FOUNDATION
2011 Annual Report
Northrop Grumman Foundation
A Message From the President

On behalf of the Northrop Grumman Foundation and its Board of Directors, I am pleased to present our 2011 annual report.

Our efforts to be in the vanguard of science, technology, engineering and mathematics (STEM) education have allowed us to partner with many organizations who are doing amazing projects and programs across America and beyond.

We are proud of our successes but seek to press forward in search of education that makes a difference in the lives of our country’s students and teachers. The enhancement of their education opportunities will ultimately affect generations to come and our country as a whole. We strive to be a part of life-changing experiences.

This annual report will share highlights of our endeavors and we hope you are excited by these snapshots into the varied ways STEM can be taught and appreciated. Feel free to click on the many hyperlinks embedded throughout this report.

Thanks for your interest in the Northrop Grumman Foundation.

Sincerely,

Sandra Evers-Manly, President
Northrop Grumman Foundation
**Foundation Overview**

The Northrop Grumman Foundation supports diverse and sustainable national-level education programs for students as well as teachers. These programs create innovative education experiences in STEM. Highlights from those programs are described within the pages of the annual report.

The Foundation has two primary methods for giving: Matching Gifts for Education and Northrop Grumman Foundation grants. All funding focuses on education-related programs and in 2011, approximately $4.8 million in giving supported a varied array of STEM education programs across the U.S.

For quarterly news about activities and community programming across the enterprise, check out our Community Partnerships In Motion newsletters.

For more information about the Foundation, click here

**2011 Matching Gifts for Education**

The Northrop Grumman Foundation Matching Gifts for Education program is a popular vehicle for employees to increase their contributions to qualified education institutions and affiliated organizations. Employees can also double their donations by matching their qualified ECHO education contributions to schools.

In 2011, the Foundation matched 2,482 gifts for a total of $945,014.

- Kindergarten through 12 - 42% ($396,125)
- Higher Education - 58% ($549,289)

For further information about the Matching Gifts program, click here

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**Where Do Donors Give?**

- California..............................943
- Maryland...............................240
- Virginia..................................181
- New York...............................151
- Pennsylvania.........................112
- Massachusetts.......................109

**Giving Categories**

- Annual Fund.........................1286
- PTA.......................................120
- Specific Depts.........................464
- Scholarships..........................219
- Pledges....................................30
Top 20 Matching Gift Recipients

University of California, Los Angeles ........................................ $35,210
Manhattan Beach Education Foundation .................................. $30,520
Peninsula Education Foundation ........................................... $29,265
Purdue University ...................................................................... $14,280
Virginia Tech ........................................................................... $11,100
Massachusetts Institute of Technology .................................. $10,615
University of Southern California ........................................ $10,205
California Polytechnic San Luis Obispo .................................. $9,282
Association of Graduates, U.S. Military Academy ................. $8,905
University of California, Berkeley .......................................... $8,725
Hermosa Beach Education Foundation .................................. $8,500
Harvey Mudd College ............................................................ $8,450
Rensselaer Polytechnic Institute ............................................. $7,500
U.S. Naval Academy .............................................................. $7,300
University of Illinois ............................................................. $7,170
University of California, Santa Barbara ................................. $7,132
University of Virginia ............................................................. $7,070
Mt. St. Joseph High School ................................................... $6,639
Johns Hopkins University ..................................................... $6,560
Pennsylvania State University ............................................... $6,545
**2011 Highlights**

**EarthWatch**

In the summer of 2011, funding allowed 22 mathematics and science educators from 12 states to study ocean preservation and climate change on two separate Earthwatch fellowship.

- Ten of the teacher awardees were assigned to field study that focused on preservation of the coastal ecology of the Bahamas. The Bahamas expedition teams focused on research sites at the archipelago’s southern islands of Long Island, Great Exuma and Great Inagua.
- Twelve others joined field study to monitor climate change at the edge of the Arctic. The Arctic project took teachers to Churchill, Canada, on the coast of the Hudson Bay near the geographical center of the North American continent.

**Great Minds in STEM – Viva Technology**

As a step in continuing efforts to expose middle school students to STEM careers, Northrop Grumman brought the nationally acclaimed Viva Technology Program to facilities in Maryland and California. The program helps students understand the correlation between their math and science studies and the numerous exciting careers in technology. Viva Technology is a national K-12 educational program sponsored by Great Minds in STEM and engages students, parents and teachers.
Weightless Flights of Discovery (WFoD) Program Statistics (2006 - 2011)

- Professional development program for middle school math and science teachers and college students studying to become teachers
- 1,332 teachers from every state in the nation
- 24 U.S. cities, 46 flights
- More than 1.2 million students have benefited from the teacher experiences
  - Program reach: 300 students per teacher per year (nationally accepted average)

2012 Special Notes

The CyberPatriot IV National Finals Competition was held outside Washington, D.C., on March 23. The Foundation, presenting sponsor of the Air Force Association’s (AFA) CyberPatriot program, helps the nation’s future cyber defenders further their education. It is the largest high school cyber defense competition and designed to excite, educate and motivate students toward careers in cybersecurity.

