



Human Space Exploration Update (Feb 9-13, 2015)

Congress

- **NASA FY2015 Authorization Act:** [House passes 2015 NASA authorization bill](#) The U.S. House passed a bipartisan NASA authorization act on Tuesday. The legislation directs NASA to develop a road map that leads to the human exploration of Mars, backs continued development of the Space Launch System heavy lift rocket and Orion crew vehicle as well as at least one commercial crew vehicle for the transportation of astronauts to low Earth orbit. Once signed into law, the legislation would require NASA to deliver the Mars road map within 180 days with updates every two years thereafter. The legislation which does not waiver from already appropriated NASA funding for 2015, moves on to the U.S. Senate.

International Space Station

- **Russian Soyuz to Support ISS:** [With regret, NASA readies checkbook for backup Soyuz seats](#) Earlier this month, NASA announced plans to purchase a half dozen trips to the International Space Station aboard Russian Soyuz rockets. It's an insurance policy essentially, NASA explains, in the event efforts to foster a pair of new U.S. commercial crew transportation services, provided by Boeing and SpaceX, are not complete by late 2017 as planned.

Orion and Space Launch System

- **EFT-1 Update:** [Lockheed official: Orion performed flawlessly](#) The Dec. 5 Lockheed Martin managed test flight of NASA's new Orion crew exploration capsule was a tremendous success, the Lockheed Martin deputy program manager responsible for the test told a Central Florida space gathering. "Trust me, a lot of people, Congress, contractors, NASA, everyone are trying to figure out, how do we leverage this tremendous success and move forward as quickly as we can?" said Larry Price, the executive.
- **SLS Testing:** [NASA fires up mini rockets for SLS base heating tests](#) NASA's Marshall Space Flight Center and contractor CUBRC are developing scaled down hardware testing to assess thermal conditions for the Space Launch System heavy lift rocket. The SLS is under development for a 2018 unpiloted test flight and eventual launchings of humans on missions of deep space exploration.
- **SLS Science Missions:** [NASA's big new rocket, built to send humans to Mars, may start with robotic probes](#) Some experts believe growing enthusiasm for a NASA mission to the Jovian moon Europa could mean new missions for NASA's Space Launch System, the heavy lift rocket already under development to start human explorers on future missions of deep space exploration. An SLS launch would cut the travel time for a robotic probe to distant Europa from five to two years.

Commercial Space Transportation

- **Dragon Cargo Mission Concludes Successfully:** [Commercial Dragon supply ship returns to Earth](#) The latest U.S. commercial resupply mission to the six person International Space Station

concluded with a Pacific Ocean splashdown and recovery late Tuesday. Launched to the space station on Jan. 10 with more than 5,100 pounds of scientific equipment, crew supplies and other gear, the SpaceX Dragon capsule returned to Earth with nearly 3,700 pounds of scientific equipment and crew hardware. The items included the first samples produced by a commercial 3-D printer.

- **ASAP Panel Notes Progress:** [NASA panel: Commercial Crew Program more open](#) Members of NASA's independent Aerospace Safety Advisory Panel said the space agency's Commercial Crew Program is exhibiting more transparency after the panel issued an annual report earlier this year expressing concerns over the flow of information. NASA's Commercial Crew Program is fostering the final development of transportation services by Boeing and SpaceX that will take astronauts to and from the International Space Station. The panel's latest comments came during a meeting at NASA's Kennedy Space Center, headquarters for the commercial crew initiative.

Space Budgets, Policy, Missions, Benefits, International ...

- **Asteroids:** [The number of asteroids we could visit and explore has just doubled](#) The prospects for identifying an asteroid suitable for a visit by human explorers has doubled, according to a tally compiled by NASA's Jet Propulsion Laboratory and the Near-Earth Program Office.
- **Mars:** [Mars is the next step for humanity: We must take it](#) Mars is calling, writes British essayist Ashley Dove-Jay, who lists the prospects of a new domain, inspiration and international cooperation among the compelling reasons for pursuing the goal.
- **Business in Space:** [A business plan for space](#) The FAA and Congress look for a strategy to encourage commercial activity on the moon and the asteroids without altering two major treaties that ban countries from staking claims. Bigelow Aerospace, of Las Vegas, and two other companies, Planetary Resources and Deep Space Industries, are interested in establishing a lunar base and mining the asteroids for valuable materials, such as platinum.

Florida

- **Astronaut Hall of Fame:** [Four space shuttle fliers to be inducted by Astronaut Hall of Fame](#) The inductees John Grunsfeld, Ph. D., Kent Rominger, Steve Lindsey and M. Rhea Seddon, M.D., will be formally inducted into the U.S. Astronaut Hall of Fame in Titusville, Fla., on May 30.
- **Pad 39B:** [Pad 39B to gain new flame deflector and trench upgrade](#) Construction will begin soon on modifications to Launch Pad 39B at NASA's Kennedy Space Center for the new Space Launch System heavy lift rocket. The changes include a new flame deflector and flame trench.
- **DSCOVR Launches:** The [Boulder \(CO\) Daily Camera](#) (2/11, Brennan) reported that Bob Rutledge, lead for Space Weather Forecast Operations at NOAA, said that seeing DSCOVR finally launch was "exceptionally rewarding" because it represents "a lot of work by a lot of people and many agencies."
- **RD-180 Rocket Engine:** [U.S. Air Force poised to award \\$200M in rocket studies](#) The U.S. Air Force is looking at just over \$200 million in contract awards this month leading to the development of an alternative to the Russian RD-180 rocket engine currently imported for use by the Alas 5 rocket, the primary launch vehicle for U.S. national security payloads. More than \$500 million will be invested in the effort over the next five years. The move comes in response to Russia's actions in Ukraine.

Citizens for Space Exploration – a pro-space, grassroots advocacy group, supported by the Melbourne Regional Chamber of Commerce, travels to Washington, D.C. to meet face-to-face with Members/staff of Congress to discuss the value of America's investment in space exploration. To sustain that dialogue on

a regular basis, Citizens distributes “Human Space Exploration Update” to Congressional offices on a weekly basis and makes it available to our Chamber members as a quick-and-easy way to stay informed on developments impacting NASA and Space Coast Florida.

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