

HR 6063

National Aeronautics and Space Administration Authorization Act of 2008

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Sponsor

Name: Rep. Udall, Mark [D-CO-2]

Party: Democratic • State: CO • Chamber: Senate

Cosponsors (12 total)

Cosponsor	Party / State	Role	Date Joined
Rep. Feeney, Tom [R-FL-24]	R · FL		May 15, 2008
Rep. Gordon, Bart [D-TN-6]	D · TN		May 15, 2008
Rep. Hall, Ralph M. [R-TX-4]	R · TX		May 15, 2008
Rep. Chandler, Ben [D-KY-6]	D · KY		Jun 4, 2008
Rep. Lampson, Nick [D-TX-22]	D · TX		Jun 4, 2008
Rep. Melancon, Charlie [D-LA-3]	D · LA		Jun 4, 2008
Rep. Wu, David [D-OR-1]	D · OR		Jun 4, 2008
Rep. Klein, Ron [D-FL-22]	D · FL		Jun 9, 2008
Rep. McCaul, Michael T. [R-TX-10]	R · TX		Jun 9, 2008
Rep. Miller, Brad [D-NC-13]	D · NC		Jun 9, 2008
Rep. Perlmutter, Ed [D-CO-7]	D · CO		Jun 9, 2008
Rep. Smith, Lamar [R-TX-21]	R · TX		Jun 9, 2008

Committee Activity

Committee	Chamber	Activity	Date
Commerce, Science, and Transportation Committee	Senate	Discharged From	Sep 25, 2008
Science, Space, and Technology Committee	House	Reported by	May 20, 2008

Subjects & Policy Tags

Policy Area:

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Related Bills

Bill	Relationship	Last Action
110 SCONRES 105	Related bill	Oct 2, 2008: Motion to reconsider laid on the table Agreed to without objection.
110 S 3270	Related bill	Jul 16, 2008: Placed on Senate Legislative Calendar under General Orders. Calendar No. 884.
110 HRES 1257	Procedurally related	Jun 12, 2008: On agreeing to the resolution Agreed to by the Yeas and Nays: 221 - 188 (Roll no. 406). (text: CR 6/11/2008 H5287)

National Aeronautics and Space Administration Authorization Act of 2008 - **Title I: Authorization of Appropriations for Fiscal Year 2009** - (Sec. 101) Authorizes appropriations to the National Aeronautics and Space Administration (NASA) for FY2009 for: (1) science; (2) aeronautics; (3) exploration; (4) education; (5) space operations; (6) cross-agency support programs; and (7) the inspector general.

Title II: Earth Science - (Sec. 201) Declares that the goal for NASA's Earth Science program shall be to pursue a program of Earth observations, research, and applications activities to better understand Earth, how it supports life, and how human activities affect its ability to do so in the future.

Directs NASA, together with the Oceanic and Atmospheric Administration (NOAA) and other relevant agencies, to provide U.S. leadership in developing and carrying out a cooperative international Earth observations-based research program.

(Sec. 202) Requires the Director of the Office of Science and Technology Policy (OSTP) to arrange with the National Academies (the National Academy of Sciences (NAS), the National Research Council, the National Academy of Engineering, and the Institute of Medicine) for a study, and a plan to implement the study, to determine a governance structure for U.S. Earth Observations programs to meet evolving U.S. Earth information needs and facilitate U.S. participation in global Earth Observations initiatives.

(Sec. 203) Directs the Administrator of NASA (the Administrator) to work toward establishing an international effort to pursue the missions recommended in the National Academies' decadal survey "Earth Science and Applications from Space," and to submit a plan to implement those missions.

(Sec. 204) Expresses the sense of the Congress that experimental NASA sensors and missions that have the potential to benefit society if transitioned into operational monitoring systems be transitioned into operational status.

Requires the OSTP Director, in consultation with the Administrator, the Administrator of NOAA, and other stakeholders, to develop a process for transitioning NASA earth science and space weather missions or sensors into operational status.

Requires NASA and NOAA to: (1) each designate an agency official who shall have the responsibility for leading NASA's and NOAA's transition activities and interagency coordination; and (2) prepare a joint plan for conducting the transition of each mission or sensor that is determined appropriate for transition.

(Sec. 205) Requires the Administrator to prepare a plan for the continuation of Landsat thermal infrared data collection or its equivalent, including a budget plan. Instructs the Administrator to provide an option for developing a thermal infrared sensor, at minimum cost, to be flown on the Landsat Data Continuity Mission, with minimum delay to the schedule of such Mission.

(Sec. 206) Reauthorizes the continuation of the development of the Glory Mission, which will examine how aerosols and solar energy affect the Earth's climate. Requires the Administrator to transmit a new baseline report in accordance with the National Aeronautics and Space Administration Authorization Act of 2005.

(Sec. 207) Requires NASA to develop a plan for a Deep Space Climate Observatory (DSCOVR), including establishing a public-private partnership for the mission and entering into an international cooperative partnership to use the spacecraft

for its primary or other purposes.

