

Foreign Relations be authorized to meet during the session of the Senate on Wednesday, September 28, 2005, at 9:30 a.m. to hold a hearing on Darfur Revisited: The International Response.

The PRESIDING OFFICER. Without objection, it is so ordered.

COMMITTEE ON HOMELAND SECURITY AND  
GOVERNMENTAL AFFAIRS

Mr. BURR. Mr. President, I ask unanimous consent that the Committee on Homeland Security and Governmental Affairs be authorized to meet on Wednesday, September 28, 2005, at 9:30 a.m. for a hearing titled, "Recovering from Hurricane Katrina: Responding to the Immediate Needs of Its Victims."

The PRESIDING OFFICER. Without objection, it is so ordered.

COMMITTEE ON INDIAN AFFAIRS

Mr. BURR. Mr. President, I ask unanimous consent that the Committee Indian Affairs be authorized to meet on Wednesday, September 28, 2005, at 2:30 p.m. in Room 485 of the Russell Senate Office Building to conduct an oversight hearing on Indian Housing.

The PRESIDING OFFICER. Without objection, it is so ordered.

COMMITTEE ON THE JUDICIARY

Mr. BURR. Mr. President, I ask unanimous consent that the Committee on the Judiciary be authorized to meet to conduct a hearing on "Protecting Copyright and Innovation in a Post-Grokster World" on Wednesday, September 28, 2005 at 9:30 a.m. in the Dirksen Senate Office Building Room 226.

Witness List

Panel I: The Honorable Mary Beth Peters, U.S. Register of Copyrights, Copyright Office, Washington, DC; and the Honorable Debra Wong Yang, U.S. Attorney for the Central District of California and Chair of the Attorney General's Advisory Committee on Cyber/Intellectual Property Subcommittee, Los Angeles, CA.

Panel II: Marty Roe, Lead Singer, Diamond Rio, Nashville, TN; Cary Sherman, President, Recording Industry Association of America, Washington, DC; Gary Shapiro, President and Chief Executive Officer, Consumer Electronics Association, Arlington, VA; Mark Lemley, William H. Neukom, Professor of Law, Stanford University Law School and Director Stanford Program in Law, Science and Technology Stanford, CA; Ali Aydar, Chief Operating Officer, SNOCAP, San Francisco, CA; and Sam Yagan, President, MetaMachine, Inc. (developer of eDonkey and Overnet) New York, NY.

The PRESIDING OFFICER. Without objection, it is so ordered.

SUBCOMMITTEE ON PUBLIC LANDS AND FORESTS

Mr. BURR. Mr. President, I ask unanimous consent that the Subcommittee on Public Lands and Forests be authorized to meet during the session of the Senate on Wednesday, September 28, at 2:30 p.m.

The purpose of the hearings is to review the Grazing programs of the Bureau of Land Management and the For-

est Service, including proposed changes to grazing regulations, and the status of grazing permit renewals, monitoring programs and allotment restocking plans.

The PRESIDING OFFICER. Without objection, it is so ordered.

PRIVILEGE OF THE FLOOR

Mr. BROWNBACK. Mr. President, I ask unanimous consent that Johanna Mihok, a legal intern on my Judiciary Committee staff, be granted floor privileges for the duration of the consideration of Judge John Roberts to be Chief Justice of the United States.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. HARKIN. I ask unanimous consent Elizabeth Leef of my staff be granted the privilege of the floor for the duration of today's session.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. NELSON of Nebraska. Mr. President, I ask unanimous consent that Valerie Frias and Katherine Hutchinson, two Judiciary Committee staffers, be granted floor privileges for the duration of the debate on the nomination of John G. Roberts to be Chief Justice of the United States.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. GRASSLEY. First, I ask unanimous consent that Matt Reisetter of my staff be granted the privilege of the floor for the remainder of the debate on the nomination of Judge Roberts.

The PRESIDING OFFICER. Without objection, it is so ordered.

NATIONAL AERONAUTICS AND  
SPACE ADMINISTRATION AU-  
THORIZATION ACT OF 2005

Mr. GRAHAM. Mr. President, I ask unanimous consent that the Senate proceed to the immediate consideration of Calendar No. 174, S. 1281.

The PRESIDING OFFICER. The clerk will report the bill by title.

The legislative clerk read as follows:

A bill (S. 1281) to authorize appropriations for the National Aeronautics and Space Administration for science, aeronautics, exploration, exploration capabilities, and the Inspector General, and for other purposes, for fiscal years 2006, 2007, 2008, 2009, and 2010.

There being no objection, the Senate proceeded to consider the bill which had been reported from the Committee on Commerce, Science and Transportation with amendments.

(Strike the parts shown in black brackets and insert the parts shown in italic.)

Mrs. HUTCHISON. Mr. President, I am delighted to join my friend and colleague, the distinguished Senator from Florida, in bringing before the Senate today, S. 1281, the NASA Authorization Bill of 2005. Our subcommittee and the full Commerce Committee have worked hard to prepare legislation that we believe is important and timely, because

it comes at a watershed moment in this Nation's civil space program.

That moment has come at no small cost. It grew out of a terrible tragedy that took place in the skies over Texas 2½ years ago, when the space shuttle *Columbia* and her brave crew were lost as they were returning home from an important and successful research mission.

In the aftermath of that accident, we were forced, as a nation, to once again confront the question of the value of space exploration in the face of the risks involved in sending our best and brightest—and those of other nations who are our partners in space exploration—into the hostile realm of space. The overwhelming and resounding answer, from the families of those who were lost to men, women and children across the country, and our elected leadership, was "yes." They gave the same answer that Lewis and Clark gave to Thomas Jefferson 200 years ago, when he charged them with the task of exploring what was then a great, largely unknown expanse.

Just as that difficult but inspiring voyage of discovery opened the way for this Nation to spread its wings from sea to sea, the voyages of discovery into the far reaches of space have begun—and will continue—to open vast opportunities for our Nation, and for the world.

While the vision that drove Lewis and Clark—the discovery of a northwest passage to the Pacific Ocean—was not the result they achieved, the understanding of the raw richness of our continent, and the insights into themselves and their fellow human beings provided a wealth of discovery more diverse and more valuable than any specific goal they had in mind as they began.

Among the many important findings of the investigation into the *Columbia* accident was the need for a renewed guiding vision for our human space exploration programs. On January 14, 2004, President George W. Bush provided the essence of that bold new vision for exploration, not only for NASA, but for the Nation. It extends far beyond his tenure in office—beyond the tenure of most of us serving in the Senate today. It reaches beyond many years and ultimately millions of miles into the solar system in which we live. It will require a long-standing commitment by this Nation, and it will not be an easy vision to accomplish. We will find unexpected obstacles and challenges along the way. If we didn't, it would not really be exploration. Our task as a nation, and in the company of international partners who will join us on this journey, will be to meet those challenges and turn them into opportunities.

The essential first step in the new Vision for Exploration was to return the space shuttle to flight. As we all know, the space shuttle *Discovery* launched into orbit and began this Nation's return to space flight on July 26th. Commander Eileen Collins and her crew,

the crew aboard the International Space Station, and the entire NASA team conducted an extremely successful first test flight to assess the progress made in the space shuttle program since the tragic *Columbia* accident. While the shedding of foam debris during liftoff—the direct cause of the damage to *Columbia*—was reduced to a level far below that previously experienced, it has not been eliminated and more work remains to understand and address that problem. Fortunately, among the major improvements in the Shuttle program is the vast increase in the ability to monitor and collect visual information on the health of the Orbiter both during launch and in orbit. That unprecedented level of information was combined with new on-orbit repair techniques to further enhance our confidence in the shuttle program's flight readiness. All of us, I'm sure, were thrilled to watch astronaut Steve Robison deftly pluck the small gap fillers from *Discovery*'s underside, and the amazing never before seen images of the orbiter's thermal protection system. Our subcommittee will continue to monitor the application of the findings of this first test flight to the preparations for the launch of the second test flight next year, which continues this first step in the Vision for Exploration.

The legislation we bring before the Senate today supports the Vision of Exploration outlined by the President. It provides an opportunity for the Congress to fulfill its responsibility to help set the stage for the commencement of our new national journey of exploration. It has been 5 years since the Congress has enacted authorization legislation for NASA and its programs. Those 5 years have seen a great deal of change in the realm of space exploration. First and foremost, for nearly all of that time, humans have been living and working continuously on orbit 240 miles above the earth aboard the International Space Station. Despite the interruption of its assembly by the *Columbia* accident, the space station has already provided a great deal of important scientific information resulting from the research the expedition crews aboard the ISS have been able to accomplish. And most of its laboratory facilities are not yet on orbit. The space station represents an immensely valuable asset for this Nation and our international and scientific partners, and the legislation before the Senate today will serve to ensure it realizes the vast potential it has long promised.

The past 5 years have seen other changes.

As we have undergone the recovery from the *Columbia* accident, we have witnessed the most comprehensive review of the hardware, systems and processing for the space shuttle program since it began operational flights 24 years ago. While we may never be able to completely eliminate the risks of human spaceflight, the space shuttle system is safer today than it has ever

been, and we have learned valuable lessons that can be applied to the next generation of human space flight vehicle.

Last year we witnessed dramatic evidence of yet another major change in space exploration when pilot Mike Melville flew *SpaceShipOne*, built by the Scaled Deposits Corporation, over 100 kilometers high, to become the first person to fly a privately-built vehicle into the reaches of space on September 29, 2004. Five days later, on October 4 Brian Binnie at the controls, *SpaceShipOne* became the first private manned spacecraft to exceed an altitude of 328,000 feet twice within the span of a 14-day period. With that accomplishment, Scaled Deposits Corporation won the \$10 million Ansari X-Prize, funded entirely by private funds. A new era in private, commercial development of manned and unmanned spacecraft has begun, which offers exciting opportunities for the future.

For example, two space entrepreneurs are planning to join together in the launch early next year of the Falcon V launch vehicle, built by Elon Musk's Space-X Corporation, which will carry aloft a prototype one-third scale space module built by Robert Bigelow's Bigelow Aerospace Corporation. Other companies are developing designs and building prototype hardware that could be the precursors of commercially developed space station modules and the means of supplying and maintaining them with cargo and crews that could complement and expand the research opportunities provided by the International Space Station. S. 1281 includes language which both encourages and enables increased commercial involvement in space activities, including servicing the International Space Station, developing and conducting free-flying space research vehicles, and providing for increased use of competitive prizes and incentives to spur private investment and development. We would expect to see that private sector interest and involvement eventually extend beyond earth orbit to become an integral part of the nation's broader commitment to exploration of the Moon, Mars and destinations beyond.

