On September 29, just before recessing to campaign for the November elections, the House passed the Senate version of the National Aeronautics and Space Administration (NASA) Reauthorization Act, S. 3729, by a vote of 304-118, clearing the way for the President to sign it. The bill:

- Represents a compromise of the Obama Administration’s priorities for human space flight and technology development; and
- Endorses the President’s request to provide large increases in funding to science and aeronautics.

As in the fiscal year (FY) 2011 President’s budget request and the House and Senate appropriations bills, the big winners for research are Earth Science (authorized for a 47 percent increase over three years) and aeronautics research (authorized for a 16 percent increase over three years). For the Science Mission Directorate overall, the bill supports the President’s request, authorizing a 23 percent increase over three years, and reiterates that NASA should continue to take into account the decadal surveys produced by the National Research Council in formulating budget priorities. For Science and Aeronautics research, the bill emphasizes the importance of collaboration, both between Mission Directorates and with agencies outside of NASA such as the Department of Energy (DOE), the Department of Defense (DOD), and the National Oceanic and Atmospheric Administration (NOAA). In addition, the bill directs NASA to establish a Suborbital Research Program within the Science Mission Directorate that integrates the existing suborbital research programs with orbital missions.

While the legislation does authorize the establishment of a new Space Technology Program, as first proposed in the President’s request, it would limit funding to this program to $350 million in FY 2011 and $1.35 billion over three years (about half of the $2.6 billion the President requested). This program would build on the current Innovative Partnerships Program for universities and industry to develop advanced technologies in areas such as communications, sensors, robotics, materials, and propulsion. The bill also requires that the President develop a national space technology policy to guide the program through 2020. In addition, it directs NASA to establish a Commercial Reusable Suborbital Research Program within the Space Technology Program to fund the development of payloads and provide flight opportunities for those payloads for scientific research, technology development, and education.

The President's FY 2011 budget request proposed dramatic changes to NASA's programmatic activities, most noticeably by canceling the Constellation Program, which has been funded since 2006 to develop next generation human spaceflight capabilities, and by providing significant increases for technology development and commercial human spaceflight. The bill authorizes $1.3 billion over three years to support development of commercial transport of humans to low earth orbit (about 40 percent of
the President’s request), but requires NASA to develop a system that can fly humans beyond low earth orbit by 2016. The measure retires the shuttle fleet at the end of 2011 after an additional mission and authorizes $1.1 billion over three years for exploration technology development (about a third of the President’s request).

Ultimately, while S. 3729 does not fully align with all of the Administration’s priorities, it was supported by Administrator Charles Bolden and Deputy Administrator Lori Garver as a move away from the oversubscribed vision for space exploration developed under former President George W. Bush.