(Sec. 208) Requires NASA to give high priority to those parts of its existing activities with NOAA that are related to the study of tornadoes and other severe storms, tornado-force winds, and other factors determined to influence the development of tornadoes and other severe storms with the goal of improving the ability to predict tornadoes and other severe storms. Instructs the Administrator to examine whether there are additional activities with NOAA that should be undertaken in the area of tornado and severe storm research.

Title III: Aeronautics - (Sec. 301) Expresses the sense of the Congress regarding support for aeronautics research by NASA.

(Sec. 302) Requires the establishment of an environmentally friendly commercial aircraft research and development initiative involving NASA, universities, industry, and other research organizations as appropriate.

(Sec. 303) Directs the Administrator to align the fundamental aeronautics research program to address high priority technology challenges of the National Academies' Decadal Survey of Civil Aeronautics and to work to increase the involvement of organizations, and especially of universities, in such program.

(Sec. 304) Requires the establishment of a research program with industry for the collection of data on the perceived impact of sonic booms which could enable the promulgation of standards for overland commercial supersonic flight operations.

Instructs the Administrator to ensure that sonic boom research is coordinated with the Administrator of the Federal Aviation Administration (FAA), and as appropriate, to make use of the expertise of the Partnership for Air Transportation Noise and Emissions Reduction Center of Excellence sponsored by NASA and the FAA.

(Sec. 305) Directs the Administrator to arrange with the National Research Council for a review of NASA's aviation safety-related research programs.

(Sec. 306) Directs the Administrator and the Administrator of NOAA to develop a collaborative research plan on convective weather events, with the goal of significantly improving the reliability of 2-hour to 6-hour aviation weather forecasts.

(Sec. 307) Requires research and development activities performed by the Aeronautics Research Mission Directorate with the primary objective of assisting in the development of a flight project in another Mission Directorate to be funded by the Mission Directorate seeking assistance.

(Sec. 308) Requires (under current law, permits) the Administrator to award grants for the establishment of university-based Centers for Research on Aviation Training.

Title IV: Exploration Initiative - (Sec. 401) Expresses the sense of the Congress that the President should invite America's friends and allies to participate in an international initiative under the leadership of the United States to expand human and robotic presence into the solar system, including the exploration and utilization of the Moon, near-Earth asteroids, Lagrangian points, and eventually Mars and its moons.

(Sec. 402) Affirms Congress's support for the goals of the space exploration policy of the United States, including the eventual return to and exploration of the Moon and other destinations in the solar system and the national imperative of independent access to space.

(Sec. 403) Instructs the Administrator, in order to maximize the cost-effectiveness of the U.S.'s long-term exploration and utilization activities, to ensure that activities in NASA's lunar exploration program be designed and implemented in a manner that gives strong consideration as to how those activities might also help meet the requirements of future exploration and utilization activities beyond the Moon.

Requires: (1) the timetable of the lunar phase of the international exploration initiative to be determined by the availability of funding; and (2) once an exploration-related project enters its development phase, the Administrator to seek to complete that project without undue delays.

(Sec. 404) Prohibits NASA, as it works toward establishing a lunar outpost, from making any plans that would require an outpost to be occupied to maintain its viability. Requires any such outpost to be operable as a human-tended facility capable of remote or autonomous operation for extended periods.

Designates the U.S. portion of the first human-tended outpost established on the surface of the Moon as the "Neil A. Armstrong Lunar Outpost."

Expresses the sense of Congress that NASA should make use of commercial services in support of its lunar outpost activities.

(Sec. 405) Requires the establishment of an exploration technology research and development program that is not tied to specific flight projects and that shall have the funding goal of ensuring that the technology research and development can be completed in a timely manner to support the safe, successful, and sustainable exploration of the solar system.

Requires the technology program to have the goal of having a significant portion of its funding available for external grants and contracts with universities, research institutions, and industry.

(Sec. 406) Directs the Administrator to prepare a plan that identifies and prioritizes the human and technical risks that will need to be addressed in carrying out human exploration beyond low Earth orbit and the research and development activities required to address those risks.

Requires the plan to address the role of the International Space Station (ISS) in exploration risk mitigation.

(Sec. 407) Directs the Administrator to discuss with the appropriate representatives of spacefaring nations who have, or plan to have, crew transportation systems capable of orbital flight or flight beyond low-Earth orbit a common docking system standard to maximize the ability to rescue astronauts from disabled space vehicles.

(Sec. 408) Directs the Administrator to develop, and report on, a technology plan to enable dissemination of information to the public to allow the public to experience missions to the Moon, Mars, or other bodies within our solar system by leveraging advanced exploration technologies.

Instructs the Administrator to examine the feasibility of having NASA enter into contracts and other agreements with appropriate public, private sector, and international partners to broadcast, including via the Internet, to the public images and multimedia records delivered from its missions in space.

(Sec. 409) Expresses the sense of the Congress regarding NASA's scientific and human exploration activities. Encourages the coordination of such activities with the goal of maximizing the success of human exploration initiatives and furthering our understanding of the Universe that we explore.

(Sec. 410) Requires the Congressional Budget Office (CBO) to update its report from 2004 on the budgetary analysis of NASA's Vision for the Nation's Space Exploration Program, including new estimates for Project Constellation, NASA's new generation of spacecraft designed for human spaceflight that will replace the Space Shuttle program.

