development to facilitate skills development, career progression and internal mobility.
- Action: Deployed the Global Supply Chain Functional Development Center as an employee development framework.

### STRATEGIC SOURCING AND SUPPLIER MANAGEMENT COE

- Focus: Enhance supply chain risk management framework.
- Action: Implemented an enhanced framework for supplier risk management across the operational, financial and business categories including 20 assessment characteristics.

### COMPLIANCE POLICY AND SUPPLIER CONTRACTS COE

- Focus: Align with Corporate Compliance Council and the Supply Chain Leadership Council for business practices to optimize resources, minimize compliance and regulatory risk and ensure social responsibility.
- Action: Implemented a series of compliance initiatives including standard procurement practices.
- Action: Developed a set of company standard terms, conditions and forms.
- Action: Developed a new Supplier Standards of Business Conduct which set forth the fundamental requirements that we expect our suppliers to comply with at all tiers.

## SUPPLIER EXCELLENCE COE

- Focus: Proactive assessment of our suppliers' ability to deliver products and services that meet the needs of our customers.
- Action: Maintained a formal method for assessing, monitoring and rating supply chain performance.
- Action: Used a dynamic set of criteria framework to determine the "most critical suppliers" to our core business requirements. We designed this framework to be flexible and correlate each element appropriately based on business needs.

### CRITICAL SUPPLIERS CRITERIA INCLUDE:

- Level of criticality of program
- Past performance
- Dollar value and total spending
- Open purchase order value and volume
- Sole-source versus single-source
- Multiple programs
- Affordability
- Risk and financial health
- Investments, business agreements and small business categories
- Unique technology
- Current pursuits, future pursuits and strategic partnering efforts

## SUPPLIER DIVERSITY

The Northrop Grumman Global Supplier Diversity Program office is a link to small and disadvantaged business owners, as well as to our partners at Historically Black Colleges and Universities, Hispanic-serving institutions and tribal colleges and universities. We sponsor outreach to members of the small business community, offer mentoring programs and sponsor academic, customer and industry activities that support small business growth and development.

## DEPARTMENT OF DEFENSE (DOD) MENTOR-PROTÉGÉ PROGRAM

This program encourages major DOD prime contractors to develop the technical and business capabilities of:

- Small Disadvantaged Businesses.
- Women-Owned Small Businesses.
- Service-Disabled Veteran and Veteran-Owned Small Businesses.
- Historically Underutilized Business (HUB) Zone Small Business.
- Organizations Employing Severely Disabled Individuals.

Since the inception of the Mentor-Protégé Program, Northrop Grumman representatives have provided guidance to more than 130 small businesses. Northrop Grumman has won 23 Department of Defense Nunn-Perry awards, the most awards of any prime contractor. Nunn-Perry awards are the highest honor prime contractors can receive for participation in the program. The award honors retired U.S. Senator Sam Nunn, who sponsored legislation to enact the Mentor-Protégé Program in 1991, and former Secretary of Defense William Perry.

## SMALL BUSINESS INNOVATION RESEARCH (SBIR)

Throughout 2016, we continued to develop our SBIR program, which is the small business program funded by the Small Business Administration to engage such firms in federal research and development projects with commercialization potential. The SBIR program is a three-phase process of transitioning new small business technology from proof-of-concept to prototype development to commercialization within industry and government platforms.

### SMALL BUSINESS INNOVATION RESEARCH PROGRAM OBJECTIVES

- Stimulate technological innovation.
- Contract with small businesses to meet federal research and development needs.
- Foster and encourage participation in innovation and entrepreneurship by socially and economically disadvantaged people.
- Increase private-sector commercialization of innovations derived from federal research and development funding.

At Northrop Grumman, we currently track an estimated 20 SBIR firms involved in the various phases of the program and have partnered to enable them to receive an estimated \$6 million in transition funding to commercialize innovative technology. We use the program to augment the company's technical and scientific expertise. Our technical experts collectively work at each sector to identify and interview potential SBIR/Commercialization Readiness Program candidates who can integrate into Northrop Grumman solutions. Ultimately, the SBIR program provides funding to small business firms to assist them in bringing technologies to market.

## 2016 SMALL BUSINESS HIGHLIGHTS

### LOCAL FOCUS:

We used local small businesses within communities surrounding our operating facilities whenever feasible. During 2016 government fiscal year, 38 percent of procurement spend went to small, women and minority-owned businesses.

38%

PROCUREMENT SPENDING



SMALL, WOMEN AND  
MINORITY-OWNED  
BUSINESSES

### U.S. GOVERNMENT MENTOR-PROTÉGÉ PROGRAM:

We managed six Mentor-Protégé agreements, and in 2016 subcontracted \$50.4 million to protégé organizations.

6

PROTÉGÉ ORGANIZATIONS



\$50.4

MILLION SUBCONTRACTED

### SMALL BUSINESS:

In 2016, for the sixth consecutive year, we hosted a joint technology interchange workshop encouraging synergy among small business owners, military representatives and Northrop Grumman employees. As part of the joint Department of Defense Industry Small Business Innovation Research (SBIR) and commercialization readiness program, Northrop Grumman technical representatives invited SBIR firms for one-on-one meetings at a Northrop Grumman facility.

**RECOGNITION:** Northrop Grumman ranked as the #2 "Top 10 Companies for Veterans" (by DiversityInc.) and #3 among "America's Top 50 Organizations for Multicultural Business Opportunities" (by DiversityBusiness.com).

## SUPPLIER PERFORMANCE

Suppliers to Northrop Grumman are valued team members. We expect each to understand the critical need for top performance. We have processes for assessing, monitoring, rating and improving performance and risk levels in our supply chain. We routinely evaluate performance of our suppliers using standard industry supply chain criteria for schedule, cost and quality of performance. We also use additional evaluations for more complex requirements.

This supplier rating process helps us make decisions, predict performance and identify suppliers at risk of reduced performance. It also provides supplier performance expectations, regular communications and the ability for Northrop Grumman, as well as our suppliers, to review their performance across multiple programs.



*Northrop Grumman employees visit California State University Los Angeles (CSULA), a Minority Institution, to learn about alternative fuel technologies at the school's hydrogen station. Engineering students at CSULA further advance innovation through participation in the SourceAmerica Design Challenge to improve workforce functionality for people with disabilities.*

## GOAL AND PERFORMANCE SUMMARY

### GOAL

Engage various external stakeholder groups that support and serve our values and interests in recruiting, developing and recognizing a diverse workforce.

### PERFORMANCE

We partnered with many external organizations to develop our diverse supply base. These organizations provided forums for our employees to create long-lasting connections, to volunteer and develop leadership skills in their communities and to contribute to the company's success through recruiting and developing employees and suppliers. Several of our employee resource groups aligned their meetings with annual partner conferences and supplier diversity outreach events to identify potential diverse suppliers.

### GOAL

Ensure performance of our supply base is consistent with our values and our customers' expectations.

### PERFORMANCE

We routinely evaluated performance of our suppliers using standard industry supply chain criteria for schedule, cost and quality of performance. When a specific subcontract warranted, we also evaluated other factors including general management, product performance, systems engineering, software engineering, technical aspects, team commitment, sub-tier supply chain, proposal adequacy, service levels and process effectiveness.

### GOAL

Establish a single, consistent operational focus promoting best practices in environmental control and sustainability with our supply base and customers.

### PERFORMANCE

A continued focus in 2016 was advancing our sustainability practices. We augmented our International Aerospace Environment Group participation to address the European Union regulation REACH (Registration, Evaluation, Authorization and Restriction of Chemicals).

### GOAL

Protect our products and sensitive information throughout Northrop Grumman by avoiding counterfeit parts and exposure to cyber attacks within our supply chain.

### PERFORMANCE

We continued to take a proactive approach to prevent counterfeit parts from entering our supply chain and developed a risk management plan for supply chain cybersecurity. In 2016, we:

- Used a company-wide team of Northrop Grumman experts to establish consistent communication and processes, procedures, tools, training and governance.
- Established a company-wide working group to implement customer cyber security requirements to prevent and communicate exposures to cybersecurity attacks and promptly report such events.
- Participated in industry and various other external working groups to share best practices, develop standards and establish industry guidelines.
- Developed and implemented system enhancements that allow increased visibility and reporting of suspect counterfeit parts via automated controls.

### GOAL

Continue to ensure commitment to ethical conduct and identify any conflicts of interest with current and potential suppliers

### PERFORMANCE

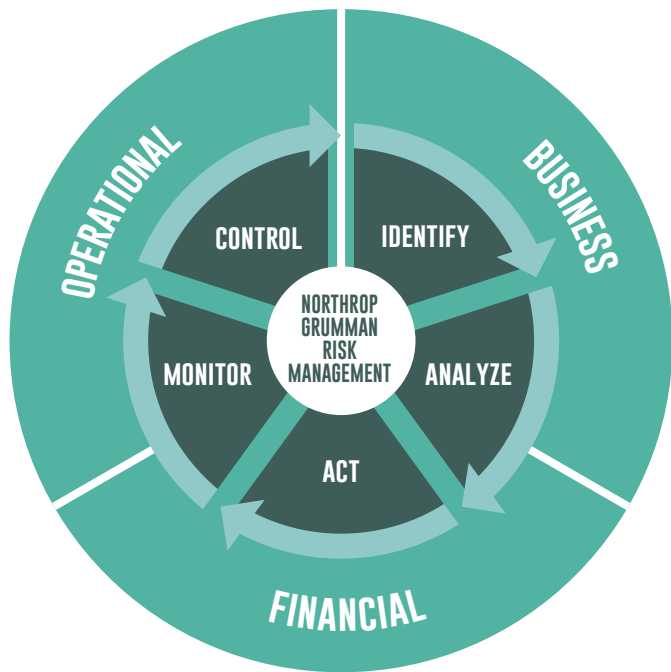
During 2016, procurement employees reviewed the procurement integrity policy and signed a certification specifying that they will not accept supplier gifts, bribes or kickbacks. We also regularly performed due diligence to assess whether suppliers and potential suppliers have been debarred or suspended from U.S. government contracting. In 2016, we implemented a risk-based supplier anti-corruption due diligence and monitoring process.



*The U.S. Navy awarded Northrop Grumman a contract to begin production of a second Japanese E-2D Advanced Hawkeye airborne early warning (AEW) and surveillance aircraft.*

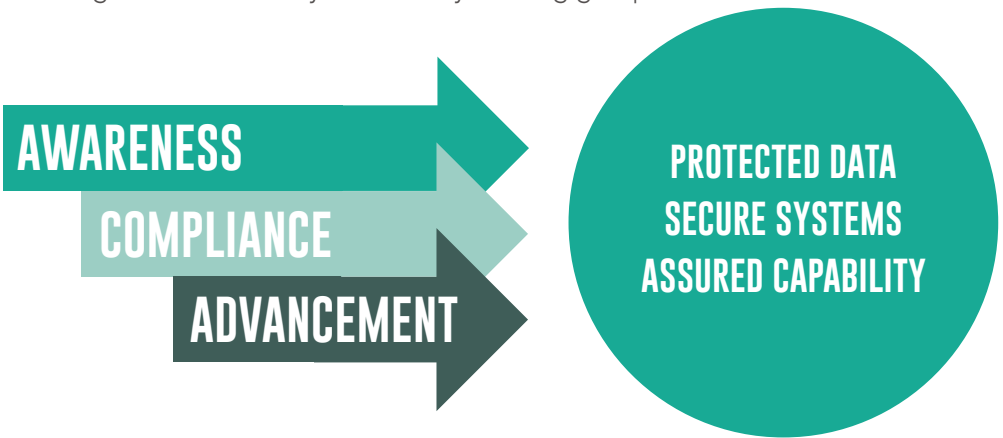


## SUPPLY CHAIN RISK MANAGEMENT



## SUPPLY CHAIN CYBER SECURITY

- In early 2016, we partnered with a supply chain research organization called CAPS to host a critical issues exchange on Supply Chain Cyber Security.
- We served as a co-leader for the Aerospace Industries Association (AIA) Supplier Management Council Cyber Security working group.



**RISK MANAGEMENT** In 2016, we established a Supply Chain Risk Management governance and operating model using 20 characteristics to collectively monitor and manage risks.

## BEING RESPONSIBLE: GLOBAL SUPPLY CHAIN MANAGEMENT

**GLOBAL SUPPLY BASE:** As Northrop Grumman expands further into global markets, we are enhancing our efforts to prevent human trafficking and other misconduct within our global supply base. We have a robust anti-corruption program to help ensure that we are doing business only with parties that share our corporate values for integrity and adhere to transparent and ethical business practices.

**HUMAN RIGHTS:** We are focused on identifying, managing and eliminating the potential of human rights violations occurring within our supply base. Within our Supplier Standards of Business Conduct, we outline our expectations for suppliers to treat people with dignity and respect.

**CONFLICT MINERALS:** We submitted the 2015 Conflict Minerals Form SD and a conflict mineral report on May 26, 2016. Northrop Grumman is a member company of the Conflict Free Sourcing Initiative, and we have issued a Conflict Minerals statement. This statement sets forth our commitment to the responsible sourcing of minerals in our global supply chain and is available on our website at [northropgrumman.com](http://northropgrumman.com).

## QUALITY MANAGEMENT

At Northrop Grumman, our commitment to our customers and enhancing global security is steadfast. In 2016, we maintained our global focus on quality as one of our key strategic priorities. We continued using quality measures company-wide that reflect the performance of our key programs against quality expectations across the program life cycle including engineering, manufacturing, supply chain and services.

We promote a company culture that infuses quality throughout Northrop Grumman. By highlighting the relationship between individual employees' work and customer success, we create sustained performance improvement.

We recognize that a holistic view of our quality performance and engaging all key stakeholders drives successful performance outcomes for our customers. To identify and prioritize areas for improvement in quality and customer satisfaction, we utilize a rigorous self-assessment process at both the business unit and corporate level.

