



Human Space Exploration Update (Dec 14 - 18, 2015)

Congress

- **FY2016 Budget for NASA:** [NASA Receives \\$19.3 Billion in Final 2016 Spending Bill](#) Details of a House and Senate agreement on a \$1.1 trillion omnibus appropriations bill for the 2016 fiscal year emerged Wednesday. At \$19.3 billion, the budget for NASA exceeds the White House request for 2016 by \$756 million. The agency's Space Launch System exploration rocket receives \$2 billion of the total, including \$85 million for work on the exploration upper stage. NASA's Commercial Crew Program fared well too, receiving \$1.244 billion to help keep test and initial operational launches on track for late 2016-17.

International Space Station

- **New Crew to Station:** [Three crew members trek from Earth to space station](#) NASA's Tim Kopra, European Space Agency astronaut Tim Peake and Russian cosmonaut Yuri Malenchenko launched to and docked with the International Space Station on Tuesday. The three men will live and work aboard the station for five to six months. (See also: [Tim Peake's launch into space will inspire a generation, says scientist](#))
- **Star Wars Comes to ISS:** ["Star Wars: The Force Awakens" to be screened in space](#) The International Space Station's six U.S., Russian and U.K. crew members expect to join terrestrial movie goers this weekend with their own screening of *Star Wars: The Force Awakens*, the latest episode in the long running Star Wars saga.
- **Space Book from ISS:** [The former NASA educator who put a new spin on "book launch"](#) Educator Patricia Tribe, fascinated by spaceflight, had an idea: encourage an astronaut to read a book on the topic penned for children as a means of interesting them in science and technology. NASA astronaut Alvin Drew agreed and so have others who live and work on the International Space Station.

Orion and Space Launch System

- **Orion Highlights / Oct 2015:**
http://www.nasa.gov/sites/default/files/atoms/files/orion_monthly_newsletter_10-2015_web.pdf
- **SLS Highlights / Nov 2015:**
http://www.nasa.gov/sites/default/files/atoms/files/sls_highlights_november_2015.pdf
- **SLS in Huntsville:** [NASA changes Huntsville skyline with soaring new Space Launch System test stand](#) As home to NASA's Marshall Space Flight Center, Huntsville's skyline is changing as the space agency develops the Space Launch System exploration rocket.

Commercial Space Transportation

- **Crew Access Tower for CST-100 / Atlas 5:** [Astronauts celebrate with builders topping of Crew Access Tower](#) NASA's Commercial Crew Program test pilots participated in a "topping off" ceremony at Florida's Cape Canaveral Air Force Station for the Crew Access Tower portion of the launch complex that will be used to transport astronauts to the International Space Station aboard Boeing's CST-100 and the United Launch Alliance Atlas 5.

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

- **China's Space Program:** [China's booming space program might put the US and Russia to shame](#) Slow to start, China's space program ambitions are accelerating with new rockets and plans for a space station and human exploration. (See also: [China develops next-generation crew vehicle](#))
- **Water on Mars:** [Year in review: Best evidence yet for water on Mars](#) This year's scientific discoveries included news of seasonal water flows on the surface of Mars. The briny water may increase the odds of current habitable environments on the red planet and serve as a potential resource for future human explorers.
- **Astronauts Wanted:** [NASA Want Ad: Astronauts Needed to Help Get to Mars](#) NASA's latest astronaut application period opened Monday and will close Feb. 18. Successful applicants will have opportunities to live and work aboard the International Space Station, launch on test missions in the new NASA Earth/moon proving ground and perhaps land on Mars.

Florida

- **GSDO Highlights / Nov 2015:** http://www.nasa.gov/sites/default/files/atoms/files/gsd0_nov2015_final.pdf
- **NASA's FY2016 Budget and KSC:** [Budget bill very good to NASA, KSC](#) The 2016 Congressional spending bill may be the best in several years for NASA's Kennedy Space Center.
- **RD-180:** [Spending Bill Lifts RD-180 Ban, Puts ULA Back in Competitive Game](#) Details of the 2016 omnibus appropriations bill released on Wednesday lifts a ban on the import of Russian RD-180 rocket engines used by the first stage of United Launch Alliance's Atlas 5 rocket. In effect until Oct. 1, the lift means ULA can compete for future launches of U.S. national security payloads as well as science and commercial payload missions. (See also: [Shelby uses Capitol Hill clout to end Russian rocket engine ban - and help Alabama workers](#) and [McCain furious over Russian rocket engine provision](#) and [U.S. Air Force Awards Three Engine Research Contracts](#))
- **XCOR Suborbital Space Plane:** [XCOR's Lynx Engine Design has Breakthrough](#) A milestone in propulsion testing could facilitate multiple flights of XCOR's winged Lynx suborbital space plane in a single day.

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.