Title V: Space Science - (Sec. 501) Requires the establishment of an intra-directorate technology development program for space and Earth science within the Science Mission Directorate for the development of new technology. Makes the program independent of flight projects presently under development. Requires NASA to have a goal of funding the program at five percent of the total Science Mission Directorate annual budget. Requires such program to be structured to include competitively awarded grants and contracts.

(Sec. 502) Instructs the Administrator to ensure that provision is made in the design and construction of all future observatory-class scientific spacecraft intended to be deployed in Earth orbit or at a Lagrangian point in space for robotic or human servicing and repair.

(Sec. 503) Reaffirms Congress's support for a systematic, integrated program of exploration of the Martian surface, for specified purposes, including to examine Mars for future habitability and future human exploration. Provides that, such program should pursue launches at every Mars launch opportunity, leading to an eventual robotic sample return.

(Sec. 504) Expresses the sense of Congress that a balanced and adequately funded set of activities, consisting of NASA's research and analysis grants programs, technology development, science missions, and suborbital research activities, contributes to a robust science program and serves as a catalyst for innovation.

(Sec. 505) Expresses the sense of the Congress regarding the various uses and benefits of suborbital flight activities. Declares that Congress believes it is in the national interest to expand the size of NASA's suborbital research program.

Requires the Administrator to arrange with the National Academies for a review of the suborbital mission capabilities of NASA.

(Sec. 506) Requires the Director of OSTP to develop a plan to restart the production of radioisotope thermoelectric generator material for deep space and other space science missions.

(Sec. 507) Directs the Administrator to arrange with the National Academies for an assessment of impediments to the conducting of interagency cooperation on space science missions, to provide lessons learned and best practices, and to recommend steps to help facilitate interagency collaborations on such missions.

(Sec. 508) Directs the Administrator to arrange for an assessment to identify the primary causes of cost growth in the space and Earth science spacecraft mission classes, and to make recommendations as to what changes, if any, should be made to contain costs and ensure frequent mission opportunities in NASA's science spacecraft mission programs.

(Sec. 509) Expresses the sense of the Congress with regard to the exploration of planets of the outer solar system and their satellites. Urges NASA to move forward with plans for an Outer Planets flagship mission to the Europa-Jupiter system or the Titan-Saturn system as soon as practicable within a balanced Planetary Science program.

Title VI: Space Operations - Subtitle A: International Space Station - (Sec. 601) Instructs the Administrator to ensure that the ISS remains capable for potential U.S. utilization through at least 2020. Prohibits the taking of any steps that would preclude its continued operation and utilization by the United States after 2015.

Requires the Administrator to submit a Plan for the support of the operations and utilization of the ISS beyond FY2015

(the Plan) for a period of not less than five years, which shall be an update and expansion of the operation plan of the ISS National Laboratory.

Requires the provision of: (1) a list of critical hardware necessary to support ISS operations through 2020; (2) specific known or anticipated maintenance actions that would need to be performed to support ISS operations and research through 2020; and (3) annual upmass and downmass requirements, including potential vehicles that will deliver such upmass and downmass, to support the ISS after the retirement of the Space Shuttle and through 2020.

Requires the development of a research management plan for the ISS, which shall include a process for selecting and prioritizing research activities (including fundamental, applied, commercial, and other research) for flight on the ISS. Specifies that the plan be used to prioritize resources such as crew time, racks and equipment, and U.S. access to international research facilities and equipment. Requires the plan to identify the organization to be responsible for managing U.S. research on the ISS. Authorizes the Administrator to request the support of the NAS or other appropriate independent entity, including an external consultant, in developing such plan.

Requires: (1) the establishment of a process by which to support ISS National Laboratory users in identifying and communicating their requirements for transportation of research supplies to and from the ISS; and (2) the development of an estimate of transportation requirements needed to support users of the ISS National Laboratory and of a plan for satisfying those requirements.

Requires an assessment under which the Administrator shall: (1) provide a list of critical hardware that is anticipated to be necessary to support non-exploration-related and exploration-related research through 2020; (2) identify existing research equipment and racks and support equipment that are manifested for flight; and (3) provide a description of the status of research equipment and facilities that were completed or in development prior to being canceled, and provide the budget and milestones for preparing the equipment for flight on the ISS.

Requires the provision of a budget plan reflecting the anticipated use of such activities and the projected amounts to be required for FY2010 through FY2020 to accomplish the objectives of all of the activities described in this section that are part of the Plan.

(Sec. 602) Requires the Administrator to establish the International Space Station National Laboratory Advisory Committee to monitor, assess, and make recommendations regarding the utilization of the ISS as a national laboratory and platform for research. States that the committee shall be in existence for the life of the ISS.

(Sec. 603) Requires the Administrator to develop a contingency plan and arrangements, including use of the ISS international partner cargo resupply capabilities, to ensure the continued viability of the ISS in the event that U.S. commercial cargo resupply services are not available during any extended period after the Space Shuttle is retired.

