

**Remarks by the Honorable Sean O'Keefe
NASA Administrator
AIAA Space 2004 Conference
San Diego Convention Center
San Diego, California
September 29, 2004**

Thank you Charles (Charles Elachi) for that very generous introduction.

I'm delighted to be here in San Diego and honored to be among so many of the talented scientists and engineers who are helping us extend our exploration horizons.

This is an incredible time to be working in our profession. There is a renewed sense of excitement about the potential of our space program to carry the torch of exploration to heights unimagined and into frontiers unknown.

Earlier this week I was privileged to spend time with some of our planet's boldest and bravest explorers, including members of our astronaut corps,

and explorers who have descended into the deepest depths of the oceans, climbed our most daunting peaks, and crawled their way through the most inaccessible caves. You could call this group the League of Extraordinary Explorers.

These hardy souls were participating in a NASA-sponsored symposium at the Naval Postgraduate School in Monterey on the subject of "Risk and Exploration."

It was incredible to hear these heroes' inspiring stories about why they put their lives on the line, not to seek thrills for thrills sake, but rather to gain knowledge, wisdom and experience that will benefit all of humanity.

We purposely coupled these risk-takers with a number of our NASA scientists and engineers, who must manage risk for a living.

From the discussions that ensued, I think we gained a greater appreciation of our responsibility in

government to take on bold and risky ventures, but to always do so in a diligent manner than minimizes and mitigates risk to the maximum extent possible. That is the price of admission for what we do.

Earlier this morning, I also had the opportunity to travel to the Mojave Desert to watch another daring adventure, the flight of Burt Rutan's SpaceShipOne. Whatever the final outcome of the X-Prize, we welcome the advent of private sector human spaceflight as the Burt Rutans of the world will help open up low Earth orbit for much anticipated commercial activity. We are enthused that incentives such as the X-Prize have spurred so much productive activity.

Congress has been equally visionary in considering NASA's proposal to offer Centennial Challenge prizes for the development of new aeronautics and space technologies. We expect a congressional endorsement of this approach for

incentives. We'll be making an announcement about our initial efforts with the Centennial Challenge prizes shortly.

Now thanks to the efforts of these commercial entrepreneurs, and the ongoing work of our NASA-industry team, we are on the cusp of a remarkable period of exploration and discovery throughout the solar system as outlined in the Vision for Space Exploration that President Bush presented to the nation nine months ago.

I would now like to show you a brief video that highlights the Vision and the work we will conduct to achieve its objectives.

Let me now make a few points about where we go from here. First, I'm confident that we will move forward with the support and interest of the American people. This summer, a Gallup Poll found that seven out of ten adult Americans support the objectives of the Vision. Also, from my trips around the country, I

can tell you that people's level of excitement about our space activities has never been higher. A measure of this interest is the NASA web site, which has received 15 billion hits this year. That's right--15 billion. This is over five times the number of hits the web site received all of last year.

This public support has been heard by our legislators in Congress. Last week the Senate Appropriations Committee approved \$16.4 billion for NASA in the next fiscal year, including funding for the Crew Exploration Vehicle and design of a robotic lunar exploration mission.

In the weeks ahead the final appropriations levels will be determined, and I am very optimistic about where we will stand at the end.

To be certain, we are currently making tangible progress in pursuit of the Vision's goals in outer space.

In November we will mark the fourth year of continuous human occupancy onboard the International Space Station. Every day that our Expedition crew members spend on this remarkable research facility we gain new knowledge that will help us conquer such human factor challenges as bone and muscle atrophy that stand in the way of long duration spaceflight beyond Low Earth Orbit.

Today, on the surface of Mars we are also gaining significant knowledge that will help inform our future exploration efforts. And who would have thought six months ago, that our Mars Exploration Rovers, Spirit and Opportunity would still be going strong? Now we're hoping to extend their work several more months.