I would like now to discuss some of the key provisions of the NASA reauthorization bill which I believe are especially important to the new beginning we are making as a nation within the Vision for Exploration.

There is an old saying that a journey of a thousand miles begins with a single step. It is also true that we must begin from where we find ourselves today. As I said earlier, the first step of the Vision was initiated this past summer with the launch of *Discovery*, and will continue with the subsequent flights of the space shuttle to complete the assembly of the International Space Station and fulfill our commitments to our international partners and—I must add—our commitments to our scientific partners.

Over the past 17 years, this Chamber has been the scene of vigorous discussion and debate on the International Space Station, long before the first module was launched in November of 1998. Through all that discussion, the central theme of those of us who supported the space station—and two-thirds of us consistently supported it in the votes following those debates—was that the ISS represents a unique laboratory in space, which holds the promise for scientific findings that can directly benefit us on Earth. I find it interesting to hear statements that the space station has not fulfilled that promise. Those who suggest that seem to have forgotten that it is not yet completed. In fact, only one of the three planned laboratories is on orbit now—the US *Destiny* laboratory—and it is not yet fully equipped. The remaining modules are completed, and are at the Kennedy Space Center, awaiting their launch and outfitting so that the long-standing plans for ISS research can finally begin. We and our international partners have invested far too much in building and preparing those facilities, and the on-orbit structure that will provide their home and supporting power and crew accommodations, to back away from that investment now. To do so would not only represent a wasteful, irresponsible and inexcusable breach of faith with the American taxpayers, but an unconscionable betrayal of scientists and researchers in a wide range of disciplines who have invested years of effort and resources preparing to conduct research that can only be done in the microgravity of space.

This bill acknowledges and reaffirms our commitment to fulfill the promise of the ISS. We recognize that NASA has limited total resources and has been given an enormous task to lead the Vision for Exploration. The demands of many valuable and important existing programs have forced NASA to make difficult choices in focusing those scarce resources in ways which support the goals of the Vision. We understand that reality, and have attempted in this 5-year reauthorization bill to provide a stable, consistent and moderately increasing level of funding to enable NASA to address those challenges.

At the same time, we have encouraged, as I noted earlier, the increased participation and involvement of commercial interests and capabilities, in a way that can relieve NASA of some of the basic burdens of space operations. With respect to space station research, we believe additional steps must be taken to enable NASA to conduct the research it must to support long-duration human spaceflight, and to return to the Moon, and move onward to Mars, while not sacrificing or undermining the investment we have made in the ISS.

To accomplish this, the legislation designates the U.S. segment of the

International Space Station as national laboratory facility. It further directs the NASA Administrator to develop a plan, within one year after enactment of the bill, to establish a ground-based national laboratory structure that will be responsible for maintaining and operating the research capabilities in the on-orbit laboratory facilities. The ISS national laboratory will be empowered to establish scientific—and funding—relationships with other governmental and non-governmental entities and to include international participation as well. The infusion of new participants and non-NASA resources will free NASA of much of the financial burden it would require to sustain broad-based research aboard ISS, and would thus enable it to focus its ISS research, as planned, on those disciplines and experiments which directly support the needs of the Vision for Exploration.

We believe this represents a creative and responsible approach to meeting our international commitments and fulfilling the long-standing research promise of the ISS, while not inhibiting NASA's pursuit of its exploration objectives.

In order to continue the Nation's exploration activities, both in continuing essential activities in low-Earth orbit and moving outward, back to the Moon, Mars, and beyond, we must have a new generation of launch and flight vehicles. The Vision for Exploration calls for the development of a new crew exploration vehicle and associated launch systems, to meet that objective.

As I have stated, this legislation supports the goals and objectives of Vision for Exploration. As the saying goes, however, sometimes "the devil is in the details." As those details have been revealed in the planning to implement the vision, I have expressed concerns about some of the early transitional steps to redirect NASA's emphasis from low-Earth orbit to exploration of the Moon and Mars. I have already addressed the question of ensuring the maximum use of the International Space Station. My other primary concern has to do with the transition from the Space Shuttle to the new crew exploration vehicle. The initial announcement of the Vision for Exploration called for the termination of Shuttle flights in 2010, and the first flight of the crew exploration vehicle in 2014. The resulting 4-year hiatus in this Nation's ability to launch humans into space was simply unacceptable to me. It would represent a serious degradation of our national and economic security, as the community of spacefaring nations expands with the advent of Chinese human spaceflight capability and the potential of even more nations developing such capability, potentially challenging U.S. leadership in this important strategic area and major engine of technological advancement.

S. 1281, as introduced, stated that uninterrupted U.S. spaceflight capability

is essential to our Nation, and required, in Section 202 of the bill, that the Space Shuttle Orbiter not be retired until a replacement crew-capable space vehicle be made operational. NASA's new Administrator, Dr. Michael Griffin, stated, in his confirmation hearing before the Commerce Committee, and again in a subsequent subcommittee hearing on the space shuttle, that he shared our concern about a lengthy hiatus period in U.S. spaceflight capability. Since assuming leadership of NASA, he has undertaken an effort to approach the development of the replacement vehicle in such a way as to close that gap as much as possible. In anticipation of the success of those efforts, Senator NELSON and I agreed to a modification of the language in the bill—included in the manager's amendment to the bill—which provides some flexibility in meeting the goal of uninterrupted U.S. spaceflight capability, but continues to state it as a policy objective. The Exploration Systems Architecture Study was recently completed and I am very pleased to say that the results track very closely to the provisions of S. 1281. The CEV development would be accelerated to 2012, with the possibility of moving its operational date to 2011. The key to CEV acceleration is largely a question of resources, and sufficient funding could enable an even earlier operational date, possibly closing the potential gap in spaceflight capability altogether.

In Dr. Griffin's appearance before the Science and Space Subcommittee during our hearing on the space shuttle program, he pointed out that the plan for space shuttle retirement involves the retirement of the Orbiters, not necessarily the additional components that make up what we call the space shuttle. Those additional components are the solid rocket boosters and the external fuel tank.

I remind my colleagues that the Orbiter is a vehicle that has two major spaceflight functions combined in a single vehicle: the delivery of crew to and from orbit, and the delivery of cargo, or payloads, to and from orbit. The future developments of U.S. human spaceflight capability are intended to separate those functions. That will enable the development of much more simplified—and arguably much safer, more efficient, and less costly—vehicles to serve each separate function. The provisions of S. 1281—coupled with the revised plans for vehicle development recently announced, will fulfill those objectives using major elements of our existing systems and adapting them to meet the requirements of both manned and unmanned launch systems.

Launch vehicles and spaceflight vehicles do not prepare and launch themselves into orbit or maintain themselves entirely independently while in space. They require ground-based support facilities, institutions and skilled personnel. The maintenance of those

capabilities are, in fact, the most labor and resource-intensive elements of a spaceflight program, over time. They must be maintained even when the vehicles themselves are not flying, and must be kept in a high state of readiness. For human spaceflight systems, especially, that expertise and readiness are fundamental elements of flight safety.

The non-orbiter elements of the space shuttle program, both in flight hardware and ground support, represent an enormous national asset and, with modifications and reengineering, can potentially be adapted to meet—in separate configurations—the requirements for human spaceflight and for the launch of large, heavy payloads. Those large payloads are beyond the reach of either evolved expendable launch vehicles or privately-developed launch vehicles—or the current or planned launch vehicles of any other nation, for that matter. For these reasons, and others, this legislation directs and encourages NASA to make the maximum possible utilization of the personnel, assets and capabilities of the space shuttle program in developing the next generation of crew and cargo vehicles. Again, the new NASA plans will do just that, as envisioned by this legislation.

Another important and historical NASA research activity is aeronautical research, a fundamental part of NASA's activities since its inception. Indeed, not only is "aeronautics" the first "a" in NASA, but NASA came into being as an expansion of the National Advisory Committee on Aeronautics, which was established in 1915. That heritage is an important NASA legacy and the continued health of the Nation's aerospace industry in a very competitive global market-place makes it essential that our Nation have solid aeronautical research capabilities. Equally important, in an environment of limited resources, is that decisions about priorities for funding and programs be guided by a clear statement of policy, based on a thorough understanding of both available assets and essential requirements. This legislation directs the development of a national policy to guide the Nation's aeronautical research—including that conducted by NASA. The policy is to be developed within one year after enactment of the legislation, in order to provide time for a thorough and complete assessment of every aspect of aeronautics research, and yet provide the earliest possible guidance for both the administration and the Congress in determining the appropriate funding levels for U.S. aeronautics research. We have chosen not to establish a specific level of funding for that research in the legislation, in order to provide the flexibility for the NASA Administrator to establish those levels using the national policy guidance we have required to be developed.

Finally, let me say something about the broad range of science activities

for which NASA has always been known. The remarkable feat of the Deep Impact asteroid interception mission and the extraordinary success of the Spirit and Opportunity Mars Rovers are, of course, only the most recent and dramatic examples of NASA Space Science expertise. Less spectacular, but equally significant, are the earth observation and earth sciences programs which help us understand—and better care for—the spaceship of which all of us are crew members—spaceship Earth. As with aeronautics research, we have not spelled out specific funding authorization levels for the full 5 years authorized among the various science disciplines, providing flexibility for the NASA Administrator to make the best judgments about resource allocations. However, we express clearly in this bill the need for maintaining a balanced science portfolio throughout all NASA programs. In addition, we require accountability and will maintain careful oversight over the plans and decisions made to implement that balance.

This legislation provides a comprehensive, forward-looking and responsible approach to the transition of our Nation's space exploration programs into a new era of discovery. I believe that, together with our colleagues in the other body, we will be able to craft a congressional consensus that will help ensure this Nation's leadership in space exploration and provide benefits beyond measure and beyond imagination to this Nation and the world.

I want to thank my friend and colleague from Florida, Senator NELSON, for the spirit of cooperation he and his staff have brought to the development and refinement of this legislation. It represents a truly bi-partisan—really a non-partisan—result, as is appropriate for the Nation's space exploration programs. I also want to express my appreciation to the staff of my Subcommittee staff and the full Commerce Committee staff who have worked to bring this measure before the Senate. And, of course, I want to acknowledge the leadership of Senators STEVENS and INOUE, who have supported our efforts to provide authorization and a strong policy foundation to our Nation's space exploration efforts.

I urge my colleagues to support S. 1281.

Mr. NELSON of Florida. Mr. President, I am pleased to join Senators HUTCHISON, STEVENS, INOUE, and LOTT today in sponsoring an amended NASA Authorization Act and managers package that provides policy guidance for keeping NASA on track to achieve their objectives; and to ensure that there is a good balance between the different activities that NASA performs.

