Remarks by the Honorable Fred Gregory
NASA Deputy Administrator
European Interparliamentary Space Conference
ESA Headquarters
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Thank you Mr. Chairman, I am delighted to have the opportunity to address this distinguished gathering of members of parliaments and space interested nations on behalf of the men and women of NASA. We all hope that Christian Cabal has a speedy recover from his recent illness.

The nations of Europe have been among our strongest partners since NASA's inception almost 50 years ago. The great spirit of international cooperation in space is embodied of course onboard the International Space Station, where Expedition 11

crewmembers cosmonaut Sergei Krikalev and astronaut John Phillips are nearly two months into their six-month mission and awaiting the arrival of ESA astronaut Thomas Reiter, for his long-duration mission.

Mr. Reiter, who is from Germany, hosts a wealth of space flight experience. In 1995, he was on the MIR space station for 179 days, performed two space walks and over forty European science experiments.

The International Space Station accomplishes much more than just the preparation for the future of exploration. It serves an immediate goal of inspiration to our youth. It should encourage each of them to realize that the future depends on their

participation and imagination and how they might build their dreams into reality and that this reality must be greater then what we around this table accept as a possibility.

Of course, we can’t predict today what great levels of cooperation we can reach with the Vision for U.S. Space Exploration.

Already nations from around the world are engaged in significant discussions on opportunities to jointly explore the Moon, Mars and beyond.

Cooperative robotic precursor missions will set the stage for a human return to the Moon, perhaps as soon as 10 years from now.

The exploration of our solar system, including planet Earth, is the great exploration quest of our time, with astounding new discoveries coming at an impressive pace.

For example, the Cassini-Huygens mission, a cooperative project between NASA, ESA and the Italian Space Agency, just last week revealed evidence of an ice volcano that releases methane into the atmosphere of Saturn's mysterious moon Titan.

Later this summer, we are looking forward to the launch from Vandenberg Air Force Base in California of another important addition to our constellation of Earth Observing Satellites, CALIPSO.

CALIPSO is a NASA cooperative mission with the French Space Agency (CNES). This exciting mission will employ revolutionary measurement technologies to probe the Earth's atmosphere as never before, providing a better understanding of how clouds and aerosols affect our atmosphere.

Indeed, today out of NASA's 64 ongoing planetary exploration, astronomy and Earth observing satellite and spacecraft missions, 34 include international participation.

Looking to the future, as part of the Vision for U.S. Space Exploration, we are currently seeking opportunities for international cooperation that will span decades.

Our purpose in developing a long-term exploration strategy involving human pioneers, robotic explorers and a new generation of powerful space telescopes is to discover the answers to fundamental questions of importance to science and society and develop revolutionary technologies and capabilities for the future.

Recently, I saw a statement that eloquently expresses the essence of our Vision.

Please allow me to repeat the statement in full. It begins as follows: "What possible attraction could there be for inhabitants of Earth in making a grueling trip to an icy desert world?

"Some reasons one might give are: a fascination for the unknown; a passion for research; a desire to become acquainted with Earth's neighboring planets; humankind's ancient longing to discover signs of life somewhere in the cosmos, even if these turn out to be no more than primitive forms from a time long past."

"Perhaps it is a combination of all these things. Whatever the case may be, the age of great geographical discovery has now been consigned to the history books."

"The human urge to discover has now assumed a cosmic dimension. Human flights to Mars are now within our grasp."

"Our blue planet is currently home to someone who is set to enter the annals of world history by becoming the Columbus of this extraterrestrial world."

What's interesting about this statement is that these words are not being used to describe the U.S. Vision.

Rather, this is a statement of the ESA's Vision for exploring the depths of space.

That our two respective visions—the U.S. and ESA's—are so complementary is a positive indication of the great potential for collaboration among nations that exists today. This potential exists

with the other national space programs represented in this hall as well.

Already, to help promote future partnerships on Vision enabling activities, NASA has hosted well-attended international workshops focusing on opportunities for collaboration in the development of exploration systems, and in space science.

The goals we have developed for international cooperation are two-fold. First, we hope to promote common space exploration objectives and cooperative or complementary space exploration missions.

Second, we want to join with other nations in developing breakthrough technologies that will open up many opportunities for exploration and discovery.

Let me briefly discuss where we are with the initial enabling steps for the Vision for U.S. Space Exploration. Our first step is to return the Space Shuttle fleet safely to flight so that we can resume assembly of the International Space Station.

We've worked very hard in our return to flight activity to correct the problems that led to the *Columbia* accident and to raise the safety bar even higher.