(Sec. 604) Expresses the sense of Congress concerning use of the Space Life Sciences Laboratory at Kennedy Space Center as an asset in ISS National Laboratory capability. Urges the Laboratory to be used to provide pre-flight-, in-flight, and post-flight support services when appropriate.

Subtitle B: Space Shuttle - (Sec. 611) Amends the National Aeronautics and Space Administration Act of 2005 to require the Administrator to submit a report on the lack of a U.S. human space flight system to replace the Space Shuttle upon its planned retirement, currently scheduled for 2010, and the ability of the U.S. to uphold its policy to possess the capability for human access to space on a continuous basis, which shall include a description of the factors previously identified for inclusion in the compliance report.

Requires: (1) the utilization flights ULF-4 and ULF-5 to be considered part of the Space Shuttle baseline flight manifest and to be flown prior to the retirement of the Space Shuttle; and (2) the flight of one additional Space Shuttle flight to deliver the Alpha Magnetic Spectrometer and other scientific equipment and payloads to the ISS prior to the retirement of the Space Shuttle.

Requires the removal of such additional flight from the Space Shuttle schedule if: (1) NASA will be unable to meet the scheduled date of the flight before the end of 2010, unless the President decides to extend Shuttle operations beyond 2010; or (2) implementation of the additional flight would result in significant increased costs to NASA over the cost estimate of the flight or unacceptable safety risks associated with making the flight before termination of the Space Shuttle program. Requires notification of such a decision to specified congressional committees and removal of the additional flight from the schedule unless Congress by law reauthorizes the flight or the President certifies that it is in the national interest to fly the mission.

Terminates or suspends any activity of NASA that, if continued between the enactment of this Act and April 30, 2009, would preclude the continued safe and effective flight of the Space Shuttle after FY2010 if the President inaugurated on January 20, 2009, were to make a determination to delay the Shuttle's scheduled retirement. Requires the Administrator to report to Congress on the expected budgetary and programmatic impacts from complying with a termination or suspension.

Requires the Administrator to report to Congress on the options, impacts, and associated costs of ensuring the safe and effective operation of the Space Shuttle at the minimum rate necessary to support ISS operations and resupply, including for both 1-to-2 year and 3-to-6 year extensions of Shuttle operations.

(Sec. 612) Instructs the Administrator to determine the degree to which an increase in the amounts authorized to be appropriated under Title I of this Act for the Commercial Orbital Transportation Services project to be used by phase one team members of such project in FY2009 would be expected to accelerate development of capabilities A, B, and C to effective operational capability as close to 2010 as possible.

(Sec. 613) Requires the provision of a plan to Congress for the disposition of the remaining Space Shuttle orbiters and other Space Shuttle program-related hardware after the retirement of the Space Shuttle fleet. Requires the plan to include a process by which educational institutions, science museums, and other appropriate organizations may acquire, through loan or disposal by the federal government, Space Shuttle program hardware.

Bars the disposal of any Space Shuttle program hardware before such plan is submitted to Congress.

Directs the Administrator to develop a plan and establish an office within NASA's Office of Human Capital Management to assist local communities affected by the termination of the Space Shuttle program in mitigating the negative impacts on such communities caused by such termination. Requires the office to offer nonfinancial, technical assistance and serve as a clearinghouse to assist such communities in identifying services available from other federal, state, and local agencies.

Terminates such office two years after the last Space Shuttle flight.

(Sec. 614) Directs the Administrator to carry out an analysis of the facilities and human capital resources that will become available as a result of the retirement of the Space Shuttle program and to identify on-going or future federal programs and projects that could use such facilities and resources.

(Sec. 615) Provides for the temporary continuation of health insurance coverage under the Federal Employees Health Benefits Program (FEHB) for employees who are terminated from the Space Shuttle Program, involuntarily separated from a position due to a reduction-in-force or declination of a directed reassignment or transfer of function, or a voluntary separation from a surplus position in NASA.

Makes such an individual receiving temporary continuation of coverage under FEHB liable for not more than the employee contributions required of an employee enrolled under the individual's same health benefits plan and level of benefits. Requires NASA to pay the remaining portion of the amount required under FEHB necessary for administrative expenses.

Makes the requirement for such temporary continuation of coverage applicable to individuals whose continued coverage is based on a separation occurring on or after enactment of this section and before December 31, 2010.

(Sec. 616) Directs the Administrator to provide a report summarizing any actions taken or planned to be taken during FY2008 and FY2009 to begin reductions in expenditures and activities related to the Space Shuttle program.

Subtitle C: Launch Services - (Sec. 621) Requires, in preparation for the awarding of contracts to follow up on the current NASA Launch Services (NLS) contracts, development of a strategy for providing commercial launch services in support of NASA's small and medium-sized science, space operations, and exploration missions. Requires a report describing such strategy.

Title VII: Education - (Sec. 701) Requires preparation of a plan identifying actions taken or planned in response to the recommendations of the National Academies report, "NASA's Elementary and Secondary Education Program: Review and Critique." Requires, for those actions that have not been implemented, the plan to include a schedule and budget required to support the actions.

(Sec. 702) Directs the Administrator to arrange for a review of the Explorer Schools program to evaluate its goals, status, plans, and accomplishments.

