# **Section-by-Section Analysis**

# H.R. 6063, as amended by the Senate, the National Aeronautics and Space Administration Authorization Act of 2008

Sec. 1. Short Title.

The "National Aeronautics and Space Administration Authorization Act of 2008".

Sec. 2. Findings.

Sec. 3. Definitions.

# TITLE I. – AUTHORIZATION OF APPROPRIATIONS FOR FISCAL YEAR 2009

Sec. 101. Fiscal Year 2009.

Authorizes NASA at \$20,210,000,000 for FY 09. This amount is approximately \$2.59 billion above the President's FY 2009 request.

The baseline Authorization of \$19.21 billion, includes the following breakdown:

Science: \$4,932,200,000 of which

\$1,518,000,000 is for Earth Science \$1,483,000,000 is for Planetary Science \$1,290,400,000 is for Astrophysics \$640,800,000 is for Heliophysics

Aeronautics: \$853,400,000 Exploration: \$3,886,000,000 Education: \$128,300,000

Space Operations: \$6,074,400,000

Cross-Agency Support Programs: \$3,299,900,000

Inspector General: \$35,500,000

In addition to the above amounts, the bill authorizes \$1,000,000,000 to accelerate the initial operational capability of the Crew Exploration Vehicle and the Crew Launch Vehicle, which makes the total authorization for Exploration in this Act \$4,886,000,000.

#### TITLE II. – EARTH SCIENCE

#### Sec. 201. Goal.

Expresses the sense of the Congress that the goal of NASA's Earth Science program shall be to pursue a leadership role in providing Earth observations, research, and applications activities to better understand the Earth system.

#### Sec. 202. Governance of U.S. Earth Observations Activities.

Requires the Director of the OSTP to task the National Academies with conducting a study to determine the most appropriate governance structure for U.S. Earth Observation programs. Directs the study to be delivered to Congress within 18 months after the enactment of the Act, and for the OSTP to provide an implementation plan of the study's recommendations within 24 months of the enactment of the Act.

#### Sec. 203. Decadal Survey Missions.

Requires the Administrator to submit a plan describing how NASA intends to implement the recommended missions in the National Academies decadal survey "Earth Sciences and Applications from Space," within 270 days of the enactment of the Act.

#### Sec. 204. Transitioning Experimental Research Into Operational Services.

Encourages NASA to transition experimental sensors and missions that have the potential to benefit society into operational status whenever possible. Directs the Director of the OSTP, in consultation with the Administrator of NASA and the Administrator of NOAA, and other relevant stakeholders, to develop a process for federal agencies to transition NASA Earth science and space weather missions or sensors into operational status. Requires NASA and NOAA to submit a joint plan for each mission or sensor that is determined to be appropriate for transition to Congress within 60 days of the successful completion of the mission or sensor critical design review.

#### Sec. 205. Landsat Thermal Infrared Data Continuity.

Requires the Administrator to prepare a plan for ensuring the continuity of Landsat thermal infrared data or its equivalent within 60 days of the enactment of the Act.

## Sec. 206. Reauthorization of Glory Mission.

Reauthorizes NASA to continue with development of the Glory mission and requires the Administrator to submit a report to Congress a new Baseline Report within 90 days of the enactment of the Act.

# Sec. 207. Plan for Disposition of Deep Space Climate Observatory.

Requires NASA to develop a plan for the Deep Space Climate Observatory (DSCOVR), which shall examine options for the future disposition of the spacecraft and its instruments, and to submit this plan no later than 180 days after the enactment of the Act.

#### Sec. 208. Tornadoes and Other Severe Storms.

Directs the Administrator to give high priority to existing cooperative activities with NOAA that are related to the study of tornadoes and other severe storms. Directs the Administrator to examine whether additional cooperative activities with NOAA on tornadoes and other severe storms should be undertaken.

## TITLE III. AERONAUTICS

#### Sec. 301. Sense of Congress.

Expresses the sense of Congress that aeronautics research continues to be an important core element of NASA and should be supported, as well as provides a sense of Congress that NASA aeronautics research should be guided by and consistent with the national policy in accordance with section 101(c) of the NASA Authorization Act of 2005.

#### Sec. 302. Environmentally Friendly Aircraft Research and Development Initiative.

Directs the Administrator to establish an initiative with the objective of enabling commercial aircraft performance characteristics such as significant noise reduction near airports and significant reductions in other environmental impacts such as greenhouse gas emissions.