We're now approaching the point where NASA can make an informed decision on whether we can

launch the Shuttle *Discovery* and its American and Japanese crew on the STS-114 mission.

Early yesterday morning we rolled the *Discovery* out to the launch pad. The launch window for the mission opens up on July 13 and extends throughout the month.

In preparation for the Shuttle's return to flight, last week an agreement was signed between the United States and France that designates Istres Le Tubé, Air Base 125 as a Transoceanic Abort Landing site for the Space Shuttle.

The agreement allows Space Shuttles supporting the International Space Station to land in the south of France in the event of an emergency during launch to

better assure the success and safety of each shuttle mission.

While we hope and expect that we will never need to land the Space Shuttle at Istres, we appreciate the willingness of the Government of France to assist.

As we resume our focus on completion of the International Space Station, let me assure you that NASA remains committed to working closely with our partners to ensure that the United States continues to meet its commitments on this program.

We view what can be learned onboard the Space Station as vital to helping human crews overcome the physical, mental and emotional challenges of long

duration human space flights, including those that will explore worlds well beyond low Earth orbit.

Looking at future cooperation, there are other challenges facing us in the near term that have more to do with international relations.

We have heard very clearly expressions of concern from many of your countries regarding U.S. export control laws and regulations, and particularly ITAR, the International Traffic in Arms Regulations, as a potential impediment to future cooperation with NASA on the Vision.

From a practical perspective, it is important to note that the laws and policies of the United States government that may impact NASA's cooperation

with other countries, and our missions, apply to the entire United States federal government.

We have conveyed the concerns of our partners to our points of contact at the U.S. Department of State and other U.S. government agencies to seek possible remedies to the concerns that have been raised.

I understand that representatives from the State Department Directorate of Defense Trade Controls are prepared to support further discussions on this matter with appropriate representatives from your respective governments, as necessary.

Another aspect of U.S. government policy that currently complicates international cooperation with Russia in particular is the Iran Nonproliferation Act of 2000.

The Administration is interested in seeking a balanced approach that continues to protect our nonproliferation goals while advancing U.S. space cooperation with Russia.

As such, the Administration is soon prepared to work with the U.S. Congress to ensure that we can continue our productive relationship with the Russian Space Agency while also addressing our nation's national security and nonproliferation goals.

Meanwhile, I'd like to report progress in our work to employ experience, technology readiness and flexibility to enable each successive exploration step in our Vision for Space Exploration.

Earlier this week we had a major step in our efforts to implement the Vision for U.S. Space Exploration. On Monday, NASA announced the selection of two contractors as a next step toward an award to build NASA's Crew Exploration Vehicle. Both contractors are teamed with European aerospace firms.

The selection is part of NASA's plan to have two contractors compete in the design and production

process for a replacement vehicle for the Space Shuttle.

However, the NASA Administrator Mike Griffin has directed that we have the six-person Crew Exploration Vehicle on-line as soon as possible after the Space Shuttle's retirement in 2010, so that we can conduct missions in Earth orbit including missions to the International Space Station, but also to support exploration missions to the Moon and other destinations. Decisions will soon be made that provides better definition of the launch vehicles to continue, as agreed to, logistic and utilization support for the International Space Station.

Throughout NASA and with other nations and organizations work is well 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 all humankind.

This is the spirit in which we hope to engage many and varied partners in cutting-edge activities that will help build revolutionary technologies and capabilities for the future.

In turn we are quite confident that our exploration activities will spur technological developments that will lead to new products and

services and tangibly improve the lives of people throughout the world.

Just as the Apollo program led to important advances in computing and electronics, the potential spinoff benefits from this broad based exploration program could prove considerable.

We are all familiar with major space spin-offs such as cataract detection, heart pumps, microchips and safer aircraft, which are all examples of NASA technologies used to advance our exploration goals being applied to productive use in society.

We believe the technology development necessary to implement the Vision will accelerate advances in robotics, autonomous and fault tolerant

systems, human-machine interface, materials, life support systems and novel applications of nanotechnology as well as microdevices.

If history is any guide, these and other technologies we develop will have a tremendous impact on human society in numerous beneficial and unanticipated ways.

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.

Finally, I'm convinced that in the ways we are attacking the challenges presented by the Vision we are setting the stage for a space program that will

increase the opportunities we will all share to become a smarter, safer, healthier and more intelligent world.

And if we do it right, we can do it together, on a scale never seen before in the history of the planet, at a pace hardly thought possible.

Once again I thank you for the opportunity to speak to this distinguished gathering and I look forward to working with representatives from each of your countries in the future as NASA continues its great exploration journey.

Thank you very much for allowing me to speak on behalf of the men and woman of NASA.