Just a few days ago, NASA released their Exploration Systems Architecture Study. The study describes how NASA plans to implement the President's Vision for Space Exploration by returning to the Moon and preparing to go beyond.

Through this NASA bill, Congress can provide constructive support to the good work being done by Administrator Michael Griffin, as they begin to implement the President's vision and prepare NASA for the challenges of the future.

This is a 5-year bill, authorizing NASA from 2006 through 2010. It authorizes NASA appropriations in excess of the President's budget request.

For fiscal year 2006, the President requested \$16.456 billion, which is a 2.4 percent increase over the fiscal year 2005 NASA operating budget. Recently the Commerce, Justice, and Science Appropriations Subcommittee approved \$16.4 billion for NASA. This bill authorizes \$16.556 billion for fiscal year 2006, which is a 3 percent increase over the fiscal year 2005 NASA operating budget. This bill authorizes increases at a level of about 3 percent each year, consistently providing more funding than the President's budget projection.

Like many of our colleagues, Senator HUTCHISON and I believe that recent NASA budget requests have been below the levels required for NASA to perform its various missions effectively. Once this bill is enacted, we intend to work with the Appropriations Committee to ensure that adequate funds are provided for NASA to succeed.

This legislation authorizes NASA to return humans to the Moon, to explore it, and to maintain a human presence on the Moon. Consistent with the President's vision, it also requires using what we learn and develop on the Moon as a stepping stone to future exploration of Mars.

To carry out these missions, our bill requires NASA to develop an implementation plan for the transition from shuttle to crew exploration vehicle, CEV. The plan will help NASA to make a smooth transition from retirement of the space shuttle orbiters to the replacement spacecraft systems. The implementation plan will help make sure that we can keep the skills and the focus that are needed to assure that each space shuttle flight is safe through retirement of the orbiters, and to retain those personnel needed for the CEV and heavy-lift cargo spacecraft.

It is essential to our national security that we prevent any hiatus or gap in which the United States cannot send astronauts to space without relying on a foreign country. The Russians have been good partners in construction of the International Space Station, and the Soyuz spacecraft has been a reliable vehicle for our astronauts. But with all of the uncertainties in our relationship with Russia, we simply cannot allow ourselves the vulnerability of being totally dependent on the Soyuz. We need to maintain assured access to space by U.S. astronauts on a continuous basis. We therefore require in this legislation, that there not be a hiatus between the retirement of the space shuttle orbiters and the availability of the next generation U.S. human-rated spacecraft.

We have worked with NASA to address their concerns regarding the hiatus, and have crafted language that expresses our desire not to have a gap, and that NASA feels is suitable. We are aware of Dr. Griffin's efforts to reduce the potential for a gap and we appreciate the work that he is doing to accelerate the crew exploration vehicle.

Our bill directs NASA to plan for and consider a Hubble servicing mission after the two Space Shuttle Return to Flight missions have been completed.

Americans are inspired by the images that Hubble produces. The new instruments to be added during the SM-4 Hubble servicing mission will produce higher quality images; enable us to see further into space; and give scientists a better understanding of our universe's past, and perhaps of our future. The replacement gyroscopes and batteries that are planned for the mission will extend Hubble's life by 5 or more years.

This NASA authorization bill calls for utilization of the International Space Station for basic science as well as exploration science. It is important that we reap the benefits of our multi-billion dollar investment in the Space Station. The promise of some basic science research requires a micro-gravity or a space environment for us to better understand the problem that we are trying to solve. This bill ensures that NASA will maintain a focus on the importance of basic science.

In order to assure that we can meet our obligations with respect to the Space Station, the administration has requested that Congress modify the Iran Nonproliferation Act to ensure that we can continue to cooperate with the Russian Federation in this area. There may be periods when our only access to the Space Station will be on the Russian Soyuz spacecraft. But Russia's failure to cease all proliferation activities with respect to Iran has resulted in sanctions against Russia that would preclude such cooperation.

This bill directs NASA to improve its safety culture. According to the Columbia Accident Investigation Board, CAIB, report, the safety culture at NASA was as much a cause of the *Columbia* tragedy as the physical cause. Low- and mid-level personnel felt that you could not elevate safety concerns without reprisals, or being ignored. NASA has already taken significant steps to address these problems, but we need to assure that the safety culture improves as quickly as possible and that it continues to improve.

This legislation proposes that the Aerospace Safety Advisory Panel monitor and measure NASA's improvements to their safety culture, including employees' fear of reprisals for voicing concerns about safety.

It also contains policy regarding NASA's need to consider and implement lessons learned, in order to avoid another preventable tragedy like the *Challenger* and *Columbia* disasters.

This authorization bill addresses NASA aeronautics and America's preeminence in aviation. The Europeans

have stated their intent to dominate the airplane market by 2020. It is not in our national interest to let that occur.

We are calling on NASA to develop and demonstrate aviation technologies for reducing commercial aircraft noise levels at airports, making aircraft more fuel efficient, improving aircraft safety and security, and continuing the pursuit of revolutionary concepts such as hypersonic flight. Aeronautics is a very important function of NASA and needs to be continued and further developed. This bill calls on NASA to assure that at least 5 percent of the aeronautics budget is allocated for fundamental aeronautical research.

NASA has a new direction, and they have outstanding leadership in Dr. Michael Griffin.

We have an opportunity to authorize NASA for: implementing the Vision for Space Exploration; renewing our commitment to U.S. aviation and NASA aeronautics research; retaining or resurrecting very important science activities at NASA; and assuring that America has continuous human access to space.

By passing this legislation, we will continue to advance our national security, strengthen our economy, inspire the next generation of explorers, and fulfill our destiny as explorers.

Mr. STEVENS. Mr. President, passage of S. 1281, the NASA Authorization Act of 2005, is a milestone in our country's continued efforts to open and develop new frontiers.

One year after the Columbia space shuttle tragedy, President Bush gave us a bold, new vision for the future of space exploration. This legislation provides the framework we need to implement the President's vision.

The Moon is the strategic gateway to the rest of the solar system. It will ultimately be a critical point for many human endeavors. It will support economic growth, cutting-edge research and technology, and innovative partnerships.

This legislation also provides NASA with important guidance for its other missions. It outlines a national aeronautics policy, which will be developed by the administration. This policy will enable us to take into account emerging challenges in aeronautics research as we plan our investments going forward.

S. 1281 also calls for the implementation of a balanced space science program and highlights the need for better access to data which can meet local and national challenges.

This is a bipartisan bill which provides a solid foundation for our current and future space activities. I am pleased we are sustaining our long-standing commitment to space exploration.

Mr. GRAHAM. I ask unanimous consent that the Hutchison amendment at the desk be agreed to; the committee-reported amendments, as amended, be agreed to; the bill, as amended, be read a third time and

passed; the motions to reconsider be laid upon the table; and that any statements relating to the bill be printed in the RECORD.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment (No. 1875) was agreed to.

(The amendment is printed in today's RECORD under "Text of Amendments.")

The committee amendments were agreed to.

The bill (S. 1281), as amended, was read the third time and passed, as follows:

#### S. 1281

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

#### SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as "National Aeronautics and Space Administration Authorization Act of 2005".

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings.
- Sec. 3. Definitions.

#### TITLE I—AUTHORIZATION OF APPROPRIATIONS

##### SUBTITLE A—AUTHORIZATIONS

- Sec. 101. Fiscal year 2006.
- Sec. 102. Fiscal year 2007.
- Sec. 103. Fiscal year 2008.
- Sec. 104. Fiscal year 2009.
- Sec. 105. Fiscal year 2010.
- Sec. 106. Evaluation criteria for budget request.

##### SUBTITLE B—GENERAL PROVISIONS

- Sec. 131. Implementation of a science program that extends human knowledge and understanding of the Earth, sun, solar system, and the universe.
- Sec. 132. Biennial reports to Congress on science programs.
- Sec. 133. Status report on Hubble Space Telescope servicing mission.
- Sec. 134. Develop expanded permanent human presence beyond low-Earth orbit.
- Sec. 135. Ground-based analog capabilities.
- Sec. 136. Space launch and transportation transition, capabilities, and development.
- Sec. 137. National policy for aeronautics research and development.
- Sec. 138. Identification of unique NASA core aeronautics research.
- Sec. 139. Lessons learned and best practices.
- Sec. 140. Safety management.
- Sec. 141. Creation of a budget structure that aids effective oversight and management.
- Sec. 142. Earth observing system.
- Sec. 143. *NASA healthcare program.*
- Sec. 144. *Assessment of extension of data collection from Ulysses and Voyager spacecraft.*
- Sec. 145. *Program to expand distance learning in rural underserved areas.*
- Sec. 146. *Institutions in NASA'S minority institutions program.*
- Sec. 147. *Aviation safety program.*
- Sec. 148. *Atmospheric, geophysical, and rocket research authorization.*
- Sec. 149. *Orbital debris.*
- Sec. 150. *Continuation of certain educational programs.*
- Sec. 151. *Establishment of the Charles "Pete" Conrad Astronomy Awards Program.*
- Sec. 152. *GAO assessment of feasibility of Moon and Mars exploration missions.*

#### SUBTITLE C—LIMITATIONS AND SPECIAL AUTHORITY

- Sec. 161. Official representational fund.
- Sec. 161. Facilities management.

#### TITLE II—INTERNATIONAL SPACE STATION

- Sec. 201. International Space Station completion.
- Sec. 202. Research and support capabilities on international Space Station.
- Sec. 20d. National laboratory status for International Space Station.
- Sec. 204. Commercial support of International Space Station operations and utilization.
- Sec. 205. Use of the International Space Station and annual report.

#### TITLE III—NATIONAL SPACE TRANSPORTATION POLICY

- Sec. 301. United States human-rated launch capacity assessment.
- Sec. 302. Space Shuttle transition.
- Sec. 303. Commercial launch vehicles.
- Sec. 304. Secondary payload capability.

#### TITLE IV—ENABLING COMMERCIAL ACTIVITY

- Sec. 401. Commercialization plan.
- Sec. 402. Authority for competitive prize program to encourage development of advanced space and aeronautical technologies.
- Sec. 403. Commercial goods and services.

#### TITLE V—MISCELLANEOUS ADMINISTRATIVE IMPROVEMENTS

- Sec. 501. Extension of indemnification authority.
- Sec. 502. Intellectual property provisions.
- Sec. 503. Retrocession of jurisdiction.
- Sec. 504. Recovery and disposition authority.
- Sec. 505. Requirement for independent cost analysis.
- Sec. 506. Electronic access to business opportunities.
- Sec. 507. Reports elimination.

