



Human Space Exploration Update (July 7-11, 2014)

Congress

- **Continuing Resolution for NASA?:** [Editorial | Another Continuing Resolution Looms for NASA](#)
Less than month ago, it appeared the U.S. Congress was on its way to passing a 2015 budget for the nation's civil space agencies, including NASA, prior to the Oct. 1 start of the 2015 fiscal year. However, that momentum stalled in the U.S. Senate over partisan procedural differences.

International Space Station

- **Antares Launch – July 12:** [How to watch spectacular Antares commercial launch to ISS on July 12 - complete viewing guide](#) Orbital Sciences prepares Saturday Antares launch from Virginia's Eastern Shore with cargo for the International Space Station. The 1:14 p.m., EDT, launch should be visible where skies are clear from South Carolina to Massachusetts.

Orion and Space Launch System

- **Orion Program Update (June 2014):**
<http://www.nasa.gov/sites/default/files/files/OrionMonthlyNewsletterJune2014print.pdf>
- **Orion & Exploration Flight Test-1:** <http://www.nasa.gov/content/five-things-we-ll-learn-from-orion-s-first-flight-test/> Five things we'll learn. (See also: [Policy Debate Aside, NASA Preparing for Orion Capsule Test Flight](#))
- **SLS Program Update (June 2014):**
http://www.nasa.gov/sites/default/files/sls_highlights_june_2014.pdf (See also: [NASA, Boeing provide details about Space Launch System contract](#) and [Space Launch System, the world's biggest rocket, goes into full production as NASA gets closer to Mars mission](#))
- **Pegasus Barge for SLS:** [Pegasus Barge to begin renovations for SLS core shipping](#) NASA plans to refurbish the Pegasus barge that once transported space shuttle external fuel tanks from New Orleans to Cape Canaveral, Fla. Once refurbished and enlarged, Pegasus will follow the same course with the core stage of NASA's Space Launch System heavy lift rocket.

Commercial Space Transportation

- **Antares Launch – July 12:** [How to watch spectacular Antares commercial launch to ISS on July 12 - complete viewing guide](#) Orbital Sciences prepares Saturday Antares launch from Virginia's Eastern Shore with cargo for the International Space Station. The 1:14 p.m., EDT, launch should be visible where skies are clear from South Carolina to Massachusetts.
- **ULA Support for Commercial Crew Launches to ISS:** [ULA awaits NASA decision before outfitting pad for crew](#) United Launch Alliance completes plans to modify an Atlas V launch pad at Cape Canaveral Air Force Station, Launch Complex 41, for the launching of astronauts -- if Boeing or Sierra Nevada wins a contract in the next round of NASA's Commercial Crew Program.

A decision is expected in August or September. Boeing's CST-100 and Sierra Nevada's Dream Chaser are two of the companies involved in the final phases of the NASA development program.

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

- **Asteroids and Property Rights:** [Posey, Kilmer introduce ASTEROIDS Act to grant property rights to asteroid resources](#) Newly introduced legislation from members of the U.S. House Science Space and Technology Committee would extend property rights to private investors who explore the asteroids. However, there is an issue: Are property rights permitted under international law?
- **Common Upper Stage:** [Aerojet Rocketdyne completes study on common upper stage service for NASA](#) Aerojet Rocketdyne completes milestone study on upper stage rocket for NASA's Space Launch System heavy lift rocket. Plan has utility for a range of U.S. commercial launch vehicles as well. "The upper stage would allow launch vehicles to deliver spacecraft and payloads to further destinations in space that are otherwise not possible with existing launch vehicles alone," according to the study.
- **The Future of Space Exploration:** [Final Atlantis crew expresses hope for future in space](#) The four member crew of the last Shuttle mission believes NASA has turned final shuttle mission a difficult corner in efforts to open deep space for human exploration and develop commercial services that transport astronauts to the International Space Station. "There were a couple of rough years after the shuttle program," notes Chris Ferguson, the STS-135 commander, who now works for Boeing on the commercial crew initiative. "But I do see that we have turned the corner, we've bottomed out and we're headed back in the right direction."
- **"Old Space vs. New Space":** [Letter: Old space vs. new space comparison misleading](#) Rivalries between traditional space companies and new commercial entities may have been overstated, with many "old" companies supporting "new" space.

Ground System Development & Operations

- **GSDO Progress Report (June 2014):** http://www.nasa.gov/sites/default/files/files/GSDO_June2014_final.pdf
- **Preparing for SLS:** <http://www.nasa.gov/content/gsd-operations-and-planning-prepares-for-nasas-space-launch-system/>

Florida Highlights

- **Risks to the Cape:** [Space Florida: Cape risks irrelevance](#) Space Florida CEO Frank DiBello urges state leaders to seize commercial space opportunities. DiBello cautions that SpaceX is close receiving approval to develop a commercial launch complex in South Texas. (See also: [SpaceX gets final environmental clearance for South Texas launch site](#) and [Shuttle runway management deal unfinished after one year](#))
- **Court Challenge:** [ULA asks court to dismiss SpaceX's block-buy protest](#) United Launch Alliance joins the U.S. Air Force in asking a U.S. federal court to drop SpaceX lawsuit challenging U.S.A.F. contract award to ULA for \$11 billion in rocket hardware for U.S. national security missions.
- **Renaming Operations & Checkout Facility:** [NASA renaming historic Florida facility for first moon walker Neil Armstrong](#) NASA will rename the Operations & Checkout building at the Kennedy Space Center for the late Apollo 11 commander in ceremonies July 21.

- **SpaceX Challenges Arianespace:** [Opinion: Arianespace facing shake-up to compete with SpaceX](#) Arianespace struggles to compete in a global launch services market it once dominated. U.S. competitors bring new challenge.
- **RD-180 Engine:** [Senate committees planning joint hearing on launch issues](#) The U.S. Senate Armed Services and Commerce committees plan a joint hearing July 16 on U.S. reliance on Russian rocket engines and other space access issues. The session follows Russian threats to halt the export of the RD-180 a rocket engine used by the Atlas V rocket and legislative actions to develop a domestic alternative. Tensions between Washington and Moscow built over Russia interference in Ukraine. (See also: [Enthusiasm wanes for quick start to new engine program](#))
- **Jay Barbree's "Neil Armstrong":** [NBC's space reporter tells Neil Armstrong's story in new book](#) goes on sale Tuesday. NBC's Jay Barbree, who has reported every U.S. human space mission, explains how his long association with Armstrong led to the book he authored (*Neil Armstrong: A Life of Flight*).

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. (www.citizensforspaceexploration.org)