### Sec. 303. Research Alignment.

Requires the Administrator, to the maximum extent possible, to align NASA's fundamental aeronautics research program to address high priority technology challenges of the National Academies "Decadal Survey of Civil Aeronautics."

#### Sec. 304. Research Program to Determine Perceived Impact of Sonic Booms.

Requires the Administrator to establish a cooperative research program with industry to collect data on the impact of sonic booms that can be used to develop standards for overland commercial supersonic flight operations.

## Sec. 305. External Review of NASA's Aviation Safety-Related Research Programs.

Requires the Administrator to arrange for the National Research Council to conduct an independent review of NASA's aviation safety-related research programs, and to submit to Congress a report on the results on this review within 18 months of the enactment of the Act.

#### Sec. 306. Aviation Weather Research.

Requires the Administrator to develop a research plan with NOAA on improving the reliability of 2-hour to 6-hour aviation weather forecasts.

## Sec. 307. Funding for R&D Activities in Support of Other Mission Directorates.

Establishes that research and development activities performed by the Aeronautics Research Mission Directorate for the flight projects of other Mission Directorates be funded by the Mission Directorate seeking assistance.

# Sec. 308. Enhancement of Grant Program on Establishment of University-Based Centers for Research on Aviation Training.

Changes "may" to "shall" in Section 427 (a) of P.L. 109-155.

#### TITLE IV. EXPLORATION INITIATIVE

#### Sec. 401. Sense of Congress.

Expresses the sense of Congress that the President should invite America's friends and allies to participate in a long term exploration initiative under the leadership of the U.S.

## Sec. 402. Reaffirmation of Exploration Policy.

Congress affirms its support of the broad goals of the space exploration policy of the United States, the development of technologies and operational approaches that will enable sustainable long-term human and robotic exploration of the solar system, activities related to Mars exploration, international participation and cooperation, and commercial involvement in space exploration activities.

# Sec. 403. Stepping Stone Approach to Exploration.

Requires the Administrator to take all necessary steps to ensure that the lunar exploration program be designed and implemented in a manner that gives strong consideration to meeting requirements of future exploration and utilization activities beyond the Moon.

#### Sec. 404. Lunar Outpost.

Requires that NASA make no plans that would require a lunar outpost to be occupied to maintain its viability. Establishes that the U.S. portion of the first human-tended outpost on the Moon shall be designated the "Neil A. Armstrong Lunar Outpost." Expresses the intent of Congress that NASA shall make use of commercial services to the maximum extent practicable in support of its lunar outpost activities.

## Sec. 405. Exploration Technology Development.

Requires the Administrator to establish a program of long-term exploration-related technology research and development that is not tied to specific flight projects.

#### Sec. 406. Exploration Risk Mitigation Plan.

Requires the Administrator to provide a plan identifying the scientific and technical risks that need to be addressed in carrying out human exploration beyond low Earth orbit and the research and development activities required to address those risks, and to provide the plan no later than one year following the enactment of the Act.

### Sec. 407. Exploration Crew Rescue.

Directs the Administrator to enter into discussions for the purpose of agreeing to a common docking system standard with other spacefaring nations who have or plan to have crew transportation systems.

## Sec. 408. Participatory Exploration.

Requires the Administrator to develop a technology plan to enable dissemination of information to the public for the purpose of allowing them to fully experience NASA's missions to the Moon, Mars and other bodies of our solar system, and to provide Congress with the plan no later than 270 days of the enactment of the Act.

### Sec. 409. Science and Exploration.

Expresses the sense of Congress that NASA's scientific and human exploration activities are synergistic, and encourages the Administrator to coordinate NASA's science and exploration activities to maximize the success of human exploration initiatives and to further our understanding of the universe.

#### Sec. 410. Congressional Budget Office Report Update.

Directs the Congressional Budget Office to update its report from 2004 on the budgetary analysis of NASA's Vision for the Nation's Space Exploration Program.

#### TITLE V - SPACE SCIENCE

## Sec. 501. Technology Development.

Directs the Administrator to establish a cross-Directorate long-term technology development program for space and Earth science within the Science Mission Directorate and sets a funding goal for the program of five percent of the total Science Mission Directorate annual budget, and directs that it be structured to include competitively awarded grants and contracts in the program.

## Sec. 502. Provision for Future Servicing of Observatory-Class Scientific Spacecraft.

Directs the Administrator to ensure that provision is made for all future observatory-class scientific spacecraft intended to be deployed in Earth orbit or at Lagrangian points in space for robotic or human servicing and repair to the extent practicable and appropriate.