#### SEC. 2. FINDINGS.

The Congress finds the following:

(1) It is the policy of the United States to advance United States scientific, security, and economic interests through a healthy and active space exploration program.

(2) Basic and applied research in space science, Earth science, and aeronautics remain a significant part of the Nation's goals for the use and development of space. Basic research and development is an important component of NASA's program of exploration and discovery.

(3) Maintaining the capability to safely send humans into space is essential to United States national and economic security, United States preeminence in space, and inspiring the next generation of explorers. Thus, a gap in United States human space flight capability is harmful to the national interest.

(4) The exploration, development, and permanent habitation of the Moon will—

- (A) inspire the Nation;
- (B) spur commerce, imagination, and excitement around the world; and
- (C) open the possibility of further exploration of Mars.

(5) The establishment of the capability for consistent access to and stewardship of the region between the Moon and Earth is in the national security and commercial interests of the United States.

(6) Commercial development of space, including exploration and other lawful uses, is in the interest of the United States and the international community at large.

(7) Research and access to capabilities to support a national laboratory facility within the United States segment of the ISS in low-

Earth orbit are in the national policy interests of the United States, including maintenance and development of an active and healthy stream of research from ground to space in areas that can uniquely benefit from access to this facility.

(8) NASA should develop vehicles to replace the Shuttle orbiter's capabilities for transporting crew and heavy cargo while utilizing the current program's resources, including human capital, capabilities, and infrastructure. Using these resources can ease the transition to a new space transportation system, maintain an essential industrial base, and minimize technology and safety risks.

(9) The United States should remain the world leader in aeronautics and aviation. NASA should align its aerospace research to ensure United States leadership. A national effort is needed to assess NASA's aeronautics programs and infrastructure to allow a consolidated national approach that ensures efficiency and national preeminence in aeronautics and aviation.]

(9) *The United States must remain the leader in aeronautics and aviation. Any erosion of this preeminence is not in the Nation's economic or security interest. NASA should align its aerospace leadership to ensure United States leadership. A national effort is needed to ensure that NASA's aeronautics programs are leading contributors to the Nation's civil and military aviation needs, as well as to its exploration capabilities.*

### SEC. 3. DEFINITIONS.

In this Act:

(1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the National Aeronautics and Space Administration.

(2) ISS.—The term "ISS" means the International Space Station.

(3) NASA.—The term "NASA" means the National Aeronautics and Space Administration.

(4) SHUTTLE-DERIVED VEHICLE.—The term "shuttle-derived vehicle" means any new space transportation vehicle, piloted or unpiloted, that—

(A) is capable of supporting crew or cargo missions; and

(B) uses a major component of NASA's Space Transportation System, such as the solid rocket booster, external tank, engine, and orbiter.

(5) IN-SITU RESOURCE UTILIZATION.—The term "in-situ resource utilization" means the technology or systems that can convert indigenous or locally-situated substances into useful materials and products.

## TITLE I—AUTHORIZATION OF APPROPRIATIONS

### Subtitle A—Authorizations

#### SEC. 101. FISCAL YEAR 2006.

There are authorized to be appropriated to the National Aeronautics and Space Administration, for fiscal year 2006, \$16,556,400,000, as follows:

(1) For science, aeronautics and exploration, \$9,661,000,000 for the following programs (including amounts for construction of facilities).

(2) For exploration capabilities, \$6,863,000,000, (including amounts for construction of facilities), which shall be used for space operations, and out of which \$100,000,000 shall be used for the purposes of section 202 of this Act.

(3) For the Office of Inspector General, \$32,400,000.

#### SEC. 102. FISCAL YEAR 2007.

There are authorized to be appropriated to the National Aeronautics and Space Administration, for fiscal year 2007, \$17,052,900,000, as follows:

(1) \$10,549,800,000 for science, aeronautics and exploration (including amounts for construction of facilities).

(2) For exploration capabilities, \$6,469,600,000, for the following programs (including amounts for construction of facilities), of which \$6,469,600,000 shall be for space operations.

(3) For the Office of Inspector General, \$33,500,000.

#### SEC. 103. FISCAL YEAR 2008.

There are authorized to be appropriated to the National Aeronautics and Space Administration, for fiscal year 2008, \$17,470,900,000.

#### SEC. 104. FISCAL YEAR 2009.

There are authorized to be appropriated to the National Aeronautics and Space Administration, for fiscal year 2009, \$17,995,000,000.

#### SEC. 105. FISCAL YEAR 2010.

There are authorized to be appropriated to the National Aeronautics and Space Administration, for fiscal year 2010, \$18,534,900,000.

#### SEC. 106. EVALUATION CRITERIA FOR BUDGET REQUEST.

It is the sense of the Congress that each budget of the United States submitted to the Congress after the date of enactment of this Act should be evaluated for compliance with the findings and priorities established by this Act and the amendments made by this Act.

### Subtitle B—General Provisions

#### SEC. 131. IMPLEMENTATION OF A SCIENCE PROGRAM THAT EXTENDS HUMAN KNOWLEDGE AND UNDERSTANDING OF THE EARTH, SUN, SOLAR SYSTEM, AND THE UNIVERSE.

The Administrator shall—

(1) conduct a rich and vigorous set of science activities aimed at better comprehension of the universe, solar system, and Earth, and ensure that the various areas within NASA's science portfolio are developed and maintained in a balanced and healthy [manner;] manner, and, as part of this balanced science research program, provide, to the maximum extent feasible, continued support and funding for the Magnetospheric Multiscale Mission, SIM-Planet Quest, and Future Explorers programs, including determining whether these delayed missions and planned missions can be expedited to meet previous schedules;

(2) plan projected Mars exploration activities in the context of planned lunar robotic precursor missions, ensuring the ability to conduct a broad set of scientific investigations and research around and on the Moon's surface;

(3) upon successful completion of the planned return-to-flight schedule of the Space Shuttle, determine the schedule for a Shuttle servicing mission to the Hubble Space Telescope, unless such a mission would compromise astronaut or safety or the integrity of NASA's other missions;

(4) ensure that, in implementing the provisions of this section, appropriate inter-agency and commercial collaboration opportunities are sought and utilized to the maximum feasible extent;

(5) seek opportunities to diversify the flight opportunities for scientific Earth science instruments and seek innovation in the development of instruments that would enable greater flight opportunities;

(6) develop a long term sustainable relationship with the United States commercial remote sensing industry, and, consistent with applicable policies and law, to the maximum practical extent, rely on their services;

(7) in conjunction with United States industry and universities, develop Earth science applications to enhance Federal, State, [local, regional, and tribal agencies] local, and tribal governments that use govern-

ment and commercial remote sensing capabilities and other sources of geospatial information to address their needs; [and]

(8) plan, develop, and implement a near-Earth object survey program to detect, track, catalogue, and characterize the physical characteristics of near-Earth asteroids and comets in order to assess the threat of such near-Earth objects in impacting the [Earth.] Earth; and

(9) ensure that, of the amount expended for aeronautics, a significant portion is directed toward the Vehicle System Program, as much of the basic, long-term, high-risk, and innovative research in aeronautical disciplines is performed within that program.

#### SEC. 132. BIENNIAL REPORTS TO CONGRESS ON SCIENCE PROGRAMS.

(a) IN GENERAL.—Within 180 days after the date of enactment of this Act and every 2 years thereafter, the Administrator shall transmit a report to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science setting forth in detail—

(1) the findings and actions taken on NASA's assessment of the balance within its science portfolio and any efforts to adjust that balance among the major program areas, including the areas referred to in section 131;

(2) any activities undertaken by the Administration to conform with the Sun-Earth science and applications direction provided in section 131; and

(3) efforts to enhance near-Earth object detection and observation.

(b) EXTERNAL REVIEW FINDINGS.—The Administrator shall include in each report submitted under this section a summary of findings and recommendations from any external reviews of the Administration's science mission priorities and programs.

#### SEC. 133. STATUS REPORT ON HUBBLE SPACE TELESCOPE SERVICING MISSION.

Within 60 days after the landing of the second Space Shuttle mission for return-to-flight certification, the Administrator shall transmit to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science a one-time status report on a Hubble Space Telescope servicing mission.

#### SEC. 134. DEVELOP EXPANDED PERMANENT HUMAN PRESENCE BEYOND LOW-EARTH ORBIT.

(a) IN GENERAL.—As part of the programs authorized under the National Aeronautics and Space Act of 1958 (42 U.S.C. 2451 et seq.), the Administrator shall establish a program to develop a permanently sustained human presence on the Moon, in tandem with an extensive precursor program, to support security, commerce, and scientific pursuits, and as a stepping-stone to future exploration of Mars. The Administrator is further authorized to develop and conduct international collaborations in pursuit of these goals, as appropriate.

(b) REQUIREMENTS.—In carrying out this section, the Administrator shall—

(1) implement an effective exploration technology program that is focused around the key needs to support lunar human and robotic operations;

(2) as part of NASA's annual budget submission, submit to the Congress the detailed mission, schedule, and budget for key lunar mission-enabling technology areas, including areas for possible innovative governmental and commercial activities and partnerships;

(3) as part of NASA's annual budget submission, submit to the Congress a plan for NASA's lunar robotic precursor and technology programs, including current and planned technology investments and scientific research that support the lunar program; and

(4) conduct an intensive in-situ resource utilization technology program in order to develop the capability to use space resources to increase independence from Earth, and sustain exploration beyond low-Earth orbit.

**SEC. 135. GROUND-BASED ANALOG CAPABILITIES.**

(a) IN GENERAL.—The Administrator shall establish a ground-based analog capability in remote United States locations in order to assist in the development of lunar operations, life support, and in-situ resource utilization experience and capabilities.

(b) LOCATIONS.—The Administrator shall select locations for subsection (a) in places that—

- (1) are regularly accessible;
- (2) have significant temperature extremes and range; and
- (3) have access to energy and natural resources (including geothermal, permafrost, volcanic, and other potential resources).

(c) INVOLVEMENT OF LOCAL POPULATIONS; PRIVATE SECTOR PARTNERS.—In carrying out this section, the Administrator shall involve local populations, academia, and industrial partners as much as possible to ensure that ground-based benefits and applications are encouraged and developed.

**SEC. 136. SPACE LAUNCH AND TRANSPORTATION TRANSITION, CAPABILITIES, AND DEVELOPMENT.**

(a) POST-ORBITER TRANSITION.—The Administrator shall develop an implementation plan for the transition to a new crew exploration vehicle and heavy-lift launch vehicle that uses the personnel, capabilities, assets, and infrastructure of the Space Shuttle to the fullest extent possible and addresses how NASA will accommodate the docking of the crew exploration vehicle to the ISS.