*At Northrop Grumman, "Quality is personal."*



*Our employees at Northrop Grumman Australia, a fully owned Australian subsidiary of Northrop Grumman Corporation, will provide a significant amount of maintenance, repair, overhaul and upgrade work for the multinational F-35 Joint Strike Fighter (JSF) program for the Australian defense forces.*

## 2016 HIGHLIGHTS

### AVIATION WEEK PROGRAM EXCELLENCE

The Aviation Week Program Excellence awards recognize best-in-class technical and business performance across the aerospace and defense industry. In 2016, Northrop Grumman had four finalists (one winner) in the Aviation Week Program Excellence awards:

- James Webb Space Telescope Program **WINNER.**
- Data Repositories Program **FINALIST.**
- Hunter Unmanned Aircraft System Program **FINALIST.**
- RQ-4 Global Hawk **FINALIST.**

### QUALITY SYMPOSIA

In October 2016, we held 10 Quality Symposia events across our company. We kicked off Quality Month at our Waddington Facility in the United Kingdom, illustrating Northrop Grumman's global focus on quality. The Quality Symposia is an opportunity for us to showcase how quality and other key company priorities connect and build a foundation for top performance. During the events, we recognized 300 employees with our "Quality is Personal" awards. This award honors individuals and small teams who demonstrate continuous improvement and produce high-quality outcomes.



# GOVERNANCE

We are committed to maintaining the highest standards in corporate governance, ensuring our interests at Northrop Grumman are aligned throughout the company, increasing accountability to shareholders and demonstrating our commitment to compliance, ethics and integrity. We regularly engage with our shareholders to better understand their perspectives regarding Northrop Grumman. That ongoing dialogue with shareholders informs decisions by the Board of Directors and helps shape our governance and compensation practices to ensure our interests remain aligned with shareholders.

## BOARD OF DIRECTORS

The primary responsibility of the Board of Directors is to foster the long-term success of Northrop Grumman, promoting the interests of our shareholders.

## 2016 GOVERNANCE GOAL AND PERFORMANCE SUMMARY

**GOAL** Effective corporate governance to ensure long-term value creation.

**PERFORMANCE** The Board has adopted corporate governance policies and programs including the Principles of Corporate Governance, which reinforce our values and provide for effective management, oversight and responsible business practices.

See the Principles of Corporate Governance on the Northrop Grumman [website](#).

## HIGHLIGHTS OF OUR GOVERNANCE PRACTICES

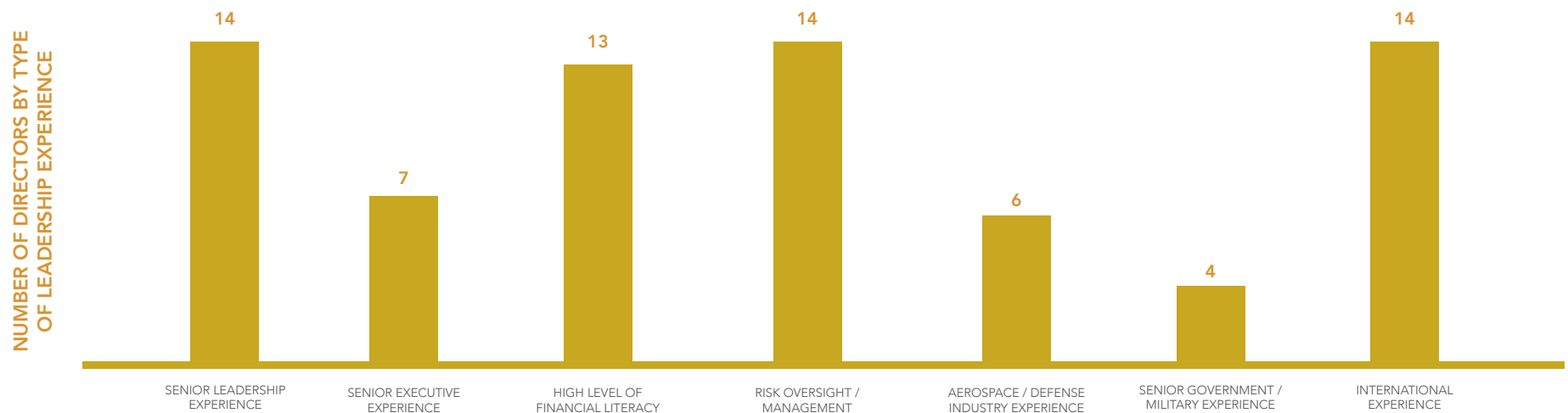
- Number of independent directors: 13 of 14 as of December 31, 2016.
- All Board committees comprised entirely of independent directors.
- Annual election of all directors.
- Lead independent director.
- Majority voting for directors in uncontested elections.
- Proxy access bylaw.
- Annual Board and committee self-evaluations.
- Ability of shareholders to act by written consent.
- Ability of shareholders to call a special meeting.
- Annual advisory vote on executive compensation.
- Recoupment policy for incentive compensation.
- Stock ownership guidelines for directors and executive officers.
- Policy prohibiting hedging and pledging of Northrop Grumman stock by directors and executive officers.

## BOARD COMPOSITION AND TENURE

As of December 31, 2016, the Board was comprised of 14 directors, 13 of whom are independent. The Board represents a diverse group of accomplished directors who bring a wide range of experience. The average tenure on our Board is 6.7 years. Three of the directors are women, and three are people of color. We believe our directors possess the reputation, education, professional background and skills highly beneficial to the Board and to our shareholders.

Each year the full Board, as well as each of its committees, conducts an assessment of performance and discusses the results and opportunities for improvement in executive session. In addition, the directors conduct an annual assessment of each individual director's performance. The Lead Independent Director or Chairperson discusses the results of this assessment with each director individually.

*Our directors are required to have a significant financial interest in Northrop Grumman to help reaffirm their interests align with those of the company's shareholders.*



## AUDIT COMMITTEE

- Focuses on risks that could affect financial performance.
- Reviews management reports on material financial risks and how we respond to, and mitigate, these risks.
- Reviews the company's periodic reports filed with the Securities and Exchange Commission.

## COMPENSATION COMMITTEE

- Reviews risk assessment of Northrop Grumman compensation programs.
- With input from its independent compensation consultant, evaluates the mix of at-risk compensation linked to stock performance and the alignment of compensation programs with shareholder value creation.

## GOVERNANCE COMMITTEE

- Regularly reviews corporate governance policies and practices.
- Makes recommendation to the Board regarding Board composition and succession planning.

## POLICY COMMITTEE

- Assists the Board in identifying and evaluating global security; political, budgetary, environmental and sustainability issues; health and safety matters; and trends that could impact Northrop Grumman business.
- Reviews management reports on ethics and corporate responsibility programs including a review of this annual Corporate Responsibility Report.

## BOARD OVERSIGHT OF RISK

The Board has four standing committees\*: audit, compensation, governance and policy. Among other duties, the Board oversees our risk management activities. Each of our Board committees assists the Board in this role. The Board also receives regular reports on the activities of the company's Enterprise Risk Management Council, which seeks to ensure effective mitigation programs are in place for each of the company's most significant risks.

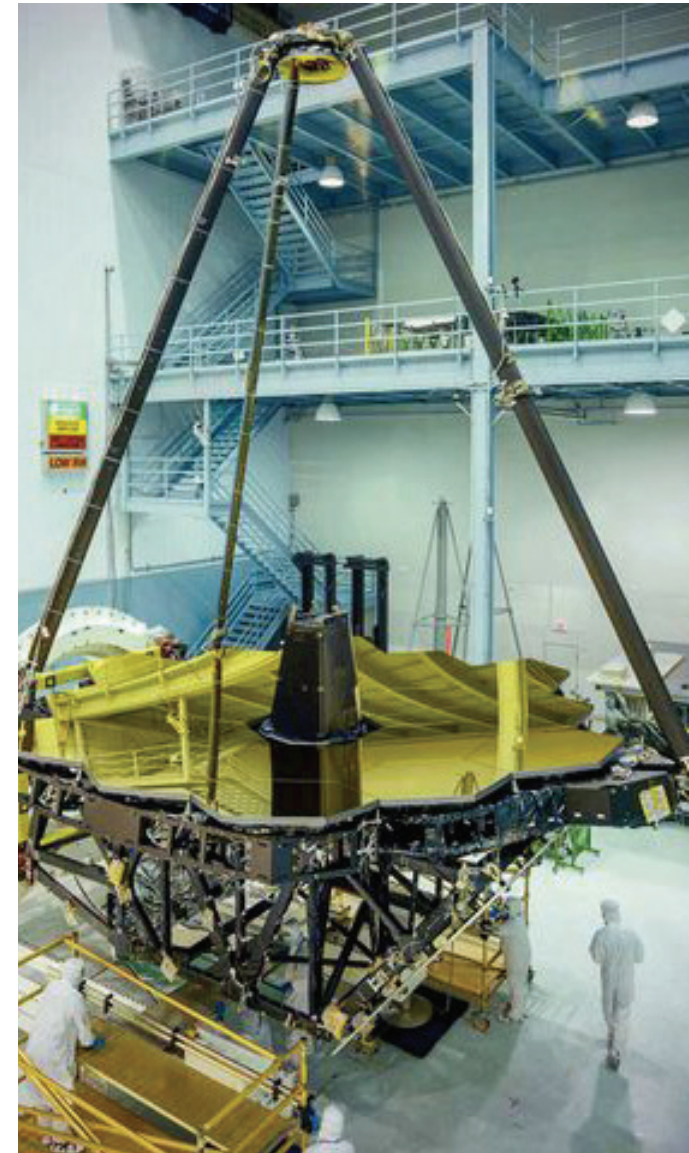
*\*Our 2017 Proxy Statement provides a summary of the duties of each committee. The committee charters are posted on the Northrop Grumman website.*

## HUMAN RIGHTS

At Northrop Grumman, our business practices reflect our strong commitment to human rights. Our Human Rights policy highlights our commitment to treat employees, suppliers, customers and competitors with dignity and respect and prohibits unlawful discrimination, harassment or retaliation. Additionally, our policy covers freedom of association, fair working conditions, ethical procurement practices, health and safety and protection of the environment. We also have established policies to combat human trafficking.

## POLITICAL PARTICIPATION DISCLOSURE

Political activities at Northrop Grumman are consistent with the company's principles of good governance and the highest standard of ethics. We publish an annual report detailing political contributions on the Northrop Grumman [website](#).



Northrop Grumman employees helped create the fully integrated Optical Telescope Element for NASA's James Webb Space Telescope.

## ETHICS AND INTEGRITY

At Northrop Grumman, we are guided by our company Values and expect that our decisions and actions demonstrate commitment to long-term benefits for our shareholders, customers, employees, suppliers and the communities we serve.

### ETHICS MISSION:

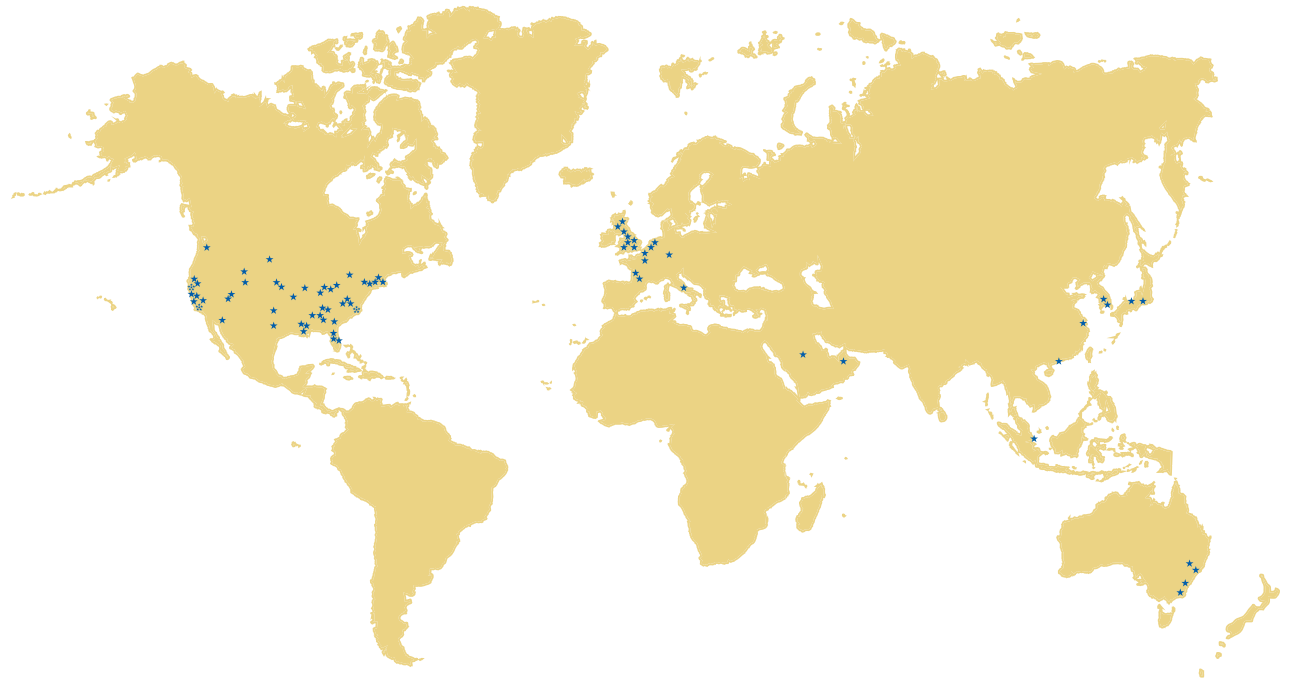
To promote a culture where leaders create and encourage an open and ethical work climate, foster trust and lead by example. We enable and require employees to act with integrity and in compliance with all ethical and legal responsibilities by providing necessary tools and knowledge. We pledge to conduct ourselves with integrity to support an internal culture of innovation and trust. Our ethical obligations extend to all employees and those who represent the interests of Northrop Grumman anywhere in the world.