### Sec. 503. Mars Exploration.

Reaffirms the Congress' support for a systematic and integrated program of robotic exploration of the Martian surface.

#### Sec. 504. Importance of a Balanced Science Program.

Expresses the sense of Congress that a balanced and adequately funded set of activities all contribute to a robust and productive science program and are catalysts for innovation.

#### Sec. 505. Suborbital Research Activities.

Expresses the further sense of Congress that suborbital flight activities provide valuable training opportunities and that it is in the national interest to expand the size of NASA's suborbital research program. Directs the Administrator to enter into an arrangement with the National Research Council to conduct a review on NASA's suborbital mission capabilities.

#### Sec. 506. Restoration of RTG Material Production.

Requires the Director of the Office of Science and Technology Policy to develop a plan for restarting and sustaining the domestic production of Radioisotope Thermoelectric Generator (RTG) material for deep space and other space science missions and to deliver the plan to Congress within 270 days of the enactment of the Act.

# Sec. 507. Assessment of Impediments to Interagency Cooperation on Space and Earth Science Missions.

Requires the Administrator to arrange for the National Research Council to assess impediments to interagency cooperation on space and Earth science missions and to provide the report to Congress within 15 months of the enactment of the Act.

#### Sec. 508. Assessment of Cost Growth.

Requires the Administrator to arrange for an independent external assessment to identify the primary causes of cost growth in large, medium, and small space and Earth science spacecraft mission classes and to identify recommendations and to provide the report within 15 months of the enactment of the Act.

#### Sec. 509. Outer Planets Exploration.

Expresses the sense of Congress that NASA should move forward with plans for an Outer Planets flagship mission.

#### TITLE VI – SPACE OPERATIONS

## **SUBTITLE A – International Space Station.**

# Sec. 601. Plan to Support Operation and Utilization of the ISS Beyond Fiscal Year 2015.

Directs the Administrator to take all necessary steps to ensure that the International Space Station (ISS) remains a viable and productive facility of potential U.S. utilization through at least 2020 and to take no steps that would preclude its continued operation and utilization by the U.S. after 2015 and directs the Administrator to provide plans to support ISS operation and utilization and research management.

## Sec. 602. International Space Station National Laboratory Advisory Committee.

Requires the Administrator to establish a committee to be known as the "International Space Station National Laboratory Advisory Committee."

# Sec. 603. Contingency Plan for Cargo Resupply.

Requires the Administrator to develop a contingency plan and arrangements to ensure the continued viability and productivity of the ISS in the event that U.S. commercial cargo resupply services are not available after the Space Shuttle is retired and to deliver the plan within one year of enactment of the Act.

# Sec. 604. Sense of Congress on Use of Space Life Sciences Laboratory at Kennedy Space Center.

Expresses the sense of Congress that the Space Life Sciences Laboratory at Kennedy Space Center represents a key investment and asset in the International Space Station National Laboratory capability.

#### **SUBTITLE B – Space Shuttle.**

## Sec. 611. Space Shuttle Flight Requirements.

Amends Section 501(c) of the NASA Authorization Act of 2005 by requiring the Administrator to provide a report on the lack of a United States human space flight system to replace the Space Shuttle. Establishes that the Utilization flights ULF-4 and ULF-5 shall be considered part of the Space Shuttle baseline flight manifest and shall be flown prior to the retirement of the Space Shuttle. Requires the Administrator to take all necessary steps to fly one additional Space Shuttle flight to deliver the Alpha Magnetic Spectrometer (AMS) to the ISS prior to the retirement of the Space Shuttle. Directs the

Administrator to notify the Congress if the additional flight cannot be flown before the end of 2010 unless the Shuttle program is extended beyond 2010, or would result in significant increased costs to NASA over the IPAO cost estimate for the mission, or poses unacceptable safety risks, and in such cases directs the Administrator to remove the additional flight from the manifest unless Congress by law reauthorizes the flight or the President certifies that it is in the national interest to fly the mission. Requires the Administrator to terminate or suspend any activity until April 30, 2009 that would preclude the continued safe and effective flight of the Space Shuttle after 2010 prior to review by the incoming Presidential Administration. Also includes several reporting requirements.

#### Sec. 612. United States Commercial Cargo Capability Status.

Requires the Administrator to determine the degree to which increased funds for the Commercial Orbital Transportation Services project would help accelerate the development of Capabilities A, B, and C of such project to an effective operations capability as close to 2010 as possible.

