## Testimony By Mr. Wes Bush President, Northrop Grumman Space Technology

## Before the U.S. House of Representatives Permanent Select Committee on Intelligence

Wednesday, November 5, 2003 The Rayburn House Office Building, Room 2212 9:00 a.m. to 12:00 p.m.

Chairman Goss, Ranking Member Harman and distinguished members of the Committee, I am Wes Bush, President of Northrop Grumman Space Technology, and I want to thank you for inviting me to provide a private-sector perspective on the importance of recruiting and developing a world-class work force for the future of the Intelligence Community. My company has served your committee and the Intelligence Community for many years, and we are honored that you asked us to participate in this discussion. We share your view that this is an issue of national priority. And I believe this is a critical point in time to be dedicating ourselves to this task.

Industry faces many of the same work force development issues as the Government side of the Intelligence Community. We are both committed to attracting the best and brightest minds in our country to develop and maintain systems to protect our national security. And although we compete for talent with one another at times, we must together address a fundamental obstacle to expanding the pool of dedicated and talented citizens who are willing to commit to careers in national security. This fundamental obstacle is the declining trend in college enrollment of U.S. citizens in science,

engineering and the physical science fields, including math and computer sciences. The expansion of the work force required to meet our common objectives simply cannot occur without attracting more minority and female participation into the fields of study that support our national security mission.

I'd like to provide some examples of things we do at Northrop Grumman to help attract women and minorities to math and science careers, as well as steps we take to promote their career development.

Our recruitment and development strategy begins with support for programs that promote interest in math and science from preschool and elementary education through post secondary fellowships. We believe the premise that many students need to be "turned-on" to math and science careers very early in their education. This is why we focus our financial and volunteer commitments on schools that are fostering curricula designed to increase the percentage of women and minority students interested in studying math and science in college.

For example, more than a decade ago, we helped found a math and science magnet high school for females and minorities in southeastern Los Angeles, California -- the California Academy of Math and Science, and we have continued to have an active presence in their development. The CAMS student body is drawn from more than 11 school districts in L.A. County, representing one of the most diverse populations in the nation. Two-thirds of its students come from inner-city schools. CAMS has produced

1,300 graduates, with a 100 percent graduation rate. Eighty-five percent of CAMS graduates advance to receive degrees from four-year universities.

In addition to financial assistance, we have placed Northrop Grumman executives on the CAMS Corporate Advisory Committee. Each summer, we hire CAMS students as interns at our Space Park facility in Redondo Beach, California. As the students move through university education, they are eligible for college-level summer internships. Our goal is to develop CAMS students into strong contributors to our nation's future work force, whether they choose Northrop Grumman or another employer.

We also participate in NASA's Summer High School Apprenticeship Research Program, hiring about 15 interns per year. This program is designed to encourage the career paths of students who have been traditionally underrepresented in science, math, technology, engineering and geography. Each intern works with a mentor for eight weeks, gaining exposure to cutting-edge research and using state-of the-art-equipment. We support these programs because they increase the likelihood that these students will someday seek math or science careers.

At the undergraduate college level, we manage a broad array of programs with the explicit objective of increasing the quality and diversity of our work force. We are active partners in the minority engineering programs at about 20 U.S. universities, providing both financial support and Northrop Grumman representation on their boards. For example, last week we agreed to send a group of executives to Stanford University to

address its Diversity Forum. And just last Monday, I spent the day with engineering undergrads at MIT, trying to lure them to careers in space and defense.

In addition to our university programs, we maintain strong partnerships with national diversity engineering programs that serve student needs, such as the Society of Hispanic Professional Engineers, the National Society of Black Engineers, the Society of Women Engineers and the American Indian Science and Engineering Society. While these relationships clearly serve the competitive needs of our business, they also encourage broader participation of underrepresented groups in math and science careers across the board.

Diversity plays an extremely important role in our direct college recruiting as we are pursuing the best minority and female talent from the top schools. We operate a Diversity Engineering Scholars Program, whereby minority or female students majoring in engineering or related discipline can complete a summer internship with Northrop Grumman and receive a stipend for each academic year they remain in the program. More than one-third of these interns become full-time Northrop Grumman employees upon graduation. This program provides our company access to top minority and female students while at the same time increasing their access to experienced mentors and high technology projects not available at many other workplaces.

Shifting emphasis from recruitment to employee development, our diversity objective is to help employees succeed in building their careers within our company. We want to increase the diversity at all levels of our company's management, and we have worked hard to provide meaningful career paths for women and minorities. For example, today nearly one-third of the vice presidents of Northrop Grumman Space Technology are female or minority executives.

We provide a number of career development programs designed specifically for underrepresented groups in our work force, including nine diversity networking groups, each with a sponsor at the vice president level. These groups sponsor professional development activities, networking opportunities, diversity education and awareness events, and community outreach.

In addition to our own programs, we are strong partners with professional development organizations that provide opportunities for our employees to continue to learn from other professionals in their field. These organizations have recognized Northrop Grumman professional employees with awards such as the Hispanic Engineering National Achievement Award, the Black Engineer of the Year Award and other similar awards.

I've provided a few examples of how important we at Northrop Grumman Space

Technology view the recruitment and development of a talented and diverse work force,

within our own company, our industry and across the broader Intelligence Community. It

is important first to expand the pool of potential employees and then help them

successfully build their careers. There is one more factor, however, that makes this a

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critical time to focus on developing the work force. And that is building a stable future for the industry.

In 2003, we at Northrop Grumman Space Technology have more than tripled the number of college hires compared to last year, which provides significantly greater opportunities to increase the diversity of our work force. One of the reasons we have been so successful recruiting college students this year is that for the first time in more than a decade, we are able to convey to students the potential for stable program growth in the coming years. The spending downturn of the 1990s created an environment of shrinking employment and reduced opportunity. At Space Park, for example our population shrunk from nearly 20,000 employees down to less than 8,000. It is difficult to attract the best and brightest minds to a declining industry.

Today, things are different. We have great, new technology programs that have the promise of stable, continued funding. The future looks bright. Now is the time to excite our elementary and high school students about math and science and the important technologies they can help develop. And now is the time to emphasize to our brightest engineering students that national security is a noble endeavor, worthy of their skills and efforts. If we can sustain that continued stability, we can, and will, expand the talent pool for our industry and for the Intelligence Community. We can build the more diverse work force that we all strive to attain.

Thank you.