### VALUES-BASED ETHICS:

We are committed to a values-based ethics program, which goes beyond the minimum standards to create and sustain an open environment and a “speak up” culture that fosters trust, helps employees achieve goals and improves our performance. By making the right decisions based on values, Northrop Grumman employees maximize both individual and company success.

## BUSINESS CONDUCT OFFICER LOCATIONS

We currently have a network of more than 140 part-time business conduct officers at Northrop Grumman sites around the world. Northrop Grumman facilities have designated business conduct officers; in the U.S. sites with over 200 employees, global sites with over 50 employees and in new areas of focus.



UNITED STATES	EUROPE	MIDDLE EAST	ASIA	AUSTRALIA
Located in 25 States	Belgium France Germany Italy Netherlands UK	Saudi Arabia United Arab Emirates	China Japan Singapore South Korea	AUS Capital Territory New South Wales Queensland Victoria

*Business conduct officers provide ethics leadership to management and employees, implement enterprise ethics and compliance initiatives, raise concerns and potential risks and respond to questions and concerns raised by employees about the company values, ethics and business conduct.*

# 1

## ETHICS: OWN IT



*We are responsible for knowing the rules and regulations that apply to the work we do and ensuring that we have the appropriate training and guidance to do our jobs with absolute integrity.*

All Northrop Grumman employees are responsible for ensuring that we maintain absolute **Integrity** across the company. Each employee participates in mandatory annual ethics and compliance training. In 2016, we provided training for our Standards of Business Conduct, information security, export compliance, human trafficking awareness and, for U.S. employees, the importance of time and labor charging accuracy. We implemented a centralized deployment and standardized certification process to increase training effectiveness. We adapted U.S. content for international relevancy and translated into German, French, Italian and Dutch.

The interactive format was engaging and feedback from our training survey showed positive responses to continued improvements in the content format and structure.

*Our Ethics Vision is to foster a workforce that takes ownership of our ethical culture, operates with integrity and lives our company values.*

To support our ethics program, we have a strong network of global business conduct officers at strategic locations. These are full-time employees who have a strong ethical commitment to the company, are approachable and broadly trained in Northrop Grumman policies and procedures.



*In February, more than 30 international Business Conduct Officers representing 13 countries, came together in London, England, for the annual training event and forum to share ideas, best practices and develop strategic plans for program enhancements.*

*In 2016, two elements demonstrated our reputation as a top performer in our industry: our “Ethics: Own It, Live It, Lead It” messaging and the refreshed Standards of Business Conduct.*

Additionally, some of our lead business conduct officers hold compliance and ethics professional certifications from the Society of Corporate Compliance and Ethics.

In February 2016, more than 30 international business conduct officers, representing 13 countries, came together in London, England for the annual business conduct officer workshop. The event began with a full-day boot camp for new business conduct officers followed by a two-day session where our executive leaders shared their views on ethics and integrity.

Our business conduct officers had an opportunity to discuss challenges, share best practices and lessons learned and develop strategic plans for program enhancements.

In April, the ethics organization hosted a similar workshop, for the U.S.-based business conduct officers, in Baltimore, Maryland. More than 100 attendees participated in two days of training, sharing ideas and regional networking. Both events enable our business conduct officers to drive the company’s Ethics and Business Conduct program and work to ensure successful implementation of ethics initiatives.

The newly revised Ethics: Own It, Live It, Lead It quarterly newsletter highlights company policies and procedures and serves as a continued refresher for ethics awareness and the importance of **Quality** and **Customer Satisfaction**.

Our corporate intranet site provides additional resources and guidance to assist with ethical dilemmas and decision making. A scenario database, based on lessons learned, was added this year to assist the business conduct officer community with keeping content fresh and relevant using reality based situations and solutions.

# 2

## ETHICS: LIVE IT



*We act in line with our values and Standards of Business Conduct. If we see something that is not in line, we speak up.*

We encourage employees to raise concerns or questions to managers or business conduct officers. Our “Speak Up – We’re Listening” OpenLine posters, with contact information for local business conduct officers, are prominently displayed at all Northrop Grumman facilities and serve to reinforce our commitment to **Integrity** and all the **People** we serve.

Our Northrop Grumman OpenLine provides an additional resource where employees, business partners, **Suppliers** and other stakeholders can seek guidance on ethics questions and report suspected violations of laws, regulations and company policy. The toll-free 24/7 number, administered by a third-party service provider, is communicated on brochures, posters, the company intranet and internet sites. Callers may choose to remain anonymous. In addition, an online web-based reporting system is available to employees.

We have dedicated OpenLine numbers at many of our international locations so employees in those countries can speak to a representative in their native language.

We thoroughly investigate and address all allegations in a manner that respects the reporting individual and the trust they have placed with us. In 2016, the ethics organization introduced a new Compliance and Ethics Investigation Team to centralize the ethics investigation process, expand automated metrics, improve tracking and augment training for all investigators.

The team coordinates ethics investigations, spots trends and tracks and reports aggregated data on issue types and actions taken. Their tracking enables us to develop targeted training and communications for our employees. We highlight Quarterly OpenLine metrics in the “Ethics: Own It, Live It, Lead It” newsletter to inform employees of investigation actions and dispositions.

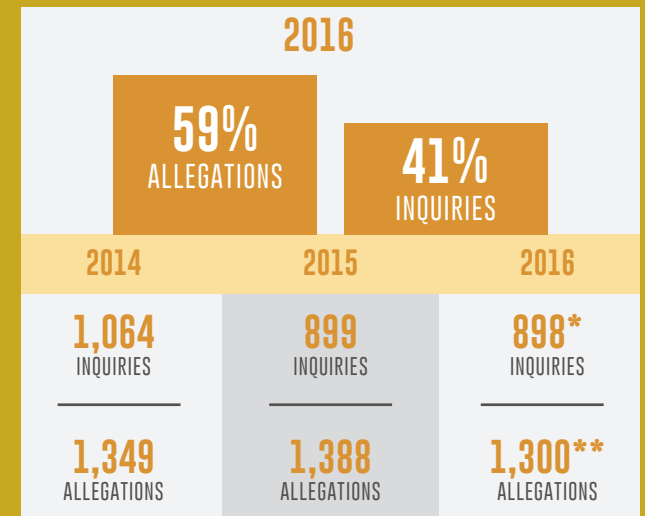
We conducted two-day investigator training sessions in Falls Church, Virginia; Redondo Beach, California; and Dallas, Texas for all Northrop Grumman employees involved in the investigations process.

We reinforce our strict Northrop Grumman non-retaliation policy during the investigation process and case-closure discussions. We have a clear, enforceable policy prohibiting retaliation for good faith reporting, supported by disciplinary measures for employees who breach our policy. The company’s non-retaliation policy, prominently posted online and in brochures, clearly states zero tolerance of direct or indirect retaliation against any individual who reports a concern in good faith. Another way we protect employees is by maintaining necessary confidentiality of personal information during OpenLine investigations.

We developed a “Know Before You Go” series, which are country specific ethics and cultural awareness guidelines for employees traveling on business. The documents are concise overviews of history, culture, communication styles, business etiquette and Northrop Grumman policies, procedures and resources for employees doing business in Europe, the Middle East, Asia and Australia. Included in this series is a guide for doing business in the United States for our global colleagues.

## OPENLINE CONTACTS

Our Northrop Grumman OpenLine is a valuable resource where employees, business partners and other stakeholders can seek guidance, ask questions and report suspected violations of company policy, regulations and laws.



Overall, approximately, 36 percent of violations were substantiated resulting in 91 terminations. Additional actions as a result of investigations included coaching, verbal and written warning and additional training.

\* 2016 inquiries were relatively consistent with 2015. Most inquiries were questions about the acceptance of gifts and gratuities.  
 \*\* The 6 percent decrease in allegations may reflect increased training and compliance awareness. Time reporting and employee misconduct continue as the highest reported violations, followed by misuse of company resources.



# 3 ETHICS: LEAD IT



*We encourage open, honest communications and an environment where everyone is included and comfortable challenging one another.*

At Northrop Grumman, we believe **Leadership** is a fundamental value, and we work to build engagement and trust within working teams. Tone at the top begins with our CEO's annual ethics message in the first quarter and continues throughout the year with timely reminders and compliance awareness.

Ethics staff and the business conduct officers lead, partner with, participate in and support external ethics and compliance organizations for professional development and to learn industry best practices. This effort includes memberships with the Defense Industry Initiative, Ethics and Compliance Initiative, Society of Corporate Compliance and Ethics, Institute of Business Ethics (UK), International Forum on Business Ethical Conduct and Aerospace Industries Association of America.

We use positive reinforcement with our ongoing "Ethics: Own It, Live It, Lead It" award (see below) for employees who demonstrate integrity and inspire others to do the right thing. In 2016, eight employees received this award and a letter from CEO Wes Bush.



At Northrop Grumman in Waddington, United Kingdom, Keith Monslow (left), Waddington Business Conduct Officer, smiles as Kevin Longman (right), UK AWACS program director, presents Senior Commercial Officer Julie Porter with an "Ethics: Own It, Live It, Lead It" award.

## REGULATORY AND LEGAL COMPLIANCE KEY ELEMENTS

**MANAGEMENT COMMITMENT:** The unwavering commitment of our management to a strong culture and integrity lies at the foundation of our ethics and compliance program. Our leadership demonstrates its commitment regularly through communications and actions.

**STANDARDS AND POLICIES:** Beyond our Standards of Business Conduct, we use a comprehensive set of policies and procedures designed to maintain robust internal controls tied to the company's functions and operations and key areas of risk.

**OVERSIGHT AND RESOURCES:** We use internal teams that work together to provide the needed oversight and resources to drive our compliance program including our Office of the Chief Compliance Officer; Compliance Council; Global Corporate Responsibility; Ethics; and Internal Audit

**RISK ASSESSMENT:** Our Enterprise Risk Management Council evaluates the risk factors disclosed in our public filings and the strategies to mitigate and address those issues.

**INCENTIVES AND DISCIPLINE:** We publicly recognize employees who do the right thing. We also have effective processes for addressing allegations and administering discipline to those employees who commit misconduct.

**DUE DILIGENCE:** We devote significant resources to evaluating and carefully selecting third parties with whom we do business as sales representatives, partners, consultants, suppliers or teammates. We clearly communicate our expectations that these third parties must share our commitment to doing business with the highest levels of ethics, integrity, privacy and compliance with applicable laws and regulations.

**REVIEW AND AUDITS:** Through employee surveys and our well-established corporate audit program, the Corporate Compliance Council, and other feedback channels, we continuously review and identify areas for potential enhancement of our compliance program.

## ANTI-CORRUPTION COMPLIANCE

We maintain a zero-tolerance policy with regard to bribery and corrupt business practices. We conduct our business consistent with high ethical standards and in full compliance with all applicable anti-corruption laws.

Our policies prohibit offering or payment of a bribe, directly or indirectly in connection with all business (commercial or government). We also prohibit the acceptance or promise of anything of value from any person or entity as an inducement or reward improperly to perform or fail to perform a function or activity.

- **Management Commitment:** From the top of our business, through our ranks of management, our leadership demonstrates a proactive, visible and steadfast commitment to anti-corruption compliance.
- **Risk Assessment:** We conduct internal risk assessments and evaluate the strength of our Anti-Corruption Compliance Program against standards provided by government authorities and industry best practices.
- **Employee Engagement:** Anti-corruption compliance is the responsibility of all Northrop Grumman personnel and suppliers, and in meeting this responsibility, each employee is expected to:

◇ Complete required anti-corruption training.

◇ Be aware of the potential for corruption risk factors in the transactions and business relationships they are involved in on Northrop Grumman's behalf, such as the perception of corruption in a particular country or organization, adverse information concerning the ethical reputation of our trading partners and other red flags that might arise.

◇ Take measures to ensure that all contracts and business records accurately reflect the true nature of each transaction and the relationship of the parties involved.

◇ Promptly report any potential or suspected violations, unethical, or illegal activity in accordance with company policies.

## OUR PROGRAM

### POLICIES AND PROCEDURES:

All employees are required to adhere to the clearly articulated requirements of our anti-corruption policy and related procedures, which include controls and guidance for:

- Risk-based due diligence of third parties.
- Conflicts of interest.
- Business courtesies.
- Offsets.
- Charitable donations.
- Political donations and political activity.
- Corporate memberships.
- Sponsorship of corporate events.
- Detection, monitoring and reporting.
- Anti-corruption training.

**Industry Engagement:** Northrop Grumman is a long standing and active member of the Defense Industry Initiative (DII) on Business Ethics and Conduct and the International Forum on Business Ethical Conduct (IFBEC).

### 2016 ACCOMPLISHMENTS

Anti-corruption compliance remains an essential element of our global business execution model, particularly with respect to third parties seeking to do business with Northrop Grumman. Recent enhancements to our policies and procedures related to our risk-based vetting of suppliers, consultants, sales representatives, teammates and other third parties include:

- Responsibility for third party due diligence for the enterprise within a highly trained and fully dedicated diligence collection and analysis organization.
- Responsibility of cross-functional teams to review and approve third-party diligence and relationships.
- Implementation of an automated diligence management system for greater transparency, collaboration, and process efficiency across the company.

## INTERNAL REPORTING

We expect our leadership to exhibit ethical behavior and to anticipate and respond appropriately to employees seeking to report misconduct. To encourage employees to report potential misconduct, we use management training and “train-the-trainer” modules. This preparation fosters a climate of trust where our employees are more likely to report potential misconduct.

## DATA PRIVACY AND SECURITY

We have a comprehensive information security program. Our Corporate Privacy Office manages our global commitment to respect the personal information of our employees, customers and other individuals. We continue to enhance our Privacy Governance Framework that includes privacy training and awareness initiatives, effective privacy notices, access controls, international and third-party supplier risk assessments, compliant cross-border transfers of data, and other risk mitigation measures. We take care to comply with the privacy regulations in the countries in which we operate. This year, we certified under the EU–U.S. Privacy Shield framework and are preparing for the new European Union general data protection regulation that will take effect in May 2018.