(b) AUTOMATED RENDEZVOUS AND DOCKING.—The Administrator is directed to pursue aggressively automated rendezvous and docking capabilities that can support ISS and other mission requirements and include these activities, progress reports, and plans in the implementation plan.

(c) CONGRESSIONAL SUBMISSION.—Within 120 days after the date of enactment of this Act the Administrator shall submit a copy of the implementation plan to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science.

**SEC. 137. NATIONAL POLICY FOR AERONAUTICS RESEARCH AND DEVELOPMENT.**

(a) IN GENERAL.—The President, through the Director of the Office of Science and Technology Policy, shall develop, in consultation with NASA and other relevant Federal agencies, a national aeronautics policy to guide the aeronautics programs of the United States through the year 2020. *The development of this policy shall utilize external studies that have been conducted on the state of United States aeronautics and aviation research and have suggested policies to ensure continued competitiveness.*

(b) CONTENT.—At a minimum the national aeronautics policy shall describe—

- (1) national goals for aeronautics research;
- (2) the priority areas of research for aeronautics through fiscal year 2011;
- (3) the basis of which and the process by which priorities for ensuing fiscal years will be selected; and
- (4) respective roles and responsibilities of various Federal agencies in aeronautics research.

(c) NATIONAL ASSESSMENT OF AERONAUTICS INFRASTRUCTURE AND CAPABILITIES.—In developing the national aeronautics policy, the President, through the Director of the Office of Science and Technology Policy, shall conduct a national study of government-owned aeronautics research infrastructure to assess—

[(1) uniqueness, mission dependency, and industry need; and

[(2) the development or initiation of a consolidated national aviation research, development, and support organization.

[(d)] (c) SCHEDULE.—No later than 1 year after the date of enactment of this Act, the President's Science Advisor and the Administrator shall submit the national aeronautics policy to the Appropriations Committees of the House of Representatives and the Senate, the House Committee on Science, and the Senate Committee on Commerce, Science, and Transportation.

**SEC. 138. IDENTIFICATION OF UNIQUE NASA CORE AERONAUTICS RESEARCH.**

Within 180 days after the date of enactment of this Act, the Administrator shall submit a report to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science that assesses the aeronautics research program for its current and potential application to new aeronautics and space vehicles and the unique aeronautical research and associated capabilities that must be retained and supported by NASA to further space exploration and support United States economic competitiveness.

**SEC. 139. LESSONS LEARNED AND BEST PRACTICES**

(a) IN GENERAL.—The Administrator shall provide an implementation plan describing NASA's approach for obtaining, implementing, and sharing lessons learned and best practices for its major programs and projects within 180 days after the date of enactment of this Act. The implementation plan shall be updated and maintained to assure that it is current and consistent with the burgeoning culture of learning and safety that is emerging at NASA.

(b) REQUIRED CONTENT.—The implementation plan shall contain as a minimum the lessons learned and best practices requirements for NASA, the organizations or positions responsible for enforcement of the requirements, the reporting structure, and the objective performance measures indicating the effectiveness of the activity.

(c) INCENTIVES.—The Administrator shall provide incentives to encourage sharing and implementation of lessons learned and best practices by employees, projects, and programs; as well as penalties for programs and projects that are determined not to have demonstrated use of those resources.

**SEC. 140. SAFETY MANAGEMENT.**

Section 6 of the National Aeronautics and Space Administration Authorization Act, 1968 (42 U.S.C. 2477) is amended—

(1) by inserting "(a) IN GENERAL.—" before "There";

(2) by striking "to it" and inserting "to it, including evaluating NASA's compliance with the return-to-flight and continue-to-fly recommendations of the Columbia Accident Investigation Board,";

(3) by inserting "and the Congress" after "advise the Administrator";

(4) by striking "and with respect to the adequacy of proposed or existing safety standards and shall" and inserting "with respect to the adequacy of proposed or existing safety standards, and with respect to management and culture. The Panel shall also"; and

(5) by adding at the end the following:

"(b) ANNUAL REPORT.—The Panel shall submit an annual report to the Administrator and to the Congress. In the first annual report submitted after the date of enactment of the National Aeronautics and Space Administration Authorization Act of 2005, the Panel shall include an evaluation of NASA's safety management culture.

"(c) SENSE OF THE CONGRESS.—It is the sense of the Congress that the Administrator should—

"(1) ensure that NASA employees can raise safety concerns without fear of reprisal;

"(2) continue to follow the recommendations of the Columbia Accident Investigation Board for safely returning and continuing to fly; and

"(3) continue to inform the Congress from time to time of NASA's progress in meeting those recommendations."

**SEC. 141. CREATION OF A BUDGET STRUCTURE THAT AIDS EFFECTIVE OVERSIGHT AND MANAGEMENT.**

In developing NASA's budget request for inclusion in the Budget of the United States for fiscal year 2007 and thereafter, the Administrator shall—

- (1) include line items for—
  - (A) science, aeronautics, and exploration;
  - (B) exploration capabilities; and
  - (C) the Office of the Inspector General;
- (2) enumerate separately, within the science, aeronautics, and exploration account, the requests for—
  - (A) space science;
  - (B) Earth science; and
  - (C) aeronautics;
- (3) include, within the exploration capabilities account, the requests for—
  - (A) the Space Shuttle; and
  - (B) the ISS; and
  - (4) enumerate separately the specific request for the independent technical authority within the appropriate account.

**SEC. 142. EARTH OBSERVING SYSTEM.**

(a) IN GENERAL.—Within 6 months after the date of enactment of this Act, the Administrator, in consultation with the Administrator of the National Oceanic and Atmospheric Administration and the Director of the United States Geological Survey, shall submit a plan to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science to ensure the long-term vitality of the earth observing system at NASA.

(b) PLAN REQUIREMENTS.—The plan shall—

- (1) address such issues as—
  - (A) out-year budgetary projections;
  - (B) technical requirements for the system; and

(C) integration into the Global Earth Observing System of Systems; and

(2) evaluate—

(A) the need to proceed with any NASA missions that have been delayed or canceled;

(B) plans for transferring needed capabilities from some canceled or de-scoped missions to the National Polar-orbiting Environmental Satellite System;

(C) the technical base for exploratory earth observing [systems;] *systems, including new satellite architectures and instruments that enable global coverage, all-weather, day and night imaging of the Earth's surface features;*

(D) the need to strengthen research and analysis programs; and

(E) the need to strengthen the approach to obtaining important climate observations and data records.

(c) EARTH OBSERVING SYSTEM DEFINED.—In this section, the term "earth observing system" means the series of satellites, a science component, and a data system for long-term global observations of the land surface, biosphere, solid Earth, atmosphere, and oceans.

**SEC. 143. NASA HEALTHCARE PROGRAM.**

*The Administrator shall develop policies, procedures, and plans necessary for—*

(1) *the establishment of a lifetime healthcare program for NASA astronauts and their families; and*

(2) *the study and analysis of the healthcare data obtained in order to understand the longitudinal health effects of space flight on humans better.*

**SEC. 144. ASSESSMENT OF EXTENSION OF DATA COLLECTION FROM ULYSSES AND VOYAGER SPACECRAFT.**

(a) **ASSESSMENT.**—Not later than 60 days after the date of the enactment of this Act, the Administrator shall carry out an assessment of the costs and benefits of extending, to such date as the Administrator considers appropriate for purposes of the assessment, the date of the termination of data collection from the Ulysses spacecraft and the Voyager spacecraft.

(b) **REPORT.**—Not later than 30 days after completing the assessment required by subsection (a), the Administrator shall submit a report on the assessment to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science.

**SEC. 145. PROGRAM TO EXPAND DISTANCE LEARNING IN RURAL UNDERSERVED AREAS.**

(a) **IN GENERAL.**—The Administrator shall develop or expand programs to extend science and space educational outreach to rural communities and schools through video conferencing, interpretive exhibits, teacher education, classroom presentations, and student field trips.

(b) **PRIORITIES.**—In carrying out subsection (a), the Administrator shall give priority to existing programs, including Challenger Learning Centers—

(1) that utilize community-based partnerships in the field;

(2) that build and maintain video conference and exhibit capacity;

(3) that travel directly to rural communities and serve low-income populations; and

(4) with a special emphasis on increasing the number of women and minorities in the science and engineering professions.

**SEC. 146. INSTITUTIONS IN NASA'S MINORITY INSTITUTIONS PROGRAM.**

The matter appearing under the heading "SMALL AND DISADVANTAGED BUSINESS" in title III of the Departments of Veterans Affairs and House and Urban Development, and Independent Agencies Appropriations Act, 1990 (42 U.S.C. 2473b; 103 Stat. 863) is amended by striking "Historically Black Colleges and Universities and" and inserting "Historically Black Colleges and Universities that are part B institutions (as defined in section 322(2) of the Higher Education Act of 1965 (20 U.S.C. 1061(2))), Hispanic-serving institutions (as defined in section 502(a)(5) of that Act (20 U.S.C. 1101a(a)(5)), Tribal Colleges or Universities (as defined in section 316(b)(3) of that Act (20 U.S.C. 1059c(b)(3)), Alaskan Native-serving institutions (as defined in section 317(b)(2) of that Act (20 U.S.C. 1059d)(b)(2)), Native Hawaiian-serving institutions (as defined in section 317(b)(4) of that Act (20 U.S.C. 1059d(b)(4)), and".

**SEC. 147. AVIATION SAFETY PROGRAM.**

The Administrator shall make available upon request satellite imagery of remote terrain to the Administrator of the Federal Aviation Administration, or the Director of the Five Star Medalion Program, for aviation safety and aerial photography programs to assist and train pilots in navigating challenging topographical features of such terrain.

**SEC. 148. ATMOSPHERIC, GEOPHYSICAL, AND ROCKET RESEARCH AUTHORIZATION.**

There are authorized to be appropriated to the Administrator for atmospheric, geophysical, or rocket research at the Poker Flat Research Range and the Kodiak Launch Complex, not more than \$1,000,000 for each of fiscal years 2006 through 2010.

**SEC. 149. ORBITAL DEBRIS.**

The Administrator, in conjunction with the heads of other Federal agencies, shall take steps to develop or acquire technologies that will enable NASA to decrease the risks associated with orbital debris.

