



H.R. 6063 – National Aeronautics and Space Administration Authorization Act of 2008

FLOOR SITUATION

H.R. 6063, as amended, is being considered on the floor under suspension of the rules and will require a two-thirds majority vote for passage. This legislation was introduced by Representative Mark Udall (D-CO) on May 15, 2008. The House passed their version of the bill on June 18, 2008, by a vote of 409 to 15. The Senate amended H.R. 6063 and passed it by unanimous consent on September 25, 2008.

H.R. 6063, as amended, represents an agreement between the House and Senate and is expected to be considered on the floor of the House on September 26, 2008.

SUMMARY

Authorization of Appropriations: H.R. 6063 authorizes \$20.2 billion for NASA in 2009. This amount is \$2.6 billion over the President's requested budget, and reflects a \$1.5 billion increase over the 2008 authorization level. The bill includes the following authorization levels:

- \$4.9 billion for Science (\$1.5 billion for Earth Science, \$1.5 billion for Planetary Science, \$1.3 billion for Astrophysics and \$640 million for Heliophysics);
- \$853 million for Aeronautics;
- \$4.9 billion for Exploration;
- \$128 million for Education; and
- \$6 billion for Space Operations. This includes a \$150 million increase for the Alpha Magnetic Spectrometer (AMS) mission and a \$100 million increase for International Space Station research utilization.
- \$3.3 billion for Cross-Agency Support Programs

Earth Science: H.R. 6063 requires the National Academies to provide a study within 24 months regarding the most appropriate governing structure for U.S. Earth Observation programs. The bill also directs the Director of the Office of Science and Technology Policy to develop a process for federal agencies to transition NASA earth science missions into operational status.

The bill reauthorizes NASA to continue the development of the Glory mission (a remote-sensing Earth-orbiting observatory), and requires the Administrator to transmit a new baseline report to Congress within 90 days of enactment.

Aeronautics: The legislation requires the Administrator to establish a research program with industry to collect data on sonic booms to enable the potential development of standards for overland commercial supersonic flights. H.R. 6063 also directs the Administrator to have the National Research Council conduct an independent review of NASA's aviation safety research programs.

H.R. 6063 directs the Administrator to develop an initiative to reduce greenhouse gas emissions of commercial aircraft and reduce aircraft noise levels on takeoff and airport approach.

H.R. 6063 also requires NASA to award grants to one or more higher education institutions to establish at least one Center for Research on Aviation Training, under current law NASA "may" award these grants.

**Note: The bill as amended removes a provision that was included in the House passed version that would have established a joint Aeronautics Research and Development Advisory Committee*



to make recommendations regarding the coordination of research and development activities between NASA and the FAA.

International Exploration Initiative: H.R. 6063 requires the Administrator to ensure that the lunar exploration program be designed and implemented so that it may meet future requirements for utilization beyond the Moon. The bill further directs NASA to make no plans to require a lunar outpost to be occupied to maintain its viability. It also includes that it is the intent of Congress that NASA shall make use of commercial services to the maximum extent practicable in support of its lunar outpost activities.

Space Science: H.R. 6063 directs the Administrator to establish a cross-Directorate technology development program for space and Earth science within the Science Mission Directorate, with a funding goal of five percent of that Directorate's budget and is required to be independent of flight projects under development.

The bill also reaffirms Congressional support for robotic exploration of Mars, and further expresses the sense of Congress that outer solar system planets can offer knowledge about the formation and evolution of the solar system and the potential for conditions conducive to life beyond Earth.

The Administrator must arrange for an independent external assessment to identify the primary causes of cost growth in science spacecraft mission classes, and make recommendations as to what changes should be made to contain costs. Within 15 months of enactment, such report will be submitted to Congress.

Space Operations: H.R. 6063 directs the Administrator to ensure that the International Space Station remains a viable and productive facility for potential American utilization through at least 2020. Under this provision, the Administrator is also required to develop a research management plan for the ISS. The bill also establishes an International Space Station National Laboratory Advisory Committee made up of individuals representing organizations who have formal agreements with NASA to utilize the United States portion of the ISS.

The bill requires the Administrator to submit a report within 90 days of enactment on the lack of a United States human space flight system to replace the Space Shuttle upon its retirement. This legislation establishes that the Utilization flights ULF-4 and ULF-5 are part of the Space Shuttle baseline flight manifest and must be flown prior to the retirement of the Space Shuttle in 2010. The bill also requires NASA to fly an additional Shuttle flight to deliver the Alpha Magnetic Spectrometer to ISS and authorizes \$150 million for this purpose. However, the bill gives the Administrator the authority to cancel the flight for schedule, cost, and safety concerns. These flights do not currently have scheduled launch dates.