Vital to Northrop Grumman’s business operations is the successful protection from cyber threats to our products and computing environments. Our comprehensive Information Security Governance framework includes policies and standards governing computing environments and company-wide services that strengthen our overall security posture including:

- **INFORMATION SHARING AND COLLABORATION:** Information sharing and engaging with government, customer, industry and supplier partners helps protect our own networks and the overall security of those partners. We participate in multiple cybersecurity information-sharing programs to address cyber threats.
- **TECHNOLOGY INVESTMENT:** We deploy multi-layered defenses to protect our computing environments and products from cyber threats. We regularly evaluate new technologies to maintain our security posture.
- **INSIDER THREAT:** To safeguard against the potential theft and misuse of intellectual property and other sensitive information, we maintain an insider threat program designed to identify, assess and investigate risks. Our program evaluates potential risks consistent with industry leading practices, customer requirements and privacy considerations.
- **SUPPLY CHAIN CYBERSECURITY:** We continue to enhance the cyber security posture of the entire Northrop Grumman global supply chain by focusing on program risk awareness, supplier oversight, subsystem acceptance and secure supplier connectivity. We work in partnership with our suppliers to implement safeguards for protecting sensitive content, whether stored on company and supplier networks, or embedded in Northrop Grumman platforms, products and services. We work with our government and industry partners to ensure the use of secure standard processes for receiving supplier deliveries and for exchanging and protecting sensitive data throughout the supply chain.
- **THIRD-PARTY RISK ASSESSMENTS:** Before hosting sensitive data in a computing environment managed by a third party, we conduct an information security assessment and implement contractual provisions that mandate security protections.
- **TRAINING AND AWARENESS PROGRAM:** We understand that our employees’ ability to identify, avoid and mitigate cyber threats is a crucial element of our information security program. Among the elements of our training and awareness program are mandatory annual training and email spear phishing exercises.



# INNOVATION PRODUCTS AND SERVICES



## AEROSPACE SYSTEMS

Northrop Grumman Aerospace Systems is a premier provider of military aircraft, autonomous and space systems and next-generation solutions to assist our customers worldwide.

## MISSIONS SYSTEMS

Northrop Grumman Mission Systems is a leading global provider, manufacturer and integrator of advanced, secure and agile software-defined systems and solutions. Our differentiated C4ISR and cyber solutions deliver timely, mission-enabling information and provide superior situational awareness and understanding.

## TECHNOLOGY SERVICES

Northrop Grumman Technology Services is a global provider of innovative and cost-effective solutions. Through sustainment and modernization, supply chain management, training, simulation and high technology services, we offer a full-spectrum of support.

## RESEARCH AND DEVELOPMENT

At Northrop Grumman, we innovate to provide advanced defense/security solutions and capabilities to our customers. A critical approach is Systems Thinking, which allows us to design and deliver complex products that are critical to preserving freedom and advancing human discovery.

Our research and development efforts include partnering with leading universities, small businesses and national laboratories to create advanced capabilities; attracting and developing a highly innovative technical workforce including leading scientists and engineers; and advancing science and human discovery.

## SYSTEMS ENGINEERING AND SYSTEMS THINKING AT A GLANCE

A Systems Thinking culture is foundational to our business and success. Systems Thinking goes beyond the ability to perform program engineering to include all of our employees helping solve complex problems. This process keeps in mind the impact of every decision on the rest of the system and ensures decisions will be sound for the entire system from initial concept, to capture and through sustainment. Developing a strong Systems Thinking culture, including world-class systems engineering across the organization from top to bottom, is a key discriminator for Northrop Grumman and allows us to better execute on programs, increase customer confidence and grow our business.

*Northrop Grumman has a proud systems engineering heritage.*

Systems engineering is a key tenet to creating first-time quality and sustainable performance. We work to communicate and emphasize the importance of systems engineering company-wide, across all functions, to ensure that we create value strategically.

Systems Thinking and systems engineering play a critical role within program teams and across the company. Systems engineers ensure the product or solution being developed fully meets mission objectives and is delivered to the customer as intended. Systems engineering considers business and technical needs of customers with the goal of providing a quality product or solution that delivers the objective. When executed well, systems engineering adds value by creating sound proposals, clear requirements, robust designs and effective testing.

Our culture of Systems Thinking is essential to derive the full benefit of our world class systems engineering. Adopting a Systems Thinking mindset across our company – to programs and projects of all sizes and scope as well as our day-to-day activities – reinforces our systems engineered solution development as we drive individual, team and company sustained top performance.



*Systems Thinking is interwoven into our products from initial concept, to capture through sustainment including MQ-8C Fire Scout unmanned helicopters for the U.S. Navy.*

## INNOVATION ECOSYSTEM

### EMPLOYEE INNOVATION: WILDLIFE CHALLENGE

Scientists studying polar bears and the Arctic have an ongoing problem. Because of the region's extreme weather and limits to existing technology, they are unable to collect the type of localized data needed to understand how climate change impacts this iconic species and its environment.

In November 2016, Northrop Grumman engineers and San Diego Zoo Global (SDZG) scientists traveled to Churchill, Manitoba, Canada, at the edge of the Arctic tundra, to validate autonomous flight technology they hope will help answer critical research questions.

The project started in August with the launch of the Wildlife Challenge. Four employee teams, three from California (San Diego, Space Park/El Segundo and Palmdale) and one from Melbourne/St. Augustine, Florida, competed to develop unmanned aerial systems to help researchers study the movement of pack ice glaciers and how polar bears use the ice.

Following successful test flights in San Diego County, the Melbourne team (Polar Eye), packed up their ruggedized plane, spare parts and head-to-toe thermal clothing to join San Diego Zoo colleagues at the Churchill Northern Studies Centre along the Hudson Bay coastline. The 11-person team (seven from Northrop Grumman) spent nearly a week on the ground to prove their design could fly and collect data in some of the toughest conditions on the planet.

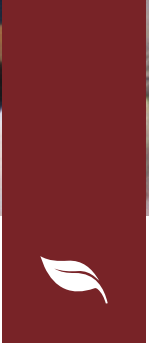
The team flew missions using an all-electric, fixed-wing aircraft with a 14-foot wingspan and a custom fuselage to accommodate several optical sensors. The plane also had multi-terrain landing gear and environmental packaging. By the last flight, the team had doubled operational time and provided imagery to the scientists, none of which was an easy feat.

Polar Eye attributes their success to individual skill sets, team bonding and close collaboration with the scientists. It is this type of cross-disciplinary knowledge and experience that will help employees at Northrop Grumman design future systems and, ideally, help scientists preserve polar bears and their special habitat. The project started in August with the launch of the Wildlife Challenge, the latest installment in the Northrop Grumman Aerospace Systems series of Innovation.



*Four teams of Northrop Grumman employees competed to develop unmanned aerial systems to help researchers study the movement of pack ice glaciers and how polar bears use the ice.*





# ENVIRONMENT

Our Environmental, Health and Safety (EHS) professionals across the company are responsible for implementing programs and practices that support compliance across our diverse operations in 25 nations at 442 separate locations. These professionals work closely with site managers to provide employees with the resources and support to operate safely and prevent and mitigate any environmental or occupational health and safety impacts.

## OUR POLICY AND COMMITMENT

- Implement pollution prevention programs to minimize the release of contaminants, the use of natural resources, and the generation of solid and hazardous waste.
- Establish processes to facilitate timely identification, reporting and response to EHS concerns and conduct EHS training and awareness campaigns.
- Integrate EHS requirements and sustainability practices in planning, design, procurement and modification activities.

## 2016 CONFERENCE

As a company with extensive industrial and manufacturing operations, it is important that we build and maintain a workforce that includes highly skilled and motivated EHS professionals. In 2016, 90 of our EHS employees came together for two days to strengthen their professional network (see above image) through team building, information sharing and education sessions.

One session generated innovative ideas for poster displays at Northrop Grumman sites to improve compliance, mitigate safety and health risks on the manufacturing floor and demonstrate how we integrate environmentally sustainable practices into daily operations. Additionally, external experts at the conference presented recent regulatory changes and updates, new and emerging trends and insight into our customers' current and future needs.

## ENVIRONMENTAL COMPLIANCE

Through robust environmental compliance programs and awareness campaigns, we remain committed to conducting our operations in a manner that minimally impacts surrounding environments.

In 2016, 22 sites, or approximately one third of our total floor space, were ISO 14001 certified. To ensure Environmental Compliance we:

- Comply with all applicable laws and procedures within our regions of operation, adhere to Northrop Grumman policies and procedures and reduce our environmental footprint.
- Strive for excellence and promote efficiency, affordability, innovation and forward thinking in our operations.

*Our vision at Northrop Grumman is to demonstrate environmental stewardship through innovative and value-added solutions.*

## INTERNATIONAL AEROSPACE ENVIRONMENTAL GROUP

As a founding member of the International Aerospace Environmental Group (IAEG), a global industry association, we support environmental sustainability and compliance initiatives in collaboration with our peers to address common industry challenges.

We engage both at the Board level, supporting the organization’s governance and strategy, and at the working-group level, providing subject matter expertise for the following work groups:

**CHEMICAL REPORTING** Establishing a standardized process for collecting information on chemicals contained in mixtures, materials, products/articles and technologies to fulfill any customer or regulatory reporting requirements.

**REPLACEMENT TECHNOLOGIES** Developing, as an industry, a method for identifying and evaluating alternatives to substances and technologies that pose a threat to human health and the environment.

**GREENHOUSE GAS (GHG) MANAGEMENT AND REPORTING** Developed GHG Reporting Guidance for the Aerospace Industry - A Supplement to the GHG Protocol Corporate Accounting and Reporting Standard. This guidance provides a common framework of greenhouse gas accounting methodologies to promote consistent, complete and accurate reporting in the aerospace industry.

**REACH PROCESS AUTHORIZATION** Allows all of us in the Aerospace and Defense industry to make informed decisions by identifying uses of specific substances and working with suppliers to understand any risks directly linked to such materials.

**SUPPLY CHAIN ENVIRONMENTAL SUSTAINABILITY SURVEY HARMONIZATION** Developing industry-wide tools for companies to survey their suppliers to improve efficiency and better manage environmental sustainability risk.



*In October 2016, Northrop Grumman IAEG representatives met with industry peers in Bordeaux, France to address common industry challenges.*

## HAZARDOUS WASTE AND TOXICS RELEASE INVENTORY

Northrop Grumman seeks to reduce hazardous chemical usage and to reduce the volume and toxicity of waste generated in our operations to the extent that it is technically and economically feasible. As a Department of Defense contractor, our use of hazardous materials is influenced by emerging technologies, material specifications from our customers and fluctuations in demand for our products.

	2013	2014	2015
HAZARDOUS WASTE (TONS)	1,065	1,003	1,032
TOXICS RELEASE INVENTORY (TONS)	34.8	46.0	42.0

The hazardous waste and toxics release data presented represents all U.S.-based operations that are required to report or disclose to the Environmental Protection Agency and/or state governments.



## ENVIRONMENTALLY SUSTAINABLE PERFORMANCE

### THE **greeNG** PROGRAM

Our focus on environmental performance extends beyond compliance. Established in 2009, our greeNG environmental sustainability program reduces the company's environmental footprint by improving operational efficiency and integrating environmental sustainability practices into all our operations.

*Environmental sustainability is one of our six non-financial corporate performance metrics overseen by the Compensation Committee of our Board of Directors.*

Our greeNG Program strives to expand environmental sustainability awareness throughout our organization, supporting our corporate values and meeting the expectations of our diverse set of stakeholders. greeNG is a catalyst for environmentally sustainable performance that drives long-term affordability into our operations, benefiting our customers as well as our shareholders. The Policy Committee of our Board of Directors oversees the alignment of the program with the company's strategic objectives.



Solar panel installations at Northrop Grumman are powering operations such as our Melbourne Manned Aircraft Design Center of Excellence in Florida.

## 2020 ENVIRONMENTAL SUSTAINABILITY GOALS

REDUCE GREENHOUSE GASES

**30%**  
FROM 2010

REDUCE WATER USE BY

**20%**  
FROM 2014



**70%**

SOLID WASTE DIVERSION FROM LANDFILL\*

*Our environmental sustainability goals, along with greenhouse gas, water, and solid waste inventories, include our full portfolio of facilities where we have operational control. This represents more than 98 percent of our global floor space.*

## 2016 PERFORMANCE SUMMARY



### GREENHOUSE GAS EMISSIONS

Throughout 2016 we maintained our focus on building efficiencies and systems, information technology infrastructure and engineering/manufacturing process modifications.

Last year we implemented projects that reduce annual emissions by 15,715 MTCO<sub>2</sub>e and contributed to a total 29 percent reduction in greenhouse gas emissions from our 2010 base year. Our greenhouse gas footprint continues to trend downward even with increased business activity in 2016.

We are committed to maintaining high quality data and performance tracking. For a sixth consecutive year, we received third-party verification of our Scope 1 (direct) and Scope 2 (indirect, location-based) GHG inventory. For the third consecutive year, we received third-party verification of our Scope 3 (other indirect) Business Travel GHG inventory. Verification is to International Organization for Standardization (ISO) 14064-3.

We provide further details on our climate change risk management, Scope 2 market-based and Scope 3 emissions, and energy consumption in our CDP Climate Change disclosure report.



### WATER USE REDUCTION

We are committed to minimizing our water consumption, emphasizing action in regions where water stress is a reality, including California, parts of Australia and most recently, the southeastern United States. Our conservation efforts are enhancing our environmental stewardship but also creating long-term operational cost savings for the company.

Maintaining our commitment to data quality, we received third-party verification of our 2014 through 2016 water inventories in accordance with ISO 14064-3. Water conservation highlights include:

- Reduced our water use in California by 14.7 percent between 2014 and 2016.
- Implemented projects throughout the United States and reducing annual water consumption by more than 39 million gallons.
- Completed water use assessments in 2016 at our two largest sites in Linthicum, Maryland, to evaluate operational conservation and source alternatives.