**SEC. 150. CONTINUATION OF CERTAIN EDUCATIONAL PROGRAMS.**

From amounts appropriated to NASA for educational programs, the Administrator shall ensure continuation of the Space Grant Program, the Experimental Program to Stimulate Competitive Research, and the NASA Explorer School to motivate and develop the next generation of explorers.

**SEC. 151. ESTABLISHMENT OF THE CHARLES "PETE" CONRAD ASTRONOMY AWARDS PROGRAM.**

(a) **IN GENERAL.**—The Administrator shall establish a program to be known as the Charles "Pete" Conrad Astronomy Awards Program.

(b) **AWARDS.**—The Administrator shall make an annual award under the program of—

(1) \$3,000 to the amateur astronomer or group of amateur astronomers who in the preceding calendar year discovered the intrinsically brightest near-Earth asteroid among the near-Earth asteroids that were discovered during that year by amateur astronomers or groups of amateur astronomers; and

(2) \$3,000 to the amateur astronomer or group of amateur astronomers who made the greatest contribution to the Minor Planet Center's mission of cataloging near-Earth asteroids during the preceding year.

(c) **QUALIFICATION FOR AWARD.**—

(1) **RECOMMENDATION.**—These awards shall be made based on the recommendation of the Minor Planet Center of the Smithsonian Astrophysical Observatory.

(2) **LIMITATION.**—No individual who is not a citizen or permanent resident of the United States at the time of that individual's discovery or contribution may receive an award under this program.

**SEC. 152. GAO ASSESSMENT OF FEASIBILITY OF MOON AND MARS EXPLORATION MISSIONS.**

Within 9 months after the date of enactment of this Act, the Comptroller General shall transmit to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science an assessment of the feasibility of NASA's planning for exploration of the Moon and Mars, giving special consideration to the long-term cost implications of program architecture and schedules.

**Subtitle C—Limitations and Special Authority****SEC. 161. OFFICIAL REPRESENTATIONAL FUND.**

Amounts appropriated pursuant to paragraphs (1) and (2) of section 101 may be used, but not to exceed \$70,000, for official reception and representation expenses.

**SEC. 162. FACILITIES MANAGEMENT.**

(a) **IN GENERAL.**—Notwithstanding any other provision of law, the Administrator may convey, by sale, lease, exchange, or otherwise, including through leaseback arrangements, real and related personal property under the custody and control of the Administration, or interests therein, and retain the net proceeds of such dispositions in an account within NASA's working capital fund to be used for NASA's real property capital needs. All net proceeds realized under this section shall be obligated or expended only as authorized by appropriations Acts. To aid in the use of this authority, NASA shall develop a facilities investment plan that takes into account uniqueness, mission dependency, and other studies required by this Act.

(b) **APPLICATION OF OTHER LAW.**—Sales transactions under this section are subject to section 501 of the McKinney-Vento Homeless Assistance Act (42 U.S.C. 11411).

(c) **NOTICE OF REPROGRAMMING.**—If any funds authorized by this Act are subject to a reprogramming action that requires notice to be provided to the Appropriations Committees of the House of Representatives and the Senate, notice of such action shall concurrently be provided to the House of Rep-

resentatives Committee on Science and the Senate Committee on Commerce, Science, and Transportation.

(d) **DEFINITIONS.**—In this section:

(1) **NET PROCEEDS.**—The term "net proceeds" means the rental and other sums received less the costs of the disposition.

(2) **REAL PROPERTY CAPITAL NEEDS.**—The term "real property capital needs" means any expenses necessary and incident to the agency's real property capital acquisitions, improvements, and dispositions.

**TITLE II—INTERNATIONAL SPACE STATION****SEC. 201. INTERNATIONAL SPACE STATION COMPLETION.**

(a) **ELEMENTS, CAPABILITIES, AND CONFIGURATION CRITERIA.**—The Administrator shall ensure that the ISS will be able to—

(1) fulfill international partner agreements and provide a diverse range of research capacity, including a high rate of human biomedical research protocols, countermeasures, applied bio-technologies, technology and exploration research, and other priority areas;

(2) have an ability to support crew size of at least 6 persons;

(3) support crew exploration vehicle docking and automated docking of cargo vehicles or modules launched by either heavy-lift or commercially-developed launch vehicles; and

(4) be operated at an appropriate risk level.

(b) **CONTINGENCY PLAN.**—The transportation plan to support ISS shall include contingency options to ensure sufficient logistics and on-orbit capabilities to support any potential hiatus between Space Shuttle availability and follow-on crew and cargo systems, and provide sufficient pre-positioning of spares and other supplies needed to accommodate any such hiatus.

(c) **CERTIFICATION.**—Within [180] 60 days after the date of enactment of this Act, and before making any change in the ISS assembly sequence in effect on the date of enactment of this Act, the Administrator shall certify in writing to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science NASA's plan to meet the requirements of subsections (a) and (b).

(d) **COST LIMITATION FOR THE ISS.**—Within 6 months after the date of enactment of this Act, the Administrator shall submit to the Congress information pertaining to the impact of the Columbia accident and the implementation of full cost accounting on the development costs of the International Space Station. The Administrator shall also identify any statutory changes needed to section 202 of the NASA Authorization Act of 2000 to address those impacts.

**SEC. 202. RESEARCH AND SUPPORT CAPABILITIES ON INTERNATIONAL SPACE STATION.**

(a) **IN GENERAL.**—The Administrator shall—

(1) within 60 days after the date of enactment of this Act, provide an assessment of biomedical and life science research planned for implementation aboard the ISS that includes the identification of research which can be performed in ground-based facilities and then, if appropriate, validated in space to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science;

(2) ensure the capacity to support ground-based research leading to spaceflight of scientific research in a variety of disciplines with potential direct national benefits and applications that can advance significantly from the uniqueness of micro-gravity;

(3) restore and protect such potential ISS research activities as molecular crystal growth, animal research, basic fluid physics,

combustion research, cellular biotechnology, low temperature physics, and cellular research at a level which will sustain the existing scientific expertise and research capabilities until such time as additional funding or resources from sources other than NASA can be identified to support these activities within the framework of the National Laboratory provided for in section 203 of this Act; and

(4) within 1 year after the date of enactment of this Act, develop a research plan that will demonstrate the process by which NASA will evolve the ISS research portfolio in a manner consistent with the planned growth and evolution of ISS on-orbit and transportation capabilities.

(b) MAINTENANCE OF ON-ORBIT ANALYTICAL CAPABILITIES.—The Administrator shall ensure that on-orbit analytical capabilities to support diagnostic human research, as well as on-orbit characterization of molecular crystal growth, cellular research, and other research products and results are developed and maintained, as an alternative to Earth-based analysis requiring the capability of returning research products to Earth.

(c) ASSESSMENT OF POTENTIAL SCIENTIFIC USES.—The Administrator shall assess further potential possible scientific uses of the ISS for other applications, such as technology development, development of manufacturing processes, Earth observation and characterization, and astronomical observations.

(d) TRANSITION TO PUBLIC-PRIVATE RESEARCH OPERATIONS.—By no later than the date on which the assembly of the ISS is complete (as determined by the Administrator), the Administrator shall initiate steps to transition research operations on the ISS to a greater private-public operating relationship pursuant to section 203 of this Act.

**SEC. 203. NATIONAL LABORATORY STATUS FOR INTERNATIONAL SPACE STATION.**

(a) IN GENERAL.—In order to accomplish the objectives listed in section 202, the United States segment of the ISS is hereby designated a national laboratory facility. The Administrator, after consultation with the Director of the Office of Science and Technology Policy, shall develop the national laboratory facility to oversee scientific utilization of an ISS national laboratory within the organizational structure of NASA.

(b) NATIONAL LABORATORY FUNCTIONS.—The Administrator shall seek to use the national laboratory to increase the utilization of the ISS by other national and commercial users and to maximize available NASA funding for research through partnerships, cost-sharing agreements, and arrangements with non-NASA entities.

(c) IMPLEMENTATION PLAN.—Within 1 year after the date of enactment of this Act, the Administrator shall provide an implementation plan to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science for establishment of the ISS national laboratory facility which, at a minimum, shall include—

- (1) proposed on-orbit laboratory functions;
- (2) proposed ground-based laboratory facilities;
- (3) detailed laboratory management structure, concept of operations, and operational feasibility;
- (4) detailed plans for integration and conduct of ground and space-based research operations;
- (5) description of funding and workforce resource requirements necessary to establish and operate the laboratory;
- (6) plans for accommodation of existing international partner research obligations and commitments; and

(7) detailed outline of actions and timeline necessary to implement and initiate operations of the laboratory.

(d) U.S. SEGMENT DEFINED.—In this section the term “United States Segment of the ISS” means those elements of the ISS manufactured—

- (1) by the United States; or
- (2) for the United States by other nations in exchange for funds or launch services.

**SEC. 204. COMMERCIAL SUPPORT OF INTERNATIONAL SPACE STATION OPERATIONS AND UTILIZATION.**

The Administrator shall purchase commercial services for support of the ISS for cargo and other [needs] needs, and for enhancement of the capabilities of the ISS, to the maximum extent possible, in accordance with Federal procurement law.

**SEC. 205. USE OF THE INTERNATIONAL SPACE STATION AND ANNUAL REPORT.**

(a) POLICY.—It is the policy of the United States—

- (1) to ensure diverse and growing utilization of benefits from the ISS; and
- (2) to increase commercial operations in low-Earth orbit and beyond that are supported by national and commercial space transportation capabilities.

(b) USE OF INTERNATIONAL SPACE STATION.—The Administrator shall conduct broadly focused scientific and exploration research and development activities using the ISS in a manner consistent with the provisions of this title, and advance the Nation’s exploration of the Moon and beyond, using the ISS as a test-bed and outpost for operations, engineering, and scientific research.

(c) REPORTS.—No later than March 31 of each year the Administrator shall submit a report to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science on the use of the ISS for these purposes, with implementation milestones and associated results.

**TITLE III—NATIONAL SPACE TRANSPORTATION POLICY**

**SEC. 301. UNITED STATES HUMAN-RATED LAUNCH CAPACITY ASSESSMENT.**

Notwithstanding any other provision of law, the Administrator shall, within 60 days after the date of enactment of this Act, provide to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science, a full description of the transportation requirements needed to support the space launch and transportation transition implementation plan required by section 136 of this Act, as well as for the ISS, including—

- (1) the manner in which the capabilities of any proposed human-rated crew and launch vehicles meet the requirements of the implementation plan under section 136 of this Act;
- (2) a retention plan of skilled personnel from the legacy Shuttle program which will sustain the level of safety for that program through the final flight and transition plan that will ensure that any NASA programs can utilize the human capital resources of the Shuttle program, to the maximum extent practicable;
- (3) the implications for and impact on the Nation’s aerospace industrial base;
- (4) the manner in which the proposed vehicles contribute to a national mixed fleet launch and flight capacity;
- (5) the nature and timing of the transition from the Space Shuttle to the workforce, the proposed vehicles, and any related infrastructure;
- (6) support for ISS crew transportation, ISS utilization, and lunar exploration architecture;
- (7) for any human rated vehicle, a crew escape system, as well as substantial protec-

tion against orbital debris strikes that offers a high level of safety;

- (8) development risk areas;
- (9) the schedule and cost;
- (10) the relationship between crew and cargo capabilities; and
- (11) the ability to reduce risk through the use of currently qualified hardware.

