



**Legislative Bulletin.....June 11, 2008**

**Contents:**

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

---

---

**Summary of the Bill Under Consideration Today:**

**Total Number of New Government Programs:** Several.

**Total Cost of Discretionary Authorizations:** \$20.2 billion in FY 2009.

**Effect on Revenue:** \$0

**Total Change in Mandatory Spending:** \$0

**Total New State & Local Government Mandates:** \$0

**Total New Private Sector Mandates:** \$0

**Number of Bills Without Committee Reports:** 0

**Number of Reported Bills that Don't Cite Specific Clauses of Constitutional Authority:** 1

---

---

**H.R. 6063—National Aeronautics and Space Administration Authorization Act of 2008 (*Udall, D-CO*)**

**Order of Business:** H.R. 6063 is scheduled to be considered on Wednesday, June 11, 2008, under a structured rule ([H.Res. 1257](#)). The rule waives all points of order against consideration of the bill (except those for PAYGO and earmarks), provides for one hour of general debate, and makes in order 11 amendments. The RSC will circulate a subsequent document summarizing the amendments made in order by the rule.

**Background:** The National Aeronautic and Space Administration (NASA) was created in 1958 by the National Aeronautics and Space Act. NASA initially grew out of the National Advisory Committee on Aeronautics (NACA), which had carried out the Nation's aviation technology research since World War I. NASA began operating almost exactly one year after Russia launched Sputnik, the world's first orbital satellite. NASA's main duties include conducting manned and unmanned spaceflight, developing aeronautic and space technology, and conducting scientific research in space and on earth. According to NASA, the agency's mission is to "pioneer the future in space exploration, scientific discovery and aeronautics research."

In 2004, NASA's priorities turned in a new direction when President Bush announced his "Vision for Space Exploration." The plan set a new agenda for NASA in the coming decades, which includes the retirement of the Space Shuttle, the development of a new spacecraft, new manned trips to the moon by 2020, and the goal of someday sending a manned flight to Mars. In order to meet the goals set by the Administration's new vision, NASA is scheduled to permanently retire the Space Shuttle in 2010 and end its use of the International Space Station (ISS) by 2017. NASA's new spacecrafts, the Orion Crew Exploration Vehicle and the Ares I Crew Launch Vehicle are planned to be operational by 2015. According to CRS, the total estimated cost of the Vision for Space Exploration is \$230 billion over a span of approximately 20 years.

Over the next two years, NASA faces a number of challenges, including phasing out the Space Shuttle program and preparing for a five year gap in manned mission capacity between 2010 and 2015. NASA is still responsible to 13 other countries for completing work on the ISS that was delayed after the Columbia disaster in 2003. In order to carry out this operation NASA is planning ten Space Shuttle flights between 2008 and 2010, when the shuttle program is terminated. NASA also has the choice to fly three optional contingency flights to continue work on the ISS. Though these flights are not currently planned by NASA, H.R. 6063 would statutorily require that the agency undertake them, presumably before the end of 2010.

In addition, concerns have been raised that NASA may not be able to complete the Orion and Ares I spacecraft projects by 2005. Some have expressed concerns with delaying the project because the U.S. will be dependent on Russia to send astronauts to the ISS in the interim time between the retirement of the Space Shuttle and the launch of Orion. In a statement given to the Science and Technology Committee, NASA Administrator Michael Griffin testified that the project could be moved forward if additional funds were available. For that purpose, H.R. 6063 would include an additional authorization of \$1 billion in FY 2009 specifically for Orion and Ares I project development.

**Summary:** H.R. 6063 authorizes \$19.2 billion for space travel and scientific research programs conducted by the National Aeronautic and Space Administration (NASA) in FY 2009 and an additional \$1 billion to speed up the date of the first flight of NASA's new Orion Crew Exploration Vehicle, which will replace the Space Shuttle. **The total FY 2009 authorization of \$20.2 billion is \$2.6 billion over the Administration's request of \$17.6 billion.** The authorization is a \$2.9 billion increase from the FY 2008 authorization of \$17.3 billion. Below are summarized highlights of the legislation.

***Authorized Discretionary Spending Levels:*** In FY 2009, NASA will begin budgeting for its incidental overhead expenses through the Cross-Agency Support program account. In previous years, overhead costs were accounted for in each program's budget. The FY 2009 authorization reflects this accounting change by drastically increasing funding for the Cross-Agency Support program and reducing overhead costs from the other program's budgets. Since overhead funds are authorized for indirect costs, the accounting change has no effect on NASA's budgeting formula.