### SOLID WASTE

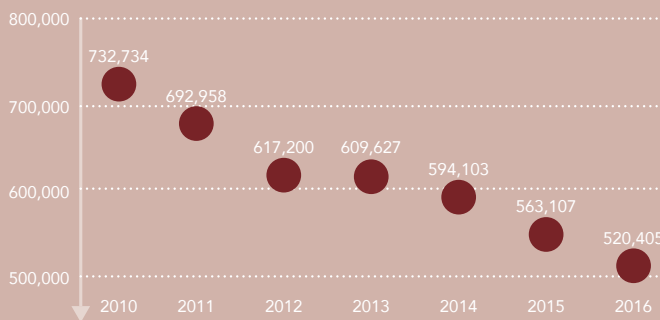
Consistent with the principles of lean manufacturing and Six Sigma, elimination of waste is a proven objective that drives cost savings. Likewise, diverting solid waste from landfills through reduction, reuse and recycling initiatives makes good business sense.

#### 2016 WASTE REDUCTION HIGHLIGHTS:

- Our corporate office in Falls Church, Virginia eliminated disposable to-go containers from our cafeteria and expanded our composting program throughout the building. This resulted in 15 tons of compost being diverted from landfill in 2016.
- Our team at the St. Augustine, Florida facility converted 10 trash cans into recycling containers and purchased an onsite compactor to divert nearly 24 cubic yards of plastic film from landfill weekly.

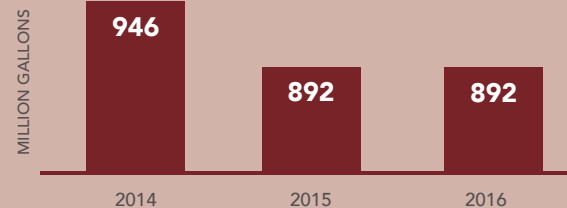
## ABSOLUTE GHG EMISSIONS

SCOPE-1 AND SCOPE-2 LOCATION BASED



*Our water use has reduced 5.7 percent from our 2014 base year.*

## POTABLE WATER USE



## SOLID WASTE PERFORMANCE

% DIVERSION FROM LANDFILL	60.1%
TONS DIVERTED	13,240
TONS DISPOSED	8,800
TONS WASTE-TO-ENERGY	955

### CONSTRUCTION AND DEMOLITION DEBRIS (C&D)

(not included in solid waste diversion)

C&D DIVERTED	4,550
C&D DISPOSED	276

\* MTCO<sub>2</sub>e = metric tonnes of carbon dioxide equivalent. We develop our GHG inventory in accordance with The GHG Protocol Corporate Standard, which is inclusive of mergers, acquisitions and divestitures.

**ONSITE RENEWABLE ENERGY** Our St. Augustine Aircraft Integration Center of Excellence and Melbourne Manned Aircraft Design Center of Excellence are powered by two onsite solar systems totaling 0.56 MW of generation capacity. In 2016, we used a total of 1,370 megawatt hours of onsite renewable energy.

**RENEWABLE ENERGY PURCHASES** We maintain our multi-year purchase commitment for 20,857 megawatt hours of Green-e certified, renewable energy certificates (RECs) first purchased in 2012. Through utility providers and the energy market, our REC purchases support solar, wind and geothermal energy installations.

**GREEN BUILDINGS** Eight Northrop Grumman operating facilities are certified to the U.S. Green Building Council's "Leadership in Energy and Environmental Design" (LEED) standards. An additional two Northrop Grumman operating facilities are certified under the U.S. Environmental Protection Agency's ENERGY STAR® program for energy-efficient equipment and building systems design.

**ECOSYSTEM CONSERVATION** We have continued our multi-year commitment and purchase of 11,000 MTCO<sub>2</sub>e of American Carbon Registry-certified carbon offsets. These conservation-based carbon offsets are generated by the Mississippi Valley Reforestation Project in the southeastern United States and support the re-forestation of one million acres of the Lower Mississippi Alluvial Valley; one of the most important ecosystems in North America.

We also ensure conservation at our own facilities. At our Melbourne Manned Aircraft Design Center of Excellence we established an on-site nursery to support storage of more than 120 mature trees removed for new building construction. The trees will be transplanted on the site in new locations once construction is complete.

**ELECTRIC VEHICLE CHARGING** Our electric vehicle Workplace Charging Program doubled in 2016 to support the growing number of employees who use low/no emission vehicles to commute. We currently have 78 "Level 2" charging connections at 18 sites supporting more than 400 drivers of registered electric cars. (shown in image at right)



## 2016 CORPORATE FORUM PARTICIPATION

In 2016, we participated in forums across the United States. As corporate members, we receive valuable updates and information within the fields of environmental, health, safety and sustainability. Resources range from collaboration opportunities with our peers to educational resources and regulatory updates.

### ORGANIZATION OF RESEARCH COUNSELORS - HEALTH, SAFETY AND ENVIRONMENT

Our partnership with this group is integral to our commitment to excellence. Through participation in work groups and conferences, we receive updates on regulatory changes, present to peers on sustainability strategies and collaborate with member companies during workshops. Group members also advocate to ensure OSHA and EPA regulatory actions are workable solutions that include industry realities.

### ASSOCIATION OF CLIMATE CHANGE OFFICERS

We address climate change issues through this professional development and cross-sector community. The group fosters collaboration with practitioners, policy makers, climate scientists and researchers to advance solutions and build capacity in addressing climate change.

### BUSINESS RENEWABLES CENTER

This group provides a collaborative environment and knowledge base to promote streamlined corporate renewable energy procurement.

### CORPORATE ECO FORUM

Membership in this group enables us to collaborate closely with other sustainability leaders and work to accelerate sustainable business innovation.

### THE **greeng** EMPLOYEE RESOURCE GROUP

This community of volunteers helps shape our company's environmental stewardship program. Resource groups create an atmosphere where employees can share knowledge, solve problems, build relationships and enhance personal development. Employees participate in events that support the local community and help protect the environment.

## ENVIRONMENTAL REMEDIATION 2016 REMEDIATION GOALS AND PERFORMANCE SUMMARY

**GOAL** Effectively address environmentally impacted properties in compliance with applicable regulatory requirements. We continue to explore cost-effective alternatives to traditional resource-intensive remediation practices, which reduce environmental disturbance and energy use and promote ecosystem recovery.

We pursue this goal by seeking to work cooperatively with government agencies, conservation groups, citizen groups and other stakeholders to address environmental impacts at our remediation sites and protect human health.

**PERFORMANCE** In 2016, we were involved in approximately 170 environmental remediation projects with an annual budget of \$52 million. From 2006 to 2016, we successfully completed active remediation at 80 sites and removed them from the company's portfolio of impacted properties. During the same decade, we also accomplished life-cycle cost reductions exceeding \$44 million by using innovative engineering approaches.

For example, in Greenfield, Massachusetts bordering a site on the Green River, we excavated and removed approximately 3,500 cubic yards of hydrocarbon-impacted soils and sediments. We worked to return the site to pre-excavation conditions with clean fill and native rounded river stones, grasses and trees. Post-excavation samples indicate removal of free-phase hydrocarbons, reducing the potential for future impacts to the river and the ecosystem.

### THERMAL REMEDIATION

In Murphy, North Carolina we implemented a thermal remediation program addressing volatile organic compounds (VOCs) in the soil and groundwater. These compounds are common in solvents used in de-greasing and other industrial processes. In less than one year, the thermal program reduced contamination to levels that could have taken previous remedial approaches more than 100 years.

*We seek  
cost-effective and efficient  
solutions that reduce  
environmental impact.*



*Thermal remediation treatment systems, such as this one at a former Northrop Grumman site in Murphy, North Carolina, can reduce solvent levels in soil and groundwater.*



**BEFORE**



**AFTER**

*Remediation construction efforts in Greenfield, Massachusetts showing the transformation.*

## EHS AUDIT PROGRAM

Our internal EHS Audit Program supplements our day-to-day compliance management and provides an objective assessment of how effectively we are meeting regulatory compliance programs in our operations. Our policy is to conduct compliance and management system audits at required sites every three to five years. Our internal audit teams comprise EHS experts from across the company who review their specific area. The audits ensure sufficient expertise and time to conduct a thorough evaluation of EHS programs and management.

The scope of the audits includes federal, national, state and local regulatory requirements, standards organization codes such as fire codes and company policy and procedures. We base our management systems assessments on ISO 14001 and OSHA's 18001 standards, as well as industry best practices that emphasize key fundamentals of day-to-day business operations.

Through benchmarking and a continual improvement assessment of our internal EHS Audit Program, we evaluated and identified opportunities for improved efficiency and effectiveness. As a result, the program is currently undergoing updates that will provide more detailed program performance metrics and improve cross-sector collaboration and sharing of best practices.

## AUDIT PROGRAM: LOOK-AHEAD

We use our internal EHS audit program to ensure compliance and foster continuous improvement at our sites. To that end, our data shows we are consistently improving audits year over year. To continue this trend, we are adjusting the program protocol to focus on specific higher-risk issues identified during audits, using software and programming to gain efficiencies in the audit process, and providing regulatory resources that will help promote consistency among auditors. We are dedicated to investing in the continuous improvement of our audit program.

**CALIFORNIA 5**

**MARYLAND 5**  
**NEW YORK 1**  
**VIRGINIA 1**

**GERMANY 2**

**GEORGIA 2**  
**NORTH CAROLINA 1**  
**ALABAMA 1**  
**FLORIDA 1**

**AUSTRALIA 1**

NORTHROP GRUMMAN CORPORATE HEADQUARTERS

**WE AUDITED 20  
NORTHROP GRUMMAN  
SITES IN 2016**



# PEOPLE AND CULTURE

## ENGAGING OUR MOST VALUABLE RESOURCE: OUR TALENT

At Northrop Grumman, our employees are the driving force behind achieving sustained top performance.

Our strategy begins with attracting the best, most diverse talent from top colleges and the labor market. We also target military veterans for their commitment, high ethical standards, skills, experiences and knowledge of our industry, and we reach out to hire and mentor our nation's wounded warriors.

To attract and retain the best employees, we foster a company culture of diversity and inclusion. Our annual employee survey helps us understand employee perspectives across the globe on inclusion, engagement and accountability. We also use a robust performance management process to recognize top performers throughout Northrop Grumman.

The performance management process, coupled with our leadership development programs, is key in preparing our employees and the company for future opportunities.

Throughout Northrop Grumman, we maintain close relationships with representatives at top colleges across the globe. Through these partnerships, we provide expertise to university research programs and support various campus and student initiatives.

Our Professional Development Program for new college hires provides up to three years of rotational opportunities to offer various skill building opportunities and locations. In 2016, approximately 500 of our new college hires participated.

Acquiring, engaging, developing and managing our talent goes beyond fulfilling capability needs. Our people help us shape a values-based culture that is the framework in which every employee is able to achieve their full potential.

*Our values-based culture at Northrop Grumman is the framework to help each employee maximize potential.*

### **DIVERSITY AND INCLUSION**

At Northrop Grumman, shaping a culture of diversity and inclusion defines who we are and how we operate our business. With employees in 50 U.S. states and 40 countries, our values-based culture creates a workplace that blends multiple cultures, perspectives, skills and experiences.

### **OPERATION IMPACT**

A dedicated team of employees ensures we train and employ troops and wounded warriors through Operation IMPACT (OI: Injured Military Pursuing Assisted Career Transition). OI provides program management, personalized placement assistance, community outreach and workplace accommodations for severely injured service members transitioning to civilian employment. Since inception, we have hired 195 employees through Operation IMPACT.

### **STRATEGIC SOURCING AND MILITARY RECRUITING**

We continually look for ways to help bridge the employment gap for retiring and exiting service members. VERITAS, our internal employee resource group, is a resource we use to support veterans. We also support existing partnerships with external groups including Military Officers Association of America, DOD Hiring Heroes, Virginia Employment Commission, Student Veterans of America and Corporate Gray.

### **DIVERSITY AND STRATEGIC SOURCING**

We are dedicated to bringing together people with different perspectives, unique skills and experiences. That focus helps us find the best talent for future leadership positions and employees with strategic skills. As we have throughout our history, in 2016 we continued to partner with numerous diversity-based organizations to connect with talented candidates.

### **EQUAL PAY ASSURANCE**

We benchmark pay using external salary surveys. We monitor pay rates to ensure equitable remuneration for women and People of Color, and our incentive system is performance-based.

*Women hold 50 percent of senior executive positions and People of Color hold more than 20 percent of senior executive positions.*

### **EQUAL EMPLOYMENT OPPORTUNITY**

We build employment equity and non-discrimination principles and policies into our company operations within legal parameters for each country in which we operate. Within the United States, we develop annual Affirmative Action plans, where applicable, that document specific steps to hire veterans and increase representation of minorities, women and People with Disabilities.

### **PERFORMANCE REVIEWS**

All employees receive regular performance feedback and are eligible for development opportunities to achieve career goals. Employees receive formal performance reviews every 12 to 15 months, based on their hire date within a calendar year and scheduling.

### **BENEFITS**

Employees who are regularly scheduled to work 20 or more hours per week are eligible for health and welfare benefits under the Northrop Grumman Health Plan, including benefits for domestic partners and transgender benefits. Qualified full-time and part-time employees are eligible for the 401(k) plan, retirement plans, work/life benefits, childcare, life and disability insurance, education assistance and other employee benefits.

### **AGENCY COMPLAINTS**

In 2016, external agencies logged 27 complaints of discrimination across the company. We investigate all such complaints and take appropriate action. Of these complaints, we successfully resolved 13, with 14 still open/pending as of December 31, 2016.

### **COLLECTIVE BARGAINING**

Currently, collective bargaining agreements cover approximately 5 percent of Northrop Grumman employees. At Northrop Grumman facilities, our employees are free to exercise their rights of freedom of association and collective bargaining.

