bill, therefore, protects the jobs and facilities from cuts that are driven by what accountants want instead of what good scientists and engineers in our Nation need.

The bill stands in defense of aeronautics in a nod to the crucial role that it plays in so many facets of our everyday life. The effort to keep NASA healthy is by no means over, but this bill represents a long stride in the right direction. I urge my colleagues to join me in supporting it.

I want to also thank my colleagues from other committees such as the gentleman from Virginia (Mr. WOLF), the gentleman from Ohio (Mr. HOBSON), the gentleman from Ohio (Mr. LATOURETTE), the gentlewoman from Ohio (Mrs. JONES), and others who have been very supportive of our overall efforts.

Mr. MCGOVERN. Mr. Speaker, I yield myself the balance of my time.

Mr. Speaker, let me just close by saying that this is an important bill. It is important because our space program yields many benefits to the people of this country and the world.

A lot of times people do not quite understand all that we gain from the space program. It is not just about rockets flying up in the sky. It is about improving aeronautics research. It is about communications, improving our communications systems. It is about protecting our national security. It is about learning more about science and our environment. It is about finding better ways to protect our environment here on Earth. We learn of medical breakthroughs, medical research goes on during these space flights. So it benefits us in multiple ways, and I think it is important for people to appreciate that because oftentimes people will ask, why do we need to spend all this money on the space program? The reason why is there are tangible benefits all around us that have been directly derived from the space program.

Finally, Mr. Speaker, let me again say I am grateful that this is a bipartisan bill, and I am grateful that there is no controversy on the rule. This is a unique moment because we have not had such a bill like this in a long time. I ask Members to support the bill and support the rule.

Mr. Chairman, I yield back the balance of my time.

Mr. GINGREY. Mr. Speaker, I yield myself the balance of my time.

Mr. Speaker, I would like to close by saying that from the Apollo Moon landing to the first Space Shuttle to the International Space Station, NASA has been pushing the envelope of American science.

NASA is not just about inventing TANG. It is about American achievement, American pride. As we move to consideration of the underlying bill, I would ask my colleagues to remember their first thoughts of space as a child and the wonderment they felt.

As a child I remember looking at the stars and Moon at night and the sheer awe I experienced. NASA has taken that wonderment and awe and turned it into tangible results with legal real-life applications.

My good friend and colleague from Massachusetts (Mr. MCGOVERN) talked about breakthroughs in the field of medicine where, of course, I practiced as a physician for almost 30 years, and NASA has been a part of numerous breakthroughs that do help doctors treat their patients and save lives.

For instance, NASA has been directly or indirectly involved in digital imaging breast biopsy systems; breast cancer detection; laser angioplasty for blocked arteries; ultrasound skin damage assessment; human tissue stimulator which helps control chronic pain; cool suits that lower a patient's body temperature, producing a dramatic improvement of symptoms of multiple sclerosis, cerebral palsy, spina bifida and others; programmable pacemakers, eye screening to detect eye problems in very young children; automated urinalysis, medical gas analyzer systems used to monitor operating rooms for analysis of anesthetic gasses and measurement of oxygen, carbon dioxide and nitrogen concentrations to assure proper breathing environment for surgery patients; voice-controlled wheelchairs.

Just to list off a few more: Arteriosclerosis, hardening of the arteries, detection, ultrasound scanners, automatic insulin pump, portable x-ray devices, invisible braces, dental arch wire, palate surgery. I could go on and on.

Mr. Speaker, of course the field of medicine is only one area of course that NASA has helped all of us. In reality that are so many, many more that we do not have time to mention here today. Suffice it to say, we are making tremendous breakthroughs in the field of science because of what NASA has done and how we have funded this program.

I urge my colleagues to support this rule and the underlying bill.

Mr. Speaker, I yield back the balance of my time, and I move the previous question on the resolution.

The previous question was ordered.

The resolution was agreed to.

A motion to reconsider was laid on the table.

## GENERAL LEAVE

Mr. BOEHLERT. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days within which to revise and extend their remarks and include extraneous material on H.R. 3070.

The SPEAKER pro tempore (Mr. WALDEN of Oregon). Is there objection to the request of the gentleman from New York?

There was no objection.

## NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AUTHORIZATION ACT OF 2005

The SPEAKER pro tempore. Pursuant to House Resolution 370 and rule XVIII, the Chair declares the House in the Committee of the Whole House on the State of the Union for the consideration of the bill, H.R. 3070.

□ 0939

IN THE COMMITTEE OF THE WHOLE

Accordingly, the House resolved itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (H.R. 3070) to reauthorize the human space flight, aeronautics, and science programs of the National Aeronautics and Space Administration, and for other purposes.

The Chair designates the gentleman from Nebraska (Mr. TERRY) as chairman of the Committee of the Whole, and requests the gentleman from Oregon (Mr. WALDEN) to assume the chair temporarily.

The Clerk read the title of the bill.

The Acting CHAIRMAN. Pursuant to the rule, the bill is considered as having been read the first time.

Under the rule, the gentleman from New York (Mr. BOEHLERT) and the gentleman from Tennessee (Mr. GORDON) each will control 30 minutes.

The Chair recognizes the gentleman from New York (Mr. BOEHLERT).

Mr. BOEHLERT. Mr. Speaker, I yield myself such time as I may consume.

(Mr. BOEHLERT asked and was given permission to revise and extend his remarks.)

Mr. BOEHLERT. Mr. Speaker, I rise in strong support of H.R. 3070. Let me begin by thanking the gentleman from California (Mr. CALVERT) for the magnificent work he has performed as chairman of our Subcommittee on Space and Aeronautics and the lead author of this bill. Without the gentleman's steadfast determination, his insight and openness to compromise, we would not be here today.

I also want to thank my ranking member, the gentleman from Tennessee (Mr. GORDON), and our subcommittee ranking, the gentleman from Colorado (Mr. UDALL) for their leadership and willingness to compromise, and I want to thank all the members of the committee on both sides of the aisle who have contributed to this bill. It is truly a team effort and it shows what Congress can accomplish if we work together in an open-minded and cooperative manner.

Now, I have opened my statement by focusing on compromise but I do not want anyone to think that this bill represents some kind of random hodgepodge of competing views. H.R. 3070 is built on firm central principles that will give clear direction to NASA.

What are those principles? First, Congress endorses the President's Vision for Space Exploration. The United States will work to return to the Moon by 2020 and then will move on to other destinations. We will build a new Crew Exploration Vehicle that, among other tasks, will service the International Space Station. And the bill allows the Space Shuttle to be retired no later

than 2010, which we must do if the space program is to continue to make progress.

Obviously, we hope and pray for the safe return to flight of the Space Shuttle now scheduled for next Tuesday. The Space Shuttle is a magnificent machine and our current space program is dependent on it, but it is not our future in space.

The second principle on which this bill is founded, and it is every bit as essential as the first principle, is that NASA is a multi-mission agency with vital responsibilities in space science, earth science, and aeronautics. Those programs are NASA's most successful efforts. They bring enormous economic and intellectual benefits and they create every bit as much excitement among students and the general public as do the human space flight programs.

This bill recognize the centrality of those programs and authorizes them at a greater level than the administration has proposed. The bill specifically endorses the Hubble space telescope repair mission, assuming, and this is important, assuming the NASA Administrator determines that the mission would not impose any unreasonable risk. And the bill treats these programs as priorities to be evaluated on their own merits, not in terms of the human space flight program.

The third principle behind this bill is an understanding that NASA is in a period of transition and that Congress needs much more information before we can make detailed decisions on the future of the agency's programs. For that reason the bill asks NASA to develop a vision for aeronautics, a prioritized list of science missions and a plan for its workforce and facilities. We require more joint planning with the National Oceanic and Atmospheric Administration and the Department of Energy.

We explicitly list the numerous basic reports that Administrator Griffin has promised to provide by September, including, most significantly, reports on the number of remaining shuttle flights and their mission, the final configuration of the space station, the cost of the Crew Exploration Vehicle, the plan for what we will do on the Moon, and the plan for Project Prometheus, and that is not even the full list. We have a lot of oversight work ahead of us.

The fourth principle of the bill is that NASA has to try new ways of doing business if it is to remain innovative. This is a point that the former chairman, the gentleman from California (Mr. ROHRABACHER) always hammered home and it is an emphasis of the gentleman from California (Chairman CALVERT) as well.

NASA has to be open to entrepreneurs. NASA needs to see how much it can gain from an expanded prize program which is authorized in this bill.

□ 0945

NASA needs to work with international partners on the Vision for Space Exploration.

So this is a bill built on solid principles that will give NASA a solid foundation from which to launch its many missions. We can all be proud of our space program, which has been a symbol of and contributor to the Nation's technological prowess. This bipartisan bill will ensure that that remains the case, and I urge my colleagues to support it.

Mr. Chairman, I submit for the RECORD the Congressional Budget Office cost estimate on H.R. 3070.

JULY 20, 2005.

Hon. SHERWOOD L. BOEHLERT,
*Chairman, Committee on Science, U.S. House of Representatives, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 3070, the National Aeronautics and Space Administration Authorization Act of 2005.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Mike Waters.

Sincerely,

DOUGLAS HOLTZ-EAKIN.

Enclosure.

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

H.R. 3070—NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AUTHORIZATION ACT OF 2005—AS REPORTED BY THE HOUSE COMMITTEE ON SCIENCE ON JULY 18, 2005

Summary: H.R. 3070 would authorize appropriations for National Aeronautics and Space Administration (NASA) activities for fiscal years 2006 and 2007. Assuming appropriation of the authorized amounts, CBO estimates that implementing H.R. 3070 would cost $33 billion over the 2006–2010 period. The legislation would extend NASA's authority to indemnify or insure developers of experimental aerospace vehicles from damage claims by third parties. That provision could increase direct spending, but CBO estimates any such costs would be insignificant over the 2006–2015 period.

H.R. 3070 contains no intergovernmental or private-sector mandates as defined by the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

Estimated cost to the Federal Government: The estimated budgetary impact of H.R. 3070 is shown in the following table. The costs of this legislation fall within budget functions 250 (general science, space, and technology) and 400 (transportation).

| | By fiscal year, in millions of dollars | | | | | |
|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| SPENDING SUBJECT TO APPROPRIATION | | | | | | |
| NASA Spending Under Current Law: | | | | | | |
| Budget Authority[a] | 16,196 | 0 | 0 | 0 | 0 | 0 |
| Estimated Outlays | 14,783 | 5,948 | 770 | 282 | 77 | 0 |
| Proposed Changes: | | | | | | |
| Authorization Level | 0 | 16,471 | 16,962 | 0 | 0 | 0 |
| Estimated Outlays | 0 | 10,107 | 15,649 | 6,168 | 912 | 286 |
| NASA Spending Under H.R. 3070: | | | | | | |
| Authorization Level[a] | 16,196 | 16,471 | 16,962 | 0 | 0 | 0 |
| Estimated Outlays | 14,783 | 16,055 | 16,419 | 6,450 | 989 | 286 |

[a] The 2005 level is the amount appropriated for NASA for that year.

Basis of estimate: For this estimate, CBO assumes that the amounts authorized by the bill will be appropriated near the start of each fiscal year and that outlays will follow the historical spending patterns for NASA activities.

*Spending subject to appropriation*

H.R. 3070 would authorize the appropriation of $16.5 billion in 2006 and almost $17 billion in 2007 for NASA activities, including science, aeronautics and education, exploration systems, space operations, and funding for NASA's Inspector General.

*Direct spending*

H.R. 3070 also would extend through 2015 NASA's authority to indemnify or insure developers of experimental aerospace vehicles operated by civilian developers from damage claims by third parties. The Administrator would be able to indemnify or insure a single event for up to $1.5 billion (in 1989 dollars) beyond the developer's private insurance coverage, regardless of whether amounts are available from appropriations to pay such claims.

Extending NASA's authority to indemnify developers of experimental aerospace vehicles could result in direct spending, but we estimate that any such spending would not be significant. Assuming that the risk of claims would be similar to that of existing launch vehicles and that private insurance and appropriated funds would be tapped first to pay any claims, CBO expects that the likelihood of direct spending for indemnification payments would be small. If NASA were obligated to pay claims in excess of the amounts available from private insurance and appropriations, CBO assumes that any additional payments would be made from the Claims and Judgments Fund, which would increase direct spending.

Intergovernmental and private-sector impact: H.R. 3070 contains no intergovernmental or private-sector mandates as defined by UMRA and would impose no costs on state, local, or tribal governments.

Estimate prepared by: Federal Costs: Mike Waters. Impact on State, Local, and Tribal Governments: Lisa Ramirez-Branum. Impact on the Private Sector: Craig Cammarata.

Estimate approved by: Peter H. Fontaine, Deputy Assistant Director for Budget Analysis.

Mr. Chairman, I reserve the balance of my time.

Mr. GORDON. Mr. Chairman, I yield myself such time as I may consume, and I want to speak in support of H.R. 3070, the NASA Authorization Act of 2005. This bill, as reported out of the Committee on Science, is a good bill and one that I am pleased to support. It is the result of constructive negotiations between the majority and the minority that led to a bill that provides

important funding and policy guidelines to the National Aeronautics and Space Administration.

Mr. Chairman, during the hearings the Committee on Science held earlier this year on NASA and its human exploration initiative, I laid out a series of principles I believed needed to be included in this year's NASA authorization bill. Those principles include the following:

First, NASA should continue to be a multimission agency with robust R&D activities in science, aeronautics, and human space flights.

Second, I support human exploration beyond the low Earth orbit as an appropriate long-term goal for the space flight program. However, I believe there needs to be appropriate guidelines and flexible firewalls to ensure that it is properly paid for and not funded at the expense of other important NASA programs.

Third, there needs to be clear priorities within NASA's exploration program as well as within the agency's other core missions.

Fourth, the United States should honor its international obligations to the International Space Station program.

Fifth, there needs to be funding and policy direction to ensure that the International Space Station realizes its potential for fundamental and applied scientific and commercial research and is not just a platform for exploration initiative. The American taxpayer has invested too much money in the ISS for NASA to walk away from its longstanding commitment to research that can help benefit our citizens back here on Earth.

Finally, I believe that programmatic goals should be flexible, not rigid, guidelines. The flexibility is needed to allow for the changing situations at NASA, whether they be technical, operational, or budgetary in nature.

Mr. Chairman, it was my belief that the initial version of H.R. 3070 did not properly address those essential principles and, as a result of our concerns, Democrat members of the Subcommittee on Space and Aeronautics withheld their support for the bill when it was marked up at the subcommittee level.

Following the markup, Democrats worked to develop an alternative NASA authorization bill that would address our concerns and be credible, practical, and conferenceable. That alternative bill was introduced as H.R. 3250, with cosponsorship of all the Democratic members of the Committee on Science.

As a result, we were able to have a productive dialogue with the Committee on Science majority, which led to many of the provisions in H.R. 3250 being incorporated into the bill before us today. I am pleased at the outcome because I think it did result in a better bill, one that can provide useful congressional guidance to NASA for the coming 2 years.

Mr. Chairman, before I close, I would like to say a word about the manager's amendment that will be considered later today. I would like to focus on one particular provision, namely, the increase in the overall authorization level for NASA to allow the human exploration program to be fully funded.

That provision would result in a total of $1.26 billion being added to NASA's 2-year authorization, with all of it being allocated to the exploration initiative. It should be noted that this provision was specifically sought by the White House and that the White House indicated that failure to include it would result in an unfavorable statement of administrative policy.

I have decided to support the inclusion of the extra funding for two basic reasons: first, money is being added for the exploration in a way that is consistent with the principles I outlined earlier, that is, funds sought by the administration to increase the exploration account are coming from an augmentation to NASA's overall bottom line rather than from the cannibalizing of other important NASA activities in aeronautics and science.

Second, the White House action in seeking the additional funding for NASA provides compelling confirmation of a point I have been making all year, namely, it is not possible to provide the levels of funding needed to maintain healthy aeronautics and science programs at NASA and fully fund the Human Exploration Initiative under the budget plan put forth by the White House. The amendments sought by the White House make that point clear.

I want the exploration initiative to succeed. It is a worthwhile endeavor. But it is clear if additional resources are not forthcoming, NASA will have to adjust the scope of its exploration activities and its timetables to fit within the available funds. That is going to be challenging to accomplish, but I believe it is going to be necessary.

Finally, Mr. Chairman, I would like to take this opportunity to thank the gentleman from New York (Mr. BOEHLERT), the chairman of the committee; chairman of the subcommittee, the gentleman from California (Mr. CALVERT); the subcommittee's ranking member, the gentleman from Colorado (Mr. UDALL), for all their efforts in putting this bill together.

I would also like to give a special thanks to my staff, with Dick Obermann and Chuck Atkins, who spent late nights and many hours helping us work together, and the majority staff, who spent those same hours working together trying to get a good bill here, and they were successful. Mission accomplished.

Despite a somewhat rocky start, I believe the final product is a testament to their unwavering commitment to a strong and productive civil space program. I look forward to working with them to get this legislation enacted into law.

Mr. Chairman, I reserve the balance of my time.

Mr. BOEHLERT. Mr. Chairman, I yield myself such time as I may consume, before actually yielding to this next speaker, because I feel it is most important for Members to note that the gentleman from California (Mr. CALVERT) took over the subcommittee and totally immersed himself in the work of it. He is traveling around to all the NASA centers; he is interacting with the employees. And not just the top guys, but all the way down the line. This guy is proving by performance that he is outstanding in his leadership, and for that I thank him very much.

Mr. Chairman, I am pleased to yield 5 minutes to the gentleman from California (Mr. CALVERT), the distinguished chairman of the subcommittee.

Mr. CALVERT. Mr. Chairman, I thank the gentleman for yielding me this time.

The NASA Authorization Act of 2005 is the culmination of a lot of hard work on both sides of the aisle. We have developed a real bipartisan compromise. This is the first NASA authorization bill to come to the House in 5 years, and I want to commend Chairman BOEHLERT and the ranking members, the gentleman from Tennessee (Mr. GORDON) and the gentleman from Colorado (Mr. UDALL), for their cooperation in carefully crafting this bipartisan bill. But I most especially thank Chairman BOEHLERT for his unwavering support to get this bill out and to have it here today.

Mr. Chairman, we carefully crafted this bill. It took a lot of meetings on the principles and long hard hours of staff work on both sides to come up with this balanced agreement. This is the first authorization bill to endorse the President's Vision for Space Exploration that was announced on January 14, 2004. This vision includes the shuttle's return to flight, the completion of the International Space Station, the development of a new Crew Exploration Vehicle, the CEV, which will allow us to return to the Moon by 2020 and then on to Mars and beyond.

Our civil space program excites the world. In a Gallop poll released last week, more than three-fourths of the American people support a new plan for space exploration. The Committee on Science strongly supports NASA's new administrator, Dr. Michael Griffin, and wants to provide him the flexibility to transform the agency in this second Space Age. Our bill provides the rules and tools that will enable the agency to maintain its multimission agenda with a balanced approach for human and robotic space flight, science, and aeronautics.

The Committee on Science has not addressed the Iran nonproliferation issue in our bill today, but we will continue to work with the House Committee on International Relations to resolve this matter. We are committed to resolving this issue before our bill is signed into law.

Once we pass the manager's amendment, our bill will fully fund exploration, the Space Shuttle, the International Space Station, and will increase funding for priorities such as aeronautics and the Hubble Space Telescope Servicing Mission. We have asked for a number of strategic plans in the areas of aeronautics, science, human capital, and in facilities in order to better guide NASA in the future.

The bill also addresses the need for NASA to make better use of commercial products, including software, as well as to work with the entrepreneurs in accomplishing NASA's goals. In addition, the bill authorizes a prize program for NASA to stimulate innovation and basic research and technology, modeled on the X-Prize that was recently won by Burt Rutan and his SpaceShipOne team. We have also included a cost-containment regime that has been crafted for NASA in its major development programs.

By remaining silent on the shuttle program's length of operation, the bill provides the administrator the flexibility to move forward with his plans to retire the shuttle in 2010. Ending the shuttle program at this time will free up funding to accelerate the development of the CEV and will close the gap between the shuttle and the CEV. Hopefully, this flexibility will allow us to eliminate the gap entirely.

We have asked the Office of Science and Technology Policy to look at the R&D programs across the Federal Government and to document all programs that may be redundant in multiple agencies and also those that may have fallen through the cracks. In addition, we have asked NASA to consider various business models as it looks at the agency's restructuring. In total, the information will enable Congress to craft legislation which parallels the exciting changes and challenges that NASA will be facing in the coming years.

Mr. Chairman, we do not consider this legislation in a vacuum. Other nations are actively pursuing human space flight and exploration. China alone graduates almost as many engineers in a month as we do in a year. India graduates five times as many engineers per year as we do in the United States. NASA, with its excellent reputation in exploration, science and aeronautics, is the one agency which can focus and inspire America's youth to take up the challenging work of math and science careers.

Again, I want to thank our committee leadership, Chairman BOEHLERT, Ranking Member GORDON, subcommittee Ranking Member UDALL, and the hard-working staff for their efforts in putting this bill together. This bill is an important milestone for our committee, NASA, and America.

Mr. GORDON. Mr. Chairman, I yield such time as he may consume to the gentleman from Colorado (Mr. UDALL), the ranking member of the Subcommittee on Space and Aeronautics; and I thank him not only for his work on the bill in general but specifically in the aeronautics area, where he was a real leader.

Mr. UDALL of Colorado. Mr. Chairman, I want to thank the ranking member of the full committee, the gentleman from Tennessee (Mr. GORDON), for yielding me this time and also for his kind words.

I also want to acknowledge my good friend, the gentleman from New York (Mr. BOEHLERT), the chairman, and the chairman of the subcommittee, the gentleman from California (Mr. CALVERT), for the work we have all done together for this important legislation.

Mr. Chairman, I believe the legislation strikes a productive and essential balance between NASA's core missions and provides important policy direction as the agency embarks on the Mars-Moon initiative. Though I hate to use a cliche, I believe NASA is at a crossroads with its many missions: the Space Shuttle will hopefully be returning to flight next week, after being grounded for nearly 2½ years; a Hubble Servicing Mission is being considered and prepared for; and NASA is looking to accelerate the development of the Crew Exploration Vehicle; and research universities are anxiously awaiting news about the future of many of their projects with NASA.

As NASA moves forward with these initiatives, it is the opportune time for Congress to weigh in and provide NASA with long-term policy direction. The bill takes important steps to ensure that NASA continues its important investment in each of its core missions: science, aeronautics, and human space flight, including human exploration.

For example, it sets up a budgetary structure that separates NASA's human space flight and exploration accounts from its science, aeronautics, and education accounts.

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In addition to establishing flexible firewalls between NASA accounts, it provides guidance on how to deal with subsequent cuts to the overall budget. Namely, any cuts to the NASA budget would reduce the authorizations for each of its accounts proportionally, ensuring one account does not make the bulk of the cut.

These provisions provide sound government policy to ensure that the intentions of Congress are followed and that NASA maintains a balance within its missions.

The bill contains a number of provisions that seek to establish better oversight of NASA. One I would specifically like to mention requires NASA to provide a transition plan to Congress and identify funds to support any transfer of programs from NASA to NOAA. This should not be considered a congressional endorsement of the transfer of Earth science missions or Earth observing systems from NASA to NOAA. Instead, it intends to ensure that all transfers are done openly.

H.R. 3070 also takes commonsense steps to review the extension of missions which have already met their original goals. With minimal investment, many missions, such as Voyager, can continue to provide useful data even though they have exceeded their original operational timelines.

The bill requires NASA to review each of the missions and assess the costs and benefits to continue these programs, thus allowing a maximum benefit from all of our investments. I would like to turn to four areas of particular importance to me in the bill: Aeronautics, education, remote sensing and the wonderful Hubble telescope.

I am pleased to see the inclusion of positive policy and funding guidance to NASA on revitalizing the aeronautics program at NASA. Historically, aeronautics has provided America with jobs, economic security, a positive input to our balance of trade, and technological advances for both commercial aviation and defense. However, recently those aeronautics investments have been declining with projections of continuing decline in the NASA budget. This all comes at a time when the European Union has announced a goal to become a leader in aeronautics by 2020 and is increasing R&D funding in aeronautics to $2.5 billion. If we are to remain competitive, we must revitalize our R&D programs to match what the European Union and other nations in the world are doing.

The aeronautics piece also names three breakthrough R&D initiatives in subsonic, supersonic and rotorcraft, as well as rejects the proposed decline in the aeronautics budget by authorizing increased R&D funding for 2006 and 2007. Overall the bill ensures that we continue to be a global leader in aeronautics.

As this body knows, and as the gentleman from California (Mr. CALVERT) just shared with us, the United States is not graduating students in science, technology, engineering and math in the numbers required to sustain our current workforce. As we prepare for the return of flight with the Shuttle, young boys and girls are looking up to the astronaut corps and thinking one day they would like to become astronauts.

The bill provides specific emphasis on the education programs within NASA that excite and inspire our youth to continue to study in these fields. NASA's missions have the power to attract the American public, both young and old, and I believe we need to ensure that we utilize this excitement and encourage students to follow their childhood dreams of working with NASA.

I am pleased that the bill recognizes the importance of ensuring that our minority and economically disadvantaged young people have access to NASA's educational activities.

Turning to another topic, many of the American public only see NASA looking outward into space. However,

the agency's Earth science program provides valuable information about our own planet. NASA collects data about the Earth that has practical applications for States, tribal agencies, cities, and municipalities by providing geospatial data from satellites.

I am particularly interested because in my home State of Colorado, we have two of the leading companies involved in this important work, and many cities and counties in Colorado are working to address growth and sprawl. A bill that I have introduced which has been incorporated into this bill works to increase access to that data from both commercial and public sources.

Lastly, I am gratified that the bill calls for a human servicing mission to be scheduled once the Shuttle has returned to flight with appropriate safety precautions and provides authorization funding for the mission to service the Hubble telescope.

Hubble has truly become the people's telescope. Its data is accessible to scientists and nonscientists alike, and has allowed amateur astronomers of all ages to study our universe. I am pleased that NASA has already taken these steps towards a human servicing mission, and this bill affirms the congressional commitment to extending the life of Hubble.

In closing, I again want to acknowledge the great leadership of the gentleman from New York (Mr. BOEHLERT), the ranking member, the gentleman from Tennessee (Mr. GORDON), and the subcommittee chairman, the gentleman from California (Mr. CALVERT), for their work on the bill. This legislation has truly been the result of productive and positive dialogue and negotiations on both sides of the aisle. The staff has done a marvelous job in bringing us together as well. I believe this is the right policy for NASA, and I urge Members to support its passage.

Mr. BOEHLERT. Mr. Chairman, I yield myself such time as I may consume.

I want to thank the gentleman from Colorado (Mr. UDALL) for his remarks and the gentleman from Tennessee (Mr. GORDON) for his remarks.

A lot of people will look at this bill and wonder how we got here today, with seemingly widespread support, and I think that will be proven when the vote actually occurs, because we started out with clear differences. We are not talking about petty cash, we are talking about $30-plus billion over the next 2 years, but we got to this point because we reasoned together.

The professional staffs, and I emphasize the word, and Members worked in a bipartisan manner to fashion compromise, and this is the product that we have here today.

Mr. GORDON. Mr. Chairman, will the gentleman yield?

Mr. BOEHLERT. I yield to the gentleman from Tennessee.

Mr. GORDON. Mr. Chairman, I would like to engage in a colloquy with the gentleman from New York (Mr. BOEHLERT) concerning the issue of intellectual property rights with regard to prizes.

The bill is silent on this issue, and I would like to have a better outcome. This is an issue that needs to be resolved. Is it the chairman's intention to work toward a compromise as we go forward to conference?

Mr. BOEHLERT. Mr. Chairman, this is an important outstanding issue that does need to be resolved, and it is my intention to address it in the final version of the bill.

As Members know, H.R. 3070 as originally introduced mandates that prize contestants keep their intellectual property, although NASA may negotiate a license. The gentleman's substitute would require that prize contestants choose one of two alternatives: Either agree to give NASA a royalty-free license in order to accept the prize or waive the prize in exchange for the right to negotiate a royalty agreement with NASA.

We have offered meritorious but quite different approaches, and we will have to figure out how to handle it in the final bill. I look forward to working with the gentleman on that.

Mr. GORDON. Mr. Chairman, I appreciate the gentleman's willingness to work on this issue. We have been able to accommodate other issues, and I am sure we will this one. Just as steel is made by combining iron and other elements, by combining our two bills, we have a stronger bill, and I am sure we will work this out.

Mr. BOEHLERT. Mr. Chairman, I yield 2 minutes to the gentleman from Texas (Mr. HALL), a valued member of the committee. All members on the committee are valued, but this guy is valued for so many reasons. One is because he brings intellectual curiosity to the committee and he also brings it with a sense of wit that has us smiling even at some of the most tense times.

(Mr. HALL asked and was given permission to revise and extend his remarks.)

Mr. HALL. Mr. Chairman, I thank the gentleman for his kind words, and for the hard work he and the group have put in.

Mr. Chairman, as we wait to launch *Discovery* on another vital mission to the International Space Station, Congress is moving forward with legislation that celebrates and supports the Space Shuttle fleet, as well as putting our country on a new vision for space exploration.

When President Bush announced the new vision for space in January 2004, I was really excited to see that NASA had a new direction and a new focus for the future. Our ventures into space not only keep our country at the forefront of exploration and innovation, but they are also vital to our economy and very vital to our national security.

This new vision sets America on a course toward the Moon and toward Mars, and we should embrace this dream and work to make it a reality.

Today's bill before the House reauthorizes NASA and outlines the broad goals of the vision. While it embraces the exploration agenda of the space agency, it also bolsters other NASA programs in science and aeronautics that keeps America competitive globally.

I am grateful for a well-balanced bill, and I commend the gentleman from New York (Chairman BOEHLERT) and the gentleman from California (Chairman CALVERT), and the ranking members, the gentleman from Tennessee (Mr. GORDON) and the gentleman from Colorado (Mr. UDALL), and the staff, for crafting such a fine bill.

I am particularly pleased that the bill includes a provision that I worked with that directs Administrator Griffin, our fine new leader, to develop a Crew Exploration Vehicle with a robust crew escape system. As we implement this new space vision, I am going to continue to work and I know our leaders are going to continue to work to ensure that NASA fulfills this priority and minimizes the risk for our brave men and women who fly our space missions.

Our hopes and dreams ride with them, and we must do all we can, and we want to do all we can, and we are going to do all we can at whatever cost is necessary to ensure their safety.

The money that we put into NASA grows exponentially when we consider the scientific and technological spin-offs that space exploration provides. Experiments conducted on the Space Shuttle and International Space Station expand health research and move us toward cures for some of our most threatening diseases. Microgravity experiments in the 1990s led to advances in antibiotics to fight infections. These experiments also unlocked secrets to protein growth that produced medicines to treat patients who have suffered from strokes and to prepare them for open-heart surgery. Americans suffering from osteoporosis also benefit from bone-density experiments conducted on the International Space Station in microgravity environments. These tests accelerated the clinical trials of a drug that is expected to be on the market soon. From the development of MRI technology to microchips, the scientific partnerships between NASA and American universities and companies ensure our Nation's viability, increase our Nation's competitiveness, and help drive our economy.