(Sec. 703) Expresses the sense of the Congress regarding support for NASA's educational programs. Urges NASA to support programs such as EarthKAM and robotics competitions.

(Sec. 704) Expresses the sense of the Congress concerning the use of the ISS by federal agencies for engaging students in science, technology, engineering, and mathematics education. Encourages NASA to include other federal agencies in its planning efforts to use the ISS National Laboratory for such educational activities.

Instructs NASA to detail in its annual budget submission additional steps that can be taken to further integrate the participating EPSCoR (the Experimental Program to Stimulate Competitive Research) states in existing and new or emerging NASA research programs and center activities.

Title VIII: Near Earth Objects - (Sec. 801) Reaffirms the policy direction established in the National Aeronautics and Space Act of 1958 for NASA to detect, track, catalogue, and characterize near-Earth asteroids and comets in order to provide warning and mitigation of the potential hazard of such near-Earth objects to the Earth.

(Sec. 803) Directs the Administrator to issue requests for information on: (1) a low-cost space mission to rendezvous with, attach a tracking device, and characterize the Apophis asteroid; and (2) a medium-sized space mission to detect near-Earth objects equal to or greater than 140 meters in diameter.

(Sec. 804) Requires the Director of OSTP to: (1) develop a policy for notifying federal agencies and relevant emergency response institutions of an impending near-Earth object threat, if near-term public safety is at risk; and (2) recommend a federal agency(ies) to be responsible for protecting the United States from a near-Earth object that is anticipated to collide with Earth and implement a deflection campaign, in consultation with international bodies, should one be necessary.

(Sec. 805) Instructs the Administrator to maintain a planetary radar that is comparable to the capability provided through NASA's Deep Space Network Goldstone facility.

(Sec. 806) Reiterates the Congress's support for the use of the Arecibo Observatory for NASA-funded near-Earth object-related activities. Instructs the Administrator to ensure the availability of the Observatory's planetary radar to support these activities until the National Academies' review of NASA's approach for the survey and deflection of near-Earth objects, including a determination of the role of Arecibo, is completed.

(Sec. 807) Expresses the sense of the Congress that the United States should seek to obtain commitments for cooperation from other nations with significant resources for contributing to a thorough and timely search for such objects and an identification of their characteristics.

Title IX: Commercial Initiatives - (Sec. 901) Expresses the sense of the Congress regarding the use of commercial services in conducting the activities of NASA's space exploration program. Encourages NASA to look for such service opportunities and to make use of the commercial sector to provide those services.

Expresses the sense of the Congress that U.S. entrepreneurial space companies have the potential to develop and deliver innovative technology solutions at affordable costs. Encourages NASA to use such companies to conduct research and development activities and to ensure that firms that rely on fixed-price proposals are not disadvantaged when NASA seeks to procure technology development.

(Sec. 902) Sets forth requirements for the use of commercial crew transfer and crew rescue services for the ISS.

Requires NASA to issue a notice of intent to enter into a funded, competitively awarded Space Act Agreement with two or more commercial entities for a Phase I Commercial Orbital Transportation Services crewed vehicle demonstration program.

Expresses Congress's intent that funding for such program not come at the expense of full funding of the amounts authorized for exploration under title I of this Act, and for future fiscal years, for Orion Crew Exploration Vehicle development, Ares I Crew Launch Vehicle development, or ISS cargo delivery.

Requires NASA to make ISS-compatible docking adaptors and other relevant technologies available to the commercial crew providers selected to service the ISS.

Requires, if a commercial provider demonstrates the capability to provide ISS crew transfer and crew rescue services and to satisfy NASA ascent, entry, and ISS proximity operations safety requirements, NASA to enter into an ISS crew transfer and crew rescue services contract with that commercial provider for a portion of NASA's anticipated ISS crew transfer and crew rescue requirements from the time the provider commences operations under contract with NASA through 2016, with an option of extending through 2020.

Title X: Revitalization of NASA Institutional Capabilities - (Sec. 1001) Requires a review of NASA's information security controls by the Government Accountability Office (GAO). Requires a report on intrusions of NASA's network

resources.

(Sec. 1002) Instructs the Administrator to ensure that adequate maintenance and upgrading of NASA's Centers is performed regularly.

(Sec. 1003) Requires an external review of NASA's laboratories.

(Sec. 1004) Requires completion of a study of all field centers of NASA, including the Michoud Assembly facility.

Title XI: Other Provisions - (Sec. 1101) Requires the Director of OSTP to develop a plan for sustaining space-based measurements of solar wind from the L-1 Lagrangian point in space and for dissemination of the data for operational purposes.

Directs the Administrator to arrange with the National Research Council for a study of the impacts of space weather on the current and future U.S. aviation industry, and in particular to examine the risks for Over-The-Pole (OTP) and Ultra-Long Range (ULR) operations.

(Sec. 1102) Directs the Administrator to initiate discussions with the appropriate representatives of other spacefaring countries to determine a framework under which information intended to promote safe access into outer space, operations in outer space, and return from outer space to Earth free from physical or radio-frequency interference can be shared among those nations.