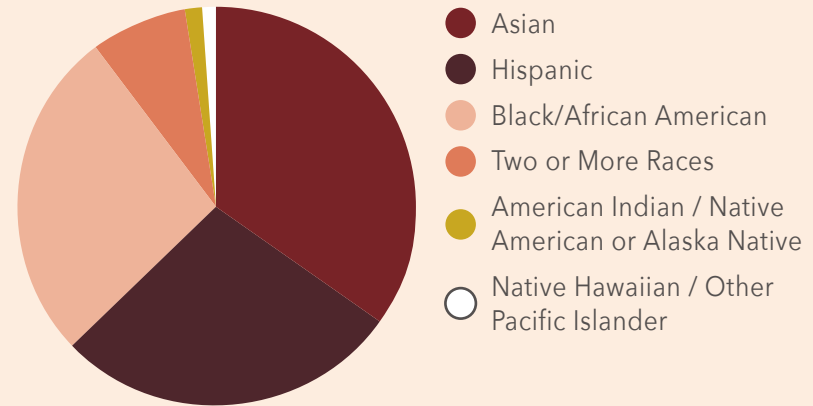
## EMPLOYEE DEMOGRAPHICS

### TOTAL POPULATION:

26.9% 73.1%  
FEMALE MALE

33.1%  
POC

### PEOPLE OF COLOR (POC) POPULATION

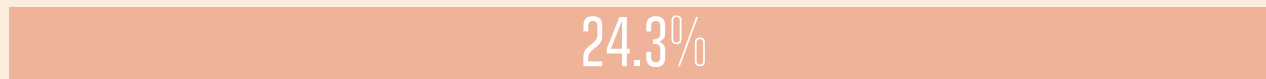


### VETERANS AND PERSONS WITH DISABILITIES (PWD) POPULATION:

Veteran Population



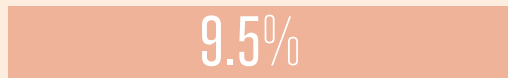
Veteran New Hires 2016



PWD Population



PWD New Hires 2016



### MANAGEMENT POPULATION:

25.2% 74.8%  
FEMALE MALE

23.1%  
POC

### SENIOR EXECUTIVE\* POPULATION:

50% 21.4%  
FEMALE POC

\*Executives who report directly to the CEO.



## DIVERSITY AND INCLUSION 2016

**GOAL:** Create an inclusive work environment that fosters creativity and innovation and promotes colleague engagement through awareness and inclusive leadership skills training.

**PERFORMANCE:** In 2016, we continued use of our Employee Engagement and Inclusion Survey, which provided managers with ongoing insights to engage employees and discuss diversity and inclusion. As always, our employee resource groups continued to show strong growth, such as strengthening our global women's network and introducing Small Acts of Inclusion.

**GOAL:** Increase representation of women and People of Color in leadership positions as benchmarked against labor market recruitment census data.

**PERFORMANCE:** In 2016, we completed year two of our five-year diversity plan with modest growth in almost all areas. Female leaders increased from 24.5 percent in 2015 to 25.2 percent in 2016. People of Color in leadership increased from 21 percent in 2015 to 23.1 percent in 2016.

In 2016, more than 50 percent of college hires were diverse or female candidates, strengthening our future leaders' pipeline. Our overall representation for People with Disabilities increased from 5.4 percent in 2015 to 6.0 percent in 2016. Of all hires, People with Disabilities comprised 9.5 percent in 2016 and veterans 24.3 percent.

**GOAL:** Engage various external stakeholder groups that support and serve our values and interests in recruiting, developing and recognizing a diverse workforce and contracting with diverse suppliers.

**PERFORMANCE:** In 2016, we participated in 12 diversity conferences to recruit new diverse employees and develop talent. We won awards from various LGBT organizations and were named a top company for executive women. We achieved a perfect 100 point rating on the Disability Equality Index Best Places to Work for Individuals with Disabilities. To strengthen our partnerships, senior leaders spoke at conferences such as Women in National Security Careers and the Women in Leadership and Business Summit, held in the United Arab Emirates.

## ACCOMMODATIONS REQUESTS AT A GLANCE

### HOW WE SUPPORT

We launched our self-service online request system ACCOMMODATE in June 2015, which provides accommodations for people with disabilities. We are committed to providing accommodations for disabilities and a range of other needs including religious, dietary, new mother, caregiver, transition assistance and travel. For example, our employee resource group VOICE (Victory Over Impairment and Challenge Enterprise) helped pilot a software solution for lactation room reservations, accessibility and utilization.

### WHAT WE SUPPORT

**Job Modifications** (duties/hours/location)

**Job Equipment** (chairs, lamps, mirrors, sit/stand desks)

**Accessibility** (facilities modifications and IT hardware/software)

**Accommodation Services** (interpreters, captioning, travel, lactation/prayer rooms, dietary)

**2016 TOTAL** **1,172** REQUESTS  
**1,896** REQUESTS (SINCE INCEPTION IN 2015)

### 2016 HIGHLIGHTS

- Ongoing partnerships: We work closely with disability organizations including Office of Disability Employment Policy, U.S. Business Leadership Network, American Association for People with Disabilities and Job Accommodation Network.
- Museum on Wheels: Hosted and sponsored America's Disability Rights Museum on Wheels featuring interactive learning and technology. The mobile exhibit stopped in major cities in the United States, including a stop at our Northrop Grumman location in Mclean, Virginia, to educate people about the disability movement and passage of Americans with Disabilities Act in 1990.
- Facilities Upgrades: At a number of Northrop Grumman facilities we have installed automatic opener buttons on doors, gender-neutral restrooms and other building improvements.
- Operation IMPACT: Continued support of our program by providing accommodations to veteran employees (and their spouses) who qualify as OI candidates.

## CREATING THE BEST CULTURE

### 1 EMPLOYEE ENGAGEMENT

We are committed to employee engagement and creating an inclusive work environment where employees are receptive to diverse ideas, perspectives and talents. We want all employees to feel welcomed, respected, included and valued so everyone can contribute to innovation and achieve top performance.

### EMPLOYEE SURVEY

Since 2010, we have used an annual employee survey to gather feedback on and improve our company culture. A third-party company administers the survey to ensure employee anonymity. Additionally, employees around the globe had the opportunity to provide feedback on focus areas such as company leadership, manager effectiveness, work environment, sustainable engagement, accountability and career development.

In 2016, 85 percent of Northrop Grumman employees completed the survey, which was made available in eight languages to employees in 40 countries. Overall, engagement and inclusion scores were on par with externally benchmarked, high-performing companies and exceeded the benchmark for other aerospace and defense companies included in the survey database. Our leaders and teams worked together to use the results to create 2017 action plans.

### EMPLOYEE RESOURCE GROUPS (ERGs)

Our Employee Resource Groups allow members to develop and build leadership skills, raise awareness, educate others and contribute to communities. These groups include a variety of focus areas most important to our employees including those supporting African Americans, Asian Pacific Islanders, Hispanics, Native Americans, women, People with Disabilities, veterans, lesbian, gay, bisexual and transgender (LGBT) employees, young professionals, parents, multiple generations and environmentalists.

Employees unite as volunteers to coordinate events based on common interests: personal development, community service, recruiting of prospective employees and leadership experience. Northrop Grumman management supports Employee Resource Group members by providing a culture that supports these valuable employee efforts. Our LGBT group PRiDA helps review the Corporate Equality Index. Another group, VOICE, provides feedback on the national Disability Equality Index. The ERG-sponsored 2016 Speaker Series offered 15 sessions ranging from gaining insight on the value of speaking up to learning the art of being an authentic leader to creating your personal culture of wellness.

## 2 OUR COMMITMENT TO DEVELOPMENT

At Northrop Grumman, we provide the tools and support to build leaders at every level. We have high expectations for our leaders, so we provide numerous avenues to learn the skills for successful career development and enhanced team performance.

### THE FOUNDATION-LEADERSHIP CHARACTERISTICS

The six Northrop Grumman leadership characteristics provide the foundation for skills all employees must develop to be successful and deliver top-tier, sustainable performance. Our leadership behaviors define the company culture so we give these characteristics equal consideration with performance objectives during the annual performance review process. Likewise, the leadership behaviors are also key to assessing potential in our annual succession planning process.

### MENTORING

Mentoring is a valuable method for developing employees at all levels and supports our culture of performance, learning and innovation. We offer a variety of opportunities to support career growth and development for mentors and mentees. Our Vice President Mentor Program, launched in 2016, creates increased leadership visibility and business exposure of high-potential talent.

As the Northrop Grumman workforce evolves, we will continue to support knowledge transfer through formal and informal mentoring. In 2017, vice presidents will continue to mentor high-potential employees, and we will expand our mentoring programs to provide opportunities to develop our next generation of talent.

### NEW MANAGER PROGRAM

Individual contributors promoted to manager, and newly hired managers and directors, complete the New Manager Program. The program provides information, tools and resources to clearly articulate expectations of leaders at Northrop Grumman. Coursework includes Leadership Characteristics, Northrop Grumman policies and legal and ethical obligations. In 2016, 1,209 managers completed the program.

### LEADERSHIP SERIES

We introduced a series of speaking engagements and learning labs to provide management with opportunities to improve effectiveness and team performance by focusing on Sustainable Performance, Best Culture and People Leadership.

## MANAGER SELECTION

In 2016, we launched the Manager Readiness Initiative that established the skills and abilities required for manager success at Northrop Grumman. We use this criteria to prepare, select and develop the best managers.

## EXECUTIVE DEVELOPMENT

Our annual organizational leadership review process identifies and tracks high-potential employees. To further prepare and evaluate candidates for advancements, employees can attend a number of leadership programs including Strategic Leadership, Executive Leadership Cohort, Women in Leadership and Affinity Forum. Participants in these programs also receive one-on-one coaching and access to tools such as a 360 and executive assessments.

In 2016, we launched the Building the Best Culture program, which focused on driving awareness and advocacy for gender and People of Color inclusion through experiential learning and behavioral shifts. The program helps leaders develop critical inclusive leadership strategies, sharpen awareness of inequalities, awareness of unconscious biases and privilege and hone their skills to make a lasting, positive impact.

## PROFESSIONAL AND TECHNICAL DEVELOPMENT

Through our annual survey and other communication channels, our employees requested more career development resources. In 2016, we launched several key initiatives to help all employees grow and develop their careers. We redesigned our Northrop Grumman Development Center, an online portal providing access to tools, guidance and courses for professional and career development, to improve site navigation and offer more resources including thousands of online courses, videos and books available through the 24/7 online development portfolio. Additionally, we offered a career development webinar series that highlighted resources available on the Northrop Grumman Development Center.

Through the Northrop Grumman Development Center, employees can learn about key business areas by using our functional development centers. Functional development centers provide targeted experiences, exposure and education recommendations to help employees develop in and explore new opportunities in other functional areas.

Each functional development center is based on a job experience profile (JEP), which includes key capability areas critical to a specific function. The JEP serves as a guide for experience, exposure and educational activities to assist employees in identifying and accomplishing their professional development goals.



Our bi-annual Women's Conference, which we began in 2006, successfully brings together more than 400 female employees from all levels of the company to network, hear senior leaders discuss their unique journeys within Northrop Grumman and gain valuable insight into our strategy for sustainable top performance.

# 3 HEALTH AND SAFETY COMPLIANCE

It is our policy to conduct our operations in a manner that promotes and protects the health and safety of our employees, contractors, visitors and surrounding community. We invest continually in people, equipment and training to ensure employees are empowered to work in healthy and safe environments.

One way we demonstrate our commitment to health and safety is participating in National Safety Month each year in conjunction with the National Safety Council. The 2016 company theme was "Safety is No Accident." Highlights included workplace training materials and a video for all employees with a message from our CEO who reasserts our commitment to safety. Another key area in June was the focus on safety away from work and at home.

## SAFE+Y IS NO ACCIDENT

We also encourage good communication and a strong relationship between workers and management, which helps empower employees to maintain safety. A good example of this is our Environmental,

Health and Safety councils at each facility. These councils encourage collaboration between workers and management, and provide a safe and open environment for discussing safety issues and ensuring the quick and satisfactory resolution of any potential problems.

**INJURY AND ILLNESS PREVENTION** We make significant investments in tools, training and assessments of work practices to prevent injuries. Through our relationships with industry leaders in loss control, we work to develop programs that will identify and reduce accidents to our employees.

### VIRTUAL OFFICE ERGONOMIC ASSESSMENTS REDUCE CLAIMS AND INCURRED COSTS

The Virtual Ergonomics Intake and Resolution System provides a central communications entry point, combining technology-driven efficiency with live support from experienced consultants. The process provides our employees quick and consistent access to help.

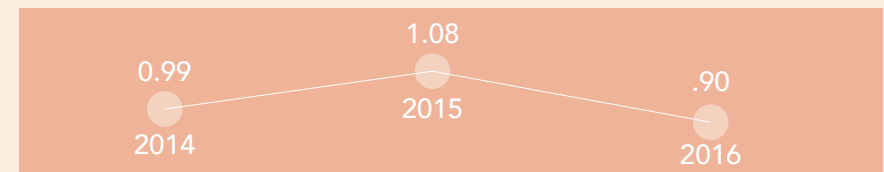
**KAIZEN EVENTS FOR INJURY REDUCTION** At our F/A-18 aircraft production program in El Segundo, California, we addressed injury risk by conducting four Kaizen Events to uncover, assess and eliminate ergonomic risk factors. We implemented 191 improvements resulting in significant efficiency gains. For example, we removed 137,820 walking steps from processes that eliminated more than 38 hours of walking annually.

### 2016 HEALTH AND SAFETY GOALS PERFORMANCE SUMMARY

We evaluate the effectiveness of our health and safety programs externally, through benchmarking with industry peers and Department of Labor Statistics, as well as internally through the analysis of past performance. Safety is one of Northrop Grumman's six corporate non-financial performance metrics. For each safety metric, a lower statistic is indicative of better performance.