The bill prohibits NASA from taking any steps from its date of enactment until April 30, 2009, that would preclude the continued operation of the Space Shuttle post 2010. This will permit the new Administration an opportunity to develop policy on whether to continue utilizing the Shuttle.

The Space Shuttle must be retired following completion of the baseline flight manifest, expected to occur by the end of 2010. H.R. 6063 directs the Administrator to establish an office within NASA's Office of Human Capital to assist local communities affected by the termination of the Space Shuttle Program and to submit a report to Congress on the plan for the disposition of the remaining Space Shuttle Orbiters and other Space Shuttle program related hardware after the retirement of the fleet.

Near Earth Objects: The bill expresses Congressional support for NASA to detect and track and characterize the physical characteristics of near-Earth objects (NEOs). H.R. 6063 requires the Director of the Office of Science and Technology Policy to develop a policy for notifying federal agencies and



emergency response institutions in the case of an imminent NEO threat. The NASA Administrator is also to maintain a planetary radar comparable to that of the NASA Deep Space Network Goldstone facility.

Commercial Initiatives: H.R. 6063 expresses the sense of Congress that the commercial sector can make significant contributions to NASA's space exploration program. NASA is directed to make use of U.S. commercially provided ISS crew transfer and crew rescue services to the maximum extent practicable, as well as other commercially available space services. H.R. 6063 directs NASA to enter into a crew transportation services contract with a commercial provider if it demonstrates the ability to provide ISS crew transfer in accordance with safety requirements.

Revitalization of NASA Institutional Capabilities: H.R. 6063 requires the Comptroller General to review the information security controls at NASA and to report to Congress within one year. The Administrator is to ensure that NASA Centers receive adequate and regular maintenance and upgrades. This provision also arranges for an independent external review of the quality of NASA's laboratories.

Other Provisions:

- H.R. 6063 amends the 2005 NASA Authorization Act (P.L. 109-155) to permit awards of up to \$50 million for innovation prizes, the current authorized prize level being \$10 million.
- NASA is also directed to contract with an organization to carry out a program to facilitate knowledge technology transfer, technology assistance from NASA Centers to small, minority owned, or women owned businesses and report to Congress annually on program highlights. This provision is authorized at \$4 million per year is authorized for this purpose.
- The bill puts a reduction in force moratorium on NASA for non-Senior Executive Service, permanent, civil service employees through December 31, 2010.
- It also limits the amount of annual funding for any expenses related to conferences to \$5 million.
- The bill requires a report on NASA efficiency and performance to be conducted by the Comptroller General and submitted to Congress within one year of enactment.

SUMMARY

Created in 1958, NASA is the federal agency primarily responsible for the United States' public space program and aerospace research. The agency was established largely in response to the launch of the Soviet satellite *Sputnik* in 1957. The current NASA Administrator is Michael D. Griffin, who supervises about 17,000 employees. NASA was most recently authorized by the NASA Authorization Act of 2005 (P.L. 109-155).

The International Space Station (ISS) is a research facility under construction in space since 1998. The ISS is a joint project between space agencies of the United States, Russia, Japan, Canada and eleven European nations. The ISS has been continuously staffed with a human presence since 2000.

The Administration's 2009 budget requested \$17.6 billion for NASA. H.R. 6063 authorizes appropriations of \$20.2 billion for NASA. This includes an additional \$1 billion to accelerate development of the Shuttle follow-on Orion and Ares launch system. The Administration plans a five year gap in U.S. access to space between the retirement of the Space Shuttle in 2010 and the expected arrival of Orion and Ares in 2015. This accelerated development funding is intended to reduce American dependence on Russia for access to the ISS. According to Science and Technology Committee Republicans, NASA has already agreed to pay Russia \$760 million for access under a current contact, and this cost potentially could rise to \$2.8 billion during the five year gap period.

In markup, Committee Republicans stressed that Section 526 of the Energy Independence and Security Act of 2007 (P.L. 110-140) prevented federal agencies from purchasing alternative fuels, thus preventing agencies from freeing up conventional fuels (i.e., petroleum derived) for purchase by the American



public. Two amendments were offered by Rep. Gingrey (R-GA) to exempt NASA, but were voted down by Committee Democrats. NASA has experienced a 400 percent increase in fuel costs over the past five years, according to Committee Republicans.

[National Aeronautics and Space Administration \(NASA\) website](#)

[International Space Station website](#)

[Office of Science and Technology Policy website](#)

COST

The Congressional Budget Office (CBO) estimates that implementing the House passed version of H.R. 6063 “would cost \$20.1 billion over the 2009-2013 period.”

[Full CBO Cost Estimate](#)

STAFF CONTACT

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