I urge Members to pass this bill with the space shuttle and International Space Station. I thank everybody involved.

Mr. GORDON. Mr. Chairman, I yield 3 minutes to the gentleman from California (Mr. HONDA), a very active member of the committee.

Mr. HONDA. Mr. Chairman, I would like to share my thanks to the gentleman from New York (Mr. BOEHLERT) and the gentleman from California (Mr. CALVERT) and the ranking members, the gentleman from Tennessee (Mr. GORDON) and the gentleman from Colorado (Mr. UDALL), and their staff for all of the work they have done in producing a bill that we all can support.

I think Members sometimes wish they could say that they sit on a committee that is working well and being productive, and I am one such Member that can say that. Our chairman, the chairman of the subcommittee, and our ranking members have put together a very, very good bill that all of us can be very proud of. It focuses not only on NASA, but also on the productivity of this country.

I was concerned, however, along with many other members of the committee, that a singular focus on manned space exploration was going to drain resources from other parts of NASA's mission. Outstanding scientific work, such as that being done at NASA's Ames Research Center, in fields such as astrobiology, the life sciences, and nanotechnology, was losing out in a battle for resources with short-term acquisitions for exploration systems. In addition, air traffic management and other important aviation and aeronautic programs were being given the short shrift.

I am pleased that the bill enables us to move forward in exploration, science and aviation which are critical not only to manned space exploration but also to other NASA priorities. I hope that this balance will ensure that existing scientific and technical collaborations such as the University Affiliated Research Center collaboration between Ames and the University of California at Santa Cruz and Carnegie Mellon University's West Coast campus at Ames will continue as envisioned.

The bill also brings some rationality to the agency's workforce strategy. The process had appeared to be driven by a desire to shed civil servants solely to reduce the number of employees without much thought about the competencies that would be lost. The workforce strategy required by the bill will ensure the workforce has the appropriate skills to get the job done, and the bill allows the NASA Federal employees unions to participate in the process.

I am grateful that the chairman accepted into the manager's amendment my amendment which extended the bill's moratorium on reduction in force or involuntary separations to make it consistent with Acting Administrator Gregory's testimony to our committee.

I will end by noting that I am pleased that the bill seeks to honor our existing international partnerships on the International Space Station. I am particularly supportive of continuing our partnership in biological research on the International Space Station. I am glad the bill contains language supporting life science work on the space station.

To accomplish this work, the space station will need the centrifuge module, and I am glad the manager's amendment notes that nothing in this bill prevents the centrifuge from flying.

I thank the chairmen, the ranking members and all of the staff.

Mr. BOEHLERT. Mr. Chairman, I yield 3 minutes to the gentleman from California (Mr. ROHRABACHER), the former chairman of the subcommittee who helped immeasurably to get us where we are today.

Mr. ROHRABACHER. Mr. Chairman, I rise in support of this legislation, this authorization bill. I want to congratulate the gentleman from New York (Chairman BOEHLERT) and the ranking member, the gentleman from Tennessee (Mr. GORDON), for a job well done. I especially want to congratulate the gentleman from California (Mr. CALVERT), who has taken over the position of chairman of the subcommittee, and the ranking member, the gentleman from Colorado (Mr. UDALL). Good job. It is a good job for America, good job for NASA and a good job for the future.

In its short history, I believe NASA has done more than any other governmental agency to inspire generations of America's youth to pursue careers in science and engineering and thus propel the United States and the world into an era of technology that has elevated the human condition to what, only a few decades ago, was beyond imagination.

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Now at a time of intense global competition, NASA plays a vital role for our country both in inspiration and in technology development. America's success in the future depends on it.

In just a few short months, NASA administrator Michael Griffin has shown tremendous leadership in transforming an agency from a maintenance-oriented mindset to a mission-oriented mindset. Dr. Griffin is fully behind the President's Vision for Space Exploration, and I am confident that he is the right man at the helm to guide NASA to achieve the vision and to achieve goals that will uplift all of humankind and especially our own country.

Although these are exciting times for NASA, these are also challenging times. Hard decisions will have to be made as the administrator and all of us have to prioritize spending. The pressure of a constrained budget, expensive legacy missions, and future program developments of the Crew Exploration Vehicle and other exploration initiatives will require creative and bold spending cuts as well as an expansive partnership with the private sector. The administrator will need our support for making those tough decisions. NASA's success, America's success depends upon it.

NASA cannot be an agency that does everything for everyone, or it will not be able to accomplish anything for anybody. It needs to have a clear focus and vision, and it needs to execute that vision as well. Let us stand proudly behind NASA and its new administrator. Let us make sure that America leads the world into this new frontier and elevates all of humankind, as was our mission that was set in place by our Founding Fathers over 225 years.

I again congratulate those who have reached a bipartisan consensus in this bill today, and I am very proud that over my 18 years in Congress the Committee on Science has always demonstrated bipartisanship in this committee.

Mr. GORDON. Mr. Chairman, I yield 3 minutes to the gentleman from Rhode Island (Mr. KENNEDY).

Mr. KENNEDY of Rhode Island. Mr. Chairman, I want to thank the gentleman from Tennessee (Mr. GORDON), ranking member, and also the gentleman from New York (Chairman BOEHLERT) for their leadership in this matter.

I am excited once again to see our Nation inspired by space travel with the imminent launch of Discovery and the recent success of the Deep Impact mission. That was an extraordinary success.

Creating new and far-reaching goals, such as the Moon landing and the International Space Station, and subsequent conquering of these goals, is one of the great legacies of NASA.

However, I remain concerned that the narrow focus on the Mars mission that has been proposed by the President may limit other critical science initiatives that have played an integral role in the evolution of NASA. I think that a lot has been done in this bill to give the NASA administrator the flexibility to be able to accommodate the various changes that will be necessary as time moves on. But we all know the lesson that has been taught us in NASA's history so far, and that is that we have to have continuity if we are going to have success.

Every administration cannot come up and say, I want my new initiative, and then the next President comes in and says, I want my new initiative. And, in fact, there is no way that it is going to be successful unless we have a kind of well-thought-through decision where the country comes to a decision that this is going to be the goal.

And one of the things that I was concerned with is that the President seemed to put this new direction out like it was a press release and did not, in my view, seem to bring in all of the different points of view as to what were going to be the various options, the various courses of action for the future of NASA. Were we going to put the money into the life sciences, or were we simply going to put vehicles into space? What was going to be the measure of success in the future? These are the kinds of questions that I think need to continue to be asked. And my only concern is that we would embark upon a path that is so stringent it would leave us no flexibility to move in other directions.

I thank the ranking member for yielding me this time.

Mr. BOEHLERT. Mr. Chairman, I yield 2 minutes to the gentleman from Florida (Mr. FEENEY), a very valuable

member of the committee, relatively new member; but he brings to the committee the leadership qualities he demonstrated in the Florida legislature, and we frequently turn to him for counsel as we are dealing with these thorny matters.

(Mr. FEENEY asked and was given permission to revise and extend his remarks.)

Mr. FEENEY. Mr. Chairman, I am very grateful today for the leadership of the gentleman from New York (Chairman BOEHLERT) for the advancement of science in general and space science in particular. I am grateful that the gentleman from California (Mr. CALVERT), our chairman of the subcommittee, is about to pass the first authorization bill for NASA in some 5 years.

It is important now that the President has laid out a grand new vision for the future of space that Congress weigh in and participate, and this is our first opportunity on the House floor. I am grateful for both the gentleman from New York (Chairman BOEHLERT) and the gentleman from California (Mr. CALVERT), but I too want to suggest that it is important we have a bipartisan consensus so that the gentleman from Tennessee (Mr. GORDON), ranking member, and the gentleman from Colorado (Mr. UDALL) have played an important role in making sure that this is a United States space vision, not a Bush vision, not a Democratic or Republican vision; and this is a great opportunity to start in this new millennium.

And, of course, Mike Griffin has done a terrific job. He has got a background with more science credentials than some entire science departments at universities; and he has proven that he can take the bull by the horns, change the entire attitude and culture at NASA in a positive way. And that is going to be necessary because in the aftermath of the Columbia accident, many on Capitol Hill and many in the space community observed there was a drift in the American human space flight program. The President responded with the Vision for Space Exploration, and I am pleased that this bill embraces that vision and enjoys such broad bipartisan support.

America's Vision for Space Exploration provides a logical pace and sustainable transition from current vehicles and missions to an exploration and science agenda that breaks out of low Earth orbit and ensures America will be a spacefaring Nation for generations to come. America will return the Shuttle to flight, complete the International Space Station, and then extend our presence to the Moon, Mars, and beyond.

The Columbia Accident Investigation Board correctly observed that NASA ''is an organization straining to do too much with too little.'' As this bill moves forward in the legislative process, I hope that the lessons learned apply to Congress as well as to NASA, that we work to provide NASA with a focused mission, including, but not limited to, human space flight, but avoid overloading and micromanaging this great agency and its leadership.

Mr. GORDON. Mr. Chairman, I yield 2½ minutes to the gentlewoman from Texas (Ms. JACKSON-LEE), a valuable and active member of our committee.

Ms. JACKSON-LEE of Texas. Mr. Chairman, I thank the distinguished ranking member for his leadership. I thank the chairman for the tone of collegiality and purpose that he sets in this committee. I thank the gentleman from California (Mr. CALVERT), chairman of the subcommittee, for his renewed vigor on the idea of space, and certainly the leadership of the ranking member of the subcommittee for his forceful support of science and the environment.

Mr. Chairman, H.R. 3070 allows America to dream, but at the same time it allows America to generate results. I am gratified to rise in enthusiastic support of this legislation because it is a compilation of the views and interests of a wide range of those of us who are committed to a forceful and determined vision for science in America. It is not limited to the vision of space, although we in Houston understand that though we heard the words ''Houston, there is a problem,'' we now know ''Houston, we can dream.''

I live amongst astronauts and scientists who have for decades committed themselves to the science of space and the results that come about through that. They are brave men and women and families, who every day rally around their astronauts and allow them to do things that others of us simply dream to do.

This legislation captures that spirit, but it also is a commonsense initiative. For example, I am gratified, as the gentleman from Colorado (Mr. UDALL) expressed, through his leadership we have firewalls between science and human space flight so that we do have the dollars necessary to set aside for science, building up our very poor resources and engineers and physicists and chemists and biologists and at the same time we have this commitment to human space flight.

For example, we are able to give a long-term commitment to this project. Funding for fiscal year 2006 is about $6.5 billion, which is approximately $15 million more than the President's request. We go on to authorize it in the years to come to give us a sense of consistency, which I think is extremely important.

Might I for a moment say that I will be supporting the manager's amendment, and I appreciate what the gentleman from New York (Chairman BOEHLERT) had to do on the International Space Station; however, I want the space station to be able to house six persons and disappointed if Dr. Griffin will pull back on that, but I am gratified that this amendment, the manager's amendment, asks for proof as to why that cannot be done. That is a constructive way to look at that problem of downsizing the space station, which I think does not serve the program very well.

Let me also say that I am very pleased because of the work of the ranking member in the subcommittee, as we have worked together on this issue, concerning the constituents who live around airports; and I have in my congressional district the Houston International Airport, one of the number one airports, or one of the largest airports in the Nation, that we have in this document the ability to provide research on noise levels so that the noise levels of airports will not go beyond the contents of this particular area, so that from the research that will be in this legislation, the word shall go out to all those who live around airports, because we know that populations have grown around airports, that they might be free at least from the sound of those airplanes taking off.

Let me quickly conclude by saying that I am grateful that in this particular legislation I have amendments that provide for a report on how much money is spent on safety, how important that is as we launch our discovery. Also, a new safety commission, which I will talk about more extensively, dealing with the International Space Station that will in this legislation as well, and finally an amendment that gives us equal access to education programs that provide for those new engineers.

I think this is a good bill. I ask my colleagues to support it.

I rise as a vigorous supporter of this NASA Authorization bill, which I am proud to say, passed by a unanimous vote of the Science Committee. Let me thank Chairman BOEHLERT and Ranking Member GORDON for their outstanding work in making this consensus legislation that takes into consideration all points of view. NASA is at a very pivotal moment in its history and therefore it is the responsibility of this Congress to ensure that the future of NASA is one of continued progress. After the tragic Colombia Space Shuttle accident the Science Committee and this Congress were forced to reevaluate NASA's purpose. I have stated that safety must be the number one priority of NASA; however this should not deter NASA from pushing the boundaries of technology and discovery. I feel confident that this Authorization addresses both safety and discovery in a comprehensive manner.

I have been supportive of President Bush's Vision for Space Exploration because I firmly believe that the investment we make today in science and exploration will pay large dividends in the future. Similarly, I do not want to put a cap on the frontiers of our discovery, NASA should aim high and continue to push our nation at the forefront of space exploration. The President has stated that the fundamental goal of his directive for the Nation's space exploration program is ". . . to advance U.S. scientific, security, and economic interests through a robust space exploration program." I could not agree more with that statement and I believe this Authorization finally

gives more detail and purpose to the overall mission.

This bill authorizes funding for the National Aeronautics and Space Administration for fiscal year 2006 and fiscal year 2007. Funding for fiscal year 2006 is $16.471 billion, which is approximately $15 million more than the President's request and the same as House Appropriations. For fiscal year 2007, the bill authorizes $16.962 billion, which is the same as the President's request. This legislation also directs NASA to strive to return Americans to the Moon no later than 2020, launch a Crew Exploration Vehicle as close to 2010 as possible, and conduct research on the impacts of space on the human body to enable long-duration space exploration. These provisions give more shape to the President Vision for Space Exploration.

I am also very pleased that many of my amendments regarding safety and equal access to NASA education programs are written into this legislation. The first amendment I advocated for requires that NASA report how much money is used for safety activities on a yearly basis. This provision is designed to ensure the safety of NASA personnel through governmental transparency. It is important to examine whether proper resources are being allocated towards ensuring the safety of our NASA personnel. My amendment addresses how the money is allocated and how much is going specifically to address safety concerns.

In addition, the Science Committee included my second amendment which calls for an independent Presidentially-appointed commission to investigate safety aboard the ISS. This amendment was introduced in the form of H.R. 4522, the International Space Station Independent Safety Commission Act of 2004 which I introduced in the 108th Congress. This vital piece of legislation can potentially make all the difference for the international crew that is stationed aboard the ISS. It is one of our most important NASA programs and therefore we must ensure that all safety precautions have been met.

My final amendment that was included was meant to ensure Equal Access to NASA's Education Programs, in which the Administrator shall strive to ensure equal access for minority and economically disadvantaged students to NASA's Education programs. Space exploration is one the most amazing things we have been able to do, and such enthusiasm for exploratory ventures should continue for generations. By striving to include minority and disadvantaged students in NASA Education Programs, we are opening a truly remarkable career to those who might have missed it.

In sum, this legislation is both comprehensive and provides a strong blueprint for NASA to follow. We as a Congress must approve this legislation and once again recommit ourselves to space exploration. Truly, we as a nation have come a long way in the area of space exploration since President John F. Kennedy set the course for our Nation when he stated in a speech at Rice University in 1962:

We set sail on this new sea because there is new knowledge to be gained, and new rights to be won, and they must be won and used for the progress of all people. For space science, like nuclear science and technology, has no conscience of its own. Whether it will become a force for good or ill depends on man, and only if the United States occupies a position of preeminence can we help decide whether this new ocean will be a sea of peace or a new terrifying theater of war . . . The great British explorer George Mallory, who was to die on Mount Everest, was asked why did he want to climb it. He said because it is there. Well space is there, and we're going to climb it. And the moon and the planets are there. And new hopes for knowledge and peace are there. And therefore, as we set sail, we ask God's blessing, on the most hazardous, and dangerous, and greatest adventure, on which man has ever embarked.

I hope that we can look back to today as another step in this grand journey for exploration.

Mr. BOEHLERT. Mr. Chairman, I yield 3 minutes to the gentleman from Texas (Mr. SMITH), who has contributed so much for so long to the workings of the committee.

Mr. SMITH of Texas. Mr. Chairman, first of all, I would like to thank the gentleman from New York, the chairman of the Committee on Science, for yielding me this time. But I would also like to thank him for his initiative, for his leadership, and for his enthusiasm whenever it comes to space issues.

Mr. Chairman, I strongly support the NASA authorization bill, as do most Americans. A recent Gallup survey shows that almost 80 percent of the American people support space exploration.

As the country gathers to witness NASA's return to flight in the launch of the Space Shuttle *Discovery*, a new generation of young people will be inspired and older generations will honor the pioneers of the Apollo program.

The launch of the Space Shuttle *Discovery* is historic. It represents the first step towards our bold new vision for space exploration, a vision that takes us and our international partners back to the International Space Station, returns our Nation to the surface of the Moon, and directs our gaze towards Mars and beyond.

The exploration of space is about hope, imagination, and new technology. The Space Shuttle and research programs on the International Space Station will help us maintain our Nation's leadership role in a globally competitive economy.

Americans of all ages and backgrounds support our human spaceflight program because they have a clear understanding that it has changed our lives and is critical to our Nation's future. The launch of the *Discovery* and continued research on the International Space Station are part of the vision that will carry us to new frontiers in both space and technology.

Mr. Chairman, I hope our colleagues will support this legislation. Again, I want to thank the gentleman from New York for his leadership on this subject.

Mr. GORDON. Mr. Chairman, I yield 2 minutes to the gentleman from Illinois (Mr. COSTELLO), second ranking member on the Committee on Science.

Mr. COSTELLO. Mr. Chairman, I thank the ranking member for yielding me this time.

Mr. Chairman, I rise in strong support of H.R. 3070 and ask my colleagues to support this legislation.

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Mr. Chairman, I want to commend Chairman Boehlert and Ranking Member GORDON for producing a thoughtful and balanced authorization for NASA. In addition, I want to thank Subcommittee Chairman Calvert and also Ranking Subcommittee Member Udall.

NASA not only inspires the imagination of our people through its space exploration programs, it funds important research and development work in aeronautics, communications, and Earth sciences. The work of NASA maintains our preeminence in engineering and sciences. As we have heard so often over the years, NASA's work lays the foundation for the creation of new industries and new products that improve our daily lives.

Mr. Chairman, I intended to offer an amendment today to ensure that NASA would spend U.S. tax dollars here in the United States. We may not be able to stop major corporations here in the United States from outsourcing jobs, but we should be able to assure the American people that their tax money, whenever possible, stays here in the United States. When NASA spends tax money on contracts, goods and services, they should spend that money here in the United States whenever possible. And when NASA enters into contracts with contractors and subcontractors, they should be able to assure the Congress and the American people that those contractors that are hired will spend the money here in the United States for goods, services and for employees.

I have been assured by the committee leadership that that is their goal as well and I intend to work with them to accomplish this goal. Let me again commend the gentleman from Tennessee (Mr. GORDON) and the gentleman from New York (Mr. BOEHLERT) for their leadership, and I appreciate their cooperation in working with me on this matter. Therefore, I will not be offering the amendment today.

Mr. BOEHLERT. Just let me say to the gentleman from Illinois how much we value his many contributions to the committee and how much we look forward to a continuing productive working relationship.

Mr. Chairman, I yield such time as she may consume to the distinguished gentlewoman from Virginia (Mrs. JO ANN DAVIS).

Mrs. JO ANN DAVIS of Virginia. Mr. Chairman, I am deeply concerned that NASA's diminishing investment in aeronautics research and development will, in time, jeopardize the health of our aerospace industry as well as jeopardize the ability of the Pentagon to develop and field aircraft to defend our homeland and to carry troops and materiel to distant battles. NASA's investment in aeronautics research and development has shrunk by half since 1998 and the agency's proposed 5-year budget continues this downward trend. This has got to stop.

Over the decades, NASA researchers and engineers have made incalculable

contributions to aviation safety, efficiency, and noise and emission reductions. The current challenges facing the aerospace industry are no less daunting as we seek to transform the Nation's commercial aviation system, avoid aviation gridlock, and to continue to sustain America's preeminence in the world's aerospace marketplace.

Is it the gentleman from New York's intention to work for a stronger aeronautics research and development program?

Mr. BOEHLERT. Mr. Chairman, will the gentlewoman yield?

Mrs. JO ANN DAVIS of Virginia. I yield to the gentleman from New York.

Mr. BOEHLERT. Mr. Chairman, I could not agree with the gentlewoman from Virginia more. Aeronautics R&D must remain a vital component of NASA's mission, and the bill before us contains several provisions to reverse, as the gentlewoman said, the downward trend. First, we increase the authorization numbers for aeronautics above those requested by the administration. Incidentally, the gentlewoman should take some credit for that because I know how strongly she feels about it and her representations to the committee have not gone unnoticed.

Second, we direct NASA to develop a national aeronautics policy to help guide the agency's investment in the years ahead and to ensure that we have the proper people and facilities to support these efforts.

Finally, we direct NASA to better manage its wind tunnels and test facilities to ensure they are accessible and cost competitive. The Science Committee is committed to ensuring that aeronautics remains a key part of NASA's mission, and we look forward to working with the gentlewoman now and in the years to come to keep aeronautics front and center.

Mrs. JO ANN DAVIS of Virginia. I thank the gentleman for those assurances.

Mr. GORDON. Mr. Chairman, I yield 2 minutes to the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON).

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Chairman, let me hasten to thank the chairman of the committee and the ranking member for continuing to work together. In our usual fashion, we have an agreed bill.

I rise today to say that I fully support this bill and also to talk a little bit about the importance of NASA. For decades, NASA has attracted some of our best and brightest. The scientific and technological advances developed by the NASA program have truly been unmatched. From athletic shoes to breast cancer screening, NASA has touched almost every aspect of our lives. It is difficult to imagine what our lives would be like if not for the race to space.

NASA plays a key part in developing new technology and innovations. Underfunding or dismantling parts of NASA will negatively impact new research and technology. We must not fall behind other countries in this field, for this has been a major reason why we have been able to remain on the cutting edge with innovations. If the United States wants to continue to be on the technological forefront, NASA authorization must have a balanced approach that includes a strong dedication to science, aeronautics, and human exploration.

As we move toward a new era in science and technology, the most important aspect of being globally competitive is developing young scientists. We must have a firm commitment to educating our young people. Therefore, this Congress needs a comprehensive authorization that addresses the needs of developing and retaining our best scientists.

During a time of extreme divisiveness in this Congress, I am very proud to say that this bill is a bipartisan compromise. I hope my colleagues will join me in supporting this important piece of legislation.

Mr. GORDON. Mr. Chairman, I yield 1½ minutes to the gentleman from Massachusetts (Mr. FRANK).

Mr. FRANK of Massachusetts. Mr. Chairman, I salute the work of the committee. I know that the ranking member has done an excellent job, the chairman has been a diligent supporter of science and of scientific freedom and I admire that, but I do want to express my profound disagreement on policy terms with much of this bill.

Mr. Chairman, we have held up for years now a transportation bill, literally years, because we are quarreling over the amount of money. To commit billions of dollars to go to Mars when we are not providing the funds for Americans to go from one city to another is simply a waste of money. The Mars money is in a zero-sum situation, and to commit $3 billion now, I am told, and billions more in the future to go to Mars when day after day when appropriations bills come up we are told, no, we can't do enough for housing and we can't do enough for health care, and the appropriators say, look, we agree with you, it's a good program we're cutting, we wish we had more, but we then set aside billions for Mars.

Indeed, I think this is a fundamental debate that the country ought to have. I hope we will see a bill that will put this question about whether or not we commit these untold billions to go to Mars coming at the expense of other important programs before us.

On this whole question of our priorities, I was struck on July 7 by a very thoughtful editorial in USA Today, with which I agreed, which called for a diminution of human space and more of the sort of scientific space travel that has in fact been so beneficial. Under the General Leave, I am going to insert this as well as a rebuttal from Mr. Griffin, but I believe, particularly now, that we have to talk about the priorities. These are not separate entities. The money that goes, the tens of billions that are being committed to go to space travel, come at the expense of cleaning up Superfund sites, of building transportation, of providing health care and providing housing. The country may decide in context to go forward with that, but we need to have that decision put before us in an explicit way.

PUBLIC SUPPORT CAN'T FLY IF MANNED FLIGHTS REMAIN COSTLY AND AIMLESS

NASA's Deep Impact probe, which smashed into a comet Monday, was a big hit. In fact, it was a billion hits. That's how many computer ''hits'' NASA's website recorded in just 24 hours around the event.

This deep interest in Deep Impact is illustrative of a new reality that the human space program confronts as it gears up for next week's planned return of the shuttle. Robotic probes, once the domain of pointy-headed academics, have become NASA's new stars.

The probes have always generated more science. Now they generate more enthusiasm and romance. They are cheaper, faster and more exciting. They go farther and stay longer. They explore the frontiers of the cosmos.

What's more, they make better use of the pre-eminent technology of our times, the Internet. Thanks to signals sent back by the Mars rovers Spirit and Opportunity, the Red Planet has been ''visited'' a little more than 670 million times since January of last year.

When and if astronauts arrive there, the product they provide the Internet consumer will be, in many respects, inferior. No sooner would they arrive than attention would shift to getting them home safely. Rovers, on the other hand, plow on, month after month, sending data, living off nothing but sunshine.

For its 22-year history, USA TODAY has been an avid supporter of the human space program. We continue to believe it should be maintained for such a day when engineers find a way of bringing down its costs, making more ambitious projects possible.

But it's impossible to deny its current status as a cure for insomnia. The International Space Station, its main focus for the past decade, orbits in near oblivion. The shuttle doesn't really go anywhere. Sadly, it makes headlines only when its flights end in tragedy. The launch of Discovery, scheduled for Wednesday, night generate attention, but only because of its novelty as the first in more than two years. President Bush's plan for sending astronauts back to the moon and on to Mars, announced in 2003, was met by public apathy and unfavorable polls. Having pushed budget deficits to the moon, he also has no plan to pay for it.

Nevertheless, Bush and Congress seem oblivious. They are intent on a vision whose main impact is not to explore space but to channel money to aerospace companies and bureaucracies.

NASA is embarking on a costly shuttle replacement program, when far cheaper options exist. This project is being undertaken in the name of Bush's moon-Mars plan, an iffy prospect at best.

Even now, in the early stages, almost two thirds of NASA's budget, a little less than $10 billion annually, goes into human space programs—the shuttle fleet, the Space Station and Bush's plan.

NASA, to its credit, did come up with an elegant and cost-effective way of continuing the human space program without having it eat up most of its funding. The so-called Orbital Space Plane was to have been lifted into space atop existing commercial rockets. Alas, the idea was too good to survive. Lawmakers representing aerospace contractors

and major NASA employment centers made sure it died.

That has left the space program on a costly and uncertain trajectory. The shuttle replacement might get built by 2014, or even 2010, as some people hope. Or it might end up like the X–33 and the National Launch System, two programs abandoned when their costs became clear. The moon-Mars idea is even more problematic, requiring increasing allocations of money from future presidents.

What does appear certain is that lawmakers will pump vast amounts of money into a directionless human space program just as the public's attention has shifted away.

That's too bad. After watching Deep Impact and other robotic missions of late, it's clear that NASA's science division has become a veritable hit machine. It would be fascinating to see what it could do if set loose.

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WE, NOT ROBOTS, KNOW WHAT WE NEED FROM OUR TRAVELS, DISCOVERIES

(By Michael Griffin)

Within the lifetime of a baby born this Fourth of July—the day NASA's Deep Impact spacecraft collided with the comet Tempel 1 (late on July 3 in the western USA), and also the 1,705th consecutive day of human occupancy onboard the International Space Station—human pioneers will build outposts on the moon and Mars, extract minerals from large asteroids and construct huge space telescopes to map the details of continents on distant planets.

This is the space program NASA will pursue, based on the premise that a robust program of human and robotic space exploration will help fuel American creativity, innovation, technology development and leadership.

If history demonstrates anything, it is that those nations that make a commitment to exploration invariably benefit. Because of Britain's centuries-long primacy in the maritime arts, variations on British systems of culture and government thrive across the globe. I believe that America, through its mastery of human spaceflight, can shape the cultures and societies of the future, in space and here on Earth, as the great nations of the past have shaped the cultures of today. This future is being purchased for the 15 cents per day that the average taxpayer currently provides for space exploration.

Spaceflight is a continuation of the ancient human imperative to explore, discover and understand; to settle new territory and to develop new ways to live and work. We need both robotic pathfinders and people in our space journeys. As capable as our robots are, a human explorer can move over new territory far more quickly than a robot, assess and interpret the local environment, and make unexpected discoveries. In all other human activities, we complement, but do not supplant, ourselves with our machines. Why should it be any different in space?

As with all pioneering journeys into the unknown, spaceflight is risky. Next week, if all goes well, we will launch seven courageous astronauts on the Space Shuttle Discovery. A successful mission would give us greater confidence we can fly the shuttle safely through its planned 2010 retirement, then move on into a new era of exploration.

It is inconceivable to me that this nation will ever abandon space exploration, either human or robotic. If this is so, then the proper debate in a world of limited resources is over which goals to pursue. I have little doubt that the huge majority of Americans would prefer to invest their 15 cents per day in the exciting, outward-focused, destination-oriented program we are pursuing.

Mr. GORDON. Mr. Chairman, I yield 1 minute to the gentleman from Arkansas (Mr. SNYDER).

Mr. SNYDER. Mr. Chairman, I rise to commend my colleagues today. We are having a very sweet garden party here this morning. But I hope the gentleman from New York (Mr. BOEHLERT), the gentleman from California (Mr. CALVERT), the gentleman from Tennessee (Mr. GORDON) and others on their committee appreciate that we appreciate how much hard work went into this. We have not had an authorization bill. This is a 2-year authorization bill. There was a lot of hard work that went into this. We appreciate how much work you did for this bill.

This is a 2-year bill, covering fiscal years 2006 and 2007. I just want to make the point that as soon as this thing gets signed into law, and we hope that it does, you will be thinking again about what the next authorization is going to look like. That is the nature of this process. It builds in a further look.

Last night I wish we had had that same opportunity. As one who had voted for the PATRIOT Act 4 years ago and as one of the 171 who voted against it last night, I believe we would have had another 100 votes in support had we had the built-in sunset provisions that the gentleman from California (Mr. ROHRABACHER) and the gentleman from Virginia (Mr. BOUCHER) had presented to us in the motion to recommit.

Thank you for your work. I hope that we will do better when this PATRIOT bill comes back from conference.

Mr. GORDON. Mr. Chairman, I yield myself the balance of my time.