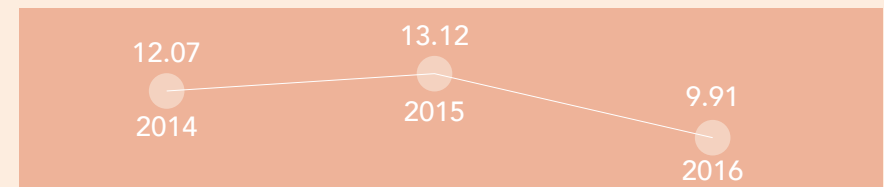
#### TOTAL CASE RATE

Total number of Occupational Safety and Health Administration-recordable occupational injuries and illnesses; i.e., cases requiring medical treatment beyond first aid, per 100 full-time workers.



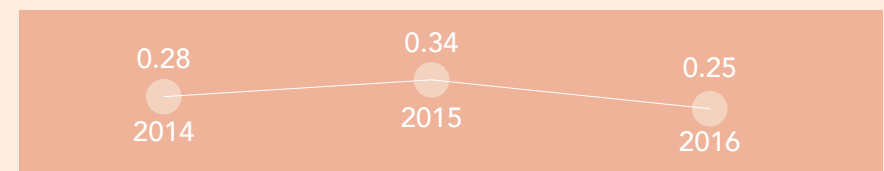
#### LOST WORK DAY RATE

Total number of lost work days per 100 full-time workers.



#### DAYS AWAY CASE RATE

The total number of cases, per 100 full-time workers, that resulted in lost or restricted days or job transfer because of work-related illnesses or injuries. Used in conjunction with the other metrics, Days Away Case Rate helps identify the severity of workplace injuries and illnesses.



## CORPORATE CITIZENSHIP AND STEM

**OUR VISION:** Connect our passions and talents to build partnerships that transform our communities

**OUR MISSION:** Leverage our time, talent and dollars to cultivate a future workforce and strengthen the lives of those within our communities.

*For 2016 we had four funding and programming strategic priorities: Education, Employee Engagement, Reputation and Strengthening Communities.*



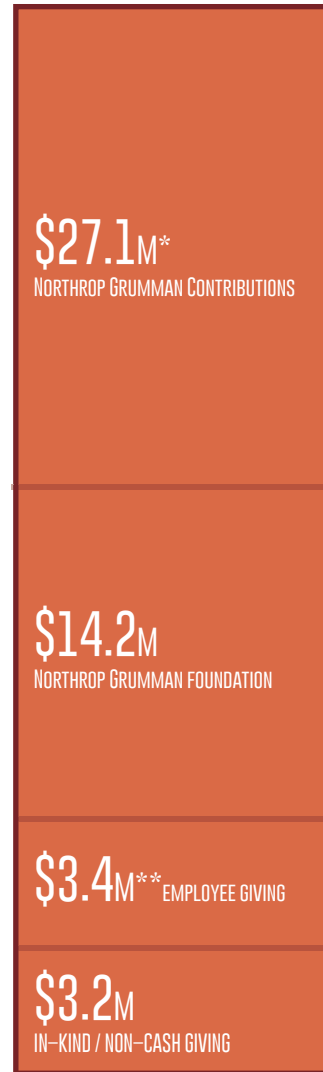
Students prepare their hovercraft for the High School Innovation Challenge at Northrop Grumman Space Park facility in Redondo Beach, California.

## COMMUNITY INVESTMENT THROUGH PHILANTHROPY

**\$47.9 MILLION**

### NORTHROP GRUMMAN CONTRIBUTIONS SUMMARY

\*Includes a \$15 million gift from Northrop Grumman to the Northrop Grumman Foundation.



28%  
K-12 EDUCATION

15%  
OTHER\*\*\*

4%  
ENVIRONMENT

24%  
HIGHER EDUCATION

15%  
MILITARY AND VETERANS

14%  
HEALTH AND HUMAN SERVICES

\*\*Includes ECHO, employees' donations for education that are matched and local fundraising campaigns.

Progress against goals for corporate contributions: \$12,115,690.

\*\*\*Includes contributions in categories such as arts and culture, youth and civic that are not in one of our four focus areas.

# 1 EDUCATION PRIORITY

Contribute to the development of a pipeline of diverse talent by supporting science, technology, engineering and mathematics (STEM) and strategic education programs and initiatives that align to the business needs of the company.

## OUTCOMES

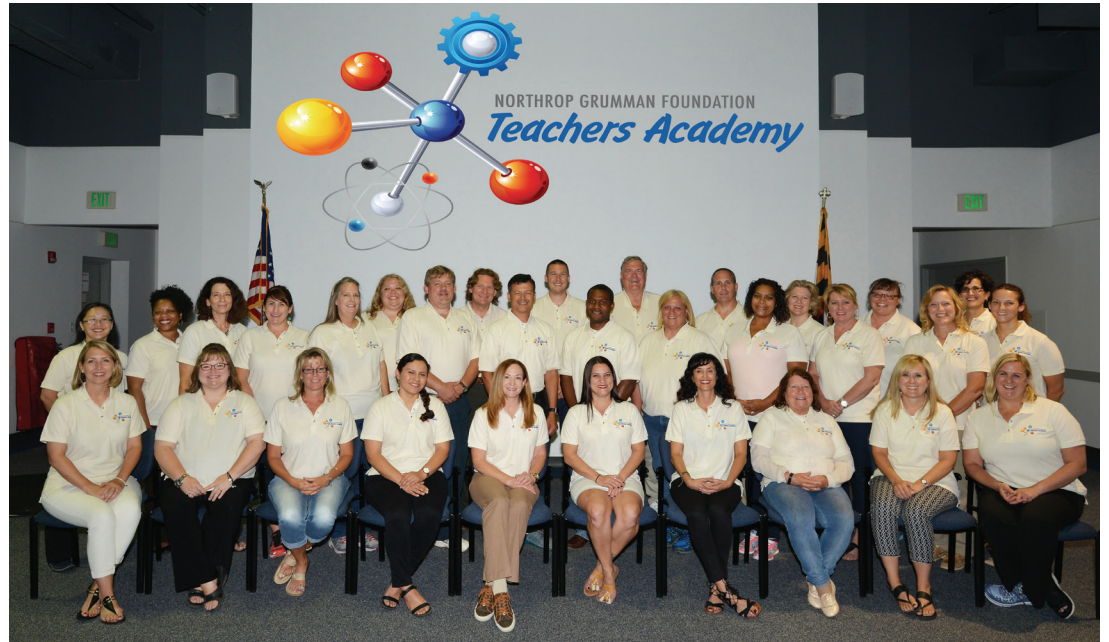
With a focus on K-12 STEM education, emphasize engineering and technology-based programs and initiatives that excite, engage and educate middle school students and serve as professional development resources for their teachers.

## SIGNATURE PROGRAMS

- Designed specifically for middle school teachers (grades 5-8), the Northrop Grumman Foundation Teacher's Academy builds teacher confidence and classroom excellence in science, engineering and technology and helps teachers to understand the skills needed for a scientifically literate workforce. Northrop Grumman engineers and technologists are integral to the design and implementation of the program and provide industry perspectives to teachers. In turn, the teachers get a yearlong immersion in a host of science, technology and engineering learning opportunities.
- The team at the Northrop Grumman Foundation designed the Fab School Labs contest to provide much-needed resources for the classroom and to boost student interest in STEM. The program allows middle school teachers and administrators to create a dream laboratory that gives students access to the best learning tools and technologies. Fab School Labs is a nationwide competition allowing public middle schools (grades 6-8) in the United States to win a science, technology, or engineering lab/classroom upgrade valued up to \$100,000. Nearly 200 schools participated in the contest in 2016 by submitting videos, photos and sharing their school vision for a state-of-the-art science lab. To help determine the five winning schools, Northrop Grumman Foundation staff enlisted the public via a five-day online voting campaign hosted on the Fab School Labs Facebook page that garnered more than 32,277 votes.

"In addition to the lesson plan that we are currently working on for the Teachers Academy, I am bringing back to my school a changed mindset. And I think that is more valuable than any lesson plan that I could ever create. I went into this externship with an open mind and a willingness to learn from everyone and every environment that I encountered. Acting like a sponge served me well. In two weeks, I pulled from every experience that I could. My mindset has changed to one that can impact more students in a greater way. I have left this externship thinking 'what can my school's STEM Initiative do to make our community better?'"

– Jason Raines, Northrop Grumman Foundation Teacher Fellow, DeKalb County Schools



The Northrop Grumman Foundation Teacher's Academy (first class pictured here) helped build teacher confidence and classroom excellence in science, engineering and technology.

- We have partnered with University of Maryland Baltimore County and Baltimore City public schools, to support a Science, Technology, Engineering, Arts and Mathematics (STEAM) Center renovation and programming. In 2016, more than 100 Northrop Grumman volunteers supported more than 1,400 students and 133 teachers with literacy reading programs, building a STEM culture within the schools and teacher-development programming.
- Our High School Involvement Partnership (HIP) pairs high school students with employees to provide mentoring, business-environment exposure and hands-on experience in real world STEM applications. Students who participate receive either school credit or may be eligible for scholarships and future internship opportunities. We had 176 students participate in HIP at 16 Northrop Grumman locations in 2016.
- The High School Innovation Challenge is an annual high school design competition held February through April. Each team is awarded a grant and paired with an engineering mentor who helps the students execute their design. Each year a different Northrop Grumman program or capability inspires a new competition theme. The 2016 challenge was to build and optimize a remote-controlled hovercraft that can compete by demonstrating different capabilities. More than 35 employees mentored approximately 35 high school teams at six Northrop Grumman sites.
- We continued our unique Northrop Grumman summer externship program at bwtech@UMBC, a research and technology park at the University of Maryland, Baltimore County. The externship enabled two female Saudi Arabian students to gain practical, hands-on training at this business incubator program and develop expertise in a field where women have historically been underrepresented.
- The Northrop Grumman Foundation, in conjunction with filmmaker Nathaniel Kahn and the Space Telescope Science Institute, produced the James Webb Space Telescope documentary *Into the Unknown* and associated education outreach materials. The film premiered at the 2016 National Science Teachers Association conference in Nashville, Tennessee. In October, the film made its international debut for students across the United Arab Emirates as part of Discover America 2016, a showcase of U.S. innovation organized by the U.S. Embassy in Abu Dhabi.



*Into the Unknown tells the story of the building of NASA's James Webb Space Telescope. The Northrop Grumman Foundation, in conjunction with an independent filmmaker, developed the documentary as a resource for teachers, students and space enthusiasts around the world.*

## KEY STEM INVESTMENTS

- During Engineers Week in February we launched the Classroom Resources for Employees website, which enables employees to access a wide repository of classroom tools, introductions to multiple engineering disciplines and hands-on activities for supporting employee-education outreach.
- Northrop Grumman Foundation was the presenting sponsor of the VEX Robotics World Championships in Louisville, Kentucky, which broke the Guinness World Record for the largest robot competition with 1,075 teams from 30 different nations. For the 2015-16 season, Northrop Grumman Foundation funding enabled 80 new U.S. teams, 20 international teams, six state/signature events and four new events in areas where new teams are started.
- Through the Northrop Grumman Foundation, we funded scholarships for 80 middle school students and 48 teachers from across the United States, the United Kingdom and Australia to attend Space Camp® July 24 to 29 at the U.S. Space and Rocket Center® in Huntsville, Alabama. This is the eighth year Northrop Grumman Foundation has funded Space Camp® scholarships.
- We continue to extend our educational outreach efforts globally. For the first time, we sponsored Space Challenge, a STEM education program organized by the Republic of Korea Air Force. These 2,200 South Korean students got to try flying unmanned aerial vehicles, testing robots, exploring virtual reality systems and conducting test flight simulations. In Australia, our Northrop Grumman Foundation partnered with the American Australian Association to advance research fellowship in science and technology. We joined other industry partners to establish scholarships to assist rural and regional students to study in STEM fields at Australian National University Burgmann College.

Students from King Saud University (KSU) College of Computer and Information Sciences compete in CyberArabia at KSU in Riyadh, Saudi Arabia. The university, C4I Center for Advanced Systems and Northrop Grumman sponsored CyberArabia.



## CYBER EDUCATION INITIATIVES

Our thought leadership in global cyber STEM education, outreach and workforce development programs and initiatives engages all elements of Northrop Grumman. Cyber education aims to excite and motivate youth to pursue academic opportunities in cybersecurity. Our outreach activities break down barriers to opportunities in cyber by focusing on scholarships and internships. Our workforce-development efforts help model and advocate for a diverse and talented cyber workforce. These engagements take many forms, including sponsoring youth camps, mentoring middle and high-school cyber competition teams, sponsoring collegiate cyber competitions, participating in national forums for cyber education and workforce, participating in Government working groups, engaging with national, state and local leadership, and speaking at cyber education and workforce development conferences globally.

Our key initiative is the CyberPatriot National Youth Cyber Education program created by the Air Force Association and sponsored by Northrop Grumman Foundation. Middle and high school students compete in teams to protect and defend the network of a fictitious company. The 2016 CyberPatriot VIII competition drew a record 3,379 teams, a 55 percent increase over 2015.

In addition to the National Youth Cyber Defense Competition, the program also includes numerous Cyber Camps and the Elementary School Education Initiative, which provides several interactive modules to excite K-6 students about computers and teach basic cyber awareness.

We used the CyberPatriot platform internationally to develop CyberCenturion in the United Kingdom and CyberArabia in Saudi Arabia. The U.K. version is the only cyber defense competition in that country dedicated to 12- to 18-year-olds. The number of registered teams has doubled year-over-year since inception in 2014 and draws a more diverse participation from across the UK.

CyberArabia is designed for college students. More than 140 students from several Riyadh universities participated in 2016, which is double the number of participants in the 2015 inaugural year.



## 2 EMPLOYEE ENGAGEMENT PRIORITY

Connect employees to strategic opportunities in volunteerism, skills development and community giving to create a culture that drives excellence and retains employees.

