



Human Space Exploration Update (Nov 2-6, 2015)

International Space Station

- **ISS at 15 Years:** [Space Station marks 15 years of nonstop human presence](#) NASA Administrator Charles Bolden hailed the International Space Station's 15 years of continuous occupation as an important example of global cooperation. "It has taught us about what's possible when tens of thousands of people across 15 countries collaborate to advance shared goals," Bolden said Monday, marking the occasion.
- **Robotic Missions Aboard ISS:** [NASA's plucky new robot will be the eyes of robotic satellite repairs](#) NASA is testing a range of technologies aboard the International Space Station that could prove pivotal to ground supervised robotic upgrades to expensive satellites in Earth orbit. One of those is VIPIR, a compact technology for visual inspections.

Orion and Space Launch System

- **Orion Service Module:** <http://www.nasa.gov/multimedia/imagegallery/iotd.html?id=373343> Orion spacecraft service module stacking assembly interface ring and stack holding stand are secured on a special transportation platform and are being loaded into NASA's Super Guppy aircraft at the Shuttle Landing Facility at Kennedy Space Center. On Nov. 3, the Guppy flew from Kennedy to Glenn Research Center's Plum Brook Station facility
- **SLS – Funding for Exploration Upper Stage:** [NASA counting on budget increase for SLS and Orion](#) NASA's current spending on the development of the Space Launch System exploration rocket and the Orion crew exploration capsule assumes a U.S. federal budget increase next month, according to the report. Bill Hill, NASA's deputy associate administrator for exploration systems development, informed the NASA Advisory Council's human exploration and operations committee of the pending spending mismatch during a Nov. 4 meeting. The U.S. federal government is functioning under a 2015 budget Continuing Resolution effective through Dec. 11.

Commercial Space Transportation

- **CRS2 Contracts Delayed:** [NASA again delays award of CRS2 commercial cargo contracts](#) NASA moved the agency's decision on a second round of contracts for the re-supply of the International Space Station, expected on Nov. 5, to no later than Jan. 30, 2016. NASA's current contractors are Orbital ATK and SpaceX.
- **Astronaut for Commercial Crew Missions:** [Williams: 'I mow the lawn and sometimes I go to space'](#) Veteran NASA astronaut Suni Williams is helping the space agency with an urgent goal, re-establishing a U.S. means of transporting astronauts to and from the International Space Station. Working with Boeing and SpaceX, NASA's Commercial Crew Program expects to re-start domestic launchings of astronauts before the end of 2017. "I think it's going to be huge," said Williams in a recent interview. "It's going to be that feeling like, we're back, we can do this again, we're going to be successful."

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

- **Astronauts Wanted:** [Wanted: Astronauts; got the right stuff?](#) NASA seeks to expand the nation's astronaut corps, men and women prepared to live aboard the International Space Station and train for future deep space missions launched aboard the Orion spacecraft and Space Launch System exploration rocket, with a call for applications. The selections, perhaps eight to 14 new astronauts, could come in 2017. NASA's active astronaut core currently counts 47 men and women.
- **The Value of Our Investment in Space:** [Is space exploration really a waste?](#) Although risky, space exploration has proven valuable to humanity in multiple ways, writes Arvind Dhople, a Florida Institute of Technology professor emeritus. "Many of the scientists of today were inspired by the daring accomplishments of the Apollo astronauts. Imagine the impact of seeing a fellow human set foot on Mars for the first time," he writes in an op-ed that explains the benefits of exploration for health care, Earth science and new technologies.
- **Mars Missions:** [Human Mars mission a "go" for 2035](#) A NASA-sponsored workshop has started the search for prospective human landing sites on Mars. Current planning calls for a series of three to five 500 day expeditions starting in the mid-2030s, each with a crew of up to a half dozen astronauts. Scientists and engineers envision landing zones that extend 100 kilometers in every direction that include features of high science value and resources such as underground water. The four-day workshop in Houston last week featured nearly 50 landing site suggestions, some of which will be studied further with existing NASA satellites and rovers.
- **International Moon Village:** [Building a Moon village](#) The moon is apparently not for everyone. The European Space Agency's new director general, Johann-Dietrich Wörner, speaks of a multinational moon village, a settlement on the lunar far side. Russia and China talk too of plans for their explorers to reach the moon. While NASA's priority is a destination deeper in space, eventually Mars, the U.S. commercial space sector may find the moon a worthy goal, writes TSR editor Jeff Foust.

Florida

- **Atlas V – GPS Launch:** [Halloween treat: Atlas V delivers GPS satellite to orbit](#) A U.S. Air Force GPS satellite reached orbit atop a United Launch Alliance Atlas V rocket from Cape Canaveral Air Force Station, Fla. The navigation spacecraft replaces a 19-year-old predecessor and joins 30 other satellites in the GPS fleet.
- **Hugh Harris – the Voice of Shuttle:** [Hugh Harris - the voice of shuttle launch control reflects](#) Harris reflects on his rewarding career at NASA, one that stretched from the early 1960s through the shuttle era. As a public affairs executive, Harris supervised personnel, wrote news releases and provided live launch commentary.
- **XCOR's Lynx Suborbital Vehicle:** [XCOR's Lynx reusable launch vehicle approaches completion](#) XCOR's reusable suborbital passenger space plane is coming together step by step. The company has vowed not to rush the production of its first test vehicle.

Citizens for Space Exploration – a pro-space, taxpayer, grassroots advocacy group (http://www.bayareahouston.com/content/c_s_e/c_s_e) – has travelled to Washington, D.C. the past 24 years to meet face-to-face with Members/staff of Congress to discuss the value of America's investment in space exploration. In order to sustain that dialogue on a regular basis, Citizens distributes "Space Exploration Update" to Congressional offices on a weekly basis. The intent is to provide an easy, quick way to stay abreast of key human space exploration program and policy developments.