Let me just conclude by once again thanking all the parties in bringing this bill together. Also, let me say a word to my friend from Massachusetts who I think made a good point about priorities. In this bill, we tried to establish priorities. We have to make them in context to going to schools, picking up the garbage, all the things that have to be done in this country. But I hope that we have seen in the past that also benefits on Earth have come about from our efforts in space, whether it is inspiring our youth to be involved in math and science or the different products that have been involved.

But a good point has been made. We need to have this balance. We want to work with him and others to try to have that balance. If we can't explain to you and justify to you the benefits of going to Mars, going to the Moon and the other aeronautic aspects of NASA, then we haven't done our job.

Mr. Chairman, I yield back the balance of my time.

Mr. BOEHLERT. Mr. Chairman, I yield myself the balance of my time.

Let me conclude by thanking all the staff who worked so hard on this bill. That is a lot of credit to go around. I want to thank David Goldston and John Mimikakis and our new chief counsel Sara Gray. They all worked so very hard. And our Space Subcommittee staff led by Bill Adkins. That staff includes Ed Feddeman, Tom Hammond, Johannes Loschnigg, Ken Monroe and Roselee Roberts, Shep Ryan and Kristi Karls, all of whom have put countless hours into this bill. We sometimes need to stop and think about it all. We will work maybe into the evening, sometimes into the wee hours of the morning and then we shake hands and we say, Okay, staff, take care of it. And we go home and sometimes they do all-nighters. They are truly dedicated. They are also very professional, Democrat, Republican.

Thank you, thank you, thank you.

And I want to thank Tim Brown of the Legislative Counsel's office who was very helpful to us. I also want to thank Dick Obermann and Chuck Atkins. They worked with us to craft on a bipartisan basis a really outstanding bill. I also want to thank Dave Ramey and Deena Contreras from the personal staff of the gentleman from California (Mr. CALVERT). What a splendid job they did.

Let me end this by thanking the NASA team. He may be gone, but he is not forgotten, the former Administrator, Sean O'Keefe, who gave so much to the program. The new Administrator who has taken over the reins. He is providing clear direction.

So many members of the committee like to talk about the equal opportunity society we have. We have got equal opportunity in spades within the NASA program. It excites so many people. I take great pride in pointing out that when the Space Shuttle returns to flight, the commander of that ship will be a New Yorker, Eileen Collins. What a wonderful role model she is for all of us. The NASA team is just particularly good.

Chris Shank, another former member of our staff, and Tim Hughes, they did a lot to help. There are so many thank-you's to go around, but most of all we all thank this great Nation of ours for making possible this opportunity.

Mr. DREIER. Mr. Chairman, the bill we are considering today, H.R. 3070, the National Aeronautics and Space Administration Authorization Act, is an important piece of legislation, especially because it is the first NASA authorization reported out of the Science Committee in 5 years. I want to commend my good friends Mr. CALVERT, who Chairs the Space and Aeronautics Subcommittee, and Mr. BOEHLERT, who Chairs the Full Committee, for working to get this bill before us.

NASA has undertaken a variety of missions over the years, and in my opinion some of the most exciting have happened in the past 3 or 4 years. As my colleagues all know, I have the privilege of representing NASA's La Canada Flintridge-based Jet Propulsion Laboratory. I was at JPL for Deep Impact, the mission that occurred during the Fourth of July and in which NASA engineers successfully maneuvered a probe into a collision course with a comet.

Several of my colleagues, including Mr. CALVERT and Mr. SCHIFF, joined me at JPL to celebrate our Nation's independence and to

witness this incredible event. This was the first mission of its kind ever undertaken by NASA, and it will give us new insight into the origins of our solar system. Deep Impact is important not only for the science that it will yield, but also for the technical feat it represents. Temple I, the comet into which Deep Impact was steered, was traveling at 23,000 miles per hour some 268 million miles from Earth.

Deep Impact was not the first time I have been able to witness first hand the amazing things that NASA and its scientists are capable of accomplishing. I was also at JPL in January of 2004 when the Mars Rover Spirit landed. Both Rovers have far surpassed their expected operational life and are still making discoveries on the Martian surface. Deep Impact, the Cassini-Huygens Probe, the Mars Rovers, and many missions before them, are all examples of what's right with NASA.

NASA's missions are important not only for what we learn from them, but also for what they inspire us to do. NASA's missions and educational programs give our youth a sense of what is made possible by the sciences. Mathematics, engineering, and chemistry are all vitally important fields and are at the forefront of American innovation in the global economy. Without federal investment in NASA-sponsored programs, we would lose an important part of our technological edge in the world.

With the Space Shuttle's imminent return to flight, and so many other exciting missions on the horizon, there is no reason why we cannot accomplish the bold vision that President Bush has outlined for space exploration. As Dr. Charles Elachi has so aptly stated after being named Director of JPL, ''We will continue to do what has never been done before, and go where no one has gone before.'' I commend the Members of the Science Committee for recognizing the important role that NASA plays not only in our society, but in our economy as well, and urge my colleagues to support this legislation.

Mr. CARDIN. Mr. Chairman, since 1990 the Hubble Space Telescope, HST, has inspired scientists and students' alike. Unlike ground-based telescopes, HST is uninhibited by the Earth's atmosphere and therefore uniquely suited to capture images from distant space with high image clarity. HST allows us to look further back in time to the universe's earliest days.

By design, the Hubble Telescope requires regular servicing missions. These missions have occurred in 1993, 1997, 1999, and 2002, and the mission scheduled for 2004 was postponed after the *Columbia* Shuttle tragedy. Servicing missions allow us to repair broken parts of the telescope and to add additional components that improve viewing abilities by ten degrees or more.

Our next servicing mission would repair three faulty gyroscopes that failed in April 2003. Without this mission, HST will continue to operate in degraded mode. There is only a 50 percent chance that HST will be in operation past March 2007 without a servicing mission. Beyond 2007, the chance for continued operation of HST declines significantly.

On January 16, 2004 former NASA Administrator Sean O'Keefe informed workers at the Space Telescope Science Institute at Johns Hopkins University in Baltimore and NASA's Goddard Space Flight Center (which built Hubble and oversees STScI) that he was canceling SM–4, a Hubble Servicing mission, because the shuttle would not have the International Space Station as a safe haven. The implication was that shuttles that have the ISS as a safe-haven are safer, but this claim is not supported by NASA or STSI experts.

I am pleased to see Congress respond to this decision, and to authorize a Hubble servicing mission in the near future. Section 302 of base bill takes into consideration the recommendations of the National Academy of Sciences, and states that ''it is the sense of the Congress that the Hubble Space Telescope is an extraordinary instrument that has provided, and should continue to provide, answers to profound scientific questions . . . all appropriate efforts should be expended to complete the Space Shuttle servicing mission. Upon successful completion of the planned return-to-flight schedule of the Space Shuttle, the schedule for a Space Shuttle servicing mission to the Hubble Space Telescope shall be determined, unless such a mission would compromise astronaut safety.''

I urge my colleagues to support this important legislation.

Ms. ESHOO. Mr. Chairman, I rise today to pay tribute to the excellent work being carried out daily by the men and women at NASA Ames Research Center, located in my district in California's Silicon Valley.

For over half a century, NASA Ames has been one of the world's premiere research labs, leading the scientific community in a wide range of endeavors as it provides vital support to NASA's core missions.

Located in the Silicon Valley, our nation's cutting-edge technology center, NASA Ames has created partnerships with leading universities and high-technology industry leaders, and brought the scientific, academic, and business communities together in multifaceted efforts to expand knowledge and explore the unknown.

As NASA begins to rise to the challenges laid out in the new Vision for Space Exploration, NASA Ames will lead the way in mission-enabling research within its core competencies of astrobiology, advanced supercomputing, intelligent adaptive systems, entry systems, and air traffic management systems. All but entry systems are uniquely resident at NASA Ames, and they represent the critical skills, facilities and people that are needed to meet NASA's mission, including the Vision for Space Exploration.

Over the last decade, NASA Ames has taken full advantage of its strategic location to create new partnerships between the private sector and federal researchers. Following the disestablishment of the Naval Air Station Moffett Field in 1991, NASA took the initiative to develop on existing federal property the NASA Ames Research Park, which today is home to over 30 companies and over 13 universities conducting collaborative research with NASA.

Thanks to this forward-thinking model for federal land reuse, major new construction plans are in motion, including a plan by the University of California to build a 120,000 square-foot Bio-Info-Nano Convergence Research & Development Lab, a project which I have been proud to support.

Mr. Chairman, I, along with many of my colleagues, have expressed deep concerns in recent months over proposed cuts to science funding within NASA's budgets. While some shifting of funding priorities is to be expected as NASA prepares to implement its new Vision for Space Exploration, my core concern has been the danger we face in losing the long-term viability of NASA's Science mission, and the risk we face in harming our Nation's ability to lead the rest of the world in scientific and high-technology innovation.

I'm pleased that the bill before us addresses my concerns in three key areas. The increases in science funding will go a long way toward ensuring the long-term viability of NASA's in-house research and development capability. To protect NASA's top-notch talent and critical skills, the bill protects Civil Service workers by blocking any layoffs until February 2007. To ensure we honor our commitment to the International Space Station, the bill expresses the Sense of the Congress of the important need to complete the centrifuge aboard the station, an important component of the Space Station Biological Research Project, which has the potential to yield enormous benefits for human systems understanding, a critical need if we are going to safely send astronauts to Mars and back.

Mr. Chairman, this is a good bill for NASA and our nation's innovation capability as a whole. I consider NASA, and the irreplaceable staff, expertise, and abilities housed at NASA Ames Research Center a national treasure, and one that deserves our fullest support as it continues to shape the technologies and understanding that will guide our nation in the 21st Century.

Mr. LARSON of Connecticut. Mr. Chairman, I rise today in support of H.R. 3070, the National Aeronautics and Space Administration Authorization Act of 2005. In particular, I am happy to see that important provisions in regards to the future of our nation's aeronautics policy were included in the bill before us today.

Over 4 years ago, the European Union unveiled its plan for gaining dominance in the global aerospace market entitled, ''European Aeronautics: A Vision for 2020.'' This plan laid out an ambitious, $93 billion, 20-year agenda for winning global leadership in aeronautics and aviation. In stark contrast, however, NASA aeronautics funding has declined dramatically over the past decade, from a high of $1.54 billion in 1994 to $906 million just last year.

As a result, the United States has put its leadership in cutting edge aeronautics R&D at risk. We are losing high paying jobs and intellectual capital critical to our economy and national defense. The only way the U.S. can continue to create high wage, high value jobs and maintain aerospace leadership is to innovate faster than the rest of the world.

To do this, we need an exciting and robust NASA aeronautics program that not only revitalizes current research but also fosters future innovation. This requires a long term national investment in critical research of emerging technologies and the training of highly skilled Americans to lead our aeronautics industry into the future.

H.R. 3070 is a step in the right direction. While it does not authorize the levels of funding necessary to fully robust NASA's aeronautics programs, it does authorize an additional $60 million more than the President's FY06 budget request. In addition, the bill requires the President to answer Europe's aeronautics plan by developing a national aeronautics policy to guide NASA's aeronautics

programs through 2020. This is bill is a good start, but there is still much more that Congress can—and must—do to ensure that America does not lose its edge in aeronautics research.

I applaud the work of Mr. GORDON, the ranking member of the Science Committee and Mr. UDALL, the ranking member on the Space and Aeronautics Subcommittee, for their hard work in ensuring that aeronautics R&D was not forgotten in this bill. Their efforts were integral in ensuring that many of the provisions of H.R. 2358, the Aeronautics Research and Development Revitalization Act, were included in the bill before us today.

Again, I thank the members of the Science Committee for their dedication to the American aeronautics industry, and look forward to continuing to work with them to ensure that NASA has the direction and resources necessary to once again make America the unsurpassed aeronautics leader in the world.

Mr. GENE GREEN of Texas. Mr. Chairman, I rise today in strong support of this bill to authorize funding for NASA programs over the next two fiscal years.

Over the years, NASA as a government agency has stream lined and reduced their cost and has done amazing research and developed innovative technology. They are a model agency which should be applauded as a role model for other government agencies to follow.

I am pleased this bill will authorize $150 million for maintenance and repair of the Hubble Space Telescope by a manned mission. As this bill states, the Hubble telescope is an ''extraordinary instrument'' that has given us immense understanding and knowledge about the far reaching edges of the universe since its launch in 1990.

I am also pleased this bill does not set a specific date for the retirement of the space shuttle. The shuttle has performed 113 flights since 1981, and is crucial to our vision of space exploration. While I agree we need to move beyond the shuttle at some point, we should not retire our only means for transporting humans into space without having a replacement vehicle ready to continue that mission.

One of the most important benefits NASA provides does not occur on the launch pad, in the laboratories, or in space however, but in the classrooms of schools across this country. NASA is to science and math, what the National Football League and the National Basketball Association are to amateur sports; our space program inspires high school, middle school, and even elementary school students to take an interest in math and science.

Since 1997, I have had the privilege of having NASA astronauts visit middle schools in the congressional district I represent. The interaction of these middle school students with the astronauts and the questions they ask about space and NASA, demonstrate the benefits of our space program and the impact it has in getting students excited about these subjects.

Mr. Chairman, as a member of the Houston delegation, home to the Johnson Space Center, I have been an avid supporter of NASA. As we return to flight, possibly as early as next Tuesday, this bill authorizes funding necessary to fulfill our vision for the future of the space program. I strongly support this bill and urge my colleagues to do the same.

Mr. REYES. Mr. Chairman, I rise in strong support of H.R. 3070, the National Aeronautics and Space Administration Authorization Act of 2005.

Technology and innovation are a vital force behind our Nation's prosperity, and NASA continues to advance our scientific, security, and economic interests through its cutting-edge work.

NASA conducts flight training for the Space Shuttle program in my congressional district of El Paso, Texas. My constituents have also benefited from NASA programs that provide local schools with funding to improve student learning in science and mathematics. In addition, small businesses in El Paso have received contracts with NASA, the University of Texas at El Paso has been awarded education grants, and local students have received scholarships to study science and engineering.

H.R. 3070 will help NASA advance its work in my district and across America.

Mr. Chairman, I urge all of my colleagues to give this important, bi-partisan bill their support.

Mr. CRAMER. Mr. Chairman, I rise to congratulate the Chairmen and Ranking Members of the Space and Aeronautics Subcommittee and the Full Science Committee for bringing this bipartisan bill to the House Floor.

I am a Member of the House Appropriations Committee, and I have served on NASA's funding subcommittee for some years now.

Since the President first challenged NASA to permanently extend mankind's presence beyond Earth orbit, we have looked to the Science Committee to bring a bill to the Floor that allows the full House to weigh in on this new mission.

Today we are considering a NASA authorization bill that thoughtfully addresses the future of our Nation's space program. This may well be one of the most critical NASA authorization bills in decades.

NASA has been given a bold challenge of exploration that calls for returning the Shuttle fleet to flight, completing the International Space Station, returning to the Moon in little more than a decade, and future missions to Mars and beyond.

This bill endorses NASA's Vision for Space Exploration, and includes full funding for the exploration activities. It recognizes the importance of returning the Space Shuttle fleet to flight as the first step in the exploration vision. It highlights the importance of scientific research onboard the International Space Station. And this legislation preserves and strengthens Space and Earth science.

The bill also helps ensure that the agency will have strong management plans for its workforce and for its facilities. And I hope that we can continue to strengthen this bill in conference.

In particular, it is important that Congress addresses the consequences of the Iran Nonproliferation Act on the crew escape needs for the Space Station.

We should ensure a balanced approach to our Nation's nonproliferation policy—one that maintains a strong nonproliferation stance while preserving peaceful cooperation with Russia in the area of human space exploration.

I also hope that we can re-look at some of the many reporting requirements that are contained in this legislation during conference.

Mr. Chairman, I have the privilege to represent the employees and contractors of NASA's Marshall Space Flight Center in my congressional district.

During the *Apollo* program, my constituents were challenged to help lead mankind's first steps of exploration off of our planet Earth. They responded by developing the *Saturn 1, Saturn IB* and the *Saturn 5* rockets, and the F1 and the J2 rocket engines. They developed the Lunar Roving Vehicle that transported astronauts on the lunar surface. They developed Skylab, America's first crewed orbiting space station.

And today, they are ready to get on with the hard work of finishing the job—permanently extending mankind's presence beyond Earth orbit.

Mr. Chairman, as our Nation prepares for the historic launch of the Shuttle *Discovery* and the return of America's ability to launch humans into space, I will support this balanced legislation that we are considering today.

Mr. HOYER. Mr. Chairman, I congratulate the Science Committee and Chairman BOEHLERT and Ranking Member GORDON on bringing to the floor a fair, balanced NASA authorization bill. The unanimous vote to report the bill out of the committee is testament to the positive outcome that results when Members work together in a bipartisan fashion to make good public policy.

And this is a good bill for NASA, for Goddard Space Flight Center in my district, and the American people. The bill restores our investment in a more vigorous, forward-looking space agency and provides multi-year funding and detailed policy guidance to NASA at a critical time in the history of space exploration.

NASA has a unique set of challenges as we seek to return to flight and expand our reach in space. What we do now will determine how well we meet those challenges in the future.

That's why I was pleased to see that the bill included $150 million for a new servicing mission to the Hubble Space Telescope and a directive to NASA to devise a plan to send a crew to repair the Hubble Telescope after completion of the currently planned space shuttle mission.

This funding is a clear recognition by the Committee of the unique role that the Hubble Space Telescope plays in broadening our scientific understanding of the observable universe. I applaud the call for a manned servicing mission to repair Hubble and extend its life so that future generations will be able to further understand and explore distant galaxies and the mysteries of space. I look forward to working with my colleagues to make sure that a new servicing mission is adequately funded and supported.

The bill also renews focus on the significance and future of science research. While Mars/Moon exploration also continues to be a major focus of the work at NASA, we must not lose sight of the needs and promise of a core area of future inquiry such as science. This bill finds the right balance. Not only does the bill provide increase funding for NASA science programs, but it also directs NASA to develop a comprehensive science policy through 2016, complete with proposed missions, priorities, budget, and staff to bring much-needed focus back onto science research. This will go a long way in bringing new focus to science in the 21st Century.

Finally, the bill provides funding and brings attention to such important areas as aeronautics, education, and space operations and exploration activities that will help our nation further understand and explore distant galaxies and develop breakthrough technologies important to our health and security.

This is a big step forward in our efforts to maintain innovation and ingenuity at NASA and in space and technology industries in the years ahead. Working together, Congress will pass a bill that would make NASA stronger and better prepared to face the future challenges that it may confront.

I urge a "yes" vote on this bill.

Mr. BOEHLERT. Mr. Chairman, I yield back the balance of my time.

The CHAIRMAN. All time for general debate has expired.

Pursuant to the rule, the committee amendment in the nature of a substitute printed in the bill shall be considered as an original bill for the purpose of amendment under the 5-minute rule and shall be considered read.

The text of the committee amendment in the nature of a substitute is as follows:

*H.R. 3070*

*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 the ''National Aeronautics and Space Administration Authorization Act of 2005''.*

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



***SEC. 2. FINDINGS.***

*The Congress finds the following:*

*(1) On January 14, 2004, the President unveiled the Vision for Space Exploration to guide United States policy on human space exploration.*

*(2) The President's vision of returning humans to the Moon and working toward a sustainable human presence there and then venturing further into the solar system provides a sustainable rationale for the United States human space flight program.*

*(3) As we enter the Second Space Age, the National Aeronautics and Space Administration should continue to support robust programs in space science, aeronautics, and earth science as it moves forward with plans to send Americans to the Moon, Mars, and worlds beyond.*

*(4) The National Aeronautics and Space Administration's programs can advance the frontiers of science, expanding understanding of our planet and of the universe, and contribute to American prosperity.*

*(5) The United States should honor its international commitments to the International Space Station program.*

*(6) 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 interests. Past Federal investments in aeronautics research and development have benefited the economy and national security of the United States and improved the quality of life of its citizens.*

*(7) Long-term progress in aeronautics and space requires continued Federal investment in fundamental research, test facilities, and maintenance of a skilled civil service workforce at NASA's Centers.*

*(8) An important part of NASA's mission is education and outreach.*

***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.*

***TITLE I—GENERAL PRINCIPLES AND REPORTS***

***SEC. 101. RESPONSIBILITIES, POLICIES, AND PLANS.***

*(a) GENERAL RESPONSIBILITIES.—*

*(1) PROGRAMS.—The Administrator shall ensure that NASA carries out a balanced set of programs that shall include, at a minimum, programs in—*

*(A) human space flight, in accordance with subsection (b);*

*(B) aeronautics research and development; and*

*(C) scientific research, which shall include, at a minimum—*

*(i) robotic missions to study planets, and to deepen understanding of astronomy, astrophysics, and other areas of science that can be productively studied from space;*

*(ii) earth science research and research on the Sun-Earth connection through the development and operation of research satellites and other means;*

*(iii) support of university research in space science and earth science; and*

*(iv) research on microgravity, including research that is not directly related to human exploration.*

*(2) CONSULTATION AND COORDINATION.—In carrying out the programs of NASA, the Administrator shall—*

*(A) consult and coordinate to the extent appropriate with other relevant Federal agencies, including through the National Science and Technology Council;*

*(B) work closely with the private sector, including by—*

*(i) encouraging the work of entrepreneurs who are seeking to develop new means to launch satellites, crew, or cargo;*

*(ii) contracting with the private sector for crew and cargo services to the extent practicable; and*

*(iii) using commercially available products (including software) and services to the extent practicable to support all NASA activities; and*

*(C) involve other nations to the extent appropriate.*

*(b) VISION FOR SPACE EXPLORATION.—The Administrator shall manage human space flight programs to strive to achieve the following goals:*

*(1) Returning Americans to the Moon no later than 2020.*

*(2) Launching the Crew Exploration Vehicle as close to 2010 as possible.*

*(3) Increasing knowledge of the impacts of long duration stays in space on the human body using the most appropriate facilities available.*

*(4) Enabling humans to land on and return from Mars and other destinations on a timetable that is technically and fiscally possible.*

*(c) AERONAUTICS.—*

*(1) IN GENERAL.—The President of the United States, through the Administrator, and in consultation with other Federal agencies, shall develop a national aeronautics policy to guide the aeronautics programs of NASA through 2020.*

*(2) CONTENT.—At a minimum, the national aeronautics policy shall describe for NASA—*

*(A) the priority areas of research for aeronautics through fiscal year 2011;*

*(B) the basis on which and the process by which priorities for ensuing fiscal years will be selected;*

*(C) the facilities and personnel needed to carry out the aeronautics program through fiscal year 2011; and*

*(D) the budget assumptions on which the national aeronautics policy is based, which for fiscal years 2006 and 2007 shall be the authorized level for aeronautics provided in title II of this Act.*

*(3) CONSIDERATIONS.—In developing the national aeronautics policy, the President shall consider the following issues, which shall be discussed in the transmittal under paragraph (5):*

*(A) The extent to which NASA should focus on long-term, high-risk research or more incremental research, and the expected impact on the United States aircraft and airline industries of that decision.*

*(B) The extent to which NASA should address military and commercial needs.*

*(C) How NASA will coordinate its aeronautics program with other Federal agencies.*

*(D) The extent to which NASA will fund university research, and the expected impact of that funding on the supply of United States workers for the aeronautics industry.*

*(E) The extent to which the priority areas of research listed pursuant to paragraph (2)(A) should include the activities authorized by title IV of this Act, the discussion of which shall include a priority ranking of all of the activities authorized in title IV and an explanation for that ranking.*

*(4) CONSULTATION.—In the development of the national aeronautics policy, the Administrator shall consult widely with academic and industry experts and with other Federal agencies. The Administrator may enter into an arrangement with the National Academy of Sciences to help develop the national aeronautics policy.*

*(5) SCHEDULE.—The Administrator shall transmit the national aeronautics policy to the Committee on Appropriations and the Committee on Science of the House of Representatives, and to the Committee on Appropriations and the Committee on Commerce, Science, and Transportation of the Senate, not later than the date on which the President submits the proposed budget for the Federal Government for fiscal year 2007 to the Congress. The Administrator shall make available to those committees any study done by a nongovernmental entity that was used in the development of the national aeronautics policy.*

*(d) SCIENCE.—*

*(1) IN GENERAL.—The Administrator shall develop a policy to guide the science programs of NASA through 2016.*

*(2) CONTENT.—At a minimum, the policy shall describe—*

*(A) the missions NASA will initiate, design, develop, launch, or operate in space science and earth science through fiscal year 2016, including launch dates;*

*(B) a priority ranking of all of the missions listed under subparagraph (A), and the rationale for the ranking;*

*(C) the budget assumptions on which the policy is based, which for fiscal years 2006 and 2007 shall be consistent with the authorizations provided in title II of this Act; and*

*(D) the facilities and personnel needed to carry out the policy through fiscal year 2016.*

*(3) CONSIDERATIONS.—In developing the science policy under this subsection, the Administrator shall consider the following issues, which shall be discussed in the transmittal under paragraph (6):*

*(A) What the most important scientific questions in space science and earth science are.*

*(B) The relationship between NASA's space and earth science activities and those of other Federal agencies.*

*(4) CONSULTATION.—In developing the policy under this subsection, the Administrator shall draw on decadal surveys and other reports in planetary science, astronomy, solar and space physics, earth science, and any other relevant fields developed by the National Academy of Sciences. The Administrator shall also consult widely with academic and industry experts and with other Federal agencies.*

*(5) HUBBLE SPACE TELESCOPE.—The policy developed under this subsection shall address plans for a human mission to repair the Hubble Space Telescope consistent with section 302 of this Act.*

*(6) SCHEDULE.—The Administrator shall transmit the policy developed under this subsection to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than the date on which the President submits the proposed budget for the Federal Government for fiscal year 2007 to the Congress. The Administrator shall make available to those committees any study done by a nongovernmental entity that was used in the development of the policy.*

*(e) FACILITIES.—*

*(1) IN GENERAL.—The Administrator shall develop a plan for managing NASA's facilities through fiscal year 2015. The plan shall be consistent with the policies and plans developed pursuant to this section.*

*(2) CONTENT.—At a minimum, the plan shall describe—*

*(A) any new facilities NASA intends to acquire, whether through construction, purchase, or lease, and the expected dates for doing so;*

*(B) any facilities NASA intends to significantly modify, and the expected dates for doing so;*

*(C) any facilities NASA intends to close, and the expected dates for doing so;*

*(D) any transaction NASA intends to conduct to sell, lease, or otherwise transfer the ownership of a facility, and the expected dates for doing so;*

*(E) how each of the actions described in subparagraphs (A), (B), (C), and (D) will enhance the ability of NASA to carry out its programs;*

*(F) the expected costs or savings expected from each of the actions described in subparagraphs (A), (B), (C), and (D);*

*(G) the priority order of the actions described in subparagraphs (A), (B), (C), and (D);*

*(H) the budget assumptions of the plan, which for fiscal years 2006 and 2007 shall be consistent with the authorizations provided in title II of this Act; and*

*(I) how facilities were evaluated in developing the plan.*

*(3) SCHEDULE.—The Administrator shall transmit the plan developed under this subsection to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than the date on which the President submits the proposed budget for the Federal Government for fiscal year 2008 to the Congress.*

*(f) WORKFORCE.—*

*(1) IN GENERAL.—The Administrator shall develop a human capital strategy to ensure that NASA has a workforce of the appropriate size and with the appropriate skills to carry out the programs of NASA, consistent with the policies and plans developed pursuant to this section. The strategy shall cover the period through fiscal year 2011.*

*(2) CONTENT.—The strategy shall describe, at a minimum—*

*(A) any categories of employees NASA intends to reduce, the expected size and timing of those reductions, the methods NASA intends to use to make the reductions, and the reasons NASA no longer needs those employees;*

*(B) any categories of employees NASA intends to increase, the expected size and timing of those increases, the methods NASA intends to use to recruit the additional employees, and the reasons NASA needs those employees;*

*(C) the steps NASA will use to retain needed employees; and*

*(D) the budget assumptions of the strategy, which for fiscal years 2006 and 2007 shall be consistent with the authorizations provided in title II of this Act, and any expected additional costs or savings from the strategy by fiscal year.*

*(3) SCHEDULE.—The Administrator shall transmit the strategy developed under this subsection to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than the date on which the President submits the proposed budget for the Federal Government for fiscal year 2007 to the Congress. At least 60 days before transmitting the strategy, NASA shall provide a draft of the strategy to its Federal Employee Unions for a 30-day consultation period after which NASA shall respond in writing to any written concerns provided by the Unions.*

*(4) LIMITATION.—NASA may not initiate any buyout offer or Reduction in Force until 60 days after the strategy required by this subsection has been transmitted to the Congress in accordance with paragraph (3). NASA may not implement any Reduction in Force or other involuntary separations prior to October 1, 2006.*

*(g) CENTER MANAGEMENT.—*

*(1) IN GENERAL.—The Administrator shall conduct a study to determine whether any of NASA's centers should be operated by or with the private sector by converting a center to a Federally Funded Research and Development Center or through any other mechanism.*

*(2) CONTENT.—The study shall, at a minimum—*

*(A) make a recommendation for the operation of each center and provide reasons for that recommendation; and*

*(B) describe the advantages and disadvantages of each mode of operation considered in the study.*

*(3) CONSIDERATIONS.—In conducting the study, the Administrator shall take into consideration the experiences of other relevant Federal agencies in operating laboratories and centers and any reports that have reviewed the mode of operation of those laboratories and centers, as well as any reports that have reviewed NASA's centers.*

*(4) SCHEDULE.—The Administrator shall transmit the study conducted under this subsection to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than May 31, 2006.*

*(h) BUDGETS.—The proposed budget for NASA submitted by the President for each fiscal year shall be accompanied by documents showing—*

*(1) the budget for each element of the human space flight program;*

*(2) the budget for aeronautics;*

*(3) the budget for space science;*

*(4) the budget for earth science;*

*(5) the budget for microgravity science;*

*(6) the budget for education;*

*(7) the budget for technology transfer programs;*

*(8) the budget for the Integrated Financial Management Program, by individual element;*

*(9) the budget for the Independent Technical Authority, both total and by center;*

*(10) the budget for public relations, by program;*

*(11) the comparable figures for at least the 2 previous fiscal years for each item in the proposed budget;*

*(12) the amount of unobligated funds and unexpended funds, by appropriations account—*

*(A) that remained at the end of the fiscal year prior to the fiscal year in which the budget is being presented that were carried over into the fiscal year in which the budget is being presented;*

*(B) that are estimated will remain at the end of the fiscal year in which the budget is being presented that are proposed to be carried over into the fiscal year for which the budget is being presented; and*

*(C) that are estimated will remain at the end of the fiscal year for which the budget is being presented; and*

*(13) the budget for safety, by program.*

*(i) GENERAL AND ADMINISTRATIVE EXPENSES.—NASA shall make available, upon request from the Committee on Science of the House of Representatives or the Committee on Commerce, Science, and Transportation of the Senate, information on Corporate and Center General and Administrative Costs and Service Pool costs, including—*