(Sec. 1103) Requires a survey of astronauts and flight surgeons regarding astronaut health care. Instructs that the survey questions and the analysis of the results of such survey be evaluated by experts who are independent of NASA.

(Sec. 1104) Directs the Administrator to enter into agreements periodically with the National Academies for decadal surveys to take stock of the status and opportunities for Earth and space science discipline fields and aeronautics research and to recommend priorities for research and programmatic areas over the next decade. Requires that such agreements include independent estimates of life cycle costs and technical readiness of missions assessed in the surveys whenever possible.

(Sec. 1105) Amends the National Aeronautics and Space Act of 1958 to require the Administrator, in selecting topics for innovation prize competitions, to consider prize goals such as the demonstration of the ability to provide energy to the lunar surface from space-based solar power systems, demonstration of innovative near-Earth object survey and deflection strategies, and innovative approaches to improving the safety and efficiency of aviation systems. Increases the maximum award amount for an innovation prize.

(Sec. 1106) Requires the Director of OSTP to work with other appropriate federal agencies to establish an interagency committee to conduct a study to (1) identify the issues and challenges with establishing space launch ranges and facilities for commercial space missions in close proximity to federal launch ranges or other federal facilities; and (2) develop a mechanism such that states seeking to establish such commercial space launch ranges will be able to interface with the federal government on issues related to the establishment of such ranges.

(Sec. 1107) Directs NASA to competitively select an organization to partner with NASA centers, aerospace contractors, and academic institutions to carry out a NASA outreach program for small, minority-owned, and women-owned businesses in communities across the United States. Provides for such program to support the mission of NASA's Innovative Partnerships Program with its emphasis on joint partnerships with industry, academia, government agencies, and national laboratories.

Species the activities that will be undertaken under the outreach and technology assistance program.

(Sec. 1108) Prohibits NASA from initiating or implementing a reduction-in-force, or conducting any other involuntary separations of permanent, non-Senior Executive Service, civil servant employees, before December 31, 2010, except for cause on charges of misconduct, delinquency, or inefficiency.

(Sec. 1109) Expresses the sense of the Congress that NASA should not dilute, distort, suppress, or impede scientific research or the dissemination thereof.

Directs the Comptroller General to initiate a study to determine whether the regulations set forth in the Code of Federal Regulations (CFR) governing the release of public information to the news and information media are being implemented clearly and consistently by NASA to ensure the dissemination of research.

Directs the Administrator to work to ensure that NASA's policies on the sharing of climate-related data respond to the recommendations of the report of the Government Accountability Office (GAO) on climate change research and data-sharing policies and to the recommendations on the processing, distribution, and archiving of data by the National Academies Earth Science Decadal Survey, "Earth Science and Applications from Space," and other relevant National Academies reports, to enhance and facilitate their availability and widest possible use to ensure public access to accurate and current data on global warming.

(Sec. 1110) Expresses the sense of the Congress regarding the need for a robust and highly skilled workforce at NASA. Urges NASA to work with other U.S. government agencies responsible for programs related to space and the aerospace industry to implement policies, including those emphasizing improvement of science, technology, engineering, and mathematics education, to sustain and expand the diverse workforce available to NASA.

(Sec. 1111) Requires the Director of OSTP to develop a plan, including a cost estimate and timetable, and initiate an inventory of natural methane stocks and fluxes in the polar region of the United States.

(Sec. 1112) States that the provisions of the Energy Independence and Security Act of 2007 regarding the procurement and acquisition of alternative and synthetic fuels by federal agencies do not prohibit NASA from entering into a contract to purchase generally available fuel that is not an alternative or synthetic fuel or predominately produced from a nonconventional petroleum source, as specified in this section.

(Sec. 1113) Expresses the sense of Congress regarding the importance of NASA maintaining an Office of Program Analysis and Evaluation that has as its mission the development of strategic and annual performance plans, the provision of analysis and recommendations to the Administrator on matters related to planning and programming phases, and the provision of analysis and recommendations to the Administrator on matters related to acquisition management and program oversight.

(Sec. 1114) Expresses the sense of Congress that the President should elevate the importance of space and aeronautics within the Executive Office of the President by organizing the interagency focus on space and aeronautics matters as effectively as possible, such as by means of the National Space Council or other appropriate mechanisms.

(Sec. 1115) Requires completion of a study on the leasing practices of all NASA field centers, including the Michoud Assembly Facility.

(Sec. 1116) Continues the use of the capabilities of unmanned aerial vehicles in support of NASA and interagency cooperative missions. Authorizes the Administrator to enter into cooperative agreements with universities with unmanned

vehicle programs and related assets to conduct collaborative research and development activities, including development of applications of small unmanned aerial vehicle technologies and systems in remote areas.

(Sec. 1117) Requires the Administrator to develop an enhanced-use lease policy that is based upon sound business practices and lessons learned from the demonstration centers and that establishes controls and procedures to ensure accountability and protect the government's interests. Revises procedures for the retention of cash consideration received by NASA field centers.

(Sec. 1118) Expresses the sense of the Congress that every effort should be made to ensure the effective use of the Michoud Assembly Facility as well as NASA's other centers and facilities.