H.R. 6063 Discretionary Authorizations as Compared to the FY 2008 Authorization and the Administration's Request  
(Millions of Dollars)

Program		FY 2008 Enacted	FY 2009 Requested	H.R. 6063
<b>Science</b>		<b>\$5,546</b>	<b>\$4,441</b>	<b>\$4,932</b>
	Earth Science	\$1,524	\$1,367	\$1,518
	Planetary Science	\$1,387	\$1,334	\$1,483
	Astrophysics	\$1,578	\$1,162	\$1,290
	Heliophysics	\$1,056	\$577	\$640
<b>Aeronautics</b>		<b>\$621</b>	<b>\$446</b>	<b>\$853</b>
<b>Exploration</b>		<b>\$3,821</b>	<b>\$3,500</b>	<b>\$4,886</b>
	Constellation Systems	\$2,991	\$3,048	\$4,148
	Advanced Capabilities	\$830	\$452	\$737
<b>Space Operations</b>		<b>\$6,733</b>	<b>\$5,774</b>	<b>\$6,074</b>
<b>Education</b>		<b>\$177</b>	<b>\$115</b>	<b>\$128</b>
<b>Cross-Agency Support</b>		<b>\$375</b>	<b>\$3,299</b>	<b>\$3,299</b>
<b>Inspector General</b>		<b>\$32</b>	<b>\$35</b>	<b>\$35</b>
<b>Accelerating the Orion Space Flight</b>		----	----	<b>\$1,000</b>
<b>Total</b>		<b>\$17,309</b>	<b>\$17,614</b>	<b>\$20,210</b>

***Earth Sciences:***

- The bill requires the Office of Science and Technology Policy (OSTP) to conduct a study to determine the best governance structure for NASA's earth observation and research programs. The bill also requires NASA to develop a plan to ensure the continued use of Landsat, a satellite system used to study the earth.
- H.R. 6063 requires NASA report on how aerosols and solar energy affect the earth's climate. The bill also requires NASA to develop a plan for creating a Deep Space Climate Observatory to monitor the earth's climate from space.

### **Aeronautics:**

- The legislation requires NASA, in conjunction with universities, industries, and other research organizations, to research and develop technology to reduce the amount of noise and greenhouse gas emissions produced by commercial aircraft. The bill also requires NASA to engage in a cooperative research program to determine the environmental effect of sonic booms and supersonic flight.
- The bill requires NASA, in coordination with the U.S. Climate Change Science Program, to establish a research initiative to determine the impact of aviation on the environment.
- H.R. 6063 requires NASA to arrange an outside independent review of NASA's safety-related research programs to determine their effectiveness.
- The measure would establish a joint Aeronautics Research and Development (R&D) Advisory Committee to coordinate R&D activities carried out between NASA and the Federal Aviation Administration (FAA).

### **International Exploration Initiative:**

- H.R. 6063 would express the sense that the president should invite America's allies to participate in future NASA space projects, including trips to the moon, and eventually Mars. The bill stipulates that any lunar outpost made by NASA must not require full-time occupation to be viable. This section also requires that any preparations made to travel to the moon be done in such a way that would facilitate using the same equipment to explore beyond the moon.
- H.R. 6063 requires NASA to identify the risks in carrying out deep space exploration and develop a plan to mitigate those risks. In addition, the bill requires NASA to discuss the development of a standard orbital docking system with other nations to enable spacecraft to dock with crews from other nations that may be stranded in space.

### **Space Science:**

- The legislation establishes a long-term space and earth science technology development program within NASA's Science Mission Directorate. The bill stipulates that the program would be independent of any other current space programs and should receive 5% of the Science Mission Directorate's annual budget and include a competitive grant program.
- H.R. 6063 reaffirms Congress' continued support of exploration on Mars. The bill also expresses the sense of Congress that NASA should pursue a balanced set of activities that includes small, medium, and large sized space science missions.
- The measure requires NASA to arrange for independent studies of impediments to interagency cooperation on NASA's missions and the primary costs associated with the

growth of spacecraft mission classes. This section would also express the sense of Congress that NASA should move forward with an outer-solar system mission to either the Europa-Jupiter or Titan-Saturn systems.

### **International Space Station:**

- H.R. 6063 requires the president to take steps to ensure that the International Space Station (ISS) is operational for the U.S. through 2020. The bill also prohibits the president from taking any steps that would interrupt the continued use of the ISS after 2016. According to President Bush's "Vision for Space Exploration," U.S. involvement in the ISS would end in 2017.
- The measure requires NASA to develop an ISS research management plan in order to select ISS research priorities. This section also requires NASA to develop a contingency plan for transporting cargo to the ISS after the retirement of the Space Shuttle in 2010.

### **Space Shuttle:**

- The bill mandates that NASA fly every Space Shuttle mission that is authorized in NASA's 2008 baseline manifest, including two optional "contingency missions" to make repairs on the ISS and a mission to take the [Alpha Magnetic Spectrometer](#) to the ISS. These additional missions would have to be carried out prior to 2010, when the Space Shuttle is scheduled to be retired. NASA already plans to launch ten shuttle flights in 2008-2010. H.R. 6063 would raise the total number of shuttle flights over the next two years to 13.
- H.R. 6063 establishes the shuttle transition liaison office within NASA's Office of Human Capital Management to help communities affected by the termination of the Space Shuttle program. The bill also requires NASA to develop a plan for disposing of Space Shuttle hardware and components after the Space Shuttle program is terminated.
- The bill requires that NASA develop a plan for awarding contracts for small and medium sized mission launch services.