*(1) the total amount of funds being allocated for those purposes for any fiscal year for which the President has submitted an annual budget request to Congress;*

*(2) the amount of funds being allocated for those purposes for each center, for headquarters, and for each directorate; and*

*(3) the major activities included in each cost category.*

*(j) NASA TEST FACILITIES.—*

*(1) REVIEW.—The Director of the Office of Science and Technology Policy shall commission an independent review of the Nation's long-term strategic needs for test facilities and shall submit the review to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate. The review shall include an evaluation of the facility needs described pursuant to subsection (c)(2)(C).*

*(2) LIMITATION.—The Administrator shall not close or mothball any aeronautical test facilities identified in the 2003 independent assessment by the RAND Corporation, entitled ''Wind Tunnel and Propulsion Test Facilities: An Assessment of NASA's Capabilities to Serve National Needs'' as being part of the minimum set of those facilities necessary to retain and manage to serve national needs, as well as any other NASA test facilities that were in use as of January 1, 2004, until the review conducted under paragraph (1) has been transmitted to the Congress.*

***SEC. 102. REPORTS.***

*(a) IMMEDIATE ISSUES.—Not later than September 30, 2005, the Administrator shall transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report on each of the following items:*

*(1) The research agenda for the ISS and its proposed final configuration.*

*(2) The number of flights the Space Shuttle will make before its retirement, the purpose of those flights, and the expected date of the final flight.*

*(3) A description of the means, other than the Space Shuttle, that may be used to ferry crew and cargo to and from the ISS.*

*(4) A plan for the operation of the ISS in the event that the Iran Nonproliferation Act of 2000 is not amended.*

*(5) A description of the launch vehicle for the Crew Exploration Vehicle.*

*(6) A description of any heavy lift vehicle NASA intends to develop, the intended uses of that vehicle, and whether the decision to develop that vehicle has undergone an interagency review.*

*(7) A description of the intended purpose of lunar missions and the architecture for those missions.*

*(8) The program goals for Project Prometheus.*

*(9) A plan for managing the cost increase for the James Webb Space Telescope.*

*(b) CREW EXPLORATION VEHICLE.—The Administrator shall not enter into a development contract for the Crew Exploration Vehicle until at least 30 days after the Administrator has transmitted to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report describing—*

*(1) the expected cost of the Crew Exploration Vehicle through fiscal year 2020, based on the specifications for that development contract;*

*(2) the expected budgets for each fiscal year through fiscal year 2020 for human space flight, aeronautics, space science, and earth science—*

*(A) first assuming inflationary growth for the budget of NASA as a whole and including costs for the Crew Exploration Vehicle as projected under paragraph (1); and*

*(B) then assuming inflationary growth for the budget of NASA as a whole and including at least two cost estimates for the Crew Exploration Vehicle that are higher than those projected under paragraph (1), based on NASA's past experience with cost increases for similar programs, along with a description of the reasons for selecting the cost estimates used for the calculations under this subparagraph and the probability that the cost of the Crew Exploration Vehicle will reach those estimated amounts; and*

*(3) the extent to which the Crew Exploration Vehicle will allow for the escape of the crew in the event of an emergency.*

*(c) SPACE COMMUNICATIONS STUDY.—*

*(1) STUDY.—The Administrator shall develop a plan for updating NASA's space communications architecture for both low-Earth orbital operations and deep space exploration so that it is capable of meeting NASA's needs over the next 20 years. The plan shall also include life-cycle cost estimates, milestones, estimated performance capabilities, and 5-year funding profiles. The plan shall also include an estimate of the amounts of any reimbursements NASA is likely to receive from other Federal agencies during the expected life of the upgrades described in the plan. The plan shall include a description of the following:*

*(A) Projected Deep Space Network requirements for the next decade, including those in support of human space exploration missions.*

*(B) Upgrades needed to support Deep Space Network requirements.*

*(C) Cost estimates for the maintenance of existing Deep Space Network capabilities.*

*(D) Cost estimates and schedules for the upgrades described in subparagraph (B).*

*(2) CONSULTATIONS.—The Administrator shall consult with other relevant Federal agencies in developing the plan under this subsection.*

*(3) REPORT.—The Administrator shall transmit the plan under this subsection to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than February 17, 2007.*

*(d) PUBLIC RELATIONS.—Not later than December 31, 2005, the Administrator shall transmit a plan to the Committee on Appropriations and the Committee on Science of the House of Representatives, and to the Committee on Appropriations and the Committee on Commerce, Science, and Transportation of the Senate, describing the activities that will be undertaken as part of the national awareness campaign required by the report of the Committee on Appropriations of the House of Representatives accompanying the Science, State, Justice, Commerce, and Related Agencies Appropriations Act, 2006, and the expected cost of those activities. NASA may undertake activities as part of the national awareness campaign prior to the transmittal of the plan required by this subsection, but not until 15 days after notifying the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate of any activity. The plan required by this subsection shall include the estimated costs of any activities undertaken pursuant to notice under the preceding sentence.*

*(e) JOINT DARK ENERGY MISSION.—The Administrator and the Director of the Department of Energy Office of Science shall jointly transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate, not later than the date on which the President submits the proposed budget for the Federal Government for fiscal year 2007, a report on plans for a Joint Dark Energy Mission. The report shall include the amount of funds each agency intends to expend on the Joint Dark Energy Mission for each of the fiscal years 2007 through 2011, and any specific milestones for the development and launch of the Mission.*

*(f) SHUTTLE EMPLOYEE TRANSITION.—The Administrator shall consult with other appropriate Federal agencies and with NASA contractors and employees to develop a transition plan for Federal and contractor personnel engaged in the Space Shuttle program. The plan shall include actions to assist Federal and contractor personnel to take advantage of training, retraining, job placement, and relocation programs, and any other actions that NASA will take to assist the employees. The plan shall also describe how the Administrator will ensure that NASA and its contractors will have an appropriate complement of employees to allow for the safest possible use of the Space Shuttle through its final flight. The Administrator shall transmit the plan to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than 90 days after the date of enactment of this Act.*

*(g) OFFICE OF SCIENCE AND TECHNOLOGY POLICY.—*

*(1) STUDY.—The Director of the Office of Science and Technology Policy shall conduct a study to determine—*

*(A) if any research and development programs of NASA are unnecessarily duplicating aspects of programs of other Federal agencies; and*

*(B) if any research and development programs of NASA are neglecting any topics of national interest that are related to the mission of NASA.*

*(2) REPORT.—Not later than March 1, 2006, the Director of the Office of Science and Technology Policy shall transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report that—*

*(A) describes the results of the study under paragraph (1);*

*(B) lists the research and development programs of Federal agencies other than NASA that were reviewed as part of the study, which shall*

*include any program supporting research and development in an area related to the programs of NASA, and the most recent budget figures for those programs of other agencies;*

*(C) recommends any changes to the research and development programs of NASA that should be made to eliminate unnecessary duplication or address topics of national interest; and*

*(D) describes mechanisms the Office of Science and Technology Policy will use to ensure adequate coordination between NASA and Federal agencies that operate related programs.*

***SEC. 103. BASELINES AND COST CONTROLS.***

*(a) CONDITIONS FOR DEVELOPMENT.—*

*(1) IN GENERAL.—NASA shall not enter into a contract for the development phase of a major program unless the Administrator determines that—*

*(A) the technical, cost, and schedule risks of the program are clearly identified and the program has developed a plan to manage those risks; and*

*(B) the program complies with all relevant policies, regulations, and directives of NASA.*

*(2) REPORT.—The Administrator shall transmit a report describing the basis for the determination required under paragraph (1) to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate at least 30 days before entering into a contract for development under a major program.*

*(3) NONDELEGATION.—The Administrator may not delegate the determination requirement under this subsection.*

*(b) MAJOR PROGRAM ANNUAL REPORTS.—*

*(1) REQUIREMENT.—Not later than February 15 of each year following the date of enactment of this Act, the Administrator shall transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report on each major program for which NASA proposes to expend funds in the subsequent fiscal year. Reports under this section shall be known as Major Program Annual Reports.*

*(2) BASELINE REPORT.—The first Major Program Annual Report for each major program shall include a Baseline Report that shall, at a minimum, include—*

*(A) the purposes of the program and key technical characteristics necessary to fulfill those purposes;*

*(B) an estimate of the life-cycle cost for the program, with a detailed breakout of the development cost and an estimate of the annual costs until the development is completed;*

*(C) the schedule for the development, including key program milestones; and*

*(D) the name of the person responsible for making notifications under subsection (c), who shall be an individual whose primary responsibility is overseeing the program.*

*(3) INFORMATION UPDATES.—For major programs with respect to which a Baseline Report has been previously submitted, each subsequent Major Program Annual Report shall describe any changes to the information that had been provided in the Baseline Report, and the reasons for those changes.*

*(c) NOTIFICATION.—*

*(1) REQUIREMENT.—The individual identified under subsection (b)(2)(D) shall immediately notify the Administrator any time that individual has reasonable cause to believe that, for the major program for which he or she is responsible—*

*(A) the development cost of the program is likely to exceed the estimate provided in the Baseline Report of the program by 15 percent or more; or*

*(B) a milestone of the program is likely to be delayed by 6 months or more from the date provided for it in the Baseline Report of the program.*

*(2) REASONS.—Not later than 7 days after the notification required under paragraph (1), the individual identified under subsection (b)(2)(D) shall transmit to the Administrator a written notification explaining the reasons for the change in the cost or milestone of the program for which notification was provided under paragraph (1).*

*(3) NOTIFICATION OF CONGRESS.—Not later than 5 days after the Administrator receives a written notification under paragraph (2), the Administrator shall transmit the notification to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.*

*(d) FIFTEEN PERCENT THRESHOLD.—Not later than 30 days after receiving a written notification under subsection (c)(2), the Administrator shall determine whether the development cost of the program is likely to exceed the estimate provided in the Baseline Report of the program by 15 percent or more, or whether a milestone is likely to be delayed by 6 months or more. If the determination is affirmative, the Administrator shall—*

*(1) transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate, not later than 14 days after making the determination, a report that includes—*

*(A) a description of the increase in cost or delay in schedule and a detailed explanation for the increase or delay;*

*(B) a description of actions taken or proposed to be taken in response to the cost increase or delay; and*

*(C) a description of any impacts the cost increase or schedule delay will have on any other program within NASA; and*

*(2) if the Administrator intends to continue with the program, promptly initiate an analysis of the program, which shall include, at a minimum—*

*(A) the projected cost and schedule for completing the program if current requirements of the program are not modified;*

*(B) the projected cost and the schedule for completing the program after instituting the actions described under paragraph (1)(B); and*

*(C) a description of, and the projected cost and schedule for, a broad range of alternatives to the program.*

*NASA shall complete an analysis initiated under paragraph (2) not later than 6 months after the Administrator makes a determination under this subsection. The Administrator shall transmit the analysis to the Committee on Science of the House of Representatives and Committee on Commerce, Science, and Transportation of the Senate not later than 30 days after its completion.*

*(e) THIRTY PERCENT THRESHOLD.—If the Administrator determines under subsection (d) that the development cost of a program will exceed the estimate provided in the Baseline Report of the program by more than the lower of 30 percent or $1,000,000,000, then, beginning 1 year after the date the Administrator transmits a report under subsection (d)(1), the Administrator shall not expend any additional funds on the program, other than termination costs, unless the Congress has subsequently authorized continuation of the program by law. If the program is continued, the Administrator shall submit a new Baseline Report for the program no later than 90 days after the date of enactment of the Act under which Congress has authorized continuation of the program.*

*(f) DEFINITIONS.—For the purposes of this section—*

*(1) the term ''development'' means the phase of a program following the formulation phase and beginning with the approval to proceed to implementation, as defined in NASA's Procedural Requirements 7120.5c, dated March 22, 2005;*

*(2) the term ''development cost'' means the total of all costs, including construction of facilities and civil servant costs, from the period beginning with the approval to proceed to implementation through the achievement of operational readiness, without regard to funding source or management control, for the life of the program;*

*(3) the term ''life-cycle cost'' means the total of the direct, indirect, recurring, and nonrecurring costs, including the construction of facilities and civil servant costs, and other related expenses incurred or estimated to be incurred in the design, development, verification, production, operation, maintenance, support, and retirement of a program over its planned lifespan, without regard to funding source or management control; and*

*(4) the term ''major program'' means an activity approved to proceed to implementation that has an estimated life-cycle cost of more than $100,000,000.*

***SEC. 104. PRIZE AUTHORITY.***

*The National Aeronautics and Space Act of 1958 (42 U.S.C. 2451, et seq.) is amended by inserting after section 313 the following new section:*

*''PRIZE AUTHORITY*

*''SEC. 314. (a) IN GENERAL.—The Administration may carry out a program to competitively award cash 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. The Administration may carry out a program to award prizes only in conformity with this section.*

*''(b) TOPICS.—In selecting topics for prize competitions, the Administrator shall consult widely both within and outside the Federal Government, and may empanel advisory committees.*

*''(c) ADVERTISING.—The Administrator shall widely advertise prize competitions to encourage participation.*

*''(d) REQUIREMENTS AND REGISTRATION.—For each prize competition, the Administrator shall publish a notice in the Federal Register announcing the subject of the competition, the rules for being eligible to participate in the competition, the amount of the prize, and the basis on which a winner will be selected.*

*''(e) ELIGIBILITY.—To be eligible to win a prize under this section, an individual or entity—*

*''(1) shall have registered to participate in the competition pursuant to any rules promulgated by the Administrator under subsection (d);*

*''(2) shall have complied with all the requirements under this section;*

*''(3) in the case of a private entity, shall be incorporated in and maintain a primary place of business in the United States, and in the case of an individual, whether participating singly or in a group, shall be a citizen or permanent resident of the United States; and*

*''(4) shall not be a Federal entity or Federal employee acting within the scope of their employment.*

*''(f) LIABILITY.—(1) Registered participants must agree to assume any and all risks and waive claims against the United States Government and its related entities, except in the case of willful misconduct, for any injury, death, damage, or loss of property, revenue, or profits, whether direct, indirect, or consequential, arising from their participation in a competition, whether such injury, death, damage, or loss arises through negligence or otherwise. For the purposes of this subparagraph, the term 'related entity' means a contractor or subcontractor at any tier, and a supplier, user, customer, cooperating party, grantee, investigator, or detailee.*

*''(2) Participants must obtain liability insurance or demonstrate financial responsibility in amounts to compensate for the maximum probable loss, as determined by the Administrator, from claims by—*

*''(A) a third party for death, bodily injury, or property damage, or loss resulting from an activity carried out in connection with participation in a competition, with the Federal Government named as an additional insured under the*

*registered participant's insurance policy and registered participants agreeing to indemnify the Federal Government against third party claims for damages arising from or related to competition activities; and*

*''(B) the United States Government for damage or loss to Government property resulting from such an activity.*

*''(g) JUDGES.—For each competition, the Administration, either directly or through a contract under subsection (h), shall assemble a panel of qualified judges from both within and outside the Administration to select the winner or winners of the prize competition on the basis described pursuant to subsection (d). Judges for each competition shall include individuals from the private sector. A judge may not—*

*''(1) have personal or financial interests in, or be employees, officers, directors, or agents of, any entity that is a registered participant in a competition; or*

*''(2) have a familial or financial relationship with an individual who is a registered participant.*

*''(h) ADMINISTERING THE COMPETITION.—The Administrator may enter into an agreement with a private, nonprofit entity to administer the prize competition, subject to the provisions of this section.*

*''(i) FUNDING.—(1) The Administrator may accept funds from other Federal agencies and from the private sector for cash prizes under this section. Such funds shall not increase the amount of a prize after the amount has been announced pursuant to subsection (d). The Administrator may not give any special consideration to any private sector entity in return for a donation.*

*''(2) Funds appropriated for the program under this section shall remain available until expended, and may be transferred, reprogrammed, or expended for other purposes only after the expiration of 10 fiscal years after the fiscal year for which the funds were originally appropriated. No provision in this section permits obligation or payment of funds in violation of the Anti-Deficiency Act (31 U.S.C. 1341).*

*''(3) No prize may be announced under subsection (d) until all the funds for that prize have been appropriated or obligated for such purpose by a private sector source.*

*''(4) No prize competition under this section may offer a prize in an amount greater than $10,000,000 unless 30 days have elapsed after written notice has been provided to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.*

*''(j) USE OF NASA NAME AND INSIGNIA.—A registered participant in a competition under this section may use the Administration's name, initials, or insignia only after prior review and written approval by the Administration.*

*''(k) COMPLIANCE WITH EXISTING LAW.—The Federal Government shall not, by virtue of offering or providing a prize under this section, be responsible for compliance by registered participants in a prize competition with Federal law, including licensing, export control, and nonproliferation laws, and related regulations.''.*

***SEC. 105. FOREIGN LAUNCH VEHICLES.***

*(a) ACCORD WITH SPACE TRANSPORTATION POLICY.—NASA shall not launch a mission on a foreign launch vehicle except in accordance with the Space Transportation Policy announced by the President on December 21, 2004.*

*(b) INTERAGENCY COORDINATION.—NASA shall not launch a mission on a foreign launch vehicle unless NASA commenced the interagency coordination required by the Space Transportation Policy announced by the President on December 21, 2004, at least 90 days before entering into a development contract for the mission.*

*(c) APPLICATION.—This section shall not apply to any mission for which development has begun prior to the date of enactment of this Act, including the James Webb Space Telescope.*

***SEC. 106. 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 is hereby'';*

*(2) by striking ''plans referred to it'' and inserting ''plans referred to it, including evaluating the National Aeronautics and Space Administration'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 the Administration's safety management culture. Each annual report shall include an evaluation of the Administration's compliance with the recommendations of the Columbia Accident Investigation Board.''.*

***SEC. 107. 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 not later than 180 days after the date of enactment of this Act. The implementation plan shall be updated and maintained to ensure 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 at 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. 108. COMMERCIALIZATION PLAN.***

*(a) IN GENERAL.—The Administrator, in consultation with 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 missions 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 conducting research and the development of technologies and services. The plan shall include provisions for developing and funding sustained university and industry partnerships to conduct commercial research and technology development, to proactively translate results of space research to Earth benefits, to advance United States economic interests, and to support the vision for exploration.*

*(b) REPORT.—Not later than 180 days after the date of enactment of this Act, the Administrator shall submit a copy of the plan to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.*

***SEC. 109. STUDY ON THE FEASIBILITY OF USE OF GROUND SOURCE HEAT PUMPS.***

*(a) IN GENERAL.—The Administrator shall conduct a feasibility study on the use of ground source heat pumps in future NASA facilities or substantial renovation of existing NASA facilities involving the installation of heating, ventilating, and air conditioning systems.*

*(b) CONTENTS.—The study shall examine—*

*(1) the life-cycle costs, including maintenance costs, of the operation of such heat pumps compared to generally available heating, cooling, and water heating equipment;*

*(2) barriers to installation, such as availability and suitability of terrain; and*

*(3) such other issues as the Administrator considers appropriate.*

*(c) DEFINITION.—In this section, the term ''ground source heat pump'' means an electric-powered system that uses the Earth's relatively constant temperature to provide heating, cooling, or hot water.*

## *TITLE II—AUTHORIZATION OF APPROPRIATIONS*

***SEC. 201. STRUCTURE OF BUDGETARY ACCOUNTS.***

*Section 313 of the National Aeronautics and Space Act of 1958 (42 U.S.C. 2459f) is amended to read as follows:*

***''SEC. 313. BUDGETARY ACCOUNTS.***

*''Appropriations for the Administration for fiscal year 2007 and thereafter shall be made in four accounts, 'Science, Aeronautics, and Education', 'Exploration Systems', 'Space Operations', and an account for amounts appropriated for the necessary expenses of the Office of the Inspector General. Appropriations shall remain available for two fiscal years, unless otherwise specified in law. Each account shall include the planned full costs of Administration activities.''.*

***SEC. 202. FISCAL YEAR 2006.***

*There are authorized to be appropriated to NASA for fiscal year 2006 $16,471,050,000, as follows:*

*(1) For Science, Aeronautics and Education (including amounts for construction of facilities), $6,870,250,000 of which—*

*(A) $962,000,000 shall be for Aeronautics;*

*(B) $150,000,000 shall be for a Hubble Space Telescope servicing mission; and*

*(C) $24,000,000 shall be for the National Space Grant College and Fellowship Program.*

*(2) For Exploration Systems (including amounts for construction of facilities), $3,181,100,000.*

*(3) For Space Operations (including amounts for construction of facilities), $6,387,300,000.*

*(4) For the Office of Inspector General, $32,400,000.*

***SEC. 203. FISCAL YEAR 2007.***

*There are authorized to be appropriated to NASA for fiscal year 2007 $16,962,000,000, as follows:*

*(1) For Science, Aeronautics and Education (including amounts for construction of facilities), $7,331,600,000 of which—*

*(A) $990,000,000 shall be for Aeronautics; and*

*(B) $24,000,000 shall be for the National Space Grant College and Fellowship Program.*

*(2) For Exploration Systems (including amounts for construction of facilities), $3,589,200,000.*

*(3) For Space Operations (including amounts for construction of facilities), $6,007,700,000.*

*(4) For the Office of Inspector General, $33,500,000.*

***SEC. 204. ISS RESEARCH.***

*The Administrator shall allocate at least 15 percent of the funds budgeted for ISS research to research that is not directly related to supporting the human exploration program.*

***SEC. 205. TEST FACILITIES.***

*(a) CHARGES.—The Administrator shall establish a policy of charging users of NASA's test facilities for the costs associated with their tests at a level that is competitive with alternative test*

*facilities. As a general principle, NASA shall not seek to recover the full costs of the operation of those facilities from the users. The Administrator shall not implement a policy of seeking full cost recovery for a facility until at least 30 days after transmitting a notice to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.*

*(b) FUNDING ACCOUNT.—The Administrator shall establish a funding account that shall be used for all test facilities. The account shall be sufficient to maintain the viability of test facilities during periods of low utilization.*

***SEC. 206. PROPORTIONALITY.***

*If the total amount appropriated for NASA pursuant to section 202 or 203 is less than the amount authorized under such section, the amounts authorized under each of the accounts specified in such section shall be reduced proportionately.*

***SEC. 207. LIMITATIONS ON AUTHORITY.***

*Notwithstanding any other provision of this Act, no amount appropriated pursuant to this Act may be used for any program in excess of the amount actually authorized for the particular program by section 202 or 203, unless a period of 30 days has passed after the receipt, by each such Committee, of notice given by the Administrator containing a full and complete statement of the action proposed to be taken and the facts and circumstances relied upon in support of such a proposed action. NASA shall keep the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate fully and currently informed with respect to all activities and responsibilities within the jurisdiction of those Committees.*

***SEC. 208. 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 Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.*

***SEC. 209. COST OVERRUNS.***

*When reprogramming funds to cover unexpected cost growth within a program, the Administrator shall, to the maximum extent practicable, protect funds intended for fundamental and applied Research and Analysis.*

***SEC. 210. OFFICIAL REPRESENTATIONAL FUND.***

*Amounts appropriated pursuant to this Act may be used, but not to exceed a total of $35,000 in any fiscal year, for official reception and representation expenses.*

***SEC. 211. INTERNATIONAL SPACE STATION COST CAP.***

*Section 202 of the National Aeronautics and Space Administration Authorization Act of 2000 (42 U.S.C. 2451 note) is repealed.*

## *TITLE III—SCIENCE*

### *Subtitle A—General Provisions*

***SEC. 301. PERFORMANCE ASSESSMENTS.***

*(a) IN GENERAL.—Performance of each discipline in the Science account of NASA shall be reviewed and assessed by the National Academy of Sciences at 5-year intervals.*

*(b) TIMING.—Beginning with the first fiscal year following the date of enactment of this Act, the Administrator shall select at least one discipline for review under this section. The Administrator shall select disciplines so that all disciplines will have received their first review within six fiscal years of the date of enactment of this Act.*

*(c) REPORTS.—Each year, beginning with the first fiscal year after the date of enactment of this Act, the Administrator shall transmit a report to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate—*

*(1) setting forth in detail the results of any external review under subsection (a);*

*(2) setting forth in detail actions taken by NASA in response to any external review; and*

*(3) including a summary of findings and recommendations from any other relevant external reviews of NASA's science mission priorities and programs.*

***SEC. 302. STATUS REPORT ON HUBBLE SPACE TELESCOPE SERVICING MISSION.***

*It is the sense of the Congress that the Hubble Space Telescope is an extraordinary instrument that has provided, and should continue to provide, answers to profound scientific questions. In accordance with the recommendations of the National Academy of Sciences, all appropriate efforts should be expended to complete the Space Shuttle servicing mission. Upon successful completion of the planned return-to-flight schedule of the Space Shuttle, the schedule for a Space Shuttle servicing mission to the Hubble Space Telescope shall be determined, unless such a mission would compromise astronaut safety. Not later than 60 days after the landing of the second Space Shuttle mission for return-to-flight certification, the Administrator shall transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a status report on plans for a Hubble Space Telescope servicing mission.*

***SEC. 303. INDEPENDENT ASSESSMENT OF LANDSAT-NPOESS INTEGRATED MISSION.***

*(a) ASSESSMENT.—In view of the importance of ensuring continuity of Landsat data and in view of the challenges facing the National Polar-Orbiting Environmental Satellite System program, the Administrator shall seek an independent assessment of the costs as well as the technical, cost, and schedule risks associated with incorporating the Landsat instrument on the first National Polar-Orbiting Environmental Satellite System spacecraft versus undertaking a dedicated Landsat data ''gap-filler'' mission followed by the incorporation of the Landsat instrument on the second National Polar-Orbiting Environmental Satellite System spacecraft. The assessment shall also include an evaluation of the budgetary requirements of each of the options under consideration.*

*(b) REPORT.—The Administrator shall transmit the independent assessment to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than 180 days after the date of enactment of this Act.*

***SEC. 304. ASSESSMENT OF SCIENCE MISSION EXTENSIONS.***

*(a) ASSESSMENT.—The Administrator shall carry out annual termination reviews within each of the Science disciplines to assess the cost and benefits of extending the date of the termination of data collection for those missions which are beyond their primary goals. In addition:*

*(1) Not later than 60 days after the date of enactment of this Act, the Administrator shall carry out such an assessment for the following missions: FAST, TIMED, Cluster, Wind, Geotail, Polar, TRACE, Ulysses, and Voyager.*

*(2) For those missions that have an operational component, the National Oceanic and Atmospheric Administration shall be consulted and the potential benefits of instruments on missions which are beyond their primary goals taken into account.*

*(b) REPORT.—Not later than 30 days after completing the assessments required by subsection (a)(1), the Administrator shall transmit a report on the assessment to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.*

***SEC. 305. MICROGRAVITY RESEARCH.***

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

*(1) not later than 60 days after the date of enactment of this Act, provide to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate an assessment of microgravity research planned for implementation aboard the ISS that includes the identification of research which can be performed in ground-based facilities and then validated in space;*

*(2) ensure the capacity to support ground-based research leading to space-based basic and applied scientific research in a variety of disciplines with potential direct national benefits and applications that can advance significantly from the uniqueness of microgravity and the space environment; and*

*(3) carry out, to the maximum extent practicable basic, applied, and commercial ISS research activities such 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.*

*(b) ON-ORBIT CAPABILITIES.—The Administrator shall ensure that the on-orbit analytical capabilities of the ISS are sufficient to support any diagnostic human research and on-orbit characterization of molecular crystal growth, cellular research, and other research that NASA believes is necessary to conduct, but for which NASA lacks the capacity to return the materials that need to be analyzed to Earth.*

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

***SEC. 306. COORDINATION WITH THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.***

*(a) JOINT WORKING GROUP.—The Administrator and the Administrator of the National Oceanic and Atmospheric Administration shall appoint a Joint Working Group, which shall review and monitor missions of the two agencies to ensure maximum coordination in the design, operation, and transition of missions. The Joint Working Group shall also prepare the transition plans required by subsection (c).*

*(b) COORDINATION REPORT.—Not later than February 15 of each year, the Under Secretary of Commerce for Oceans and Atmosphere and the Administrator shall jointly transmit a report to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate on how the earth science programs of the National Oceanic and Atmospheric Administration and NASA will be coordinated during the fiscal year following the fiscal year in which the report is transmitted.*

*(c) COORDINATION OF TRANSITION PLANNING AND REPORTING.—The Administrator, in conjunction with the Administrator of the National Oceanic and Atmospheric Administration, shall evaluate all NASA missions for their potential operational capabilities and shall prepare transition plans for all existing and future Earth observing systems found to have potential operational capabilities and all National Oceanic and Atmospheric Administration operational space-based systems.*

*(d) LIMITATION.—The Administrator shall not transfer any NASA earth science mission or Earth observing system to the National Oceanic and Atmospheric Administration until the transition plan required under subsection (c) has been approved by the Administrator and the Administrator of the National Oceanic and Atmospheric Administration and until financial resources have been identified to support the transition or transfer in the President's budget request for the National Oceanic and Atmospheric Administration.*

### Subtitle B—Remote Sensing

**SEC. 311. DEFINITIONS.**

In this subtitle—

(1) the term ''geospatial information'' means knowledge of the nature and distribution of physical and cultural features on the landscape based on analysis of data from airborne or spaceborne platforms or other types and sources of data;

(2) the term ''high resolution'' means resolution better than five meters; and

(3) the term ''institution of higher education'' has the meaning given that term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

**SEC. 312. PILOT PROJECTS TO ENCOURAGE PUBLIC SECTOR APPLICATIONS.**

(a) IN GENERAL.—The Administrator shall establish a program of grants for competitively awarded pilot projects to explore the integrated use of sources of remote sensing and other geospatial information to address State, local, regional, and tribal agency needs.

(b) PREFERRED PROJECTS.—In awarding grants under this section, the Administrator shall give preference to projects that—

(1) make use of commercial data sets, including high resolution commercial satellite imagery and derived satellite data products, existing public data sets where commercial data sets are not available or applicable, or the fusion of such data sets;

(2) integrate multiple sources of geospatial information, such as geographic information system data, satellite-provided positioning data, and remotely sensed data, in innovative ways;

(3) include funds or in-kind contributions from non-Federal sources;

(4) involve the participation of commercial entities that process raw or lightly processed data, often merging that data with other geospatial information, to create data products that have significant value added to the original data; and

(5) taken together demonstrate as diverse a set of public sector applications as possible.

(c) OPPORTUNITIES.—In carrying out this section, the Administrator shall seek opportunities to assist—

(1) in the development of commercial applications potentially available from the remote sensing industry; and

(2) State, local, regional, and tribal agencies in applying remote sensing and other geospatial information technologies for growth management.

(d) DURATION.—Assistance for a pilot project under subsection (a) shall be provided for a period not to exceed 3 years.

