



Human Space Exploration Update (May 5-9, 2014)

Congress

- **House Appropriations:** [House appropriators approve FY2015 CJS bill with \\$435 million increase for NASA](#) U.S. House Appropriation Committee approves \$17.9 billion budget for NASA in 2015, \$495 million more than requested and \$250 million more than the current appropriation. The increase includes more funding for the Space Launch System heavy lift rocket; and Orion crew capsule; space science, including an Europa mission; Commercial crew counts an increase, though less than the White House sought. (See also: [House appropriators give NASA almost \\$18 billion for 2015, tell White House to get going in space](#) and [Amid Ukraine tensions, House panel increases funds for NASA commercial space program](#))

International Space Station

- **Tracking the ISS:** <http://spotthestation.nasa.gov/sightings/>

Orion and Space Launch System

- **Orion/SLS Endorsement:** [Country music star Kellie Pickler touts NASA's SLS | video](#) Singer appears in public service announcement endorsing Orion and the Space Launch System heavylift rocket.
- **Orion/EFT-1 – STEM Outreach:** [Team ARES wins NASA's Exploration Design Challenge for Orion's first flight](#) Team ARES, from Hampton, Va., prevails in NASA Exploration Design Challenge for high school students by shaping a radiation protection strategy for NASA's Orion deep space capsule.
- **SLS Engine Testing:** [NASA completes 'cold-shock' milestone for SLS engine testing](#) A crucial test stand for NASA Space Launch System engine testing at the Stennis Space Center in Mississippi clears 'cold shock' testing in preparation for upcoming engine firings. The plumbing must withstand the minus 300 and 400 degree temperatures of liquid oxygen and hydrogen propellants.

Commercial Space Transportation

- **SpaceX Resupply Mission:** [SpaceX supply ship unloaded by robots and astronauts](#) Aboard the International Space Station, a pair of Canadian robot arms remove external experiments from the "trunk" of the latest SpaceX Dragon resupply capsule. One is a collection of high definition cameras, the other a NASA laser communications demonstration.
- **Orbital Resupply Mission:** [Antares gets a new launch date from Wallops](#) Orbital Sciences will look to June 10 for its second commercially contracted cargo delivery to the International Space Station. The launching from the Mid Atlantic Regional Spaceport of Virginia was originally set for May 6, but postponed to accommodate changes in the current SpaceX Dragon mission underway at the space station.

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

- **Russia's Moon Plans:** [Russia to begin Moon colonization in 2030](#) Plan draft from Roscosmos and statements from Deputy Prime Minister Dmitry Rogozin reveal plans to begin colonizing the moon with cosmonauts in 2030. "The Moon is a first step on the way to the deep space," chief scientific fellow of the Institute of Space Policy Ivan Moiseyev said. Russia is open to commercial participation in its goal of establishing a permanent base, according to the report.
- **NASA JSC Director Ochoa on Space and Youth:** [Ochoa: Johnson Space Center continues to inspire youth and innovation](#) From operations of the International Space Station to development of the Orion crew exploration capsule, NASA's Johnson Space Center offers youthful inspiration and new opportunities for the economy, writes JSC Director Ellen Ochoa in an op-ed.
- **Astronaut Jack Schmitt's Views of Deep Space Exploration:** [Moonwalker Jack Schmitt and the future of U.S. space exploration \(exclusive interview\)](#) Apollo 17 astronaut Harrison Schmidt, also geologists and former U.S. Senator, offers his assessment of the way forward in space. "Political leadership of the country has to decide that, geopolitically, it's important for the U.S. to be dominate in deep space, or at least competitive, but dominate would be better," says Schmidt in part. "Until the political leadership makes that decision there's not much else we can do except try to make sure that the science community at least is prepared. Hopefully, the technology community is going to be prepared too. Both need to be ready, given a challenge by some new leadership of the country that recognizes the geopolitical significance of deep space."
- **Rep. Wolfe on US Leadership in Space:** [Squandering America's leadership in exploration](#) America's human space exploration program is floundering, not because of NASA or the American people, writes U.S. Rep. Frank Wolfe, chair of the House appropriations subcommittee with jurisdiction over NASA's budget. In an op-ed, Wolfe blames poor leadership and suggests a need to isolate NASA management from politics.
- **Mike Griffin and Jim Albaugh on Mars Human Flyby Mission:** [Griffin, Albaugh: Mars mission could serve to refocus purpose of NASA](#) Mike Griffin, NASA's previous administrator, and Jim Albaugh, former president and CEO of Boeing Commercial Airplanes and Integrated Defense Systems, back the Mars 2021 human flyby mission initially proposed by Inspiration Mars and backed by some in Congress.
- **Owen and Richard Garriott on Human Space Flight:** [It's time to push for U.S. human spaceflight independence \(op-ed\)](#) Owen and Richard Garriott, the first father/son or generational astronauts, urge an accelerated effort to develop U.S. human commercial space transportation systems in an op-ed. The two men note that U.S. sanctions against Russia over the annexation of Crimea are exposing an over reliance on Russian space systems.
- **Sanctions Against Russia:** [Editorial: Don't punish the space industry](#) Editorial urges care with space sanctions against Russia over the annexation of Crimea and other tensions. U.S. space companies are being penalized financially as their hardware remains in the U.S. unable to make its way to Russian launch vehicles. Also, two U.S. commercial alternatives to Russia's Soyuz for the transportation of American astronauts to the International Space Station depend on the Atlas 5 as launch vehicles. First stage Atlas rocket engines are imported from Russia.

Florida Highlights

- **Space Shuttle Landing Strip:** [NASA applies for shuttle strip permit](#) Permit from U.S. Army Corps of Engineers would allow extension of Kennedy Space Center landing strip for use by commercial space companies.

- **Astronaut Hall of Fame:** [2014 class inducted into Astronaut Hall of Fame](#) Retired NASA astronauts Shannon Lucid and Jerry Ross were inducted Saturday into the U.S. Astronaut Hall of Fame. They flew a dozen missions total. Lucid once held the single spaceflight duration record for women, 188 days. Ross is tied for the most launches, seven. (Also: [Astronaut Hall of Fame inductee Jerry Ross talks space past, present and future in SFI exclusive interview](#))
- **Russian Engines:** [Court lifts RD-180 injunction](#) U.S. Court of Federal Claims lifts injunction banning United Launch Alliance purchase of Russian RD-180 rocket engines for the Atlas 5. Letters from State, Commerce and Treasury weighed in the decision. The letters said the purchases by United Launch Alliance did not violate sanctions against Russia for actions in Ukraine. (Also: [Judge lifts temporary ban on RD-180 engine purchases](#) and [Musk open to settlement with USAF over launch dispute](#))
- **AF Defends Launch Decision:** [Amid SpaceX protest, USAF defends sole-source EELV strategy](#) U.S. national security and defense concerns underpin U.S. Air Force decision to award contested contract with United Launch Alliance for future rockets. SpaceX has protested that the company was unfairly prevented from competing.

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)