### **Education:**

- The legislation requires NASA to develop a plan to respond to the National Academies' report, "NASA's Elementary and Secondary Education Program: Review and Critique." The bill would also require NASA to arrange an independent audit of the [Explorer Schools program](#).

### **Near-Earth Objects:**

- H.R. 6063 reaffirms Congress' established policy requiring NASA to detect, track, and catalogue near-earth objects (asteroids, comets, etc.) that are more than 140 meters in

diameter. The bill also requires NASA to seek information on a potential mission to rendezvous with a near-earth object.

- The bill requires the Office of Science and Technology Policy (OSTP) to develop a policy for notifying appropriate federal agencies in the event of an impending near-earth object collision. This section also requires the OSTP to recommend which agencies would be best suited to protect the nation in the event of a near-earth object collision.

### **Commercial Initiatives:**

- The legislation expresses the sense of Congress that the commercial sector can make significant contributions to NASA's programs and that some activities (namely, shipments of cargo to low-earth orbit and communications services) could be effectively carried out by the private sector.
- H.R. 6063 authorizes NASA to transfer certain duties on small and medium sized missions to commercial service providers.

### **NASA Institutional Capabilities and Other Provisions:**

- The bill requires NASA to conduct surveys and reviews, and submit reports, regarding:
  - NASA's information security controls that protect information from inadvertent or deliberate misuse;
  - The timeliness of maintenance and upgrading at NASA facilities;
  - The level of maintenance and upgrading at NASA laboratories, including laboratory equipment, facilities, and support services;
  - The impact of space weather and solar wind on the present and future of U.S. aviation;
  - Space traffic management;
  - The issues and challenges associated with commercial space flight; and
  - The relationship between astronauts and flight surgeons and the effectiveness of astronaut health care policies.
- H.R. 6063 establishes a program for NASA to transfer space technology and technical assistance to small businesses through joint partnerships with industry, academia, and government agencies. The bill authorizes \$4 million for the program.

**Possible Conservative Concerns:** Some conservatives may be concerned that H.R. 6063 authorizes \$2.6 billion more than the president requested for programs carried out by NASA in FY 2009.

In addition, the [Statement of Administration Policy](#) (SAP) regarding H.R. 6063 expressed concern that the bill requires NASA to fly every Space Shuttle mission authorized in NASA's 2008 baseline manifest, including three optional "contingency missions," despite the fact that NASA is already planning to fly ten other Space Shuttle missions before the shuttle is retired in 2010. Some conservatives may be concerned that forcing NASA to fly its optional missions

could delay the implementation of the president's "Vision for Space Exploration," which is scheduled to return a manned spacecraft to the moon by 2020. In addition, some may be concerned that requiring NASA to make the optional flights may lead to hurried, unsafe, and unnecessary space missions.

**Committee Action:** H.R. 6063 was introduced on May 15, 2008, and referred to the Committee on Science and Technology Subcommittee on Space and Aeronautics. On May 20, 2008, the subcommittee held a mark-up and forwarded the bill to the full committee by voice vote. On June 4, 2008, the full committee held a mark-up and reported the bill, as amended, by voice vote.

**Administration Position:** According to a [Statement of Administration Policy](#) (SAP) released on June 10, "the Administration strongly opposes H.R. 6063 because it mandates specific Space Shuttle flights that greatly threaten NASA's ability to retire the Shuttle in 2010, an action that is critical to implementing the President's Vision for Space Exploration."

**Cost to Taxpayers:** According to CBO, H.R. 6063 authorizes \$20.2 billion in discretionary spending in FY 2009.

**Does the Bill Expand the Size and Scope of the Federal Government?** Yes, it authorizes several new NASA programs, new offices within NASA, and new reporting requirements to Congress.

**Does the Bill Contain Any New State-Government, Local-Government, or Private-Sector Mandates?** No.

**Does the Bill Comply with House Rules Regarding Earmarks/Limited Tax Benefits/Limited Tariff Benefits?** The Committee on Science and Technology, in [House Report 110-702](#), states that "H.R. 6063 does not contain any congressional earmarks, limited tax benefits, or limited tariff benefits as defined in clause 9(d), 9(e), or 9(f) of rule XXI of the Rules of the House of Representatives."

**Constitutional Authority:** The Committee on Science and Technology, in [House Report 110-702](#), cites constitutional authority in Article I, Section 8 but does not cite a specific clause. House Rule XIII, Section 3(d)(1), requires that all committee reports contain a statement citing the *specific* powers granted to Congress in the Constitution to enact the law proposed by the bill or joint resolution. [*Emphasis added*]

**RSC Staff Contact:** Andy Koenig; [andy.koenig@mail.house.gov](mailto:andy.koenig@mail.house.gov); 202-226-9717.

---