(e) REPORT.—Each recipient of a grant under subsection (a) shall transmit a report to the Administrator on the results of the pilot project within 180 days of the completion of that project.

(f) WORKSHOP.—Each recipient of a grant under subsection (a) shall, not later than 180 days after the completion of the pilot project, conduct at least one workshop for potential users to disseminate the lessons learned from the pilot project as widely as feasible.

(g) REGULATIONS.—The Administrator shall issue regulations establishing application, selection, and implementation procedures for pilot projects, and guidelines for reports and workshops required by this section.

**SEC. 313. PROGRAM EVALUATION.**

(a) ADVISORY COMMITTEE.—The Administrator shall establish an advisory committee, consisting of individuals with appropriate expertise in State, local, regional, and tribal agencies, the university research community, and the remote sensing and other geospatial information industry, to monitor the program established under section 312. The advisory committee shall consult with the Federal Geographic Data Committee and other appropriate industry representatives and organizations. Notwithstanding section 14 of the Federal Advisory Committee Act, the advisory committee established under this subsection shall remain in effect until the termination of the program under section 312.

(b) EFFECTIVENESS EVALUATION.—Not later than December 31, 2009, the Administrator shall transmit to the Congress an evaluation of the effectiveness of the program established under section 312 in exploring and promoting the integrated use of sources of remote sensing and other geospatial information to address State, local, regional, and tribal agency needs. Such evaluation shall have been conducted by an independent entity.

**SEC. 314. DATA AVAILABILITY.**

The Administrator shall ensure that the results of each of the pilot projects completed under section 312 shall be retrievable through an electronic, Internet-accessible database.

**SEC. 315. EDUCATION.**

The Administrator shall establish an educational outreach program to increase awareness at institutions of higher education and State, local, regional, and tribal agencies of the potential applications of remote sensing and other geospatial information.

### Subtitle C—George E. Brown, Jr. Near-Earth Object Survey

**SEC. 321. GEORGE E. BROWN, JR. NEAR-EARTH OBJECT SURVEY.**

(a) SHORT TITLE.—This section may be cited as the ''George E. Brown, Jr. Near-Earth Object Survey Act''.

(b) FINDINGS.—The Congress makes the following findings:

(1) Near-Earth objects pose a serious and credible threat to humankind, as many scientists believe that a major asteroid or comet was responsible for the mass extinction of the majority of the Earth's species, including the dinosaurs, nearly 65,000,000 years ago.

(2) Similar objects have struck the Earth or passed through the Earth's atmosphere several times in the Earth's history and pose a similar threat in the future.

(3) Several such near-Earth objects have only been discovered within days of the objects' closest approach to Earth, and recent discoveries of such large objects indicate that many large near-Earth objects remain undiscovered.

(4) The efforts taken to date by NASA for detecting and characterizing the hazards of near-Earth objects are not sufficient to fully determine the threat posed by such objects to cause widespread destruction and loss of life.

(c) DEFINITIONS.—For purposes of this section the term ''near-Earth object'' means an asteroid or comet with a perihelion distance of less that 1.3 Astronomical Units from the Sun.

(d) NEAR-EARTH OBJECT SURVEY.—

(1) SURVEY PROGRAM.—The Administrator shall plan, develop, and implement a Near-Earth Object Survey program to detect, track, catalogue, and characterize the physical characteristics of near-Earth objects equal to or greater than 100 meters in diameter in order to assess the threat of such near-Earth objects to the Earth. It shall be the goal of the Survey program to achieve 90 percent completion of its near-Earth object catalogue (based on statistically predicted populations of near-Earth objects) within 15 years after the date of enactment of this Act.

(2) AMENDMENTS.—Section 102 of the National Aeronautics and Space Act of 1958 (42 U.S.C. 2451) is amended—

(A) by redesignating subsection (g) as subsection (h);

(B) by inserting after subsection (f) the following new subsection:

''(g) The Congress declares that the general welfare and security of the United States require that the unique competence of the National Aeronautics and Space Administration be directed to detecting, tracking, cataloguing, and characterizing near-Earth asteroids and comets in order to provide warning and mitigation of the potential hazard of such near-Earth objects to the Earth.''; and

(C) in subsection (h), as so redesignated by subparagraph (A) of this paragraph, by striking ''and (f)'' and inserting ''(f), and (g)''.

(3) ANNUAL REPORT.—The Administrator shall transmit to the Congress, not later than February 28 of each of the next 5 years beginning after the date of enactment of this Act, a report that provides the following:

(A) A summary of all activities taken pursuant to paragraph (1) for the previous fiscal year.

(B) A summary of expenditures for all activities pursuant to paragraph (1) for the previous fiscal year.

(4) INITIAL REPORT.—The Administrator shall transmit to Congress not later than 1 year after the date of enactment of this Act an initial report that provides the following:

(A) An analysis of possible alternatives that NASA may employ to carry out the Survey program, including ground-based and space-based alternatives with technical descriptions.

(B) A recommended option and proposed budget to carry out the Survey program pursuant to the recommended option.

(C) An analysis of possible alternatives that NASA could employ to divert an object on a likely collision course with Earth.

## TITLE IV—AERONAUTICS

**SEC. 401. DEFINITION.**

For purposes of this title, the term ''institution of higher education'' has the meaning given that term by section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

### Subtitle A—National Policy for Aeronautics Research and Development

**SEC. 411. POLICY.**

It shall be the policy of the United States to reaffirm the National Aeronautics and Space Act of 1958 and its identification of aeronautical research and development as a core mission of NASA. Further, it shall be the policy of the United States to promote aeronautical research and development that will expand the capacity, ensure the safety, and increase the efficiency of the Nation's air transportation system, promote the security of the Nation, protect the environment, and retain the leadership of the United States in global aviation.

### Subtitle B—NASA Aeronautics Breakthrough Research Initiatives

**SEC. 421. ENVIRONMENTAL AIRCRAFT RESEARCH AND DEVELOPMENT INITIATIVE.**

(a) OBJECTIVE.—The Administrator may establish an initiative with the objective of developing, and demonstrating in a relevant environment, within 10 years after the date of enactment of this Act, technologies to enable the following commercial aircraft performance characteristics:

(1) NOISE.—Noise levels on takeoff and on airport approach and landing that do not exceed ambient noise levels in the absence of flight operations in the vicinity of airports from which such commercial aircraft would normally operate.

(2) ENERGY CONSUMPTION.—Twenty-five percent reduction in the energy required for medium to long range flights, compared to aircraft in commercial service as of the date of enactment of this Act. This reduction may be achieved by a combination of improvements to—

(A) specific fuel consumption;

(B) lift-to-drag ratio; and

(C) structural weight fraction.

(3) EMISSIONS.—Nitrogen oxides on take-off and landing that are reduced by 50 percent relative to aircraft in commercial service as of the date of enactment of this Act.

(b) STUDY.—

(1) REQUIREMENT.—The Administrator shall enter into an arrangement for the National Research Council to conduct a study to identify and quantify new markets that would be created, as well as existing markets that would be

expanded, by the incorporation of the technologies developed pursuant to this section into future commercial aircraft. The study shall identify whether any of the performance characteristics specified in subsection (a) would need to be made more stringent in order to create new markets or expand existing markets. The National Research Council shall seek input from at least the aircraft manufacturing industry, academia, and the airlines in carrying out the study.

(2) REPORT.—A report containing the results of the study conducted under paragraph (1) shall be provided to Congress not later than 18 months after the date of enactment of this Act.

**SEC. 422. CIVIL SUPERSONIC TRANSPORT RESEARCH AND DEVELOPMENT INITIATIVE.**

The Administrator may establish an initiative with the objective of developing, and demonstrating in a relevant environment, within 20 years after the date of enactment of this Act, technologies to enable overland flight of supersonic civil transport aircraft with at least the following performance characteristics:

(1) Mach number of at least 1.4.

(2) Range of at least 4,000 nautical miles.

(3) Payload of at least 24 passengers.

(4) Noise levels on takeoff and on airport approach and landing that meet community noise standards in place at airports from which such commercial supersonic aircraft would normally operate at the time the aircraft would enter commercial service.

(5) Shaped sonic boom signatures sufficiently low to permit overland flight over populated areas.

(6) Nitrogen oxide, carbon dioxide, and water vapor emissions consistent with regulations likely to be in effect at the time of this aircraft's introduction.

**SEC. 423. ROTORCRAFT AND OTHER RUNWAY-INDEPENDENT AIR VEHICLES RESEARCH AND DEVELOPMENT INITIATIVE.**

The Administrator may establish a rotorcraft and other runway-independent air vehicles initiative with the objective of developing and demonstrating in a relevant environment, within 10 years after the date of enactment of this Act, technologies to enable significantly safer, quieter, and more environmentally compatible operation from a wider range of airports under a wider range of weather conditions than is the case for rotorcraft and other runway-independent air vehicles in service as of the date of enactment of this Act.

***Subtitle C—Other NASA Aeronautics Research and Development Activities***

**SEC. 431. FUNDAMENTAL RESEARCH AND TECHNOLOGY BASE PROGRAM.**

(a) OBJECTIVE.—In order to ensure that the Nation maintains needed capabilities in fundamental areas of aeronautical research, the Administrator shall establish a program of long-term fundamental research in aeronautical sciences and technologies that is not tied to specific development projects.

(b) ASSESSMENT.—The Administrator shall enter into an arrangement with the National Research Council for an assessment of the Nation's future requirements for fundamental aeronautics research and whether the Nation will have a skilled research workforce and research facilities commensurate with those requirements. The assessment shall include an identification of any projected gaps, and recommendations for what steps should be taken by the Federal Government to eliminate those gaps.

(c) REPORT.—The Administrator shall transmit the assessment, along with NASA's response to the assessment, to Congress not later than 2 years after the date of enactment of this Act.

**SEC. 432. AIRSPACE SYSTEMS RESEARCH.**

(a) OBJECTIVE.—The Airspace Systems Research program shall pursue research and development to enable revolutionary improvements to and modernization of the National Airspace System, as well as to enable the introduction of new systems for vehicles that can take advantage of an improved, modern air transportation system.

(b) ALIGNMENT.—Not later than 2 years after the date of enactment of this Act, the Administrator shall align the projects of the Airspace Systems Research program so that they directly support the objectives of the Joint Planning and Development Office's Next Generation Air Transportation System Integrated Plan.

**SEC. 433. AVIATION SAFETY AND SECURITY RESEARCH.**

(a) OBJECTIVE.—The Aviation Safety and Security Research program shall pursue research and development activities that directly address the safety and security needs of the National Airspace System and the aircraft that fly in it. The program shall develop prevention, intervention, and mitigation technologies aimed at causal, contributory, or circumstantial factors of aviation accidents.

(b) PLAN.—Not later than 1 year after the date of enactment of this Act, the Administrator shall transmit to Congress a 5-year prioritized plan for the research to be conducted within the Aviation Safety and Security Research program. The plan shall be aligned with the objectives of the Joint Planning and Development Office's Next Generation Air Transportation System Integrated Plan.

**SEC. 434. ZERO-EMISSIONS AIRCRAFT RESEARCH.**

(a) OBJECTIVE.—The Administrator may establish a zero-emissions aircraft research program whose objective shall be to develop and test concepts to enable a hydrogen fuel cell-powered aircraft that would have no hydrocarbon or nitrogen oxide emissions into the environment.

(b) APPROACH.—The Administrator may establish a program of competitively awarded grants available to teams of researchers that may include the participation of individuals from universities, industry, and government for the conduct of this research.

**SEC. 435. MARS AIRCRAFT RESEARCH.**

(a) OBJECTIVE.—The Administrator may establish a Mars Aircraft project whose objective shall be to develop and test concepts for an uncrewed aircraft that could operate for sustained periods in the atmosphere of Mars.

(b) APPROACH.—The Administrator may establish a program of competitively awarded grants available to teams of researchers that may include the participation of individuals from universities, industry, and government for the conduct of this research.

**SEC. 436. HYPERSONICS RESEARCH.**

The Administrator may establish a hypersonics research program whose objective shall be to explore the science and technology of hypersonic flight using air-breathing propulsion concepts, through a mix of theoretical work, basic and applied research, and development of flight research demonstration vehicles.

**SEC. 437. NASA AERONAUTICS SCHOLARSHIPS.**

(a) ESTABLISHMENT.—The Administrator shall establish a program of scholarships for full-time graduate students who are United States citizens and are enrolled in, or have been accepted by and have indicated their intention to enroll in, accredited Masters degree programs in aeronautical engineering at institutions of higher education. Each such scholarship shall cover the costs of room, board, tuition, and fees, and may be provided for a maximum of 2 years.

(b) IMPLEMENTATION.—Not later than 180 days after the date of enactment of this Act, the Administrator shall publish regulations governing the scholarship program under this section.

(c) COOPERATIVE TRAINING OPPORTUNITIES.—Students who have been awarded a scholarship under this section shall have the opportunity for paid employment at one of the NASA Centers engaged in aeronautics research and development during the summer prior to the first year of the student's Masters program, and between the first and second year, if applicable.

**SEC. 438. AVIATION WEATHER RESEARCH.**

The Administrator may carry out a program of collaborative research with the National Oceanic and Atmospheric Administration on convective weather events, with the goal of significantly improving the reliability of 2-hour to 6-hour aviation weather forecasts.

**SEC. 439. ASSESSMENT OF WAKE TURBULENCE RESEARCH AND DEVELOPMENT PROGRAM.**

(a) ASSESSMENT.—The Administrator shall enter into an arrangement with the National Research Council for an assessment of Federal wake turbulence research and development programs. The assessment shall address at least the following questions:

(1) Are the Federal research and development goals and objectives well defined?

(2) Are there any deficiencies in the Federal research and development goals and objectives?

(3) What roles should be played by each of the relevant Federal agencies, such as NASA, the Federal Aviation Administration, and the National Oceanic and Atmospheric Administration, in wake turbulence research and development?

(b) REPORT.—A report containing the results of the assessment conducted pursuant to subsection (a) shall be provided to Congress not later than 1 year after the date of enactment of this Act.

**SEC. 440. UNIVERSITY-BASED CENTERS FOR RESEARCH ON AVIATION TRAINING.**

(a) IN GENERAL.—The Administrator may award grants to institutions of higher education (or consortia thereof) to establish one or more Centers for Research on Aviation Training under cooperative agreements with appropriate NASA Centers.

(b) PURPOSE.—The purpose of the Centers shall be to investigate the impact of new technologies and procedures, particularly those related to the aircraft flight deck and to the air traffic management functions, on training requirements for pilots and air traffic controllers.

(c) APPLICATION.—An institution of higher education (or a consortium of such institutions) seeking funding under this section shall submit an application to the Administrator at such time, in such manner, and containing such information as the Administrator may require, including, at a minimum, a 5-year research plan.

(d) AWARD DURATION.—An award made by the Administrator under this section shall be for a period of 5 years and may be renewed on the basis of—

(1) satisfactory performance in meeting the goals of the research plan proposed by the Center in its application under subsection (c); and

(2) other requirements as specified by the Administrator.

***TITLE V—HUMAN SPACE FLIGHT***

**SEC. 501. INTERNATIONAL SPACE STATION COMPLETION.**

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

(1) be used for a diverse range of microgravity research, including fundamental, applied, and commercial research;

(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 period during which the Space Shuttle or its follow-on crew and cargo systems is unavailable, and provide sufficient prepositioning of spares and other supplies needed to accommodate any such hiatus.

(c) CERTIFICATION.—Not later than 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 Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate NASA's plan to meet the requirements of subsections (a) and (b).*

***SEC. 502. HUMAN EXPLORATION PRIORITIES.***

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

*(1) construct an architecture and implementation plan for NASA's human exploration program that is not critically dependent on the achievement of milestones by fixed dates; and*

*(2) determine the relative priority of each of the potential elements of NASA's implementation plan for its human exploration program in case funding shortfalls or cost growth necessitate the adjustment of NASA's implementation plan.*

*(b) PRIORITIES.—Development of a Crew Exploration Vehicle with a robust crew escape system, development of a launch system for the Crew Exploration Vehicle, and definition of an overall architecture and prioritized implementation plan shall be the highest priorities of the human exploration program over the period governed by this Act.*

***SEC. 503. GAO ASSESSMENT.***

*Not later than 9 months after the date of enactment of this Act, the Comptroller General shall transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate an assessment of the milestones and estimated costs of the plans submitted under section 102(a)(7).*

## *TITLE VI—OTHER PROGRAM AREAS*

### *Subtitle A—Space and Flight Support*

***SEC. 601. 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. 602. SECONDARY PAYLOAD CAPABILITY.***

*The Administrator is encouraged to provide the capabilities to support secondary payloads on United States launch vehicles, including freeflyers, for satellites or scientific payloads.*

### *Subtitle B—Education*

***SEC. 611. INSTITUTIONS IN NASA'S MINORITY INSTITUTIONS PROGRAM.***

*The matter appearing under the heading ''**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION**—SMALL AND DISADVANTAGED BUSINESS'' in title III of the Departments of Veterans Affairs and Housing 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. 612. 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—*

*(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. 613. CHARLES "PETE" CONRAD ASTRONOMY AWARDS.***

*(a) SHORT TITLE.—This section may be cited as the ''Charles 'Pete' Conrad Astronomy Awards Act''.*

*(b) DEFINITIONS.—For the purposes of this section—*

*(1) the term ''amateur astronomer'' means an individual whose employer does not provide any funding, payment, or compensation to the individual for the observation of asteroids and other celestial bodies, and does not include any individual employed as a professional astronomer;*

*(2) the term ''Minor Planet Center'' means the Minor Planet Center of the Smithsonian Astrophysical Observatory;*

*(3) the term ''near-Earth asteroid'' means an asteroid with a perihelion distance of less than 1.3 Astronomical Units from the Sun; and*

*(4) the term ''Program'' means the Charles ''Pete'' Conrad Astronomy Awards Program established under subsection (c).*

*(c) PETE CONRAD ASTRONOMY AWARD PROGRAM.—*

*(1) IN GENERAL.—The Administrator shall establish the Charles ''Pete'' Conrad Astronomy Awards Program.*

*(2) AWARDS.—The Administrator shall make awards under the Program based on the recommendations of the Minor Planet Center.*

*(3) AWARD CATEGORIES.—The Administrator shall make one annual award, unless there are no eligible discoveries or contributions, for each of the following categories:*

*(A) 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.*

*(B) The amateur astronomer or group of amateur astronomers who made the greatest contribution to the Minor Planet Center's mission of cataloguing near-Earth asteroids during the preceding year.*

*(4) AWARD AMOUNT.—An award under the Program shall be in the amount of $3,000.*

*(5) GUIDELINES.—(A) No individual who is not a citizen or permanent resident of the United States at the time of his discovery or contribution may receive an award under this section.*

*(B) The decisions of the Administrator in making awards under this section are final.*

***SEC. 614. REVIEW OF EDUCATION PROGRAMS.***

*(a) IN GENERAL.—The Administrator shall enter into an arrangement with the National Research Council of the National Academy of Sciences to conduct a review and evaluation of NASA's science, technology, engineering, and mathematics education program. The review and evaluation shall be documented in a report to the Administrator and shall include such recommendations as the National Research Council determines will improve the effectiveness of the program.*

*(b) REVIEW.—The review and evaluation under subsection (a) shall include—*

*(1) an evaluation of the effectiveness of the overall program in meeting its defined goals and objectives;*

*(2) an assessment of the quality and educational effectiveness of the major components of the program, including an evaluation of the adequacy of assessment metrics and data collection requirements available for determining the effectiveness of individual projects;*

*(3) an evaluation of the funding priorities in the program, including a review of the funding level and funding trend for each major component of the program and an assessment of whether the resources made available are consistent with meeting identified goals and priorities; and*

*(4) a determination of the extent and the effectiveness of coordination and collaboration between NASA and other Federal agencies that sponsor science, technology, engineering, and mathematics education activities.*

*(c) REPORT TO CONGRESS.—Not later than 18 months after the date of enactment of this Act, the Administrator shall transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate the report required under subsection (a).*

***SEC. 615. EQUAL ACCESS TO NASA'S EDUCATION PROGRAMS.***

*The Administrator shall strive to ensure equal access for minority and economically disadvantaged students to NASA's Education programs. Not later than 1 year after the date of enactment of this Act, and every 2 years thereafter, the Administrator shall submit a report to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate describing the efforts by the Administrator to ensure equal access for minority and economically disadvantaged students under this section, and the results of such efforts.*

## *TITLE VII—MISCELLANEOUS AMENDMENTS*

***SEC. 701. RETROCESSION OF JURISDICTION.***

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

*''RETROCESSION OF JURISDICTION*

*''SEC. 316. (a) Notwithstanding any other provision of law, the Administrator may relinquish to a State all or part of the legislative jurisdiction of the United States over lands or interests under the control of the Administrator in that State.*

*''(b) For purposes of this section, the term 'State' means any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the United States Virgin Islands, Guam, American Samoa, the Northern Mariana Islands, and any other commonwealth, territory, or possession of the United States.''.*

***SEC. 702. EXTENSION OF INDEMNIFICATION.***

*Section 309 of the National Aeronautics and Space Act of 1958 (42 U.S.C. 458c) is amended in subsection (f)(1) by striking ''December 31, 2002'' through ''September 30, 2005'' and inserting, ''December 31, 2010, except that the Administrator may extend the termination date to a date not later than September 30, 2015, if the Administrator has entered into an arrangement with the National Academy of Public Administration to determine the impact on private parties and the Federal Government of eliminating this section''.*

***SEC. 703. NASA SCHOLARSHIPS.***

*(a) AMENDMENTS.—Section 9809 of title 5, United States Code, is amended—*

*(1) in subsection (a)(2) by striking ''Act.'' and inserting ''Act (42 U.S.C. 1885a or 1885b).'';*

*(2) in subsection (c) by striking ''require.'' and inserting ''require to carry out this section.'';*

*(3) in subsection (f)(1) by striking the last sentence; and*

*(4) in subsection (g)(2) by striking ''Treasurer of the'' and all that follows through ''by 3'' and inserting ''Treasurer of the United States''.*

*(b) REPEAL.—The Vision 100—Century of Aviation Reauthorization Act is amended by striking section 703 (42 U.S.C. 2473e).*

***SEC. 704. INDEPENDENT COST ANALYSIS.***

*Section 301 of the National Aeronautics and Space Administration Authorization Act of 2000 (42 U.S.C. 2459g) is 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) by striking ''Chief Financial Officer'' each place it appears in subsection (a) and inserting ''Administrator'';

(4) by inserting ''and consider'' in subsection (a) after ''shall conduct''; and

(5) 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 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.''.

**SEC. 705. LIMITATIONS ON OFF-SHORE PERFORMANCE OF CONTRACTS FOR THE PROCUREMENT OF GOODS AND SERVICES.**

(a) CONVERSIONS TO CONTRACTOR PERFORMANCE OF ADMINISTRATION ACTIVITIES.—Except as provided in subsection (c), an activity or function of the Administration that is converted to contractor performance under Office of Management and Budget Circular A–76 may not be performed by the contractor or any subcontractor at a location outside the United States.

(b) CONTRACTS FOR THE PROCUREMENT OF SERVICES.—(1) Except as provided in subsection (c), a contract for the procurement of goods or services that is entered into by the Administrator may not be performed outside the United States unless it is to meet a requirement of the Administration for goods or services specifically at a location outside the United States.

(2) The President may waive the prohibition in paragraph (1) in the case of any contract for which the President determines in writing that it is necessary in the national security interests of the United States for goods or services under the contract to be performed outside the United States.

(3) The Administrator may waive the prohibition in paragraph (1) in the case of any contract for which the Administrator determines in writing that essential goods or services under the contract are only available from a source outside the United States.

(c) EXCEPTION.—Subsections (a) and (b)(1) shall not apply to the extent that the activity or function under the contract was previously performed by Federal Government employees outside the United States.

(d) CONSISTENCY WITH INTERNATIONAL AGREEMENTS.—The provisions of this section shall not apply to the extent that they are inconsistent with obligations of the United States under international agreements.

(e) ANNUAL REPORT.—The Administrator shall submit to Congress, not later than 120 days after the end of each fiscal year, a report on the contracts performed overseas and amount of purchases by NASA from foreign entities in that fiscal year. Such report shall separately indicate the dollar value of contracts for which the provisions of this section were waived and the dollar value of items for which the Buy American Act was waived pursuant to obligations of the United States under international agreements.

## TITLE VIII—INDEPENDENT COMMISSIONS

**SEC. 1. DEFINITIONS.**

For purposes of this title—

(1) the term ''Commission'' means a Commission established under this title; and

(2) the term ''incident'' means either an accident or a deliberate act.

### Subtitle A—International Space Station Independent Safety Commission

**SEC. 811. ESTABLISHMENT OF COMMISSION.**

(a) ESTABLISHMENT.—The President shall establish an independent, nonpartisan Commission within the executive branch to discover and assess any vulnerabilities of the International Space Station that could lead to its destruction, compromise the health of its crew, or necessitate its premature abandonment.

(b) DEADLINE FOR ESTABLISHMENT.—The President shall issue an executive order establishing a Commission within 30 days after the date of enactment of this Act.

**SEC. 812. TASKS OF THE COMMISSION.**

The Commission established under section 811 shall, to the extent possible, undertake the following tasks:

(1) Catalog threats to and vulnerabilities of the ISS, including design flaws, natural phenomena, computer software or hardware flaws, sabotage or terrorist attack, number of crewmembers, and inability to adequately deliver replacement parts and supplies, and management or procedural deficiencies.

(2) Make recommendations for corrective actions.

(3) Provide any additional findings or recommendations related to ISS safety.

(4) Prepare a report to Congress, the President, and the public.

**SEC. 813. SUNSET.**

The Commission established under this subtitle shall expire not later than one year after the date on which the full Commission membership is appointed.

### Subtitle B—Human Space Flight Independent Investigation Commission

**SEC. 821. ESTABLISHMENT OF COMMISSION.**

(a) ESTABLISHMENT.—The President shall establish an independent, nonpartisan Commission within the executive branch to investigate any incident that results in the loss of—

(1) a Space Shuttle;

(2) the International Space Station or its operational viability;

(3) any other United States space vehicle carrying humans that is being used pursuant to a contract with the Federal Government; or

(4) a crew member or passenger of any space vehicle described in this subsection.

(b) DEADLINE FOR ESTABLISHMENT.—The President shall issue an executive order establishing a Commission within 7 days after an incident specified in subsection (a).

**SEC. 822. TASKS OF THE COMMISSION.**

A Commission established pursuant to this subtitle shall, to the extent possible, undertake the following tasks:

(1) Investigate the incident.

(2) Determine the cause of the incident.

(3) Identify all contributing factors to the cause of the incident.

(4) Make recommendations for corrective actions.

(5) Provide any additional findings or recommendations deemed by the Commission to be important, whether or not they are related to the specific incident under investigation.

(6) Prepare a report to Congress, the President, and the public.

### Subtitle C—Organization and Operation of Commissions

**SEC. 831. COMPOSITION OF COMMISSIONS.**

(a) NUMBER OF COMMISSIONERS.—A Commission established pursuant to this title shall consist of 15 members.

(b) SELECTION.—The members of a Commission shall be chosen in the following manner:

(1) The President shall appoint the members, and shall designate the Chairman and Vice Chairman of the Commission from among its members.

(2) Four of the 15 members appointed by the President shall be selected by the President in the following manner:

(A) The majority leader of the Senate, the minority leader of the Senate, the Speaker of the House of Representatives, and the minority leader of the House of Representatives shall each provide to the President a list of candidates for membership on the Commission.

(B) The President shall select one of the candidates from each of the 4 lists for membership on the Commission.

(3) In the case of a Commission established under subtitle A, the President shall select one candidate from a list of candidates for membership on the Commission provided by the President of the collective-bargaining organization including the largest member of NASA engineers.

(4) No officer or employee of the Federal Government shall serve as a member of the Commission.

(5) No member of the Commission shall have, or have pending, a contractual relationship with NASA.

(6) The President shall not appoint any individual as a member of a Commission under this section who has a current or former relationship with the Administrator that the President determines would constitute a conflict of interest.

(7) To the extent practicable, the President shall ensure that the members of the Commission include some individuals with experience relative to human carrying spacecraft, as well as some individuals with investigative experience and some individuals with legal experience.

(8) To the extent practicable, the President shall seek diversity in the membership of the Commission.

(9) The President may waive the prohibitions in paragraphs (5) and (6) with respect to the selection of not more than 2 members of a Commission established under subtitle A.

(c) DEADLINE FOR APPOINTMENT.—All members of a Commission established under subtitle A shall be appointed no later than 60 days after issuance of the executive order establishing the Commission. All members of a Commission established under subtitle B shall be appointed no later than 30 days after the incident.

(d) INITIAL MEETING.—A Commission shall meet and begin operations as soon as practicable.

(e) QUORUM; VACANCIES.—After its initial meeting, a Commission shall meet upon the call of the Chairman or a majority of its members. Eight members of a Commission shall constitute a quorum. Any vacancy in a Commission shall not affect its powers, but shall be filled in the same manner in which the original appointment was made.

**SEC. 832. POWERS OF COMMISSION.**

(a) HEARINGS AND EVIDENCE.—A Commission or, on the authority of the Commission, any subcommittee or member thereof, may, for the purpose of carrying out this title—

(1) hold such hearings and sit and act at such times and places, take such testimony, receive such evidence, administer such oaths; and

(2) require, by subpoena or otherwise, the attendance and testimony of such witnesses and the production of such books, records, correspondence, memoranda, papers, and documents,

as the Commission or such designated subcommittee or designated member may determine advisable.

(b) CONTRACTING.—A Commission may, to such extent and in such amounts as are provided in appropriation Acts, enter into contracts to enable the Commission to discharge its duties under this title.

(c) INFORMATION FROM FEDERAL AGENCIES.—

(1) IN GENERAL.—A Commission may secure directly from any executive department, bureau, agency, board, commission, office, independent establishment, or instrumentality of the Government, information, suggestions, estimates, and statistics for the purposes of this title. Each department, bureau, agency, board, commission, office, independent establishment, or instrumentality shall, to the extent authorized by law, furnish such information, suggestions, estimates, and statistics directly to the Commission, upon request made by the Chairman, the chairman of any subcommittee created by a majority of the Commission, or any member designated by a majority of the Commission.