Students from the Colorado Springs Cadet Squadron, Civil Air Patrol, earned first prize for the All-Service Division

Wounded Warriors Operation Enduring Care Initiative

The Foundation donated $5 million as lead donor for the new Wounded Warrior and Family Center on the grounds of Fort Belvoir in Virginia. The Center will be a 25,000 square foot facility where wounded troops and their families can find respite and renewal in “home away from home” surroundings. Operated by the USO of Metropolitan Washington, the Center will support wounded warriors at the Fort Belvoir Community Hospital and the Warrior Transition Unit.
Foundation Aid to Higher Education - University & College Partnerships and Diversity Scholarships

In 2011, the Foundation continued its support to numerous universities and colleges across the country. Over $160,000 was allocated to support higher education programs ranging from STEM initiatives and diversity and inclusion to academic organizations.

The Association of Computing Machinery (ACM), Association for Women in Computing (AWC) and Electrical and Computer Engineering are three such academic organizations. Many ACM student chapters grew, extending amazing opportunities which included teaching presentations, needed programming team meetings and speaker series.

The Foundation also contributed an additional $140,000 to national diversity association scholarships for the American Indian Science and Engineering Society (AISES), National Society of Black Engineers (NSBE), Society of Hispanic Professional Engineers (SHPE), Society of Women Engineers (SWE), the United Negro College Fund and the Hispanic Scholarship Fund. These contributions will further increase the enrollment, retention, and graduation rates for women and underrepresented minority students.

Relationships with multicultural engineering programs provide additional opportunities for students and the Foundation continues its support of these efforts. The California Polytechnic State University, San Luis Obispo Multicultural Engineering Program (MEP) were able to continue efforts of increasing retention and graduation rates, continue support to their Tutoring Center and contributed to the Math Engineering Science Achievement pre-college program.

The Center for Engineering Diversity at the University of Southern California utilized the contribution to support the Summer Institute for underrepresented engineers. This signature event is 4-week residential program that invites incoming African-American, Hispanic, and Native American engineering students to attend. By providing a greater understanding of engineering through an introduction to research and to build an early awareness of opportunities to participate during their time at the USC Viterbi School of Engineering and beyond in an M.S. or Ph.D. program.

In support of efforts to advance STEM education for educators and students, grants were provided for varied projects and programs. Virginia Commonwealth University used their Foundation grant to create an event that was held in conjunction with National Engineers Week. It enabled them to host and present to an underserved audience within the School of Engineering.

As the resources of the Foundation have continued to fund strategic university programming over the years, emphasis is placed on building a continuum of support to those initiatives that have proven to make a difference with the people and organizations that promote learning opportunities for our next generation of scientists, engineers and technicians.
Japan Overview

In March 2011, a magnitude-8.9 offshore quake unleashed a 23-foot tsunami and was followed by more than 50 aftershocks for hours, many of them of more than magnitude 6.0. Northrop Grumman Board of Directors answered the call and launched a matching gift relief effort that was supported by employees. The organizations that benefited from the generosity of employees were Save The Children, The American Red Cross and AmeriCares who were already on the ground and able to provide many needed services to Japanese residents. The Foundation gave a total of $1 million.

Additional 2011 partnerships include:

Botball
Let's Go!
MATHCOUNTS
National Action Council for Minorities in Engineering
National Science Teachers Association
Sally Ride Science
Science Buddies
Space Camp
Teach For America
U.S.A Science and Engineering Festival
VEX Robotics
Wolf Trap Foundation

Wolf Trap Teaching Artist Paige Hernandez leads a dance/movement experience, where the children and teacher are exploring the science concepts of attract, repel, push, pull, North and South poles as these relate to magnets. By engaging their bodies in the dance arts concepts of space (direction) and energy/dynamics (quality of movement) through the push/pull motion, the children embody and gain awareness of the science concepts.
Conservation International - ECO Classroom

With the goal of providing teachers with resources and learning opportunities in environmental science, the Northrop Grumman Foundation has collaborated with Conservation International (CI) to launch the ECO Classroom program. This unique, nationwide teacher professional development program is designed to equip teachers so they can inspire students to pursue science and technical careers and become our next generation of environmental stewards and innovators.

In July 2012, CI staff will take 16 middle and high school life sciences teachers (biology, ecology, environmental or earth systems science) to the TEAM field site at La Selva Biological Station in Costa Rica for an intensive, two-week field experience.
The Northrop Grumman Foundation
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For additional information on the Northrop Grumman Foundation or the grant application process, visit: www.northropgrumman.com and keyword search: foundation.
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