**SEC. 302. SPACE SHUTTLE TRANSITION.**

(a) IN GENERAL.—In order to ensure continuous human access to space, the Administrator may not retire the Space Shuttle orbiter until a replacement human-rated spacecraft system has demonstrated that it can take humans into Earth orbit and return them safely, except as may be provided by law enacted after the date of enactment of this Act. The Administrator shall conduct the transition from the Space Shuttle orbiter to a replacement capability in a manner that uses the personnel, capabilities, assets, and infrastructure of the current Space Shuttle program to the maximum extent feasible.

(b) REPORT.—After providing the information required by section 301 to the Committees, the Administrator shall transmit a report to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science containing a detailed and comprehensive Space Shuttle transition plan that includes any necessary recertification, including requirements, assumptions, and milestones, in order to utilize the Space Shuttle orbiter beyond calendar year 2010.

(c) CONTRACT TERMINATIONS; VENDOR REPLACEMENTS.—The Administrator may not terminate any contracts nor replace any vendors associated with the Space Shuttle until the Administrator transmits the report required by subsection (b) to the Committees.

**SEC. 303. COMMERCIAL LAUNCH VEHICLES.**

It is the sense of Congress that the Administrator should use current and emerging commercial launch vehicles to fulfill appropriate mission needs, including the support of low-Earth orbit and lunar exploration operations.

**SEC. 304. SECONDARY PAYLOAD CAPABILITY.**

In order to help develop a cadre of experienced engineers and to provide more routine and affordable access to space, the Administrator shall provide the capabilities to support secondary payloads on United States launch vehicles, including free flyers, for satellites or scientific payloads weighing less than 500 kilograms.

**TITLE IV—ENABLING COMMERCIAL ACTIVITY**

**SEC. 401. COMMERCIALIZATION PLAN.**

(a) IN GENERAL.—The Administrator, in consultation with the Associate Administrator for Space Transportation of the Federal Aviation Administration, the Director of the Office of Space Commercialization of the Department of Commerce, and any other relevant agencies, shall develop a commercialization plan to support the human missions to the Moon and Mars, to support Low-Earth Orbit activities and Earth science mission and applications, and to transfer science research and technology to society. The plan shall identify opportunities for the private sector to participate in the future missions and activities, including opportunities for partnership between NASA and the private sector in the development of technologies and [services.] services, shall emphasize the utilization by NASA of advancements made by the private sector in space launch and orbital hardware, and shall include opportunities for innovative collaborations between NASA and the private sector under existing authorities of NASA for reimbursable and non-reimbursable

agreements under the National Aeronautics and Space Act of 1958 (42 U.S.C. 2451 et seq.).

(b) REPORT.—Within 180 days after the date of enactment of this Act, the Administrator shall submit a copy of the plan to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science.

**SEC. 402. AUTHORITY FOR COMPETITIVE PRIZE PROGRAM TO ENCOURAGE DEVELOPMENT OF ADVANCED SPACE AND AERONAUTICAL TECHNOLOGIES.**

Title III of the National Aeronautics and Space Act of 1958 (42 U.S.C. 2451 et seq.) is amended by adding at the end the following:

**“SEC. 316. PROGRAM ON COMPETITIVE AWARD OF PRIZES TO ENCOURAGE DEVELOPMENT OF ADVANCED SPACE AND AERONAUTICAL TECHNOLOGIES.**

“(a) PROGRAM AUTHORIZED.—

“(1) IN GENERAL.—The Administrator may carry out a program to award prizes to stimulate innovation in basic and applied research, technology development, and prototype demonstration that have the potential for application to the performance of the space and aeronautical activities of the Administration.

“(2) USE OF PRIZE AUTHORITY.—In carrying out the program, the Administrator shall seek to develop and support technologies and areas identified in section 134 of this Act or other areas that the Administrator determines to be providing impetus to NASA’s overall exploration and science architecture and plans, such as private efforts to detect near Earth objects and, where practicable, utilize the prize winner’s technologies in fulfilling NASA’s missions. The Administrator shall widely advertise any competitions conducted under the program and must include advertising to research universities.

“(3) COORDINATION.—The program shall be implemented in compliance with section 138 of the National Aeronautics and Space Administration Authorization Act of 2005.

“(b) PROGRAM REQUIREMENTS.—

“(1) COMPETITIVE PROCESS.—Recipients of prizes under the program under this section shall be selected through one or more competitions conducted by the Administrator.

“(2) ADVERTISING.—The Administrator shall widely advertise any competitions conducted under the program.

“(c) REGISTRATION; ASSUMPTION OF RISK.—

“(1) REGISTRATION.—Each potential recipient of a prize in a competition under the program under this section shall register for the competition.

“(2) ASSUMPTION OF RISK.—In registering for a competition under paragraph (1), a potential recipient of a prize shall assume any and all risks, and waive claims against the United States Government and its related entities, for any injury, death, damage, or loss of property, revenue, or profits, whether direct, indirect, or consequential, arising from participation in the competition, whether such injury, death, damage, or loss arises through negligence or otherwise, except in the case of willful misconduct.

“(3) RELATED ENTITY DEFINED.—In this subsection, the term ‘related entity’ includes a contractor or subcontractor at any tier, a supplier, user, customer, cooperating party, grantee, investigator, or detailee.

“(d) LIMITATIONS.—

“(1) TOTAL AMOUNT.—The total amount of cash prizes available for award in competitions under the program under this section in any fiscal year may not exceed \$50,000,000.

“(2) APPROVAL REQUIRED FOR LARGE PRIZES.—No competition under the program may result in the award of more than \$1,000,000 in cash prizes without the approval of the Administrator or a designee of the Administrator.

“(e) RELATIONSHIP TO OTHER AUTHORITY.—The Administrator may utilize the authority in this section in conjunction with or in ad-

dition to the utilization of any other authority of the Administrator to acquire, support, or stimulate basic and applied research, technology development, or prototype demonstration projects.

“(f) AVAILABILITY OF FUNDS.—Funds appropriated for the program authorized by this section shall remain available until expended.”

**SEC. 403. COMMERCIAL GOODS AND SERVICES.**

It is the sense of the Congress that NASA should purchase commercially available space goods and services to the fullest extent feasible in support of the human missions beyond Earth and should encourage commercial use and development of space to the greatest extent practicable.

**TITLE V—MISCELLANEOUS ADMINISTRATIVE IMPROVEMENTS**

**SEC. 501. EXTENSION OF INDEMNIFICATION AUTHORITY.**

Section 309 of the National Aeronautics and Space Act of 1958 (42 U.S.C. 2458c) is amended by striking “December 31, 2002” and inserting “December 31, 2007”, and by striking “September 30, 2005” and inserting “December 31, 2009”.

**SEC. 502. INTELLECTUAL PROPERTY PROVISIONS.**

Section 305 of the National Aeronautics and Space Act of [1958, as amended (42 U.S.C. 2457 et seq.)] 1958 (42 U.S.C. 2457) is amended by inserting after subsection (f) the following:

“(g) ASSIGNMENT OF PATENT RIGHTS, ETC.—

“(1) IN GENERAL.—Under agreements entered into pursuant to paragraph (5) or (6) of section 203(c) of this Act (42 U.S.C. 2473(c)(5) or (6)), the Administrator may—

“(A) grant or agree to grant in advance to a participating party, patent licenses or assignments, or options thereto, in any invention made in whole or in part by an Administration employee under the agreement; or

“(B) subject to section 209 of title 35, grant a license to an invention which is Federally owned, for which a patent application was filed before the signing of the agreement, and directly within the scope of the work under the agreement, for reasonable compensation when appropriate.

“(2) EXCLUSIVITY.—The Administrator shall ensure, through such agreement, that the participating party has the option to choose an exclusive license for a pre-negotiated field of use for any such invention under the agreement or, if there is more than 1 participating party, that the participating parties are offered the option to hold licensing rights that collectively encompass the rights that would be held under such an exclusive license by one party.

“(3) CONDITIONS.—In consideration for the Government’s contribution under the agreement, grants under this subsection shall be subject to the following explicit conditions:

“(A) A nonexclusive, nontransferable, irrevocable, paid-up license from the participating party to the Administration to practice the invention or have the invention practiced throughout the world by or on behalf of the Government. In the exercise of such license, the Government shall not publicly disclose trade secrets or commercial or financial information that is privileged or confidential within the meaning of section 552 (b)(4) of title 5, United States Code, or which would be considered as such if it had been obtained from a non-Federal party.

“(B) If the Administration assigns title or grants an exclusive license to such an invention, the Government shall retain the right—

“(i) to require the participating party to grant to a responsible applicant a nonexclusive, partially exclusive, or exclusive license to use the invention in the applicant’s licensed field of use, on terms that are reasonable under the circumstances; or

“(ii) if the participating party fails to grant such a license, to grant the license itself.

“(C) The Government may exercise its right retained under subparagraph (B) only in exceptional circumstances and only if the Government determines that—

“(i) the action is necessary to meet health or safety needs that are not reasonably satisfied by the participating party;

“(ii) the action is necessary to meet requirements for public use specified by Federal regulations, and such requirements are not reasonably satisfied by the participating party; or

“(iii) the action is necessary to comply with an agreement containing provisions described in section 12(c)(4)(B) of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3710a(c)(4)(B)).

“(4) APPEAL AND REVIEW OF DETERMINATION.—A determination under paragraph (3)(C) is subject to administrative appeal and judicial review under section 203(b) of title 35, United States Code.”

**SEC. 503. RETROCESSION OF JURISDICTION.**

Title III of the National Aeronautics and Space Act of 1958, as amended by section 502 of this Act, is further amended by adding at the end the following:

**“SEC. 317. RETROCESSION OF JURISDICTION.**

“Notwithstanding any other provision of law, the Administrator may, whenever the Administrator considers it desirable, relinquish to a State all or part of the legislative jurisdiction of the United States over lands or interests under the Administrator’s control in that State. Relinquishment of legislative jurisdiction under this section may be accomplished (1) by filing with the Governor of the State concerned a notice of relinquishment to take effect upon acceptance thereof, or (2) as the laws of the State may otherwise provide.”