#### Sec. 613. Space Shuttle Transition.

Requires the Administrator to provide a plan describing the process for the disposition of the remaining Space Shuttle orbiters and other Space Shuttle program-related hardware and facilities after the retirement of the Space Shuttle fleet and to not dispose of any Space Shuttle-related hardware prior to the completion of the plan, which shall be submitted to Congress within 90 days of the enactment of the Act. 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, which will be operated until two years after the last Space Shuttle flight.

### Sec. 614. Aerospace Skills Retention and Investment Reutilization Report.

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 identify on-going or future Federal programs and projects that could use such facilities and resources.

#### Sec. 615. Temporary Continuation of Coverage of Health Benefits.

Amends United States Code to provide for temporary continuation of coverage of health benefits for individuals affected by the termination of the Space Shuttle program.

#### Sec. 616. Accounting Report.

Directs the Administrator to provide the Congress with a report summarizing any actions taken or planned to be taken during FY 2008 and FY 2009 to begin reductions in expenditures and activities related to the Space Shuttle program.

#### **SUBTITLE C – Launch Services.**

#### Sec. 621. Launch Services Strategy.

Requires the Administrator to develop a strategy for providing launch services in support of NASA's small and medium science, space operations, and exploration missions as preparation for awards to follow up on the current NASA Launch Services contracts and to provide this report within 90 days of the enactment of the Act.

#### TITLE VII – EDUCATION

#### Sec. 701. Response to Review.

Requires the Administrator to develop 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," and to provide this report within one year of the enactment of the Act.

### Sec. 702. External Review of Explorer Schools Program.

Requires the Administrator to arrange for an independent external review of the Explorer Schools Program and provide the report within one year of the enactment of the Act.

#### Sec. 703. Sense of Congress on EarthKAM and Robotics Competition.

Expresses the sense of Congress that NASA's educational programs, and in particular EarthKAM and robotics competitions, are important sources of inspiration and hands-on learning for the next generation of engineers and scientists and should be supported.

#### Sec. 704. Enhancement of Educational Role of NASA.

Expresses the sense of Congress that the International Space Station offers a unique opportunity for Federal agencies to engage students in science, technology, engineering, and mathematics education. Congress encourages NASA to include other Federal

agencies in its planning efforts to use the International Space Station National Laboratory for science, technology, engineering, and mathematics educational activities. Also contains language supportive of EPSCoR and the National Space Grant and Fellowship Program.

#### TITLE VIII – NEAR EARTH OBJECTS

## Sec. 801. Reaffirmation of Policy.

Reaffirms the policy set forth in section 102(g) of the National Aeronautics and Space Act of 1958, and also provides the sense of Congress that the near-Earth object program activities of NASA will provide benefits to the scientific and exploration activities of NASA.

#### Sec. 802. Findings.

Includes findings on the potential threat posed by near-Earth objects and the need to prepare the appropriate policies and procedures.

#### Sec. 803. Requests for Information.

Directs the Administrator to issue requests for information on a low cost space mission to rendezvous with the Apophis asteroid, and a medium-sized space mission with the purpose of detecting near-Earth objects equal to or greater than 140 meters in diameter.

# Sec. 804. Establishment of Policy with Respect to Threats Posed by Near-Earth Objects.

Requires the Director of the Office of Science and Technology Policy to develop a policy within two years for notifying Federal agencies and relevant emergency response institutions of an impending NEO threat if near term public safety is at stake and to recommend a Federal agency or agencies to be responsible for protecting the Nation from a near-Earth object that is anticipated to collide with Earth and implementing a deflection campaign, in consultation with international bodies, should one be required.

## Sec. 805. Planetary Radar Capability.

Requires the Administrator to maintain a planetary radar that is, at minimum, comparable to the capability provided through the NASA Deep Space Network Goldstone facility.

#### Sec. 806. Arecibo Observatory.

Expresses Congress' support for the use of the Arecibo Observatory for NASA-funded near-Earth object-related activities, and requires the Administrator to ensure the availability of the Arecibo 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 is completed.

#### Sec. 807. International Resources.

Expresses the sense of 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. Sense of Congress.

Expresses the sense of Congress that a healthy and robust commercial sector can make significant contributions to the successful conduct of NASA's space exploration program, and encourages NASA to look for such service opportunities and to the maximum extent practicable, make use of the commercial sector to provide those services.