(2) RECEIPT, HANDLING, STORAGE, AND DISSEMINATION.—Information shall only be received, handled, stored, and disseminated by

*members of the Commission and its staff consistent with all applicable statutes, regulations, and Executive orders.*

*(d) ASSISTANCE FROM FEDERAL AGENCIES.—*

*(1) GENERAL SERVICES ADMINISTRATION.—The Administrator of General Services shall provide to a Commission on a reimbursable basis administrative support and other services for the performance of the Commission's tasks.*

*(2) OTHER DEPARTMENTS AND AGENCIES.—In addition to the assistance prescribed in paragraph (1), departments and agencies of the United States may provide to the Commission such services, funds, facilities, staff, and other support services as they may determine advisable and as may be authorized by law.*

*(3) NASA ENGINEERING AND SAFETY CENTER.—The NASA Engineering and Safety Center shall provide data and technical support as requested by a Commission.*

***SEC. 833. PUBLIC MEETINGS, INFORMATION, AND HEARINGS.***

*(a) PUBLIC MEETINGS AND RELEASE OF PUBLIC VERSIONS OF REPORTS.—A Commission shall—*

*(1) hold public hearings and meetings to the extent appropriate; and*

*(2) release public versions of the reports required under this Act.*

*(b) PUBLIC HEARINGS.—Any public hearings of a Commission shall be conducted in a manner consistent with the protection of information provided to or developed for or by the Commission as required by any applicable statute, regulation, or Executive order.*

***SEC. 834. STAFF OF COMMISSION.***

*(a) APPOINTMENT AND COMPENSATION.—The Chairman, in consultation with Vice Chairman, in accordance with rules agreed upon by a Commission, may appoint and fix the compensation of a staff director and such other personnel as may be necessary to enable the Commission to carry out its functions.*

*(b) DETAILEES.—Any Federal Government employee, except for an employee of NASA, may be detailed to a Commission without reimbursement from the Commission, and such detailee shall retain the rights, status, and privileges of his or her regular employment without interruption.*

*(c) CONSULTANT SERVICES.—A Commission may procure the services of experts and consultants in accordance with section 3109 of title 5, United States Code, but at rates not to exceed the daily rate paid a person occupying a position at level IV of the Executive Schedule under section 5315 of title 5, United States Code. Any consultant or expert whose services are procured under this subsection shall disclose any contract or association it has with NASA or any NASA contractor.*

***SEC. 835. COMPENSATION AND TRAVEL EXPENSES.***

*(a) COMPENSATION.—Each member of a Commission may be compensated at not to exceed the daily equivalent of the annual rate of basic pay in effect for a position at level IV of the Executive Schedule under section 5315 of title 5, United States Code, for each day during which that member is engaged in the actual performance of the duties of the Commission.*

*(b) TRAVEL EXPENSES.—While away from their homes or regular places of business in the performance of services for the Commission, members of a Commission shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 5703(b) of title 5, United States Code.*

***SEC. 836. SECURITY CLEARANCES FOR COMMISSION MEMBERS AND STAFF.***

*The appropriate Federal agencies or departments shall cooperate with a Commission in expeditiously providing to the Commission members and staff appropriate security clearances to the extent possible pursuant to existing procedures and requirements. No person shall be provided with access to classified information under this title without the appropriate security clearances.*

***SEC. 837. REPORTING REQUIREMENTS AND TERMINATION.***

*(a) INTERIM REPORTS.—A Commission may submit to the President and Congress interim reports containing such findings, conclusions, and recommendations for corrective actions as have been agreed to by a majority of Commission members.*

*(b) FINAL REPORT.—A Commission shall submit to the President and Congress, and make concurrently available to the public, a final report containing such findings, conclusions, and recommendations for corrective actions as have been agreed to by a majority of Commission members. Such report shall include any minority views or opinions not reflected in the majority report.*

*(c) TERMINATION.—*

*(1) IN GENERAL.—A Commission, and all the authorities of this title with respect to that Commission, shall terminate 60 days after the date on which the final report is submitted under subsection (b).*

*(2) ADMINISTRATIVE ACTIVITIES BEFORE TERMINATION.—A Commission may use the 60-day period referred to in paragraph (1) for the purpose of concluding its activities, including providing testimony to committees of Congress concerning its reports and disseminating the final report.*

The CHAIRMAN. No amendment to that amendment is in order except the amendments printed in House Report 109–179. Each amendment may be offered only in the order printed in the report, by a Member designated in the report, shall be considered read, shall be debatable for the time specified in the report, equally divided and controlled by the proponent and an opponent, shall not be subject to amendment, and shall not be subject to a demand for division of the question.

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The CHAIRMAN. It is now in order to consider amendment No. 1 printed in House Report 109–179.

AMENDMENT NO. 1 OFFERED BY MR. BOEHLERT

Mr. BOEHLERT. Mr. Chairman, I offer an amendment.

The CHAIRMAN. The Clerk will designate the amendment.

The text of the amendment is as follows:

Amendment No. 1 offered by Mr. BOEHLERT:

Page 7, line 10, strike ''space science and earth science'' and insert ''space science, earth science and microgravity science''.

Page 16, line 25, strike ''or Reduction in Force''.

Page 17, line 4, insert ''(except for cause)'' after ''separations''.

Page 17, line 5, strike ''October 1, 2006'' and insert ''February 16, 2007''.

Page 21, line 5, insert ''non-aeronautical'' after ''other''.

Page 26, line 21, strike ''90 days after the date of enactment of this Act'' and insert ''February 1, 2006''.

Page 29, line 6, strike the period and insert, '', except in cases in which the Administrator has a conflict of interest.''.

Page 30, line 1, insert '', program reserves,'' after ''cost''.

Page 30, line 4, strike ''and''.

Page 30, after line 4, insert the following new subparagraph:

(D) the plan for mitigating technical, schedule, and cost risks prepared in accordance with subsection (a)(1)(A); and

Page 30, line 5, strike ''(D)'' and insert ''(E)''.

Page 33, line 15, strike ''1 year'' and insert ''18 months''.

Page 33, line 20, insert ''An appropriation for the program enacted subsequent to a report being transmitted shall be considered an authorization for purposes of this subsection.'' after ''by law.''.

Page 34, line 24, strike ''$100,000,000'' and insert ''$150,000,000''.

Page 36, line 24, strike ''subparagraph'' and insert ''paragraph''.

Page 37, line 4, strike ''to compensate for the maximum probable loss, as''.

Page 37, line 21, strike ''from both within and outside the Administration''.

Page 38, line 1, insert ''from outside the Administration, including'' after ''individuals''.

Page 38, line 4, strike ''employees, officers, directors, or agents of,'' and insert ''an employee, officer, director, or agent of''.

Page 38, line 14, strike ''Such funds shall not increase the amount of a prize after the amount has been announced pursuant to subsection (d).''.

Page 38, line 19, strike ''Funds appropriated for the program'' and insert ''Notwithstanding any other provision of law, funds appropriated for prize awards''.

Page 39, strike line 3 through line 5 and insert the following:

(3) No prize may be announced under subsection (d) until all the funds needed to pay out the announced amount of the prize have been appropriated or committed in writing by a private source. The Administrator may increase the amount of a prize after an initial announcement is made under subsection (d) if—

(A) notice of the increase is provided in the same manner as the initial notice of the prize; and

(B) the funds needed to pay out the announced amount of the increase have been appropriated or committed in writing by a private source.

Page 41, line 20, strike ''provide'' and insert ''transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate''.

Page 43, line 18, insert at the end ''Not later than one year after the date of enactment of this Act, the Administrator shall transmit the study to the Committee on Science of the House of Representatives and the Committee on Commerce, Science and Transportation of the Senate''.

Page 44, after line 6, add the following new section:

**SEC. 110. SPACE SHUTTLE RETURN TO FLIGHT.**

It is the sense of Congress that, in keeping with the President's Vision for Space Exploration, the Space Shuttle should return to flight as soon as the Administrator determines that a flight can be accomplished with an acceptable level of safety.

In the table of contents in section 1(b), insert after the item relating to section 109 the following:

Sec. 110. Space shuttle return to flight.

Page 44, line 24, strike ''$16,471,050,000'' and insert ''$16,965,650,000''.

Page 45, line 6, strike ''and''.

Page 45, line 8, strike the period and insert ''; and''.

Page 45, after line 8, insert the following new subparagraph:

(D) $8,900,000 for the Science and Technology Scholarship Program.

Page 45, line 10, strike ''$3,181,100,000'' and insert ''$3,844,100,000''.

Page 45, line 12, strike ''$6,387,300,000'' and insert ''$6,218,900,000''.

Page 45, line 17, strike ''$16,962,000,000'' and insert ''$17,726,800,000''.

Page 46, line 2, strike ''$3,589,200,000'' and insert ''$4,514,000,000''.

Page 46, line 4, strike ''$6,007,700,000'' and insert ''$5,847,700,000''.

Page 47, line 14, strike ''each such Committee'' and insert ''the Committee on Science of the House of Representatives and the Committee on Commerce, Science and Transportation of the Senate''.

Page 49, line 13, strike ''Each year'' and insert ''Not later than March 1 of each year''.

Page 50, line 7, insert ''study titled 'Assessment of Options for Extending the Life of the Hubble Space Telescope'' ' after ''after National Academy of Sciences''.

Page 50, line 10, insert ''the Administrator shall determine'' after ''Space Shuttle,''.

Page 50, line 12, strike ''shall be determined''.

Page 54, lines 11 and 12, strike ''the Under Secretary of Commerce for Oceans and Atmosphere and''.

Page 54, line 12, insert ''and the Administrator of the National Oceanic and Atmospheric Administration'' after ''Administrator''.

Page 71, line 11, strike ''shall'' and insert ''may''.

Page 72, strike line 5 and all that follows through line 16, and insert the following:

**SEC. 440. UNIVERSITY-BASED CENTERS.**

(a) IN GENERAL.—The Administrator may award grants to institutions of higher education (or consortia thereof) to establish one or more centers for the purpose described in subsection (b).

(b) PURPOSE.—The purpose of the centers is to conduct basic and applied research on the impact of new technologies and procedures, particularly those related to aeronautical navigation and control.

In the table of contents in section 1(b) strike the item relating to section 440 and insert the following:

Sec. 440. University-based centers.

Page 73, line 15, strike the semicolon and insert '', unless the Administrator transmits a report to the Committee on Science of the House of Representatives and the Committee on Science, Transportation of the Senate prior to awarding a development contract for the Crew Exploration Vehicle, explaining why such a requirement should not be met and the impact of not meeting the requirement on the ISS research agenda and operations;''.

Page 73, line 25, strike ''provide sufficient'' and insert ''require sufficient surge delivery capability or''.

Page 74, after line 10, insert the following new subsection:

(d) CENTRIFUGE.—Nothing in this Act shall be construed to prohibit the installation of the centrifuge on the ISS.

Page 81, line 15, insert at the end the following: ''As part of the report, the Administrator shall provide data on minority participation in NASA's education programs, at a minimum in the following categories: elementary and secondary education, undergraduate education, and graduate education.''

Page 81, after line 15, insert the following new sections:

**SEC. 616. MUSEUMS.**

The Administrator may provide grants to, and enter into cooperative agreements with museums and planetariums to enable them to enhance programs related to space exploration, aeronautics, space science, earth science, or microgravity.

**SEC. 617. REVIEW OF MUST PROGRAM.**

Not later than 60 days after the date of enactment of this Act, the Administrator shall transmit a report to Congress on the legal status of the Motivating Undergraduates in Science and Technology program. If the report concludes that the program is in compliance with the laws of the United States, NASA shall implement the program, as planned in the July 5, 2005 National Research Announcement.

In the table of contents in section 1(b), insert after the item relating to section 615 the following:

Sec. 616. Museums.
Sec. 617. Review of MUST program.

Page 82, line 11, strike ''(42 U.S.C. 458c)'' and insert ''(42 U.S.C. 2458c)''.

Page 83, line 17 strike ''(2) by striking'' and all that follows though line 18.

Page 83, line 19, strike ''(3)'' and insert ''(2)''.

Page 83, line 22, strike ''(4)'' and insert ''(3)''.

Page 83, line 24, strike ''(5)'' and insert ''(4)''.

Page 86, after line 3, add the following new section:

**SEC. 706. LONG DURATION FLIGHT.**

No provision of this or any other Act shall be construed to prohibit NASA from accommodating the exercise of religion by astronauts engaged in long duration space flight missions.

In the table of contents in section 1(b), insert after the item relating to section 705 the following:

Sec. 706. Long duration flight.

Page 87, line 17, strike ''expire'' and insert ''shall transmit its final report''.

Page 88, line 5, insert ''that is owned by the Federal government or'' after ''humans''.

Page 90, line 3, strike ''member'' and insert ''number''.

The CHAIRMAN. Pursuant to House Resolution 370, the gentleman from New York (Mr. BOEHLERT), and a Member opposed each will control 10 minutes.

The Chair recognizes the gentleman from New York (Mr. BOEHLERT).

Mr. BOEHLERT. Mr. Chairman, I yield myself such time as I may consume.

(Mr. BOEHLERT asked and was given permission to revise and extend his remarks.)

Mr. BOEHLERT. Mr. Chairman, I rise to support my amendment, which I am offering along with my partners in this endeavor, the gentleman from California (Chairman CALVERT), the gentleman from Tennessee (Mr. GORDON), and the gentleman from Colorado (Mr. UDALL). This amendment makes many technical and clarifying changes to the bill, some of them sought by NASA. It includes specific language sought by a number of Members, including the gentleman from Florida (Mr. FEENEY) and the gentlewoman from Illinois (Mrs. BIGGERT), the gentleman from California (Mr. HONDA), and the gentleman from California (Mr. BACA).

Most importantly, this amendment fully funds the President's request for exploration for fiscal years 2006 and 2007, not by cutting other programs, but by adding to the bottom line of the bill. I want to thank the administration and key members of our committee, including the gentleman from Texas (Mr. HALL) and the gentleman from Texas (Mr. SMITH) and the gentleman from Florida (Mr. FEENEY) for working with us on this amendment.

The amendment also specifically recognizes our hope for return to flight. It gives NASA flexibility on the crew size for the space station and clarifies provisions relating to cost reporting on major programs, and raises the threshold for a major program to those with a life-cycle cost of at least $150 million.

The amendment, like the underlying bill, represents a bipartisan effort, and it has the full support of the administration. I urge its adoption.

Mr. Chairman, I reserve the balance of my time.

Mr. GORDON. Mr. Chairman, I ask unanimous consent to claim the time in opposition under the rule, since no opponent has risen to claim that time.

The CHAIRMAN. Is there objection to the request of the gentleman from Tennessee?

There was no objection.

Mr. GORDON. Mr. Chairman, I yield myself such time as I may consume.

Mr. Chairman, I want to speak in support of the manager's amendment to H.R. 3070. This manager's amendment is a result of a great deal of constructive discussion and negotiation between the majority and the minority. I believe that on balance it will make a good bill better.

The gentleman from New York (Chairman BOEHLERT) has already outlined the provisions of the manager's amendment, so I will not take the time to restate them. Instead, I would like to limit myself to a few comments.

First, I am prepared to support the increased funding of NASA's exploration program that is contained in this amendment. As I said in my statement during the general debate, I think that the approach taken in the amendment to increase exploration funding is the right one. If this amendment passes, as I hope it will, it will be a clear statement that the House of Representatives believes that additional funding for the exploration program should not be obtained by cannibalizing NASA's other core missions. That is an important policy statement, and I am pleased that the House will make it by adopting this amendment.

There are other constructive provisions in the amendment; namely, provisions to ensure that the needs of NASA's workforce are addressed in the midst of all the changes occurring at NASA; provisions to encourage the participation of minorities and women in NASA's educational activities, as well as other programs; a statement of support for NASA's shuttle return-to-flight efforts; and a statement making clear that Congress is certainly not opposed to installing the life sciences centrifuge on the International Space Station to support its research agenda.

Mr. Chairman, the manager's amendment also makes a number of technical changes that strengthen the bill.

In sum, I think the manager's amendment improves an already good bill, and I urge the Members to support it.

Mr. Chairman, I reserve the balance of my time.

Mr. BOEHLERT. Mr. Chairman, I yield 2 minutes to the gentleman from

California (Mr. CALVERT), the distinguished chairman of the Subcommittee on Space.

Mr. CALVERT. Mr. Chairman, the manager's amendment for the NASA Authorization Act of 2005 is an important complement to the bill reported out of our committee last week.

The amendment includes some technical changes, as was mentioned, as well as a number of amendments from committee members and other interested Members. We will now fully fund the President's Vision for Space Exploration, which includes the Space Shuttle's return to flight, completion of the International Space Station, and development of the new Crew Exploration Vehicle, which will allow us to return to the Moon by 2020, to Mars, and beyond.

Just as our bill is a bipartisan compromise, this amendment also represents a bipartisan effort with approval of both sides of the aisle for each addition that was incorporated. Our committee also worked with the administration on several of the fundamental concepts in both the bill and the amendment. As a result, we have received the support of the administration on the bill with the changes in the manager's amendment.

We all recognize that NASA is a multi-mission agency, and the committee worked to provide the rules and tools that will enable the agency to maintain the balance as we proceed into the Second Space Age.

We are hoping this is the first of many NASA authorization bills over the years. It has been too long since that last authorization. We owe it to NASA and the American people to offer guidance through the authorizing process on a regular basis. I commend the gentleman from New York (Mr. BOEHLERT) for his leadership and the gentleman from Tennessee (Ranking Member GORDON) and the gentleman from Colorado (Ranking Member UDALL) all for their persistence in pursuing this balanced, bipartisan bill. I also thank the committee staff, as was mentioned before, on both sides of the aisle for their efforts on this bipartisan compromise.

I urge my colleagues to support the manager's amendment and vote for its passage.

Mr. GORDON. Mr. Chairman, I yield 2 minutes to the Ranking Member of the subcommittee, the gentleman from Colorado (Mr. UDALL).

Mr. UDALL of Colorado. Mr. Chairman, I thank the gentleman for yielding me this time, and I rise in support of this manager's amendment.

I concur with the comments of the gentleman from Tennessee (Mr. GORDON) and believe he has accurately summarized the strengths of the manager's amendment.

I have to tell my colleagues I am particularly heartened that the amendment adds additional provisions intended to improve participation by Hispanics, African Americans, Native Americans, and other minorities in NASA's educational programs. In addition, it addresses some important concerns of the NASA workforce.

Finally, as was pointed out by the gentleman from Tennessee (Ranking Member GORDON), this amendment indicates that Congress supports exploration, but also that Congress is making clear that additional funding for exploration should not be obtained by cutting NASA's important science, aeronautics, and education programs. I think this is crucial policy guidance.

In closing, Mr. Chairman, I would like to again thank the chairman of the committee, the gentleman from New York (Mr. BOEHLERT), my good friend, the chairman of the subcommittee, the gentleman from California (Mr. CALVERT), and the gentleman from Tennessee (Ranking Member GORDON) for this very important piece of legislation, and salute the staff and everybody involved in the crafting of this legislation. I urge the adoption of the manager's amendment.

Mr. BOEHLERT. Mr. Chairman, I reserve the balance of my time.

Mr. GORDON. Mr. Chairman, I yield 2 minutes to the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON).

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Chairman, I rise to support the manager's amendment. Much deliberation went into the amendment. As I said earlier, the chairman of the committee and ranking member worked very closely together. We started out very far apart, but they worked very close together and we were able to come together on an agreed upon bill.

It does speak to minority participation across the board, and workforce, because we know we have to build a strong workforce to keep this mission going, and the type of research it is and how important it is to our everyday lives. It encourages us to get the shuttle back into space, because that is where we have gotten most of our products and services, through that type of research. We do not want to hasten to Mars, but we know that we cannot stop in research. It must go on continually and constantly so that we can maintain a competitive edge.

All of us know that we will not bring any products to the market or any health care techniques and technologies to the market without research. This is the type of research that has brought us to where we are now. I am delighted to say that this is my thirteenth year on this committee, and I am never bored. We know we need to encourage more young people, American-born, because most of our researchers are not, to go into the field of research so that we can, as a Nation, continue to lead the world.

Mr. BOEHLERT. Mr. Chairman, it is my pleasure to yield such time as he may consume to the gentleman from Texas (Mr. DELAY), the distinguished majority leader.

Mr. DELAY. Mr. Chairman, I rise in support, strong support of the NASA reauthorization as it continues the agency's vital work, implementing and filling in the details of the President's bold Vision for Space Exploration.

Almost 36 years to the day since Neil Armstrong took his ''small step for man,'' today the House will help NASA make its next ''giant leap for mankind.''

The Committee on Science has brought forth a comprehensive bill that fully funds the Space Shuttle, the International Space Station, both vital components of the President's vision, aeronautics, servicing the Hubble telescope and the James Webb telescope project.

I am particularly gratified that the committee has seen fit to fully fund NASA's exploration systems, which, of course, is not only the heart and soul of the agency, but the very essence of America's mission in space.

The bill dovetails seamlessly with President Bush's vision by calling for a timely return to shuttle flight, the completion of the ISS, and the development of a new Crew Exploration Vehicle.

The manager's amendment to the bill contains many improvements over the original bill, including a provision to restore $1.26 billion in funding to exploration systems, while also crafting important language to better monitor potential cost overruns. It also acknowledges the critical role the shuttle has in achieving the first step of the President's vision.

I just want to thank the gentleman from New York (Mr. BOEHLERT), the gentleman from California (Mr. CALVERT), the gentleman from Tennessee (Ranking Member GORDON), and the gentleman from Colorado (Ranking Member Udall) and the rest of their committee for their hard work on these provisions. This is an excellently crafted bill. It is a bipartisan bill; in fact, one could probably say it is a nonpartisan bill, and one that has shown how Members can come together, work together, and have an excellent outcome.

But, ultimately, Mr. Chairman, this bill does one thing: it gives the men and women of NASA, many of whom I am fortunate enough to represent, the resources they need to make that next giant leap, and I encourage all Members to support the manager's amendment and the bill.

Mr. GORDON. Mr. Chairman, I have no further requests for time, and I yield back the balance of my time.

Mr. BOEHLERT. Mr. Chairman, in closing, I urge my colleagues to vote for this bipartisan manager's amendment, and I yield back the balance of my time.

The CHAIRMAN. The question is on the amendment offered by the gentleman from New York (Mr. BOEHLERT).

The amendment was agreed to.

The CHAIRMAN. It is now in order to consider amendment No. 2 printed in House Report 109–179.

AMENDMENT NO. 2 OFFERED BY MS. VELÁZQUEZ

Ms. VELÁZQUEZ. Mr. Chairman, I offer an amendment.

The CHAIRMAN. The Clerk will designate the amendment.

The text of the amendment is as follows:

Amendment No. 2 offered by Ms. VELÁZQUEZ:

Add at the end of section 102 (page 28, after line 10) the following new subsection:

(h) OFFICE OF SMALL AND DISADVANTAGED BUSINESS UTILIZATION.—The Administrator shall transmit to the Committee on Science and the Committee on Small Business of the House of Representatives and the Committee on Commerce, Science, and Transportation and the Committee on Small Business and Entrepreneurship of the Senate a quarterly report on the NASA Office of Small and Disadvantaged Business Utilization, which shall include a description of the outreach activities of the Office and the impact of such activities on the participation of small businesses, including small businesses owned by women and minorities, in NASA contracts.

The CHAIRMAN. Pursuant to House Resolution 370, the gentlewoman from New York (Ms. VELÁZQUEZ) and a Member opposed each will control 5 minutes.

The Chair recognizes the gentlewoman from New York (Ms. VELÁZQUEZ).

Ms. VELÁZQUEZ. Mr. Chairman, I yield myself such time as I may consume.

Mr. Chairman, the Federal marketplace is doing record levels today, with nearly every agency buying more than ever before. NASA alone has increased their contracting volume by 30 percent in the past 4 years.

Despite NASA's significant increase in procurement volume, small firms continue to fare poorly when it comes to working with this agency. NASA's small business contracts have declined by 50 percent in the past 4 years. The amendment I am offering today will help to change this.

Small companies represent the majority of businesses in this country, and they are the most innovative. They issue more patents per employee than their large business counterparts. One would assume that this innovation would shine through in agencies that rely on scientific knowledge and expertise. However, this has not been the case.

NASA is an agency that relies heavily on scientific expertise while, at the same time, they control a large segment of the Federal marketplace. They are consistently ranked third out of all Federal agencies in terms of procurement volume, buying more than the Department of Health and Human Services, the Department of Agriculture, and the Department of Interior combined.

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Clearly, NASA has the capability to meet their small business goals; however, they do need some assistance and we have no way to evaluate whether or not their efforts in increasing small business contracts are truly yielding results. This agency has an array of options when it comes to identifying small companies, whether they work with them individually, host national conferences, or connect with the SBA to identify contracting possibilities. But whatever they are doing is not yielding an increase in small business contracts.

My amendment would guarantee that these outreach methods are examined so that we can pinpoint the best way for NASA to reach out to small firms. This would allow us to truly see what works, what does not work, and what industries are more likely to successfully penetrate NASA's procurement opportunities. It will also enable the Small Business Committee and the Science Committee to move forward in ensuring NASA is taking the right steps to meet their small business contracting goal.

This amendment is a good government solution to a problem that has been facing our Nation's small companies for years now, their ability to access the Federal marketplace, and it is supported by the U.S. Women's Chamber of Commerce. Clearly, as stewards of taxpayer dollars, one of our most important charges is ensuring that these resources are used in the most effective and efficient manner possible. One of the best ways to go about this is to ensure accountability exists, and adoption of this amendment will achieve just that. This amendment will begin the process of identifying the barriers that prevent small companies from doing business with NASA. It will also assist NASA in honing its efforts at increasing small business access to contracts to those endeavors that have proven successful.

I urge a ''yes'' vote on this amendment.

Mr. GORDON. Mr. Chairman, will the gentlewoman yield?

Ms. VELÁZQUEZ. I yield to the gentleman from Tennessee.

Mr. GORDON. Mr. Chairman, I rise today in support of this amendment offered by the gentlewoman from New York (Ms. VELÁZQUEZ). She has a longstanding interest and has been a great advocate for small and disadvantaged businesses. The amendment offered by the gentlewoman is a sensible measure that will help us to ensure that NASA's outreach efforts with small and disadvantaged businesses are reached to their full potential. I hope Members will join me in support of this measure and vote to include it in the bill.

Ms. VELÁZQUEZ. Mr. Chairman, I would like to take this opportunity to thank the gentleman from Tennessee (Mr. GORDON), the ranking member, for supporting my amendment.

Mr. Chairman, I reserve the balance of my time.

Mr. BOEHLERT. Mr. Chairman, I rise to claim time in opposition to the amendment, although I do not intend to oppose it.

The Acting CHAIRMAN (Mr. ADERHOLT). Without objection, the gentleman is recognized for 5 minutes.

There was no objection.

Mr. BOEHLERT. Mr. Chairman, I yield 3 minutes to the gentleman from Texas (Mr. MCCAUL).

Mr. MCCAUL of Texas. Mr. Chairman, I rise today in support of this valuable legislation to fund NASA, and I would like to thank the gentleman from New York (Mr. BOEHLERT) for his extraordinary leadership on this issue.

Americans have high hopes for the future of the space program. But if we are to explore the boundaries of our final frontier through the President's Vision for Space Exploration, NASA and its manned space flight program must be adequately supported. This legislation does just that, and it also gives NASA Administrator Mike Griffin the tools he needs to work towards the completion of the International Space Station.

In the 1960s, President Kennedy helped us begin the race to the Moon. And the United States reached that lofty goal six times with the Nation watching and listening to every mission. We won that race then, and now we must adopt again the same spirit of enthusiasm for space exploration. Accordingly, President Bush has laid out a plan that sets a goal of returning Americans to the Moon within 15 years.

However, the success of the Vision For Space Exploration is predicated on these goals being in the heart of tomorrow's scientists and engineers. To meet this need, the President's plan will again make space exploration an exciting and educational priority for America. He has made it clear within the next half century, America will be the world leader in space exploration with missions to the Moon, Mars and beyond.

We must keep in mind that we are not the only ones pursuing this goal, and America is once again in a space race. European countries are peacefully competing against us in a race to be the first country to land a man on Mars. And to win this race, NASA must work with the private sector, universities around the Nation, and possibly other countries to overcome the most challenging technological obstacles NASA has yet to face.

The successes that are surely to come from the vision will benefit not only America and its manned space flight program, but humanity and our planet will be direct benefactors of this historic undertaking.

In a world tattered by war and terrorism, the NASA space exploration program brings the hope and promise of a brighter tomorrow for our children and for future generations. Our goals to explore the endless boundaries of our universe will and must continue. They are efforts linked to no political party or branch of government. Our need and want to explore space and the bodies around the Earth belong not just to Americans but to humanity. Indeed, they are efforts to continue what humans have done since our inception and that is to explore.

Mr. BOEHLERT. Mr. Chairman, I yield myself such time as I may consume. I claim the time in opposition to the amendment only because it is procedurally necessary. I do not oppose the amendment. As a matter of fact, after careful examination of not only the language but the intent, we are pleased to accept the amendment. And I want to commend the gentlewoman from New York for offering this amendment. I think it enriches the bill.

We, because of the proximity of our offices and the frequency with which we have to travel from the offices to the floor, often find ourselves on the same path at the same time. And let me say to my colleagues, I can think of no one who is more ardent in her support of small business and her determination to help us enrich bills, no matter which committee we might serve on.

So I tell the gentlewoman I thank her for offering this constructive amendment, and we accept it.

Ms. VELÁZQUEZ. I thank the gentleman from New York (Mr. BOEHLERT) for supporting my amendment.

Mr. Chairman, I yield back the balance of my time.

The Acting CHAIRMAN. The question is on the amendment offered by the gentlewoman from New York (Ms. VELÁZQUEZ).

The amendment was agreed to.

The Acting CHAIRMAN. It is now in order to consider amendment No. 3 printed in House Report 109–179.

AMENDMENT NO. 3 OFFERED BY MS. JACKSON-LEE OF TEXAS

Ms. JACKSON-LEE of Texas. Mr. Chairman, I offer an amendment.

The Acting CHAIRMAN. The Clerk will designate the amendment.

The text of the amendment is as follows:

Amendment No. 3 offered by Ms. JACKSON-LEE of Texas:

Page 45, line 6, strike ''and''.

Page 45, line 8, strike the period and insert a semicolon.

Page 45, after line 8, insert the following new subparagraphs:

(D) $69,200,000 shall be for Historically Black Colleges and Universities education programs; and

(E) $46,400,000 shall be for Hispanic Serving Institutions education programs.

Page 45, line 22, strike ''and''.

Page 45, line 24, strike the period and insert a semicolon.

Page 45, after line 24, insert the following new subparagraphs:

(D) $71,200,000 shall be for Historically Black Colleges and Universities education programs; and

(E) $47,400,000 shall be for Hispanic Serving Institutions education programs.

The Acting CHAIRMAN. Pursuant to House Resolution 370, the gentlewoman from Texas (Ms. JACKSON-LEE) and the gentleman from New York (Mr. BOEHLERT) each will control 5 minutes.

The Chair recognizes the gentlewoman from Texas (Ms. JACKSON-LEE).

Ms. JACKSON-LEE of Texas. Mr. Chairman, I yield myself 2 minutes. And let me just thank the gentleman from New York (Mr. BOEHLERT) and the gentleman from Tennessee (Mr. GORDON), the ranking member, for their leadership on this issue; my colleagues as well, the gentleman from Texas (Mr. AL GREEN) and the gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON), and the entire Science Committee that have worked extensively on this issue.