**SEC. 504. RECOVERY AND DISPOSITION AUTHORITY.**

Title III of the National Aeronautics and Space Act of 1958, as amended by section 603 of this Act, is further amended by adding at the end the following:

**“SEC. 318. RECOVERY AND DISPOSITION AUTHORITY.**

“(a) IN GENERAL.—

“(1) CONTROL OF REMAINS.—Subject to paragraph (2), when there is an accident or mishap resulting in the death of a crewmember of a NASA human space flight vehicle, the Administrator may take control over the remains of the crewmember and order autopsies and other scientific or medical tests.

“(2) TREATMENT.—Each crewmember shall provide the Administrator with his or her preferences regarding the treatment accorded to his or her remains and the Administrator shall, to the extent possible, respect those stated preferences.

“(b) DEFINITIONS.—In this section:

“(1) CREWMEMBER.—The term ‘crewmember’ means an astronaut or other person assigned to a NASA human space flight vehicle.

“(2) NASA HUMAN SPACE FLIGHT VEHICLE.—The term ‘NASA human space flight vehicle’ means a space vehicle, as defined in section 308(f)(1), that—

“(A) is intended to transport 1 or more persons;

“(B) designed to operate in outer space; and

“(C) is either owned by NASA, or owned by a NASA contractor or cooperating party and operated as part of a NASA mission or a joint mission with NASA.”

**SEC. 505. REQUIREMENT FOR INDEPENDENT COST ANALYSIS.**

Section 301 of the National Aeronautics and Space Administration Authorization Act of 2000 (42 U.S.C. 2459g) amended—

(1) by striking "Phase B" in subsection (a) and inserting "implementation";

【(2) by striking "\$150,000,000" in subsection (a) and inserting "\$250,000,000";】

【(3)】 (2) by striking "Chief Financial Officer" each place it appears in subsection (a) and inserting "Administrator";

【(4)】 (3) by inserting "and consider" in subsection (a) after "shall conduct"; and

【(5)】 (4) by striking subsection (b) and inserting the following:

"(b) IMPLEMENTATION DEFINED.—In this section, the term 'implementation' means all activity in the life cycle of a program or project after preliminary design, independent assessment of the preliminary design, and approval to proceed into implementation, including critical design, development, certification, launch, operations, disposal of assets, and, for technology programs, development, testing, analysis and communication of the results to the customers."

**SEC. 506. ELECTRONIC ACCESS TO BUSINESS OPPORTUNITIES.**

Title III of the National Aeronautics and Space Act of 1958, as amended by section 604 of this Act, is further amended by adding at the end the following:

**"SEC. 319. ELECTRONIC ACCESS TO BUSINESS OPPORTUNITIES.**

"(a) IN GENERAL.—The Administrator may implement a pilot program providing for reduction in the waiting period between publication of notice of a proposed contract action and release of the solicitation for procurements conducted by the National Aeronautics and Space Administration.

"(b) APPLICABILITY.—The program implemented under subsection (a) shall apply to non-commercial acquisitions—

"(1) with a total value in excess of \$100,000 but not more than \$5,000,000, including options;

"(2) that do not involve bundling of contract requirements as defined in section 3(o) of the Small Business Act (15 U.S.C. 632(o)); and

"(3) for which a notice is required by section 8(e) of the Small Business Act (15 U.S.C. 637(e)) and section 18(a) of the Office of Federal Procurement Policy Act (41 U.S.C. 416(a)).

"(c) NOTICE.—

"(1) NOTICE OF ACQUISITIONS SUBJECT TO THE program authorized by this section shall be made accessible through the single Government-wide point of entry designated in the Federal Acquisition Regulation, consistent with section 30(c)(4) of the Office of Federal Procurement Policy Act (41 U.S.C. 426(c)(4)).

"(2) Providing access to notice in accordance with paragraph (1) satisfies the publication requirements of section 8(e) of the Small Business Act (15 U.S.C. 637(e)) and section 18(a) of the Office of Federal Procurement Policy Act (41 U.S.C. 416(a)).

"(d) SOLICITATION.—Solicitations subject to the program authorized by this section shall be made accessible through the Government-wide point of entry, consistent with requirements set forth in the Federal Acquisition Regulation, except for adjustments to the wait periods as provided in subsection (e).

"(e) WAIT PERIOD.—

"(1) Whenever a notice required by section 8(e)(1)(A) of the Small Business Act (15 U.S.C. 637(e)(1)(A)) and section 18(a) of the Office of Federal Procurement Policy Act (41 U.S.C. 416(a)) is made accessible in accordance with subsection (c) of this section, the wait period set forth in section 8(e)(3)(A) of the Small Business Act (15 U.S.C. 637(e)(3)(A)) and section 18(a)(3)(A) of the Office of Federal Procurement Policy Act (41 U.S.C. 416(a)(3)(A)), shall be reduced by 5

days. If the solicitation applying to that notice is accessible electronically in accordance with subsection (d) simultaneously with issuance of the notice, the wait period set forth in section 8(e)(3)(A) of the Small Business Act (15 U.S.C. 637(e)(3)(A)) and section 18(a)(3)(A) of the Office of Federal Procurement Policy Act (41 U.S.C. 416(a)(3)(A)) shall not apply and the period specified in section 8(e)(3)(B) of the Small Business Act and section 18(a)(3)(B) of the Office of Federal Procurement Policy Act for submission of bids or proposals shall begin to run from the date the solicitation is electronically accessible.

"(2) When a notice and solicitation are made accessible simultaneously and the wait period is waived pursuant to paragraph (1), the deadline for the submission of bids or proposals shall be not less than 5 days greater than the minimum deadline set forth in section 8(e)(3)(B) of the Small Business Act (15 U.S.C. 637(e)(3)(B)) and section 18(a)(3)(B) of the Office of Federal Procurement Policy Act (41 U.S.C. 416(a)(3)(B)).

"(f) IMPLEMENTATION.—

"(1) Nothing in this section shall be construed as modifying regulatory requirements set forth in the Federal Acquisition Regulation, except with respect to—

"(A) the applicable wait period between publication of notice of a proposed contract action and release of the solicitation; and

"(B) the deadline for submission of bids or proposals for procurements conducted in accordance with the terms of this pilot program.

"(2) This section shall not apply to the extent the President determines it is inconsistent with any international agreement to which the United States is a party.

"(g) STUDY.—Within 18 months after the effective date of the program, NASA, in coordination with the Small Business Administration, the General Services Administration, and the Office of Management and Budget, shall evaluate the impact of the pilot program and submit to Congress a report that—

"(1) sets forth in detail the results of the test, including the impact on competition and small business participation; and

"(2) addresses whether the pilot program should be made permanent, continued as a test program, or allowed to expire.

"(h) REGULATIONS.—The Administrator shall publish proposed revisions to the NASA Federal Acquisition Regulation Supplement necessary to implement this section in the Federal Register not later than 120 days after the date of enactment of the National Aeronautics and Space Administration Authorization Act of 2005. The Administrator shall—

"(1) make the proposed regulations available for public comment for a period of not less than 60 days; and

"(2) publish final regulations in the Federal Register not later than 240 days after the date of enactment of that Act.

"(i) EFFECTIVE DATE.—

"(1) IN GENERAL.—The pilot program authorized by this section shall take effect on the date specified in the final regulations promulgated pursuant to subsection (h)(2).

"(2) LIMITATION.—The date so specified shall be no less than 30 days after the date on which the final regulation is published.

"(j) EXPIRATION OF AUTHORITY.—The authority to conduct the pilot program under subsection (a) and to award contracts under such program shall expire 2 years after the effective date established in the final regulations published in the Federal Register under subsection (h)(2)."

**SEC. 507. REPORTS ELIMINATION.**

(a) REPEALS.—The following provisions of law are repealed:

(1) Section 201 of the National Aeronautics and Space Administration Authorization Act of 2000 (42 U.S.C. 2451 note).

(2) Section 304(d) of the Federal Aviation Administration Research, Engineering, and Development Authorization Act of 1992 (49 U.S.C. 47508 note).

(3) Section 323 of the National Aeronautics and Space Administration Authorization Act of 2000.

(b) AMENDMENTS.—

(1) Section 315 of the National Aeronautics and Space Administration Act of 1958 (42 U.S.C. 2459j) is amended by striking subsection (a) and redesignating subsections (b) through (f) as subsections (a) through (e).

(2) Section 315(a) of the National Aeronautics and Space Administration Authorization Act, Fiscal Year 1993 (42 U.S.C. 2487a(c)) is amended by striking subsection (c) and redesignating subsection (d) as subsection (c).

**VETERANS' BENEFITS  
IMPROVEMENT ACT OF 2005**

Mr. GRASSLEY. Mr. President, I ask unanimous consent that the Senate proceed to the immediate consideration of Calendar 218, S. 1235.

The PRESIDING OFFICER. The clerk will report the bill by title.

The assistant legislative clerk read as follows:

A bill (S. 1235) to amend chapters 19 and 37 of title 38, United States Code, to extend the availability of \$400,000 in coverage under the servicemembers' life insurance and veterans' group life insurance programs, and for other purposes.

There being no objection, the Senate proceeded to consider the bill which had been reported from the Committee on Veterans' Affairs with an amendment.

(Strike the part shown in black brackets and insert the part shown in italic.)

S. 1235

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

**【SECTION 1. SHORT TITLE.**

【This Act may be cited as the "Veterans' Benefits Improvement Act of 2005".】

**【SEC. 2. GROUP LIFE INSURANCE.**

【(a) SERVICEMEMBERS' GROUP LIFE INSURANCE.—Section 1967 of title 38, United States Code, as in effect on October 1, 2005, is amended—

【(1) in subsection (a)—

【(A) in paragraph (2), by adding at the end the following:

【“(C) With respect to a policy of insurance covering an insured member, the Secretary of Defense shall make a good-faith effort to notify the spouse of a member if the member elects, at any time, to—

【“(i) reduce amounts of insurance coverage of an insured member; or

【“(ii) name a beneficiary other than the insured member's spouse.

【“(D) The failure of the Secretary of Defense to provide timely notification under subparagraph (C) shall not affect the validity of an election by the member.

【“(E) If a servicemember marries or remarries after making an election under subparagraph (C), the Secretary of Defense is not required to notify the spouse of such election. Elections made after marriage or remarriage are subject to the notice requirement under subparagraph (C).”]; and