(Sec. 1119) Requires the Director of OSTP to submit a report setting forth an assessment as to the capacity of the U.S. industrial base to develop and produce engines for space launch vehicles.

(Sec. 1120) Expresses the sense of the Congress concerning the use of the Space Shuttle as a platform for precursor ISS research. Encourages the Administrator to continue the promotion of the effective use of the Space Shuttle for precursor research within the constraints of ISS assembly requirements.

(Sec. 1121) Authorizes and limits appropriations for expenses related to conferences. Prohibits the use of any funds under this Act for the support of a Space Flight Awareness Launch Honoree Event conference. Sets a limitation on the total amount of funding available under this Act for other Space Flight Awareness Honoree-related activities in FY2009.

Requires the Administrator to report to the NASA Inspector General regarding the costs and contracting procedures related to each conference held by NASA during FY2009 for which the cost is more than \$20,000.

(Sec. 1122) Requires the Comptroller General to submit a report to Congress containing a review of NASA programs and associated activities with an annual funding level of more than \$50 million that appear to be similar in scope and purpose to other activities within the federal government. Requires the report, if it is determined that any deficiency exists in NASA procedures intended to avoid or eliminate conflict or duplication with other federal agency activities, to include a recommendation as to how such procedures should be modified.

Actions Timeline

- **Oct 15, 2008:** Signed by President.
- **Oct 15, 2008:** Became Public Law No: 110-422.
- **Oct 6, 2008:** Presented to President.
- **Sep 27, 2008:** Hearings Held by Subcommittee on Space and Aeronautics Prior to Introduction and Referral (04/24/2008)..
- **Sep 27, 2008:** Hearing Held by Subcommittee on Space and Aeronautics Prior to Introduction and Referral (05/01/2008)..
- **Sep 27, 2008:** Mr. Gordon moved that the House suspend the rules and agree to the Senate amendment. (consideration: CR H10181-10195)
- **Sep 27, 2008:** DEBATE - The House proceeded with forty minutes of debate on the motion to suspend the rules and agree to the Senate amendment to H.R. 6063.
- **Sep 27, 2008:** Resolving differences -- House actions: On motion that the House suspend the rules and agree to the Senate amendment Agreed to by voice vote. (text as House agreed to Senate amendment: CR H10181-10191)
- **Sep 27, 2008:** On motion that the House suspend the rules and agree to the Senate amendment Agreed to by voice vote. (text as House agreed to Senate amendment: CR H10181-10191)
- **Sep 27, 2008:** Motion to reconsider laid on the table Agreed to without objection.
- **Sep 27, 2008:** Cleared for White House.
- **Sep 26, 2008:** Message on Senate action sent to the House.
- **Sep 25, 2008:** Senate Committee on Commerce, Science, and Transportation discharged by Unanimous Consent.
- **Sep 25, 2008:** Measure laid before Senate by unanimous consent. (consideration: CR S9471-9473)
- **Sep 25, 2008:** Passed/agreed to in Senate: Passed Senate with an amendment by Unanimous Consent.
- **Sep 25, 2008:** Passed Senate with an amendment by Unanimous Consent.
- **Sep 17, 2008:** Hearings Held by Committee on Science and Technology Prior to Introduction and Referral (February 13, 2008)..
- **Jun 20, 2008:** Received in the Senate and Read twice and referred to the Committee on Commerce, Science, and Transportation.
- **Jun 18, 2008:** Considered as unfinished business. (consideration: CR H5537-5542)
- **Jun 18, 2008:** The House resolved into Committee of the Whole House on the state of the Union for further consideration.
- **Jun 18, 2008:** The House rose from the Committee of the Whole House on the state of the Union to report H.R. 6063.
- **Jun 18, 2008:** The previous question was ordered without objection. (consideration: CR H5539)
- **Jun 18, 2008:** The House adopted the amendment in the nature of a substitute as agreed to by the Committee of the Whole House on the state of the Union.
- **Jun 18, 2008:** Mr. Gingrey moved to recommit with instructions to Science and Technology. (consideration: CR H5539-5542; text: CR H5539-5540)
- **Jun 18, 2008:** DEBATE - The House proceeded with ten minutes of debate on the Gingrey motion to recommit with instructions. The instructions contained in the motion seek to require the bill to be reported back to the House with an amendment adding language to create competition for energy efficiency.
- **Jun 18, 2008:** The previous question on the motion to recommit with instructions was ordered without objection. (consideration: CR H5541)
- **Jun 18, 2008:** On motion to recommit with instructions Failed by recorded vote: 196 - 225 (Roll no. 420). (consideration: CR H5541)
- **Jun 18, 2008:** Passed/agreed to in House: On passage Passed by the Yeas and Nays: 409 - 15 (Roll no. 421).
- **Jun 18, 2008:** On passage Passed by the Yeas and Nays: 409 - 15 (Roll no. 421).
- **Jun 18, 2008:** Motion to reconsider laid on the table Agreed to without objection.
- **Jun 12, 2008:** Rule H. Res. 1257 passed House.
- **Jun 12, 2008:** Considered under the provisions of rule H. Res. 1257. (consideration: CR H5365-5390, H5390-5393; text of measure as reported in House: CR H5372-5379)
- **Jun 12, 2008:** Rule provides for consideration of H.R. 6063 with 1 hour of general debate. Previous question shall be considered as ordered without intervening motions except motion to recommit with or without instructions. Measure will be considered read. Specified amendments are in order. The rule waives all points of order against consideration of the bill except clauses 9 and 10 of rule XXI. The amendment in the nature of a substitute recommended by the Committee