My amendment is to restore funds to Historically Black Colleges under the NASA education program and to Hispanic Serving Colleges under the NASA education program. This amendment specifically would add a funding level of $69.2 million for fiscal year 2006 and $72.2 million for fiscal year 2007. My amendment would also restore funding for Hispanic Serving Institutions under NASA education programs in the amount of $46.4 million fiscal year 2006 and $47.4 million fiscal year 2007.

Let me first of all again acknowledge the underlying bill to have included my amendment dealing with equal access to NASA's education programs in which the administrator shall strive to ensure equal access to education by minorities. Might I give you a very small example. In the opportunity to visit NASA last week on the launch of the new Discovery, I met a young lady who I had not seen for a number of years. It was a number of years ago where I recommended that she attend a NASA launch, an African American young woman in an environmental science program, Ph.D. program at Texas Southern University in Houston, Texas.

Lo and behold, when I went there she came up to me and introduced herself and said, I am the young lady that you allowed to go to a launch. Now I have a Ph.D. in environmental sciences. I am affiliated with NASA and I am writing a proposal to enhance the affiliation with Texas Southern University.

This works, Mr. Chairman. The funding of these colleges work. The greatest producer of scientists are those who, in fact, come from Historically Black Colleges. And I read into the RECORD these numbers: for S and E graduates, scientists, female in the United States only 835,000. White students, 2 million-plus. Black students 121,000; Hispanics 120,000.

We need to pass this amendment.

Mr. Chairman, I rise today in support of my amendment, which would restore funding for historically Black colleges and universities, HBCUs, under NASA education programs to the fiscal year 2004 funding level of $69.2 million for fiscal year 2006 and $71.2 million for fiscal year 2007. My amendment would also restore funding for Hispanic serving institutions under NASA education programs in the amount of $46.4 million for fiscal year 2006 and $47.4 million for fiscal year 2007.

Unfortunately, we do not have nearly enough minority representation in the fields of science and engineering. Minorities represent only a small proportion of scientists and engineers in the United States. Collectively, Blacks, Hispanics, and other ethnic groups—the latter includes American Indian/Alaskan Natives—constituted 24 percent of the total U.S. population and only 7 percent of the total science and engineering workforce in 1999. Blacks and Hispanics each accounted for about 3 percent of scientists and engineers, and other ethnic groups represented less than 0.5 percent.

The fact is that this year HBCUs face a $13 million cut in their allotment from NASA education funds. Clearly, this money could make a significant difference in the future diversity of the science community. For most of America's history, African-Americans who received a college education could only get it from an HBCU. Today, HBCUs remain one of the surest ways for an African-American, or student of any race, to receive a high quality education. In 1998, 29 percent of the African-Americans who received science and engineering bachelor's degrees earned them at HBCUs. Seven of the top eleven producers of African-American baccalaureates in engineering were HBCUs, including No. 1 North Carolina A&T State University. The top three producers of African-American baccalaureates in health professions—No. 1 Southern University and A&M College, No. 2 Florida A&M University, and No. 3 Howard University—were HBCUs. The 12 top producers of African-American baccalaureates in the physical sciences, including No. 1 Xavier University of Louisiana, were all HBCUs.

Hispanic serving institutions, HSIs, have also suffered dramatic cuts because of lower funding this year. Despite the fact that about one-third of Hispanics who earned science and engineering bachelor's degrees did so at HSIs. According to the Hispanic Association of Colleges and Universities, Hispanics are historically underrepresented in the areas of science, technology, engineering and mathematics. HSIs receive only half the Federal funding per student, on average, according to every other degree-granting institution. Indeed it seems sadly clear that HSIs are a long way from Federal funding parity with other institutions of higher learning.

I hope every Member of this body can agree on the importance of HBCUs and HSIs and I hope you will support my amendment to restore their funding to a proper level.

APPENDIX TABLE 3–15.—MEDIAN ANNUAL SALARIES OF U.S. INDIVIDUALS IN S&E OCCUPATIONS, BY HIGHEST DEGREE, OCCUPATION, SEX, RACE/ETHNICITY, AND YEARS SINCE DEGREE: 1999

[Dollars]

| Degree, occupation, sex, and race/ethnicity | Employed individuals | Years since highest degree | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Less than 5 | 5–9 | 10–14 | 15–19 | 20–24 | 25–29 | 30–34 | 35 or more |
| All S&E occupations | 60,000 | 46,000 | 57,000 | 64,000 | 69,000 | 70,000 | 70,600 | 72,000 | 70,000 |
| Male | 64,000 | 48,800 | 60,000 | 66,000 | 70,000 | 70,700 | 72,100 | 74,000 | 70,100 |

APPENDIX TABLE 3–15.—MEDIAN ANNUAL SALARIES OF U.S. INDIVIDUALS IN S&E OCCUPATIONS, BY HIGHEST DEGREE, OCCUPATION, SEX, RACE/ETHNICITY, AND YEARS SINCE DEGREE: 1999—Continued

[Dollars]

| Degree, occupation, sex, and race/ethnicity | Employed individuals | Years since highest degree | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Less than 5 | 5–9 | 10–14 | 15–19 | 20–24 | 25–29 | 30–34 | 35 or more |
| Female | 50,000 | 40,000 | 50,000 | 57,000 | 60,000 | 58,700 | 60,000 | 57,000 | 52,000 |
| White | 61,000 | 45,000 | 56,000 | 65,000 | 70,000 | 70,000 | 71,000 | 73,000 | 70,000 |
| Asian/Pacific Islander | 62,000 | 53,000 | 63,000 | 68,000 | 70,000 | 72,000 | 70,000 | 67,200 | 64,800 |
| Black | 53,000 | 45,000 | 54,000 | 55,000 | 60,000 | 58,000 | 53,000 | 53,000 | 46,500 |
| Hispanic | 55,000 | 44,000 | 56,000 | 58,000 | 65,000 | 61,000 | 68,500 | 67,000 | 68,000 |
| Other | 52,000 | 42,000 | 50,000 | 57,000 | 55,000 | 65,000 | 75,000 | 88,000 | S |
| Scientists | 58,800 | 43,000 | 54,500 | 62,000 | 65,300 | 65,000 | 67,600 | 68,100 | 65,000 |
| Male | 62,000 | 47,800 | 58,500 | 65,900 | 70,000 | 68,000 | 70,000 | 71,000 | 70,000 |
| Female | 50,000 | 37,000 | 48,000 | 55,000 | 58,100 | 58,000 | 60,000 | 56,000 | 49,000 |
| White | 59,700 | 41,000 | 53,000 | 62,000 | 65,000 | 65,000 | 68,000 | 70,000 | 69,000 |
| Asian/Pacific Islander | 60,000 | 54,000 | 63,000 | 67,000 | 73,000 | 69,000 | 67,500 | 60,000 | 58,200 |
| Black | 50,000 | 44,000 | 50,000 | 51,500 | 58,000 | 55,600 | 50,000 | 50,000 | 46,500 |
| Hispanic | 51,000 | 41,000 | 56,000 | 56,000 | 65,000 | 56,000 | 60,000 | 54,500 | 55,000 |
| Other | 45,000 | 38,000 | 47,500 | 50,000 | 36,000 | 54,000 | 74,200 | 70,000 | S |
| Mathematical/computer scientists | 64,000 | 55,000 | 62,000 | 66,000 | 69,000 | 70,000 | 70,000 | 69,000 | 64,000 |
| Male | 65,900 | 55,000 | 64,000 | 70,000 | 71,000 | 71,000 | 72,000 | 70,000 | 65,000 |
| Female | 58,000 | 50,000 | 57,000 | 58,400 | 60,000 | 60,000 | 63,000 | 62,000 | 58,000 |
| White | 65,000 | 53,000 | 60,000 | 67,000 | 68,600 | 70,000 | 70,000 | 69,200 | 65,000 |
| Asian/Pacific Islander | 65,000 | 60,000 | 70,000 | 70,000 | 75,000 | 70,000 | 62,000 | 69,100 | 59,000 |
| Black | 54,000 | 49,000 | 54,000 | 53,700 | 60,000 | 57,000 | 48,000 | 34,500 | S |
| Hispanic | 59,000 | 51,000 | 65,000 | 58,600 | 68,000 | 59,000 | 60,000 | S | S |
| Other | 54,000 | 54,000 | 30,000 | 60,000 | S | S | S | S | S |
| Life and related scientists | 47,700 | 29,000 | 43,000 | 52,800 | 60,000 | 56,000 | 63,000 | 61,000 | 72,100 |
| Male | 51,000 | 30,000 | 45,000 | 53,000 | 61,000 | 60,000 | 67,000 | 69,000 | 73,500 |
| Female | 39,000 | 28,100 | 40,000 | 49,800 | 55,000 | 52,000 | 50,600 | 46,000 | 40,000 |
| White | 49,000 | 28,100 | 42,000 | 53,000 | 60,000 | 58,000 | 63,000 | 61,000 | 72,100 |
| Asian/Pacific Islander | 43,000 | 30,000 | 44,700 | 50,400 | 76,000 | 54,000 | 80,000 | 68,000 | 58,200 |
| Black | 42,000 | 30,000 | 49,000 | 48,000 | 44,000 | 41,500 | 57,000 | 30,900 | S |
| Hispanic | 35,500 | 25,000 | 40,000 | 48,000 | 40,000 | 28,500 | 34,000 | 80,000 | S |
| Other | 39,000 | 35,000 | 43,000 | 87,000 | 43,000 | 43,100 | S | S | S |
| Physical and related scientists | 52,000 | 35,000 | 46,000 | 60,000 | 63,800 | 62,500 | 65,000 | 73,000 | 60,000 |
| Male | 56,000 | 35,000 | 47,500 | 60,000 | 65,000 | 68,000 | 66,000 | 75,000 | 74,000 |

APPENDIX TABLE 3–16.—EMPLOYED U.S. SCIENTISTS AND ENGINEERS, BY HIGHEST DEGREE ATTAINED, OCCUPATION, SEX, AND RACE/ETHNICITY: 1999

| Degree and occupation | Employed individuals | Sex | | Race/ethnicity | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Male | Female | White | Black | Hispanic | Asian/Pacific islander | Other |
| All degree levels: [1] | | | | | | | | |
| All S&E occupations | 3,540,800 | 2,705,000 | 835,800 | 2,896,600 | 121,600 | 120,900 | 390,500 | 11,300 |
| Scientists | 2,170,500 | 1,464,800 | 705,800 | 1,774,200 | 84,000 | 71,800 | 233,900 | 6,700 |
| Mathematical/computer scientists | 1,167,400 | 850,600 | 316,700 | 922,200 | 51,400 | 37,600 | 153,600 | 2,700 |
| Life/related scientists | 341,900 | 217,500 | 124,400 | 285,100 | 6,600 | 10,900 | 37,700 | 1,600 |
| Physical/related scientists | 297,900 | 229,400 | 68,400 | 252,500 | 8,800 | 7,800 | 27,800 | 900 |
| Social/related scientists | 363,400 | 167,300 | 196,200 | 314,400 | 17,200 | 15,500 | 14,800 | 1,500 |
| Engineers | 1,370,300 | 1,240,200 | 130,000 | 1,122,400 | 37,700 | 49,100 | 156,600 | 4,600 |
| Bachelor's: | | | | | | | | |
| S&E occupations | 1,994,400 | 1,564,700 | 429,700 | 1,680,900 | 73,900 | 74,800 | 158,300 | 6,600 |
| Scientists | 1,087,100 | 744,300 | 342,800 | 908,100 | 46,600 | 41,500 | 87,700 | 3,100 |
| Mathematical/computer scientists | 740,500 | 538,900 | 201,600 | 612,200 | 34,200 | 27,000 | 65,400 | 1,700 |
| Life/related scientists | 135,500 | 76,900 | 58,600 | 117,100 | 2,000 | 5,700 | 9,800 | 900 |
| Physical/related scientists | 139,600 | 101,700 | 38,000 | 120,600 | 5,800 | 4,600 | 8,400 | S |
| Social/related scientists | 71,400 | 26,800 | 44,600 | 58,300 | 4,600 | 4,200 | 4,000 | S |
| Engineers | 907,400 | 820,400 | 86,900 | 772,800 | 27,300 | 33,300 | 70,600 | 3,400 |
| Master's: | | | | | | | | |
| S&E occupations | 1,032,100 | 751,200 | 280,900 | 807,200 | 35,900 | 32,800 | 153,000 | 3,100 |
| Scientists | 655,500 | 411,400 | 244,200 | 516,000 | 27,300 | 19,100 | 91,100 | 2,100 |
| Mathematical/computer scientists | 354,100 | 253,700 | 100,500 | 256,200 | 15,200 | 8,800 | 72,900 | 900 |
| Life/related scientists | 72,500 | 44,000 | 28,500 | 61,200 | 2,200 | 1,800 | 7,100 | 300 |
| Physical/related scientists | 73,000 | 53,700 | 19,300 | 62,300 | 1,800 | 1,400 | 7,100 | 400 |
| Social/related scientists | 155,900 | 60,000 | 95,900 | 136,200 | 8,100 | 7,100 | 4,000 | 500 |
| Engineers | 376,500 | 339,800 | 36,700 | 291,300 | 8,600 | 13,600 | 62,000 | 1,000 |
| Doctoral: | | | | | | | | |
| S&E occupations | 484,100 | 368,900 | 115,200 | 381,600 | 11,000 | 12,900 | 77,000 | 1,600 |
| Scientists | 399,900 | 290,900 | 109,100 | 325,100 | 9,300 | 11,000 | 53,100 | 1,500 |
| Mathematical/computer scientists | 67,100 | 54,900 | 12,200 | 49,500 | 1,400 | 1,600 | 14,500 | S |
| Life/related scientists | 121,100 | 86,200 | 34,900 | 95,600 | 2,100 | 3,500 | 19,500 | 400 |
| Physical/related scientists | 84,900 | 73,700 | 11,200 | 69,200 | 1,200 | 1,800 | 12,300 | 300 |
| Social/related scientists | 126,900 | 76,100 | 50,800 | 110,800 | 4,500 | 4,100 | 6,800 | 700 |
| Engineers | 84,200 | 78,000 | 6,200 | 56,500 | 1,700 | 1,900 | 23,900 | 100 |

[1] Includes professional degrees.
Note.—S suppressed for reasons of confidentiality and/or data reliability.
Source: National Science Foundation, Division of Science Resources Statistics, Scientists and Engineers Statistical Data System (SESTAT), 1999.

Mr. GORDON. Mr. Chairman, will the gentlewoman yield?

Ms. JACKSON-LEE of Texas. I yield to the gentleman from Tennessee.

Mr. GORDON. Mr. Chairman, I rise today in support of the amendment offered by the gentlewoman from Texas (Ms. JACKSON-LEE). The gentlewoman has long been an articulate advocate when it comes to education. Over the years she has worked tirelessly to ensure that minority-serving institutions have adequate resources and that educational opportunities are available to all students. This amendment continues that legacy.

I understand that the gentlewoman is not going to seek a vote on her amendment today, but would like to work with the majority and minority to see that these issues are addressed during discussions with the Senate on the final version of the bill. I want to assure the gentlewoman that her concerns will receive my full support, and I look forward to working with her.

Ms. JACKSON-LEE of Texas. Mr. Chairman, I thank the gentleman for his leadership and for his support on this effort.

Mr. Chairman, I reserve the balance of my time.

Mr. BOEHLERT. Mr. Chairman, I yield myself such time as I may consume. I appreciate that the gentlewoman intends to withdraw this amendment as she did at committee. The bill already recognizes, and I think this is very, very important, the importance of minority colleges and universities in several other provisions. But I am happy to work with the gentlewoman to see if some version of this language might be included in the final version of the bill.

Mr. Chairman, may I ask how much time the gentlewoman has. Because I just want to demonstrate the spirit of comity and good relations.

The Acting CHAIRMAN. The gentlewoman has 2 minutes remaining.

Mr. BOEHLERT. Mr. Chairman, I will let the gentlewoman proceed with her time; and then if she exhausts her

time, I understand the gentleman from Texas (Mr. AL GREEN) feels very strongly about this in support of it and he would like to have a minute or so, so I would be glad to yield that time. So I will let the gentlewoman proceed.

Mr. Chairman, I reserve the balance of my time.

Ms. JACKSON-LEE. Mr. Chairman, I am very pleased to yield 1½ minutes to the distinguished gentleman from Texas (Mr. AL GREEN), a member of the Science Committee and as well a colleague from Houston, Texas.

(Mr. AL GREEN of Texas asked and was given permission to revise and extend his remarks.)

Mr. AL GREEN of Texas. Mr. Chairman, I would like to start by thanking the gentlewoman from Texas (Ms. JACKSON-LEE) for her dynamic leadership on this issue. She has taken the bull by the horns, and she has done yeoman's work. I am so honored that she has brought this to our attention.

I would also like to thank the gentleman from New York (Mr. BOEHLERT) and the gentleman from Tennessee (Mr. GORDON) because they have really demonstrated how bipartisanship can efficaciously cause us to reach a consensus that will cause great things to happen in the United States Congress. Those who say that there is no bipartisanship in this Congress are not familiar with the good works of this committee and especially the good works of these fine men, the chair and the ranking member.

Mr. Chairman, I want to make note that these institutions are not black and brown institutions. This is important because these institutions serve a multiplicity of ethnicities. They are the epitome of diversity. They are dearly needed because of the people that they serve. They do not get the children of the best and the brightest. They many times will get the children of the least, the last and the lost. They literally take the essence of mental clay and mold it into the quintessential manifestation of intellectual cloisonne. They are providing the bootstraps that we need in this society so that we can have good productive citizens who will pay taxes and will become part of the main stream that we so desire.

□ 1115

Ms. JACKSON-LEE of Texas. Mr. Chairman, I thank the gentleman from Texas (Mr. AL GREEN) for his support and for his leadership on the issue.

Mr. Chairman, I yield 30 seconds to the distinguished gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON) and I thank the gentlewoman very much for the long-standing commitment and the legislative initiatives that she has had in creating equal opportunity access of the sciences for our students in America.

Mr. BOEHLERT. Mr. Chairman, I yield 1 minute to the distinguished gentlewoman from Texas (Ms. EDDIE BERNICE JOHNSON), a valued member of the committee.

Ms. EDDIE BERNICE JOHNSON of Texas. Mr. Chairman, I rise to support the amendment. This committee has always accepted amendments and direction to be inclusive and I really appreciated that over the years. I appreciate the gentlewoman from Texas (Ms. JACKSON-LEE) for putting this amendment up for consideration.

We have in the manager's amendment addressed much of the issue, and I am delighted that the Chair and ranking member have agreed to work to get perhaps more specific language in the bill in conference. And so I thank them for their leadership.

I thank both the Chair and the ranking member for always being open and being understanding about increasing opportunities.

Mr. BOEHLERT. Mr. Chairman, I yield 1 minute to the gentlewoman from Texas (Ms. JACKSON-LEE).

Ms. JACKSON-LEE of Texas. Mr. Chairman, again, let me emphasize, as my colleagues have done, the very, very clear bipartisanship of this committee. And let me specifically thank the gentleman from Tennessee (Mr. GORDON), the chairman, the subcommittee chairman, and the ranking member of the subcommittee for their work in this area.

Let me close by simply suggesting and reading that collectively blacks and Hispanics and other ethnic groups, the latter includes American Indians and Alaskan Natives, constitute 24 percent of the U.S. population but only 7 percent of the total.

My good friend, the gentleman from Texas (Mr. AL GREEN) emphasizes that these universities are diverse. And so out of an investment of added, if you will, support, we will diversify the base of scientists which will include women, minority women, African Americans, Hispanics, Native Americans and others who have been, if you will, in the lesser numbers of these particular disciplines.

I ask that this amendment be considered in conference. I thank the chairman for working with me and hoping that we can work through conference to build these numbers up. I thank the gentleman for that.

Mr. Chairman, I ask unanimous consent that my amendment be withdrawn to further work in conference.

The Acting CHAIRMAN (Mr. ADERHOLT). Is there objection to the request of the gentlewoman from Texas?

There was no objection.

Mr. BOEHLERT. Mr. Chairman, I yield myself such time as I may consume.

I guess the amendment is withdrawn but let me say, I marvel at the ability of the gentlewoman from Texas (Ms. JACKSON-LEE) to stretch 60 seconds into 5 minutes.

The Acting CHAIRMAN. It is now in order to consider amendment No. 4 printed in House Report 109–179.

AMENDMENT NO. 4 OFFERED BY MS. VELÁZQUEZ

Ms. VELÁZQUEZ. Mr. Chairman, I offer an amendment.

The Acting CHAIRMAN. The Clerk will designate the amendment.

The text of the amendment is as follows:

Amendment No. 4 offered by Ms. VELÁZQUEZ:

Add at the end of title VII the following new section:

**SEC. 706. MINORITY INSTITUTION PILOT PROGRAM.**

(a) ESTABLISHMENT.—The Administrator shall establish and carry out a pilot program to make grants to minority institutions for the development of physical facilities and infrastructure to be provided to NASA prime contractors for use in the performance of research, development, test, and evaluation projects pursuant to NASA prime contracts.

(b) APPLICATION.—To be eligible to receive a grant under the pilot program established in subsection (a), a minority institution shall submit an application to the Administrator at such time, in such manner, and containing such information and assurances as the Administrator may require.

(c) MATCHING REQUIREMENT.—As a condition of a grant under the pilot program, the Administrator shall require that a matching amount be provided from a source other than the Federal Government that is equal to the amount of the grant.

(d) COOPERATIVE AGREEMENT.—As part of the pilot program under this section, the Administrator shall enter into a cooperative agreement with a non-profit organization that has experience developing relationships between industry, minority institutions, and other entities, under which the non-profit organization shall develop regional and national relationships between industry, minority institutions, and other entities to facilitate the development and provision of physical facilities and infrastructure of the minority institutions receiving grants under this section.

(e) MINORITY INSTITUTION.—In this section, the term ''minority institution'' has the meaning given that term in section 365(3) of the Higher Education Act of 1965 (20 U.S.C. 1067k(3)).

(f) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to carry out this section, $4,000,000 for each of fiscal years 2006 through 2009.

The Acting CHAIRMAN. Pursuant to House Resolution 370, the gentlewoman from New York (Ms. VELÁZQUEZ) and the gentleman from New York (Mr. BOEHLERT) each will control 5 minutes.

The Chair recognizes the gentlewoman from New York (Ms. VELÁZQUEZ).

Ms. VELÁZQUEZ. Mr. Chairman, I yield myself such time as I may consume.

With limited job opportunity in this country, more than ever minorities are turning to entrepreneurship, with 15 percent of this Nation's small businesses being minority owned today. Clearly this business ownership rate is well below the mainstream rate, especially in high tech fields.

My amendment will begin to change this by creating a 4-year pilot grant program focused on the development of technology laboratories at our Nation's minority institutions.

In these on-campus facilities, through a simple partnership, NASA experts will work with some of our brightest students to expose them to innovative technology development.

This will help to shore up current programs that are too narrowly focused on basic science and limited by the technological capabilities of these institutions.

This has successfully been done in more mainstream centers of learning. If you look at the Massachusetts Institute of Technology, investment by the government and private sector created an environment that allowed it to become the world renown center of study that it is now.

The tie to entrepreneurship and the development of minority students in the technological field is quite clear. Entrepreneurs who have founded technology oriented enterprises emerged from institutions with a strong affiliation to government and industry applied research. These are exactly the type of facilities this amendment will create.

As ranking member of the Committee on Small Business, I am constantly talking to agencies about their small business contracting performance. One of the agencies who struggles the most is NASA, which has regularly failed to meet its goal, and awards to minorities have decreased by 25 percent in the last 4 years.

I believe that there are several reasons for this. One is we need to develop more minority technology companies capable of meeting NASA's requirements. By making sure our science and engineering students are exposed to these opportunities early in their careers, we are increasing their ability to learn and develop. This would pay dividends in the future.

The adoption of this amendment will go a long way in opening up a culture which can seem closed and intimidating when you do not know it. We also provide these future entrepreneurs with a vital opportunity to receive mentoring and develop the understanding of the inner workings of NASA.

This will greatly increase the willingness of those at the agency to take a chance on bright individuals with innovative ideas but who may not have the history that more established entities do.

This amendment is supported by the National Black Chamber of Commerce, the Minority Business Enterprise Legal Defense Fund and the Latin American Management Association.

The adoption of this amendment is a win for all those involved. NASA will win because they will have the access to the minority high tech sector they are so desperately looking for, and the minority-serving institutions and their students will win because they will be advancing technology development. But most importantly, our Nation wins as we create the next generation of high tech firms that will be so critical to advancing this Nation's economy in years to come.

I urge adoption of the amendment.

Mr. Chairman, I reserve the balance of my time.

Mr. BOEHLERT. Mr. Chairman, I yield myself such time as I may consume.

As a preamble, let me say one of the things I am proudest of in my 23 years in this great institution is the record that I have tried to establish to expand opportunity for all, and I have worked diligently on every committee on which I have served to expand opportunities for minorities.

This committee recognizes the importance of that as the members of the committee will tell the gentlewoman who has offered the amendment. We are concerned. We care. We back up our words with deed. But I rise in strong opposition to this amendment.

This amendment proposes to take scarce Federal funds to build buildings for private industry. I cannot imagine why we would use taxpayer money in that way. The idea is apparently for the Federal Government to build buildings on the campuses of minority institutions, which is an undefined term by the way, that would then in some way be turned over to the private sector.

Ms. VELAZQUEZ. Mr. Chairman, will the gentleman yield?

Mr. BOEHLERT. I yield to the gentlewoman from New York.

Ms. VELAZQUEZ. Mr. Chairman, I would like to clarify the gentleman's statement. This is not to construct buildings. This funding in this amendment will not pay for the construction of facilities. $4 million does not pay for facilities. It will give the funds that these minority-serving institutions need to do capacity building, to start the partnership, to set up the partnership, and to manage it. It will not use one penny to build physical facilities.

Mr. BOEHLERT. Reclaiming my time, reading from the language of the amendment. ''The Administrator shall establish and carry out a pilot program to make grants to minority institutions for the development of physical facilities and infrastructure to be provided by NASA prime contractors for use in the performance of research, development, test and evaluation.''

I am not quite sure we can understand that. We on a bipartisan basis have some real problem with this language.

Ms. VELÁZQUEZ. Mr. Chairman, will the gentleman yield?

Mr. BOEHLERT. I yield to the gentlewoman from New York.

Ms. VELAZQUEZ. For clarification, it says here, ''shall enter into a cooperative agreement with a non-profit organization that has experience developing relationships between industry, minority institutions . . . ''

It does not say physical or construction of physical facilities. And ''develop'' does not mean build.

Mr. BOEHLERT. Reclaiming my time, there are some real problems with the drafting of this amendment because I am reading specifically language from the amendment. ''Development of physical facilities and infrastructure to be provided to NASA prime contractors.''

Maybe then the gentlewoman should withdraw the amendment and make sure we are understanding fully the clear intent of it so that we can work on it in a constructive manner in conference. But with that let me continue my statement because I have made a clear offer.

The Federal Government has pretty much gotten out of the business of funding the construction of campus buildings because we simply do not have the money, and funding research and equipment is a better use of Federal funds. But funding construction in this manner where the final user of the building would be private industry makes the notion even more questionable. And the language of the amendment, quite honestly, is so vague that it is not clear how anyone would benefit from this unusual financial handout. That is not the way we should be handling the taxpayers' money.

Let me once again offer to the gentlewoman in the spirit that this committee always operates, we will be glad to work with her on clearly defining the language and the intent so that as we go to conference committee, then perhaps we can come to some area of agreement. But as it now stands, I strongly oppose it.

Mr. CALVERT. Mr. Chairman, will the gentleman yield?

Mr. BOEHLERT. I yield to the gentleman from California.

Mr. CALVERT. Mr. Chairman, I thank the gentleman. I read the language also. As a former developer, ''develop'' means, in my vernacular it does mean build. And so I think people would interpret this legislation as building additional infrastructure. And as the chairman mentioned, NASA is trying to get out of the bricks and mortar business.

The fact is we have facilities, space centers throughout this country that have been woefully unmaintained. As we go through the centers around the country and look at them, we are not maintaining the facilities that we have presently. We need to make sure that the facilities that our NASA workers are working in today are maintained in proper order.

I understand what the gentlewoman is trying to accomplish, but we just do not have the resources at this time to develop additional infrastructure, additional buildings and additional maintenance costs throughout this country at this time.

I would ask the committee to oppose this amendment or to work with the chairman to come up with some language that may have a different accomplishment on what the gentlewoman is trying to do.

The Acting CHAIRMAN. The gentlewoman from New York (Ms. VELÁZQUEZ) has 1½ minutes remaining.

Ms. VELAZQUEZ. Mr. Chairman, I yield myself 30 seconds for clarification.

I am the author of this legislation or this amendment. It does not say here

in any way to build a physical facility. It says ''development of physical.'' And I want for the RECORD to reflect that I do not mean to build physical facilities.

Mr. BOEHLERT. Mr. Chairman, will the gentlewoman yield?

Ms. VELÁZQUEZ. I yield to the gentleman from New York.

Mr. BOEHLERT. What does ''development of physical facilities'' mean then in the author's mind?

Ms. VELÁZQUEZ. I mean by the minority-serving institution to develop the physical facility and develop the relationship.

I will propose to the gentleman that he adopt the amendment, and it is a matter of semantics and that we will work to clarify it.

Mr. BOEHLERT. I would propose in response to the gentlewoman that she withdraw the amendment and we work in the spirit of bipartisanship to refine it so we all clearly understand what we are talking about.

Ms. VELÁZQUEZ. Mr. Chairman, I yield myself the balance of my time to close.

Mr. Chairman, this is a commonsense amendment. It is not only good for all those involved but it will also empower us to take a huge step toward closing the technology gap that is so prevailing among the minority population.

□ 1130

The truth is that this approach has already been taken with some of the most highly renowned research facilities across the country and has proven successful. The only difference now is that it will focus on bringing these advancements to minority-serving institutions and, ultimately, closing this Nation's technology gap.

The timing could not be better for this as NASA starts fresh, undertaking a review of their facilities, leasing activities, and partnership agreements. Mr. Chairman, I urge adoption of this amendment.

Mr. Chairman, I yield back the balance of my time.

The Acting CHAIRMAN (Mr. ADERHOLT). The question is on the amendment offered by the gentlewoman from New York (Ms. VELÁZQUEZ).

The question was taken; and the Acting Chairman announced that the noes appeared to have it.

Ms. VELÁZQUEZ. Mr. Chairman, I demand a recorded vote.

The Acting CHAIRMAN. Pursuant to clause 6 of rule XVIII, further proceedings on the amendment offered by the gentlewoman from New York (Ms. VELÁZQUEZ) will be postponed.