#### Sec. 902. Commercial Crew Initiative.

Directs NASA to make use of U.S. commercially provided International Space Station (ISS) crew transfer and crew rescue services to the maximum extent practicable if they meet NASA safety requirements, limit the use, to the maximum extent practicable, of the Crew Exploration Vehicle to missions carrying astronauts beyond low Earth orbit once commercial crew transfer and crew rescue services that meet safety requirements become operational, facilitate the transfer of NASA-developed technologies to potential U.S. commercial crew transfer and rescue service providers, issue a notice of intent within 180 days of the enactment of the Act to enter into a funded Space Act Agreement with two or more commercial entities for a Phase 1 Commercial Orbital Transportation Services (COTS) crewed vehicle demonstration program. Provides the intent of Congress that funding for the program will not come at the expense of full funding amounts authorized in section 101(3) and for future fiscal years, for Orion Crew Exploration Vehicle development, Ares I Crew Launch Vehicle development, or International Space Station cargo delivery. Directs NASA to make ISS-compatible docking adaptors available to the

commercial crew providers selected to service the ISS. It also directs NASA to enter into a crew transfer and rescue services contract with a commercial provider if it demonstrates the ability to provide ISS crew transfer and rescue services in accordance with safety requirements.

#### TITLE X – REVITALIZATION OF NASA INSTITUTIONAL CAPABILITIES

## Sec. 1001. Review of Information Security Controls.

Requires the Comptroller General to complete a review of information security controls that protect NASA's information technology and to provide a report to Congress no later than one year after enactment of the Act. Requires the Comptroller General to provide a restricted report detailing results of vulnerability assessments conducted by GAO on NASA's network resources within one year of the enactment of the Act.

#### Sec. 1002. Maintenance and Upgrade of Center Facilities.

Requires the Administrator to ensure that adequate maintenance and upgrading of Center facilities is performed on a regular basis, to develop a strategy and budget plan to reduce maintenance and upgrade backlog by 50 percent over the next five years, and to deliver a report to Congress on the results on these activities with the FY 2011 budget request.

#### Sec. 1003. Assessment of NASA Laboratory Capabilities.

Requires the Administrator to arrange for an independent external review of the overall quality of NASA's laboratories.

# Sec. 1004. Study and Report of Project Assignment and Work Allocated of Field Centers.

Requires the Administrator to complete a study within 180 days of enactment of all field centers, including the Michoud Assembly Facility, on their programs, roles, functions, and activities.

#### TITLE XI. OTHER PROVISIONS

Sec. 1101. Space Weather.

Directs the Office of Science and Technology Policy to develop a plan for sustaining space-based measurements of solar wind from the L-1 Lagrangian point in space and to submit the plan within one year of the enactment of the Act. Requires the Director of the Office of Science and Technology Policy to arrange for the National Research Council to conduct a study on the impacts of space weather on the current and future United States aviation industry, and to provide the results of the report no later than one year after the enactment of the Act.

# Sec. 1102. Initiation of Discussions on Development of Framework for Space Traffic Management.

Requires the Administrator, in consultation with other appropriate agencies of the Federal government, to initiate discussions with the appropriate representatives of other spacefaring nations to determine the appropriate framework under which information intended to promote safe overall operations in outer space can be shared.

#### Sec. 1103. Astronaut Health Care.

Directs the Administrator to administer an anonymous survey of astronauts and flight surgeons to evaluate communication, relationships, and the effectiveness of policies on a biennial basis, and to report the results of the Survey to Congress no later than 90 days following completion of the survey.

#### Sec. 1104. National Academies Decadal Surveys.

Directs the Administrator to enter into agreements on a periodic basis with the National Academies for independent assessments of the status and opportunities for Earth and space science discipline fields and aeronautics research, to recommend priorities for research and programmatic areas over the next decade, to include whenever possible independent estimates of the costs and technical readiness of missions assessed, and to identify conditions that would warrant reexamination of the priorities established.

#### Sec. 1105. Innovation Prizes.

Amends Section 314 of the National Aeronautics and Space Act of 1958 by directing the Administrator to consult widely both within and outside the Federal Government, and may empanel advisory committees when selecting prize topics and identifies potential prize categories that should be given consideration. Amends subsection (i)(4) by striking "\$10,000,000" and inserting "\$50,000,000".