We are also just months away from an important milestone in the Cassini-Huygens (Hoy-Gens) mission around Saturn when the Huygens (Hoy-Gens) probe descends into the atmosphere of Titan, a

moon whose atmosphere may hold the secrets to Earth's early atmosphere from which life itself sprung forth billions of years ago.

We certainly look forward to some fantastic science results when this event happens on January 14th, the first anniversary of the President's space policy address.

Of course another important milestone in the Vision will occur when we safely return the Space Shuttle to flight and continue construction of the International Space Station.

Thanks to the diligence of the entire NASA-industry team, we've made good progress in this regard. We've completed five of the Columbia Accident Investigation Board's 15 shuttle safety recommendations. We're making good progress on the other 10 items and expect to close them out by the end of the year.

We are on track for launch of the STS-114 mission to the Space Station sometime next spring, but the final determination of "when" will hinge on our confidence that we are fit to fly.

Significant progress is also being registered in the activities of our new Exploration Systems Mission Directorate.

Under the able leadership of Admiral Craig Steidle, the Exploration Systems Mission Directorate is working on the second goal of the Vision for Space Exploration, to develop and test under Project Constellation, a new spacecraft, the Crew Exploration Vehicle, with a demonstration scheduled in 2008, and the first crewed mission no later than 2014.

In pursuit of these goals, Craig has also helped transform NASA to be a much friendlier place for entrepreneurs, innovators and creative thinkers who want to be involved.

Earlier this month, NASA awarded study contracts for the Crew Exploration Vehicle and for Lunar exploration concepts and approaches to 11 groups, drawn from 60 proposals, representing a broad cross section of traditional and nontraditional aerospace firms, of small businesses, academic institutions and commercial enterprises. We've also received 3,700 responses to a request from industry and academia for innovative ideas about human and robotic exploration technology. So we are moving forward with great speed.

A year from now, when this AIAA conference is held again, we will have awarded contracts to at least two major contractors to develop and demonstrate a Crew Exploration Vehicle by the 2008 milestone.

We can also report progress on Project Prometheus, NASA's bold attempt to use nuclear power and propulsion to enhance our deep space exploration capabilities. Last week we awarded a

contract to Northrop-Grumman to complete the Phase A and B co-design of the non-nuclear component of the Jupiter Icy Moon mission. And in August, NASA signed an agreement with the Department of Energy's Naval Reactors for development of reactor systems for Project Prometheus.

Indeed, throughout the agency and with partner nations and organizations work is already under way to advance and mature a range of novel concepts and high-leverage technologies that will enable safe, affordable, effective and sustainable human and robotic exploration for the benefit of our people and all humankind.

In the months and years ahead I'm confident we will achieve steady progress in reaching our exploration objectives--one mission, one voyage, and one landing at a time.

We can do this. We will be able to achieve sustainable progress under the realistic budget profile

the initiative is based on through strategic investments in new space systems. There is a compelling logic behind this whole profile and our determination to pursue the Vision as a journey, not a race.

It has been a tumultuous period, certainly, since the Columbia accident, but I think we have emerged from this difficult period with an enhanced diligence and with ennobling, compelling goals.

And I think it is worthwhile recalling at this point what President Theodore Roosevelt once said about people who dare to do great deeds. "It is not the critic who counts, not the man who points out how the strong man stumbled, or where the doer of deeds could have done better. The credit belongs to the man in the arena; whose face is marred by the dust and sweat and blood; who strives valiantly; who errs and comes short again and again; who knows the great enthusiasms, the great devotions and spends

himself in a worthy cause; who at the best, knows in the end the triumph of high achievement, and who, at worst, if he fails, at least fails while daring greatly; so that his place shall never be with those cold and timid souls who know neither victory or defeat."

As a community we need to seize the opportunity we have and continue to prove to the American public that our investment in space exploration is one of the best investments that can be made for strengthening our country's scientific, security and economic interests.

The dream of interplanetary exploration is alive and well. I thank you for your commitment to making this one of history's great periods of exploration and discovery. And I appreciate your warm welcome. Thank you very much.