### OUTCOMES

- Our employees logged 68,969 hours of their personal time in volunteer projects in Volunteer1NG, valued at \$1,624,909 in community impact (based on an average value of volunteer time at \$23.56/hour as suggested by the nonprofit and corporate giving coalition group Independent Sector).
- We increased the value of Community Service Grants from \$200 to \$400 for employees who volunteer 40 hours or more and apply for the grant through Volunteer1NG. In 2016, 248 employees requested grants for their volunteer organizations.
- As part of Hunger Action Month in September, we partnered with Global Impact and Stop Hunger Now to combat world hunger through the Northrop Grumman Global Giving Campaign. More than 800 employees worked in teams to package a combined 156,816 meals comprised of rice, soy, dehydrated vegetables and 23 different vitamins. The meals, which each have a two-year shelf life, provide sustenance throughout the world in school food programs, orphanages and crisis relief efforts. Northrop Grumman donated an additional \$10,000 to Stop Hunger Now through a social media campaign.
- Northrop Grumman is a national corporate team partner with the American Cancer Society Relay for Life. We had 364 participants on 35 teams nationwide and raised \$115,338. The top three teams included Beach Cities in California; Calcasieu Lake Charles in Louisiana; and St. Augustine in Florida.

## EMPLOYEE GIVING

- We partnered with YouGiveGoods for a third year to support an online back-to-school drive and holiday food and toy drive to raise \$24,300.
- We honored 11 Northrop Grumman employees dedicated to volunteerism at nonprofit organizations and public schools with the Excellence in Volunteerism award. Award recipients earned a \$5,000 grant for the organization or school where the honoree volunteered.



### ECHO (EMPLOYEE CHARITY ORGANIZATION OF NORTHROP GRUMMAN)

The Employees Charity Organization of Northrop Grumman (ECHO) celebrated its 60th anniversary with events and giving campaigns across the U.S.A in 2016. Employees donated \$2,022,844.

- Employees contributed \$1,806,008 through ECHO Designated Giving
- Employees contributed \$216,836 through ECHO Community Outreach Funds

## 3 REPUTATION PRIORITY

Enhance Northrop Grumman's position as an employer and business of choice through key partnerships in our communities.

### OUTCOMES

- We partnered with Change the Equation to fund the report *"Left to Chance: U.S. Middle Schoolers Lack in-Depth Experience with Technology and Engineering."* This analysis of student survey data is from the first-ever Nation's Report Card on Technology and Engineering Literacy (TEL). The brief focuses on the inadequacy of where, how, and from whom eighth-graders learn these critical technology and engineering skills, honing in on demographic data and offering insights into how to prepare more girls, minorities and low-income students for the workforce. The brief also offers strategies to cultivate widespread literacy in technology and engineering. A nationally representative sample of 21,500 eighth-graders in 840 U.S. public and private schools completed the survey, answering questions about how often they have learned about technology and engineering or taken part in technology and engineering activities, both in and out of school.
- Through our Corporate Citizenship department, we sponsored a panel at the U.S. News and World Report STEM Solutions Conference in May. Northrop Grumman employees were panelists to discuss our work in hiring veterans and our STEM initiatives in the Baltimore area.
- At a Maryland STEM Scholars awards dinner, we honored 24 Engineering scholars and 15 HIP seniors. More than 350 guests were in attendance including U.S. Congressman John Sarbanes and Dr. Karen Salmon, Maryland State Superintendent of Schools.

*Administrators at Fairfax County Public Schools district named our company Outstanding Business Partner for a 25-plus year partnership with Chantilly High School and Chantilly Academy.*

- Employees at our New Town, North Dakota facility received Voluntary Protection Programs Star Status recognition from the Department of Labor at the site's 45th anniversary of operations in the community. The event was attended by the North Dakota Lt. Governor and representatives of elected officials.
- Administrators at Mid-Del Public Schools in Oklahoma recognized Northrop Grumman at their Board of Education meeting in August for our sponsorship of a middle school teacher and student to attend Space Camp® at the U.S. Space and Rocket Center.
- Lawton Public Schools honored Nate Slate, site manager for Northrop Grumman in Lawton, Oklahoma, with a Friend of Education award for his science, technology, engineering and math outreach work with Eisenhower High School.
- We received recognition as Project Lead the Way (PLTW) Company of the Year for North Dakota at the PLTW North and South Dakota State Conference October 4 in Sioux Falls. Grand Forks Public Schools administrators nominated Northrop Grumman for the award for our ongoing support for expanding and enhancing STEM programs and opportunities within the school system.



*Sandra Evers–Manly, vice president of Global Corporate Responsibility and president of the Northrop Grumman Foundation, greets Japanese students who are part of the Tomodachi Disability Leadership Training Program at the University of Massachusetts–Boston. We teamed with the U.S.– Japan Council to launch this unique program that develops confidence and leadership skills in young Japanese people with disabilities.*

# 4

## STRENGTHENING COMMUNITIES PRIORITY

Define and address the needs in our communities that align with our business and focus areas

### OUTCOMES

#### Focus on Troops and Veterans

Support troops, veterans and their families, specifically in the areas of wounded warriors, veteran homelessness, employment and military appreciation

- The Military Appreciation Month online fundraiser and T-shirt campaign for USO, Inc. raised \$22,351 from 563 employees. With an average donation of \$40, employees from 32 states and the District of Columbia contributed.
- Employees, friends and family stuffed 7,155 hygiene and snack kits for active duty military and their loved ones for the USO Pack for the Troops program at Ft. Belvoir, Virginia.
- We partnered with Soldier On, a veteran service organization based in Australia, to provide veterans and their spouses career development through mentorship and training in their Hand-Up program.
- North Texas volunteers in the employee resource group VERITAS (Veterans, Employees and Reservists Inspired To Act and Serve) spent Veteran's Day retrofitting a home for a veteran in Fort Worth as part of Operation Freedom-Home4Heroes and Rebuilding Together Greater Dallas.
- We attended a special Veterans Day event at the National Museum of the American Indian in Washington D.C. to announce the company's gift in support of the National Native American Veterans Memorial.

#### Focus on Health and Human Services

Assist communities with critical local needs and disaster relief.

#### Local Community Needs

Our employees continue to help those in need in our communities including:

- Florida volunteers packed food backpacks for children in Brevard County who are in need and often do not have food during the weekend.
- Employees in Charlottesville, Virginia donated 256 pounds of peanut butter and jelly to support the after-school Backpack program at Blue Ridge Area Food Bank.
- Thirty volunteers participated in Northrop Grumman Day for Habitat for Humanity in Huntsville, Alabama. Volunteers framed a new house and worked in Habitat's "Restore" warehouse.
- Lake Charles, Louisiana employees volunteered monthly at Abraham's Tent, a local food bank, to serve meals for people in need.

#### Disaster Relief

- In 2016, the California wildfires, Hurricane Matthew and Louisiana flooding each activated our Emergency Contact Center to assist employees affected by the disasters. Our financial support provided help to our employees and their families in California, Florida and Louisiana.
- Through the American Red Cross Annual Disaster Giving Program and as an Annual Emergency Response Partner with AmeriCares, we provide reliable funding for disaster relief services. Our company contributions offset a range of expenses and help ensure that the American Red Cross and AmeriCares can respond to any disaster at a moment's notice.

#### Focus on the Environment

Identify efforts that reduce greenhouse gases, waste and conserve water as well as develop renewable energy sources.

- Northrop Grumman volunteers in Baltimore judged the Lakeland Elementary/Middle School Nitrogen Reduction Project. Seventh grade middle schoolers' researched and designed a solution to reduce nitrogen in the Chesapeake Bay watershed.
- Representatives from Fairfax County Park Foundation in Virginia honored Northrop Grumman with its 2016 Eakin Philanthropy Award. Since 2001, we have provided donations of \$109,600 to the Park Foundation to support programs such as the Land Preservation Fund and the Meaningful Watershed Educational Experience at Hidden Oaks Nature Center. Funds also went to Burke Lake Park, Frying Pan Farm Park and the Movin' and Groovin' play area at Clemyjontri Park.
- EcoClassroom, a program we developed in partnership with Conservation International, carried out its fifth trip to La Selva Biological Station in Costa Rica with 15 teachers from five states. They met scientists from the Tropical Ecology Assessment and Monitoring Network and learned first-hand the techniques researchers use to collect and analyze data. Teachers also learned activities they can use in the classroom such as introducing biodiversity and climate change. At the end of the trip, teachers presented independent group projects on topics that ranged from carbon storage and animal behavior to landscape ecology. Cumulatively, the EcoClassroom program has trained 80 teachers from 15 states and exposed 36,000 students to lessons that utilize a data-driven approach to learning.

# WORLDWIDE MAP HIGHLIGHTING EFFORTS IN FOUR FOCUS AREAS

## EDUCATION

## ENVIRONMENT

## HEALTH AND HUMAN SERVICES

## TROOPS AND VETERANS



The Maryland FIRST Lego League State Championship took place March 5 with Northrop Grumman as Presenting Sponsor. More than 20 employees volunteered as judges of the 45 teams of 9- to 14-year-olds.



Thirty-one North Texas volunteers worked at the Special Olympics Spring Games on April 9 at UT Arlington.



Charlottesville, Virginia employees collected 2,261lbs of food for the Blue Ridge Area Food Bank.



173 employees walked in the three National Capital Area walks in the Washington, D.C. region and raised \$15,098 for the Leukemia and Lymphoma Society's Light the Night walks.



Employees in North Texas collected 475 backpacks filled with school supplies, valued at \$30 per backpack (\$14,250 total), to benefit public school students in Irving, Fort Worth and Arlington.



St. Charles, Missouri employees assembled approximately 1,400 wrapped gifts, Christmas trees, cookies and cards into bags for overseas soldiers in partnership with A Soldier's Wish List.



At the 2016 Atlanta Science Festival, we hosted "Glowing Germs, Disease Detectives, and More: The Science behind Public Health" at Sequoyah Middle School where 150 students participated in four experiment stations. More than 40 employees volunteered.



We funded Engineers without Borders' projects in Nicaragua, Uganda, Ecuador and Panama



We funded a grant to Water for People to provide access for safe water and improved sanitation services to the people of Uganda.



The greenNG ERG led volunteers in the Potomac Cleanup Day with The Potomac Conservancy and the 28th Annual Clean the Bay Day volunteer activity sponsored by the Chesapeake Bay Foundation in Washington, D.C.



We hosted student and teacher STEM tours through our Northrop Grumman exhibit at the International Space Symposium April 12 to 13 in Colorado Springs. We also partnered with University of Colorado, Colorado Springs (UCCS) College of Engineering and Applied Science for the 3rd annual STEM camp July 25 to 29 at UCCS for 50 high school students.



Volunteers participated in the Arbor Day tree planting event through Tree Musketeers at Memory Row Park in El Segundo, California.



Employees promoted engineering careers March 5 at the Denver Museum of Nature and Science for a Girls and Science event to highlight STEM careers to more than 7,500 girls and their families. We also partnered with Colorado State University, Aurora Public Schools and Cherry Creek Public Schools for the fourth annual STEM Cybersecurity Camp in July for 75 middle and high school students.



Employees volunteered with USO San Diego March 5 to distribute commissary gift cards and groceries to 160 active duty military families through the USO Mobile Food Pantry Program.



Volunteers participated in the Hampton Roads, Virginia USO Warrior Week May 25 to 31 that brought together physical, therapeutic and recreational organizations that focus on the rehabilitation of wounded service members.

# G4 GRI CONTENT INDEX

## STATUS LEGEND //

- AR** 2016 ANNUAL REPORT
- PR** 2017 PROXY STATEMENT
- PCG** PRINCIPLES OF CORPORATE GOVERNANCE



PLACEHOLDER FOR  
GRI SERVICE MARK.

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G4-19	2, 3, 6	
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G4-22	No restatements reported	
G4-23	No significant changes	
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GENERAL STANDARD DISCLOSURES	PAGE NUMBER	EXTERNAL ASSURANCE
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## SPECIFIC STANDARD DISCLOSURES //

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G4-EN11	No biodiversity areas				
G4-EN12	No biodiversity areas				
G4-EN13	No biodiversity areas				
G4-EN14	No biodiversity areas				
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G4-DMA	28				
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G4-EN24	No reported spills				
G4-EN26	No biodiversity areas				
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DMA AND INDICATORS	PAGE NUMBER	IDENTIFIED OMISSION(S)	REASON(S) FOR OMISSION(S)	EXPLANATION FOR OMISSION(S)	EXTERNAL ASSURANCE
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G4-LA14	9, 10, 11, 12, 13, 14, 15				
G4-LA15	9, 10, 11, 12, 13, 14, 15				
<b>Sub-Category: Human Rights</b>					
<b>MATERIAL ASPECT: INVESTMENT</b>					
G4-DMA	18, 35, 36, 37, 38, 39, 40				
G4-HR2	35, 36, 37, 38, 39, 40				
<b>MATERIAL ASPECT: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING</b>					
G4-DMA	36				
G4-HR4	35, 36, 37, 38, 39, 40				
<b>MATERIAL ASPECT: CHILD LABOR</b>					
G4-DMA	18				
G4-HR5	No child/forced labor				
<b>MATERIAL ASPECT: FORCED OR COMPULSORY LABOR</b>					
G4-DMA	18				
G4-HR6	No child/forced labor				
<b>Sub-Category: Society</b>					
<b>MATERIAL ASPECT: LOCAL COMMUNITIES</b>					
G4-DMA	42				
G4-SO1	42, 43, 44, 45, 46, 47, 48, 49				
G4-SO2	31, 33, 34				
<b>MATERIAL ASPECT: ANTI-CORRUPTION</b>					
G4-DMA	23				
G4-SO3	19, 20, 21, 22, 23, 24				
G4-SO4	20, 21, 22, 23, 24				
G4-SO5	19, 20, 21, 22, 23, 24				

### STATUS LEGEND //

- AR** 2016 ANNUAL REPORT
- PR** 2017 PROXY STATEMENT
- PCG** PRINCIPLES OF CORPORATE GOVERNANCE



***NORTHROP GRUMMAN***

A blue curved line that starts under the 'N' and ends under the 'M' of the company name.

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