

Speech as Prepared for Delivery  
By the Honorable Shana Dale  
NASA Deputy Administrator  
Upon Receiving the Woman of the Year Award  
From the National Capital Area Council of the Boy Scouts of America  
May 8, 2007

Thank you Congressman Hall for this award and those kind words. And thank you, the representatives of Learning for Life and the National Capital Area Council of the Boy Scouts of America for this honor. I'm most grateful.

I'd also like to acknowledge a few people who made this event possible: The Honorable Robert Walker, who could not attend tonight due to his wife's illness; my good friend, The Honorable Ralph Hall; Mr. Hall's outstanding staff member, Ed Feddeman, who helped spearhead this effort; Jennifer Gayle, Coordinator of this event and Learning for Life professional; and all the members of the organizing committee who coordinated this wonderful evening.

But humility comes before – and often after – honor. So I'd like to acknowledge that tonight is not about me. Rather, it is a celebration of the spirit of achievement that the Boy Scouts and Learning for Life represent.

And since there are better ways to celebrate than listening to a speech--like having another bite of dessert – I won't speak for too long. But I would like talk for a few minutes about that spirit, for it is shared by Scouts and scientists and space explorers.

The spirit is both our heritage and our hope: It animated our ancestors to come to America, and it will propel our heirs into the next era of exploration.

At NASA we have the charge and challenge of stepping beyond low Earth orbit and opening a way of exploration to the Moon, Mars and beyond. Step by step and launch by launch, we'll bring worlds of possibility within reach. It's the most amazing and perhaps the most audacious adventure ever attempted. That's the future I hope to see. That's the future we can build together.

And I mean "we" in the broadest sense, for NASA's efforts are an expression of the spirit of achievement that we're celebrating tonight. In fact the first small step onto the Moon was taken by an Eagle Scout named Neil Armstrong. His fellow-traveler Buzz Aldrin was a Tenderfoot Scout.

Others followed. Eleven of the 12 men who have walked on the Moon were involved in scouting. And of the 312 pilots and scientists selected as astronauts since 1959, 180 of them – almost 60 percent – were either Scouts or have been active in Scouting.

Girl Scouts also have become successful space travelers. Former Girl Scouts have flown on more than forty Shuttle missions. One was Eileen Collins, who served on four flights and commanded two, including STS-114, the first Return to Flight mission.

Why is that? Why should Scouts be so successful in space? I think it's because Scouting – and Learning for Life – inculcate qualities like character, citizenship and leadership. Those characteristics are part of one of the rarest and most refined arts, what I'd like to call the art of achievement.

The art of achievement demands disciplined dreaming – setting goals that at first seem far out of reach then making steady, persistent progress towards them, and living by a code of conduct all the way. It calls for taking an active part in the community – asking for knowledge from those who have it and offering encouragement to those who need it. Ultimately, it means passing on that art to others: helping them reach their highest achievements.

But let me give you a couple of examples of how it is lived. People notice Scouting merit badges and Learning for Life Achievement Awards but they rarely notice all those who deserve merit: the mentor who kept his charge on task; the bleary-eyed parent who spent half the night working with their child to put the finishing touches on a project; the teacher who spent so much time answering questions from an eager student that their lunch went uneaten and their un-graded homework came home.

People see the giant leaps in space. But they rarely mark the many small steps it took to get there: the years of training and study; or the team of scientists and engineers who gave their all to make it happen.

So I'd like to spend my remaining time talking about applying the art of achievement to students in math and science and engineering.

For many of us – and Mike [*Griffin*], I'm excluding you on this one –succeeding in those subjects is incredibly challenging. Few words strike fear into the hearts of students like “Chemistry” and “Physics.” That was certainly true when I was in school. And if the phrase parents dread the most is “some assembly required,” the question, “could you help me with my science homework?” must vie for first place.

Yet we – the “we” that is all of us – have to keep trying. We had better.

*Science* magazine recently (April 6, 2007) noted that the number of chemistry Ph.D.'s awarded in the United States to native born students has fallen by 25 percent since 1970. That's just the latest indicator of rising international competitiveness and shrinking U.S. preeminence in science and technology. It is clear we need to encourage more American students to focus on math and science and engineering. Those interests should be strengthened at the college level.

But they must start at the Scouting age. It's pretty easy to spot. Look for the kids who bring unexpected guests to dinner – frogs and beetles come immediately to mind. We need to encourage those interests.

Success in space starts in the classroom and we're investing significant resources there too. But success in this area will really come down to people: The teacher who is there when the teaching moment is there. And the parent who is there when the final push of encouragement is needed.

You've recognized me as a role model, and I'll always be grateful for this honor. But all of you are models too. And I'm sure that each of you can think of a child you can help, a student you can encourage in science, technology, engineering and mathematics.

It may seem hard to encourage someone in a subject that scares you, or to proffer a hand on a problem you couldn't solve if your life depended on it.

I'm sure most of you could share homework horror stories that will seem funny . . . someday. But please keep trying. Because math and science are often the hardest subjects, and the students studying them need our greatest encouragement. Few will grow up to be as technically brilliant as Mike. But some of them will be, especially with a little attention.

Let me leave you with one final thought. As all of you are probably aware, Queen Elizabeth and her husband Prince Phillip spent a few hours at Goddard Space Flight Center today, as part of their visit celebrating the 400<sup>th</sup> anniversary of the English Settlement at Jamestown.

That celebration is a reminder that we are heirs to the great tradition of the art of achievement. In fact, had we been there in Jamestown 400 years ago, we would have witnessed its hard and humble beginnings.

Had we gone down to the ocean on the day the first settlers arrived, and been able to find a beachside seat, we would have seen three small ships and looked on at the landing of a small company of men. We might have gotten a glimpse of their soon-to-be leader, Captain John Smith. There would be little else to see – just the small ships, the great forest, and the vast sea.

But that landing became the Jamestown colony. Days of hardship and a deadly winter followed, yet Jamestown stayed settled. More colonists came, other colonies followed, and about 200 years later they became states united by a Constitution.

Bound by the Constitution and the great democratic tradition it represents, we're now working on new ships for a new era of exploration. The parallels between the two beginnings are striking – small, and perhaps what will someday be seen as primitive craft, carrying little companies across vast empty spaces to new worlds of possibility.

Then as now, hardship is guaranteed. And failure along the way is inevitable. But so is achievement. For hardship, and hard work, enable achievement – in the Scouts, in student life, in science and engineering, and in space.

The students we touch today could step onto another world tomorrow. That's my hope. Let's make it happen together. Thank you again for your recognition and honor.