# Sec. 1106. Commercial Space Launch Range Study.

Requires the Director of the OSTP to work with other appropriate Federal agencies to establish an interagency committee to conduct a study to identify the issues associated with establishing space launch ranges and facilities that are fully dedicated to commercial space missions in close proximity to Federal launch ranges or other Federal facilities and to develop a coordinating mechanism such that States seeking to establish such commercial space launch ranges will be able to effectively and efficiently interface with the Federal Government.

# Sec. 1107. NASA Outreach Program.

Directs NASA to competitively select an organization to partner with NASA centers, aerospace contractors, and academic institutions to carry out a program to help promote the competitiveness of small, minority-owned, and women-owned businesses. The program shall support the mission of NASA's Innovative Partnerships Program.

#### Sec. 1108. Reduction-In-Force Moratorium.

Directs NASA to not initiate or implement a reduction-in-force, or conduct 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. Protection of Scientific Credibility, Integrity, and Communication Within NASA.

Expresses the sense of Congress that NASA should not dilute, distort, suppress, or impede scientific research or the dissemination thereof. Calls for a Government Accountability Office study and directs the Administrator to work to ensure that NASA's policies on the sharing of climate related data respond to the recommendations of the Government Accountability Office's report on climate change research and data-sharing policies.

## Sec. 1110. Sense of Congress Regarding the Need for a Robust Workforce.

Expresses the sense of Congress that a robust and highly skilled workforce is critical to the success of NASA's programs; that voluntary attrition, the retirement of many senior workers, and difficulties in recruiting could leave NASA without access to the intellectual capital necessary to compete with its global competitors; and that NASA should work with other agencies to sustain and expand the diverse workforce available to NASA.

## Sec. 1111. Methane Inventory.

Directs the OSTP Director, within 12 months of enactment, to develop a plan and institute an inventory of natural methane stocks and fluxes in the polar region of the United States.

# Sec. 1112. Exception to Alternative Fuel Procurement Requirement.

Clarifies the intent of Section 526(a) of the Energy Independence and Security Act of 2007 with respect to NASA.

# Sec. 1113. Sense of Congress on the Importance of the NASA Office of Program Analysis and Evaluation.

Provides the sense of Congress that it is important for NASA to maintain an Office of Program Analysis and Evaluation as well as outlining its goals.

# Sec. 1114. Sense of Congress on Evaluating the Importance of Space and Aeronautics Within the Executive Office of the President.

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 in as effective a manner as possible.

#### Sec. 1115. Study on Leasing Practices of Field Centers.

Directs the Administrator to complete a study within 180 days of enactment on the leasing practices of all field centers of NASA, including the Michoud Assembly Facility.

#### Sec. 1116. Cooperative Unmanned Aerial Vehicle Activities.

Directs the Administrator, in cooperation with the Administrator of NOAA and in coordination with other agencies that have existing civil capabilities, to continue to utilize the capabilities of unmanned aerial vehicles as appropriate in support of NASA and interagency cooperative missions.

# Sec. 1117. Development of Enhanced-Use Lease Policy.

Requires the Administrator to develop an agency-wide enhanced-use lease policy. Includes reporting requirements and provisions governing the distribution of cash consideration received.

# Sec. 1118. Sense of Congress with Respect to the Michoud Assembly Facility and NASA's Other Centers and Facilities.

Expresses the sense of Congress that the Michoud Assembly Facility represents a unique resource in the facilitation of the Nation's exploration programs and that every effort should be made to ensure the effective utilization of that resource, as well as NASA's other centers and facilities.

#### Sec. 1119. Report on U.S. Industrial Base For Launch Vehicle Engines.

Requires the Director of the OSTP to deliver a report to Congress on the capacity of the U.S. industrial base for development and production of engines to meet the U.S. Government and commercial requirements for space launch vehicles.

# Sec. 1120. Sense of Congress on Precursor International Space Station Research.

Expresses the sense of Congress that NASA is taking positive steps to utilize the Space Shuttle as a platform for precursor International Space Station research and is encouraged to continue to do so.

## Sec. 1121. Limitation on Funding for Conferences.

Authorizes no more that \$5,000,000 for any expenses related to conferences and includes a prohibition against NASA using funds from this Act to support a Space Flight Awareness Launch Honoree Event conference and limitations on funding for other Space Flight Awareness Honoree-related activities in FY 2009.

## Sec. 1122. Report on NASA Efficiency and Performance.

Directs the Comptroller General of the United States to submit a report to Congress that reviews NASA's mission programs and associated activities with an annual funding level of more that \$50,000,000 that appear similar in scope and purpose to other activities within the Federal government to find potentially duplicative or overlapping programs.