It is now in order to consider amendment No. 5 printed in House Report 109–179.

It is now in order to consider amendment No. 6 printed in House Report 109–179.

AMENDMENT NO. 6 OFFERED BY MS. JACKSON-LEE OF TEXAS

Ms. JACKSON-LEE of Texas. Mr. Chairman, I offer an amendment.

The Acting CHAIRMAN. The Clerk will designate the amendment.

The text of the amendment is as follows:

Amendment No. 6 offered by Ms. JACKSON-LEE of Texas:

Page 44, after line 6, insert the following:

**SEC. 110. WHISTLEBLOWER PROTECTION.**

Not later than 1 year after the date of enactment of this Act, the Administrator shall transmit to the Committee on Science of the House of Representatives and the Committee on Commerce, Science and Transportation of the Senate a plan describing steps to be taken by NASA to protect the employment status of NASA employees who raise or have raised concerns about a potentially catastrophic risk to health or safety.

In the table of contents in section 1(b), insert after the item relating to section 109 the following:

Sec. 110. Whistleblower protection.

The Acting CHAIRMAN. Pursuant to House Resolution 370, the gentlewoman from Texas (Ms. JACKSON-LEE) and a Member opposed each will control 5 minutes.

The Chair recognizes the gentlewoman from Texas (Ms. JACKSON-LEE).

Ms. JACKSON-LEE of Texas. Mr. Chairman, I yield myself 3 minutes.

I think it is appropriate again to acknowledge both the chairman of the full committee, the gentleman from New York (Mr. BOEHLERT), and the ranking member, the gentleman from Tennessee (Mr. GORDON), in helping me construct both this idea and this vision. At the same time, I want to acknowledge our ranking member of the subcommittee and of course the chairman of the subcommittee.

Mr. Chairman, I speak in soft tones because this is a very serious issue, inasmuch as I think we learned a very definitive lesson after first *Challenger* and then *Columbia*. I started out by saying that this legislation helps America to dream, but I also mentioned the famous words ''Houston, we've got a problem.'' Of course, we now know how we can fix the problem.

I have worked on this committee to ensure that there is a safety vehicle, and I am gratified that this legislation includes my legislation for an independent Presidentially appointed commission to investigate safety aboard the International Space Station. This amendment was introduced earlier into H.R. 4522 in 2004, and this vital piece of legislation can potentially make the difference regarding safety for the international space crew.

The amendment I offer today is one that will protect the human resource. It may be called whistleblower legislation; but in actuality it is legislation that will expand and protect human space flight, for it protects employees who do raise or have raised concerns about a potentially catastrophic risk to health or safety. This issue was raised by the Columbia Space Shuttle Accident Investigation Board as part of the problem at NASA because employees often felt intimidated by raising safety concerns.

This is a sense of Congress that will allow us to have a placeholder, if you will, as this bill goes to conference, in that we will have and be able to utilize draft language which will create a safe reporting board where NASA employees and contractors can go safely to report potentially catastrophic health or safety concerns that may lead to the loss of a craft or a crew.

Mr. Chairman, when we send brave Americans into space, we also send their families and loved ones. We owe them a huge debt of gratitude, but we owe them our commitment to never doing anything to our knowledge that would make this unsafe. Reports after the tragic *Columbia* Space Shuttle accident indicates that this bill may serve a vital role in improving communications at NASA, protecting workers, and averting catastrophic accidents in the future. It would rapidly screen such disclosures, and either report them directly to the administrator or reject them as noneligible.

Mr. Chairman, I ask my colleagues to support my amendment.

Mr. Chairman, I reserve the balance of my time.

Mr. BOEHLERT. Mr. Chairman, I ask unanimous consent to claim the time in opposition, although I am not opposed to the amendment.

The Acting CHAIRMAN. Is there objection to the request of the gentleman from New York?

There was no objection.

Mr. BOEHLERT. Mr. Chairman, I yield myself such time as I may consume to state that we will accept the amendment, and I want to thank the gentlewoman for working with us on the language of the amendment. We will work with her and NASA to draft language in the final version of the bill that will ensure that whistleblowers have the protection they need at NASA.

Mr. Chairman, I yield back the balance of my time.

Ms. JACKSON-LEE of Texas. Mr. Chairman, I yield 1 minute to the gentleman from Tennessee (Mr. GORDON).

Mr. GORDON. Mr. Chairman, I rise in support of the amendment offered by the gentlewoman from Texas (Ms. JACKSON-LEE). From the Columbia Accident Investigation Board's report, it is clear that one of the underlying causes of the *Columbia* tragedy was a broken safety culture at NASA. While I understand that many of these cultural issues are being addressed, we need to ensure that NASA employees are in an environment where they can feel comfortable airing their safety concerns.

This is a constructive amendment that is a positive step towards fixing NASA's safety culture and ensuring the safety of the brave men and women in our space program. I am sure our chairman shares our concerns for the safety of our astronauts, and I hope we can work together to include this in the final version of the bill.

Ms. JACKSON-LEE of Texas. Mr. Chairman, I yield 30 seconds to the gentleman from Colorado (Mr. UDALL), the distinguished ranking member of the subcommittee.

Mr. UDALL of Colorado. Mr. Chairman, I thank the gentlewoman for yielding me this time, and I rise in support of her important amendment. We all know that safety is a top priority for our space program and this is a sensible measure the House should support.

Ms. JACKSON-LEE of Texas. Mr. Chairman, I yield myself the balance of my time, and I thank the distinguished gentleman from Colorado very much.

Let me simply close by saying that this need for such a safety vehicle for the employees to protect themselves was documented on page 169 of the Gehman Report that said there was a broken culture of safety.

Mr. Chairman, I believe we have gone miles ahead of this report and have really constructed a safety firewall, if you will, for the employees. This amendment, added to this legislation and working through conference, will make it clear you are protected, let us know what is going on so we can save lives and continue our vision and our dream of sending men and women into space.

Mr. Chairman, I ask my colleagues to support this amendment.

Mr. Chairman, I rise today in support of my amendment, which offers protection for whistleblowers at NASA who raise concerns about safety. This amendment would require the NASA Administrator to transmit to the House Committee on Science and the Senate Committee on Commerce, a plan describing steps NASA will take to protect employees who do raise or have raised concerns about a potentially catastrophic risk to health or safety. This issue was raised by the Columbia Space Shuttle Accident Investigation Board as part of the problem at NASA because employees often felt intimidated from raising safety concerns.

I hope that Chairman BOEHLERT will work with me to go further on this issue once this bill goes in to Conference. I have draft language which would create a ''Safe Reporting Board'' where NASA employees and contractors can go to report ''potentially catastrophic health or safety concerns'' that could lead to the loss of a craft or crew. Reports after the tragic *Columbia* space shuttle accident indicated that this bill may serve a vital role in improving communications at NASA, protecting workers, and averting catastrophe in the future.

This Safety Reporting Board would rapidly screen such disclosures and either report them directly to the Administrator, or reject them as non-eligible—perhaps with a suggestion to seek redress through their union, OSHA representative, ombudsman, etc. Afterward, the Board would be tasked with keeping a registry of reporting workers and with dispute resolution in the event that the worker alleges retaliation by management. Coupling the reporting and anti-retaliation functions in one board should limit the scope of the board to truly vital issues, and make workers feel confident that their concerns will not be lost or buried in the bureaucracy of standard whistleblower or OSHA claims. The Board would include both NASA managers and non-managers, with diverse expertise, representing multiple Centers, and include an advocate for workers.

Admiral Gehman and the Columbia Accident Investigation Board explained how fear of retaliation by management, has lead some engineers to stifle their own concerns about the safety and well-being of NASA missions and crew. Page 169 of their report gives great insight into the broken culture of safety at NASA that impeded the flow of critical information from engineers up to program managers. I quote: ''Further, when asked by investigators why they were not more vocal about their concerns, Debris Assessment Team members opined that by raising contrary points of view about Shuttle mission safety, they would be singled out for possible ridicule by their peers.''

That reaffirms to me that strong whistleblower protections do not just protect workers. They protect lines of communication and dialog that prevent waste, fraud, and abuse, and, in this case, might have saved lives. I believe strongly that my language will enhance whistleblower protections for the NASA workforce, to make sure that critical information is never lost due to intimidation or fear. This problem may have contributed to the loss of two Shuttles and 14 brave crewmembers already. Last year, an independent business consulting firm Behavioral Science Technology, Inc. reported that the problem persists at NASA even after the *Columbia* shuttle accident. Safety must be the number one priority of NASA and this amendment helps solve one of the biggest roadblocks we have remaining.

The Acting CHAIRMAN. The question is on the amendment offered by the gentlewoman from Texas (Ms. JACKSON-LEE).

The amendment was agreed to.

ANNOUNCEMENT BY THE ACTING CHAIRMAN

The Acting CHAIRMAN. Pursuant to clause 6 of rule XVIII, proceedings will now resume on the amendment on which further proceedings were postponed.

AMENDMENT NO. 4 OFFERED BY MS. VELÁZQUEZ

The Acting CHAIRMAN. The pending business is the demand for a recorded vote on the amendment offered by the gentlewoman from New York (Ms. VELÁZQUEZ) on which further proceedings were postponed and on which the noes prevailed by voice vote.

The Clerk will redesignate the amendment.

The Clerk redesignated the amendment.

RECORDED VOTE

The Acting CHAIRMAN. A recorded vote has been demanded.

A recorded vote was ordered.

The vote was taken by electronic device, and there were—ayes 192, noes 206, not voting 35, as follows:

[Roll No. 415]

AYES—192

Abercrombie
Ackerman
Allen
Andrews
Baca
Baird
Baldwin
Barrow
Bean
Becerra
Berkley
Berman
Berry
Bishop (GA)
Bishop (NY)
Blumenauer
Boswell
Boucher
Boustany
Boyd
Brady (PA)
Brown (OH)
Brown, Corrine
Butterfield
Capps
Capuano
Cardin
Carnahan
Carson
Case
Chandler
Cleaver
Clyburn
Conyers
Costello
Crowley
Cuellar
Cummings
Davis (AL)
Davis (CA)
Davis (FL)
Davis (IL)
Davis (TN)
DeFazio
DeLauro
Dicks
Dingell
Doggett
Doyle
Edwards
Emanuel
Engel
Eshoo
Etheridge
Evans
Farr
Fattah
Filner
Forbes
Ford
Frank (MA)
Gonzalez
Green, Al
Green, Gene
Grijalva
Harman
Herseth
Higgins
Hinchey
Holden
Honda
Hooley
Hoyer
Inslee
Israel
Jackson (IL)
Jackson-Lee (TX)
Jindal
Johnson, E. B.
Jones (OH)
Kanjorski
Kaptur
Kennedy (RI)
Kildee
Kilpatrick (MI)
Kind
Kucinich
Langevin
Lantos
Larsen (WA)
Larson (CT)
Lee
Levin
Lewis (GA)
Lipinski
Lofgren, Zoe
Lowey
Lynch
Mack
Maloney
Markey
Marshall
Matheson
Matsui
McCarthy
McCollum (MN)
McCrery
McDermott
McGovern
McIntyre
McKinney
McNulty
Meehan
Meek (FL)
Meeks (NY)
Melancon
Menendez
Mica
Michaud
Millender-McDonald
Miller (NC)
Miller, George
Mollohan
Moore (KS)
Moore (WI)
Moran (VA)
Murtha
Nadler
Napolitano
Neal (MA)
Ney
Oberstar
Obey
Olver
Ortiz
Owens
Pallone
Pascrell
Pastor
Payne
Pelosi
Peterson (MN)
Pomeroy
Price (NC)
Rahall
Rangel
Reyes
Rogers (AL)
Ross
Rothman
Roybal-Allard
Ruppersberger
Rush
Ryan (OH)
Sabo
Salazar
Sánchez, Linda T.
Sanchez, Loretta
Sanders
Schakowsky
Schiff
Schwartz (PA)
Scott (GA)
Scott (VA)
Serrano
Sherman
Skelton
Slaughter
Smith (WA)
Snyder
Solis
Spratt
Strickland
Stupak
Tauscher
Thompson (CA)
Thompson (MS)
Tierney
Towns
Udall (NM)
Van Hollen
Velázquez
Visclosky
Walsh
Wasserman Schultz
Waters
Watson
Watt
Weiner
Woolsey
Wu
Wynn

NOES—206

Aderholt
Akin
Alexander
Bachus
Baker
Barrett (SC)
Bartlett (MD)
Barton (TX)
Bass
Beauprez
Biggert
Bilirakis
Blackburn
Blunt
Boehlert
Boehner
Bonilla
Bonner
Bono
Boozman
Bradley (NH)
Brown-Waite, Ginny
Burgess
Burton (IN)
Buyer
Calvert
Camp
Cannon
Cantor
Capito
Carter
Castle
Chabot
Chocola
Coble
Cole (OK)
Conaway
Costa
Cox
Cramer
Culberson
Davis (KY)
Davis, Jo Ann
Davis, Tom
Deal (GA)
DeLay
Dent
Diaz-Balart, L.
Diaz-Balart, M.
Doolittle
Drake
Dreier
Duncan
Ehlers
Emerson
English (PA)
Everett
Feeney
Ferguson
Fitzpatrick (PA)
Flake
Foley
Fortenberry
Fossella
Foxx
Franks (AZ)
Frelinghuysen
Gallegly
Garrett (NJ)
Gerlach
Gibbons
Gilchrest
Gillmor
Gingrey
Gohmert
Goode
Goodlatte
Gordon
Granger
Graves
Green (WI)
Gutknecht
Hall
Harris
Hart
Hastings (WA)
Hayes
Hayworth
Hefley
Hensarling
Herger
Hobson
Hoekstra
Hostettler
Hulshof
Hunter
Hyde
Inglis (SC)
Issa
Istook
Jenkins
Johnson (CT)
Johnson (IL)
Johnson, Sam
Jones (NC)
Keller
Kelly
Kennedy (MN)
King (IA)
King (NY)
Kirk
Kline
Knollenberg
Kolbe
Kuhl (NY)
LaHood
Latham
LaTourette
Leach
Lewis (CA)
Lewis (KY)
LoBiondo
Lucas
Lungren, Daniel E.
Manzullo
Marchant
McCaul (TX)
McCotter
McHenry
McHugh

McKeon
McMorris
Miller (MI)
Miller, Gary
Moran (KS)
Murphy
Musgrave
Neugebauer
Northup
Norwood
Nunes
Osborne
Otter
Oxley
Paul
Pence
Peterson (PA)
Petri
Pitts
Platts
Poe
Pombo
Porter
Price (GA)
Pryce (OH)
Putnam
Ramstad
Regula
Rehberg
Reichert
Renzi
Rogers (KY)
Rogers (MI)
Rohrabacher
Ros-Lehtinen
Royce
Ryan (WI)
Ryun (KS)
Saxton
Schwarz (MI)
Sensenbrenner
Sessions
Shadegg
Shaw
Shays
Sherwood
Shimkus
Shuster
Simmons
Simpson
Smith (NJ)
Smith (TX)
Sodrel
Souder
Stearns
Sullivan
Sweeney
Tancredo
Tanner
Terry
Thornberry
Tiahrt
Tiberi
Turner
Udall (CO)
Upton
Walden (OR)
Wamp
Weldon (PA)
Weller
Whitfield
Wicker
Wilson (NM)
Wilson (SC)
Wolf
Young (AK)

NOT VOTING—35

Bishop (UT)
Boren
Brady (TX)
Brown (SC)
Cardoza
Clay
Cooper
Crenshaw
Cubin
Cunningham
DeGette
Delahunt
Gutierrez
Hastings (FL)
Hinojosa
Holt
Jefferson
Kingston
Linder
Miller (FL)
Myrick
Nussle
Pearce
Pickering
Radanovich
Reynolds
Stark
Taylor (MS)
Taylor (NC)
Thomas
Waxman
Weldon (FL)
Westmoreland
Wexler
Young (FL)

□ 1200

Mrs. KELLY and Messrs. SODREL, MCHUGH, GUTKNECHT, and TANNER changed their vote from ''aye'' to ''no.''

Messrs. BERRY, BOUSTANY, and JINDAL changed their vote from ''no'' to ''aye.''

So the amendment was rejected.

The result of the vote was announced as above recorded.

Stated for:

Mr. HOLT. Mr. Chairman, earlier today I was detained at a hearing and I missed rollcall vote No. 415. Had I been present, I would have voted ''aye.''

The Acting CHAIRMAN (Mr. ADERHOLT). The question is on the committee amendment in the nature of a substitute, as amended.

The committee amendment in the nature of a substitute, as amended, was agreed to.

The Acting CHAIRMAN. Under the rule, the Committee rises.

Accordingly, the Committee rose; and the Speaker pro tempore (Mr. PUTNAM) having assumed the chair, Mr. ADERHOLT, Acting Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee, having had under consideration the bill (H.R. 3070) to reauthorize the human space flight, aeronautics, and science programs of the National Aeronautics and Space Administration, and for other purposes, pursuant to House Resolution 370, he reported the bill back to the House with an amendment adopted by the Committee of the Whole.

The SPEAKER pro tempore. Under the rule, the previous question is ordered.

Is a separate vote demanded on any amendment to the committee amendment in the nature of a substitute adopted by the Committee of the Whole? If not, the question is on the amendment.

The amendment was agreed to.

The SPEAKER pro tempore. The question is on the engrossment and third reading of the bill.

The bill was ordered to be engrossed and read a third time, and was read the third time.

The SPEAKER pro tempore. The question is on the passage of the bill.

The question was taken; and the Speaker pro tempore announced that the ayes appeared to have it.

RECORDED VOTE

Mr. BOEHLERT. Mr. Speaker, I demand a recorded vote.

A recorded vote was ordered.

The vote was taken by electronic device, and there were—ayes 383, noes 15, not voting 35, as follows:

[Roll No. 416]

AYES—383

Abercrombie
Ackerman
Aderholt
Akin
Alexander
Allen
Andrews
Baca
Bachus
Baird
Baldwin
Barrett (SC)
Barrow
Bartlett (MD)
Barton (TX)
Bass
Bean
Beauprez
Becerra
Berkley
Berman
Berry
Biggert
Bilirakis
Bishop (GA)
Bishop (NY)
Blumenauer
Blunt
Boehlert
Boehner
Bonilla
Bonner
Bono
Boozman
Boswell
Boucher
Boustany
Boyd
Bradley (NH)
Brady (PA)
Brady (TX)
Brown (OH)
Brown, Corrine
Brown-Waite, Ginny
Burgess
Burton (IN)
Butterfield
Buyer
Calvert
Camp
Cannon
Cantor
Capito
Capps
Capuano
Cardin
Carnahan
Carson
Carter
Case
Castle
Chabot
Chandler
Chocola
Cleaver
Clyburn
Coble
Cole (OK)
Conaway
Costa
Costello
Cox
Cramer
Crowley
Cuellar
Culberson
Cummings
Davis (AL)
Davis (CA)
Davis (FL)
Davis (IL)
Davis (KY)
Davis (TN)
Davis, Jo Ann
Davis, Tom
Deal (GA)
DeLauro
DeLay
Dent
Diaz-Balart, L.
Diaz-Balart, M.
Dicks
Doggett
Doolittle
Doyle
Drake
Dreier
Duncan
Edwards
Ehlers
Emanuel
Emerson
Engel
English (PA)
Eshoo
Etheridge
Evans
Everett
Farr
Fattah
Feeney
Ferguson
Filner
Fitzpatrick (PA)
Foley
Forbes
Ford
Fortenberry
Fossella
Foxx
Franks (AZ)
Frelinghuysen
Gallegly
Garrett (NJ)
Gerlach
Gibbons
Gilchrest
Gillmor
Gingrey
Gonzalez
Goode
Goodlatte
Gordon
Granger
Graves
Green (WI)
Green, Al
Green, Gene
Grijalva
Gutknecht
Hall
Harman
Harris
Hart
Hastings (WA)
Hayes
Hayworth
Hefley
Hensarling
Herger
Herseth
Higgins
Hinchey
Hobson
Hoekstra
Holden
Holt
Honda
Hooley
Hostettler
Hoyer
Hulshof
Hunter
Hyde
Inglis (SC)
Israel
Issa
Istook
Jackson (IL)
Jackson-Lee (TX)
Jenkins
Jindal
Johnson (CT)
Johnson (IL)
Johnson, E. B.
Johnson, Sam
Jones (NC)
Jones (OH)
Kanjorski
Kaptur
Keller
Kelly
Kennedy (MN)
Kennedy (RI)
Kildee
Kilpatrick (MI)
Kind
King (IA)
King (NY)
Kirk
Kline
Knollenberg
Kolbe
Kucinich
Kuhl (NY)
LaHood
Langevin
Lantos
Larsen (WA)
Larson (CT)
Latham
LaTourette
Leach
Lee
Levin
Lewis (CA)
Lewis (GA)
Lewis (KY)
Lipinski
LoBiondo
Lofgren, Zoe
Lowey
Lucas
Lungren, Daniel E.
Lynch
Mack
Maloney
Manzullo
Marchant
Markey
Marshall
Matheson
Matsui
McCarthy
McCaul (TX)
McCollum (MN)
McCotter
McCrery
McGovern
McHenry
McHugh
McIntyre
McKeon
McKinney
McMorris
McNulty
Meek (FL)
Meeks (NY)
Melancon
Menendez
Mica
Michaud
Millender-McDonald
Miller (MI)
Miller (NC)
Miller, Gary
Miller, George
Mollohan
Moore (KS)
Moore (WI)
Moran (KS)
Moran (VA)
Murphy
Murtha
Musgrave
Nadler
Napolitano
Neal (MA)
Neugebauer
Ney
Northup
Norwood
Nunes
Ortiz
Osborne
Otter
Owens
Oxley
Pallone
Pascrell
Pastor
Payne
Pearce
Pelosi
Pence
Peterson (MN)
Peterson (PA)
Petri
Pitts
Platts
Poe
Pombo
Pomeroy
Porter
Price (GA)
Price (NC)
Pryce (OH)
Putnam
Rahall
Ramstad
Rangel
Regula
Rehberg
Reichert
Renzi
Reyes
Reynolds
Rogers (AL)
Rogers (KY)
Rogers (MI)
Rohrabacher
Ros-Lehtinen
Ross
Rothman
Roybal-Allard
Royce
Ruppersberger
Rush
Ryan (OH)
Ryan (WI)
Ryun (KS)
Salazar
Sánchez, Linda T.
Sanchez, Loretta
Saxton
Schakowsky
Schiff
Schwartz (PA)
Schwarz (MI)
Scott (GA)
Scott (VA)
Sensenbrenner
Serrano
Sessions
Shaw
Shays
Sherman
Sherwood
Shimkus
Shuster
Simmons
Simpson
Skelton
Slaughter
Smith (NJ)
Smith (TX)
Smith (WA)
Snyder
Sodrel
Solis
Souder
Spratt
Stearns
Strickland
Stupak
Sullivan
Sweeney
Tancredo
Tanner
Tauscher
Terry
Thompson (CA)
Thompson (MS)
Thornberry
Tiahrt
Tiberi
Towns
Turner
Udall (CO)
Udall (NM)
Upton
Van Hollen
Velázquez
Visclosky
Walden (OR)
Walsh
Wamp
Wasserman Schultz
Waters
Watson
Watt
Weiner
Weldon (PA)
Weller
Whitfield
Wicker
Wilson (NM)
Wilson (SC)
Wolf
Woolsey
Wu
Wynn
Young (AK)

NOES—15

Blackburn
Conyers
DeFazio
Dingell
Flake
Frank (MA)
McDermott
Meehan
Oberstar
Obey
Olver
Sabo
Sanders
Shadegg
Tierney

NOT VOTING—35

Baker
Bishop (UT)
Boren
Brown (SC)
Cardoza
Clay
Cooper
Crenshaw
Cubin
Cunningham
DeGette
Delahunt
Gohmert
Gutierrez
Hastings (FL)
Hinojosa
Inslee
Jefferson
Kingston
Linder
Miller (FL)
Myrick
Nussle
Paul
Pickering
Radanovich
Stark
Taylor (MS)
Taylor (NC)
Thomas
Waxman
Weldon (FL)
Westmoreland
Wexler
Young (FL)

ANNOUNCEMENT BY THE SPEAKER PRO TEMPORE

The SPEAKER pro tempore (Mr. PUTNAM) (during the vote). Members are advised 2 minutes remain in this vote.

□ 1218

So the bill was passed.

The result of the vote was announced as above recorded.

A motion to reconsider was laid upon the table.

Mr. GUTIERREZ. Mr. Speaker, I was unavoidably absent from this chamber on July 22, 2005. I would like the record to show that, had I been present, I would have voted "aye" on rollcall votes 415 and 416.

## PERSONAL EXPLANATION

Mr. TAYLOR of North Carolina. Mr. Speaker, on rollcall Nos. 415 and 416, I was detained in a conference with the Senate. Had I been present, I would have voted "no" on rollcall No. 415 and "aye" on rollcall No. 416.

## AUTHORIZING THE CLERK TO MAKE CORRECTIONS IN ENGROSSMENT OF H.R. 3070, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION AUTHORIZATION ACT OF 2005

Mr. BOEHLERT. Mr. Speaker, I ask unanimous consent that in the engrossment of the bill, H.R. 3070, the Clerk be authorized to make technical corrections and conforming changes to the bill.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from New York?

There was no objection.

## LEGISLATIVE PROGRAM

(Mr. HOYER asked and was given permission to address the House for 1 minute and to revise and extend his remarks.)

Mr. HOYER. Mr. Speaker, I take this time for the purpose of inquiring of the majority leader the schedule for the week to come.

I yield to my friend, the majority leader.

Mr. DELAY. Mr. Speaker, I appreciate my friend yielding to me.

Mr. Speaker, the House will convene on Monday at 12:30 p.m. for morning hour and 2 p.m. for legislative business. We will consider several measures under suspension of the rules. A final list of those bills will be sent to Members' offices by the end of the day. Any votes called on these measures will be rolled until 6:30 p.m.

On Tuesday and the balance of the week, the House will consider additional legislation under suspension of the rules, as well as several measures under a rule: H.R. 525, the Small Business Health Fairness Act of 2005; H.R. 5, the HEALTH Act of 2005; and H.R. 22, the Postal Accountability and Enhancement Act. In addition, we expect to consider H.R. 3045, the Dominican Republic-Central American Free Trade Agreement sometime later in the week.

Finally, I would like to note that we are expecting a very busy week heading into the August recess. Members should expect to work some late nights as we resolve these important pieces of legislation.

Mr. HOYER. Mr. Speaker, I thank the gentleman for that information. Realizing that next week is a busy week and there are a number of very important items on the agenda, how likely, Mr. Leader, do you think it is that we will be in on Friday?

I yield to the distinguished gentleman.

Mr. DELAY. Mr. Speaker, I appreciate the gentleman yielding. There is no way that we can tell what hour of the day on Friday that we might be finished with our work. As the gentleman knows, next week is going to be a typical pre-district work period week. We have several bills to consider, as well as multiple potential conference reports. Because of the unpredictability of conference reports, I would hesitate to even make firm commitments for any of the week.

For now, I would note that our plan is to consider both postal reform and small business health plans on Tuesday, and after that we will have to see where various components are and how they come together.

Mr. HOYER. Mr. Speaker, reclaiming my time, thank you for that information, Mr. Leader.

Mr. Leader, obviously next week I suppose the most controversial and most focused-upon piece of legislation will be the Central American Free Trade Agreement. This week, of course, the PATRIOT Act, which we thought was going to start Thursday and go through today, in fact was accelerated and NASA was taken today, clearly to ensure full consideration of the PATRIOT Act.

Might it be possible with some assurance to let the Members know when the CAFTA bill will be on the floor, in effect adopting a similar procedure?

I yield to the majority leader.

Mr. DELAY. Mr. Speaker, I thank the gentleman for yielding.

As I said earlier, it is very difficult. Certainly we will consult with the minority as to timing. For instance, right now we think we will have a highway conference report. There may be an energy conference report. There could be one to three appropriations conference reports. It is very difficult today to fashion a schedule that we could give to the Members.

I feel very confident by Monday we will have a better feel for what the week should look like and, in consultation with the minority, we would have a better idea when the Central American Free Trade Agreement can be considered. But I say to the gentleman that it will be fully discussed with an ample amount of time for debate, and we will just do it when we can get to it.

Mr. HOYER. Mr. Speaker, I thank the leader for that response. I understand the problem of pinning down now exact times. Would it be fair, however, Mr. Leader, to say that it would not be considered on the last day we are here, on Friday, or not, so that we could make sure that Members knew and had some degree of confidence, because it is such an important piece of legislation, that it would not be considered on the last day we are here?

I yield to my friend.

Mr. DELAY. Mr. Speaker, I appreciate the gentleman yielding.

I cannot say that. I really do not have any idea. I know it will be after Tuesday, and that is about the best I can give the gentleman.

Mr. HOYER. Mr. Speaker, reclaiming my time, the postal accountability bill, you seem to indicate that that might be considered earlier in the week rather than later. Is that accurate?

I yield to my friend.

Mr. DELAY. I thank the gentleman for yielding.

Yes, we plan to present the postal reform bill on Tuesday. We think we can do both that and the small business health plan on Tuesday.

Mr. HOYER. Mr. Speaker, I thank the leader.

Reclaiming my time, you mentioned appropriations bills. Are we likely to have motions to go to conference on appropriations bills next week; and if so, can you anticipate what bills that might be?

Mr. DELAY. It is possible that Interior, Legislative Branch, and Homeland Security conference reports could be presented by next week.

Mr. HOYER. Those conferences would be on the floor, is that what the gentleman is saying, possibly?

Mr. DELAY. We could bring them to the floor by next week.

Mr. HOYER. In terms of motions to go to conference, do you anticipate motions to go to conference on any appropriations bills next week?

Mr. DELAY. If the gentleman will continue to yield, we would have to go to conference on those three bills for sure, and, depending on the progress of the other body, we may be going to conference on others.

Mr. HOYER. I appreciate that. On the bill of the gentleman from Arizona (Mr. SHADEGG), I think it is H.R. 2355, dealing with the insurance issues, there is a lot of interest on our side of the aisle. Will that bill be considered? Did you list that as one of the health bills that would be considered?

Mr. DELAY. If the gentleman will continue to yield, no, we did not list that bill as of yet. There are still discussions going on about that bill, and until those discussions are concluded, we cannot predict when it will come to the floor.

Mr. HOYER. Reclaiming my time, Mr. Leader, I take it that in light of the fact you have not mentioned it, at this point in time it is not on the schedule. But there is a lot of discussion on this side of the aisle about that bill. Do you think it would be possible that it might be added to the calendar?

I yield to my friend.

Mr. DELAY. I appreciate the gentleman yielding. It is possible it could be added to the calendar, but looking at how busy a week we have next week and the controversial issues that we will be bringing to the floor of the House, it is hard to say if we could put that bill on the floor next week.