- on Science and Technology now printed in the bill shall be considered as an original bill for the purpose of amendment.
- **Jun 12, 2008:** House resolved itself into the Committee of the Whole House on the state of the Union pursuant to H. Res. 1257 and Rule XVIII.
 - **Jun 12, 2008:** The Speaker designated the Honorable Madeleine Z. Bordallo to act as Chairwoman of the Committee.
 - **Jun 12, 2008:** GENERAL DEBATE - The Committee of the Whole proceeded with one hour of general debate on H.R. 6063.
 - **Jun 12, 2008:** DEBATE - Pursuant to the provisions of H. Res. 1257, the Committee of the Whole proceeded with 10 minutes of debate on the Feeney amendment.
 - **Jun 12, 2008:** DEBATE - Pursuant to the provisions of H. Res. 1257, the Committee of the Whole proceeded with 10 minutes of debate on the Lampson amendment.
 - **Jun 12, 2008:** POSTPONED PROCEEDINGS - At the conclusion of debate on the Lampson amendment the Chair put the question on adoption of the amendment and by voice vote, announced that the ayes had prevailed. Mr. Lampson demanded a recorded vote and the Chair postponed further proceedings on the question of adoption of the amendment until a time to be announced.
 - **Jun 12, 2008:** DEBATE - Pursuant to the provisions of H. Res. 1257, the Committee of the Whole proceeded with 10 minutes of debate on the Arcuri amendment.
 - **Jun 12, 2008:** DEBATE - Pursuant to the provisions of H. Res. 1257, the Committee of the Whole proceeded with 10 minutes of debate on the Wu amendment.
 - **Jun 12, 2008:** DEBATE - Pursuant to the provisions of H. Res. 1257, the Committee of the Whole proceeded with 10 minutes of debate on the Harman amendment.
 - **Jun 12, 2008:** DEBATE - Pursuant to the provisions of H. Res. 1257, the Committee of the Whole proceeded with 10 minutes of debate on the Gordon amendment.
 - **Jun 12, 2008:** The Committee of the Whole rose informally.
 - **Jun 12, 2008:** The Committee of the Whole resumed its sitting.
 - **Jun 12, 2008:** DEBATE - Pursuant to the provisions of H. Res. 1257, the Committee of the Whole proceeded with 10 minutes of debate on the Hodes amendment.
 - **Jun 12, 2008:** POSTPONED PROCEEDINGS - At the conclusion of debate on the Hodes amendment the Chair put the question on adoption of the amendment and by voice vote, announced that the ayes had prevailed. Mr. Hodes demanded a recorded vote and the Chair postponed further proceedings on the question of adoption of the amendment until a time to be announced.
 - **Jun 12, 2008:** DEBATE - Pursuant to the provisions of H. Res. 1257, the Committee of the Whole proceeded with 10 minutes of debate on the Yarmuth amendment.
 - **Jun 12, 2008:** DEBATE - Pursuant to the provisions of H. Res. 1257, the Committee of the Whole proceeded with 10 minutes of debate on the Jackson-Lee (TX) amendment.
 - **Jun 12, 2008:** Mr. Gordon moved that the Committee rise.
 - **Jun 12, 2008:** On motion that the Committee rise Agreed to by voice vote.
 - **Jun 12, 2008:** Committee of the Whole House on the state of the Union rises leaving H.R. 6063 as unfinished business.
 - **Jun 10, 2008:** Rules Committee Resolution H. Res. 1257 Reported to House. Rule provides for consideration of H.R. 6063 with 1 hour of general debate. Previous question shall be considered as ordered without intervening motions except motion to recommit with or without instructions. Measure will be considered read. Specified amendments are in order. The rule waives all points of order against consideration of the bill except clauses 9 and 10 of rule XXI. The amendment in the nature of a substitute recommended by the Committee on Science and Technology now printed in the bill shall be considered as an original bill for the purpose of amendment.
 - **Jun 9, 2008:** Reported (Amended) by the Committee on Science and Technology. H. Rept. 110-702.
 - **Jun 9, 2008:** Placed on the Union Calendar, Calendar No. 446.
 - **Jun 4, 2008:** Ordered to be Reported (Amended) by Voice Vote.
 - **May 20, 2008:** Subcommittee Consideration and Mark-up Session Held.
 - **May 20, 2008:** Forwarded by Subcommittee to Full Committee by Voice Vote .
 - **May 15, 2008:** Introduced in House
 - **May 15, 2008:** Sponsor introductory remarks on measure. (CR E942-943)
 - **May 15, 2008:** Referred to the House Committee on Science and Technology.
 - **May 15, 2008:** Referred to the Subcommittee on Space and Aeronautics.