



Human Space Exploration Update (May 8-19, 2017)

International Space Station

- **200 Space Walks:** [Astronauts Complete Shortened Spacewalk Outside International Space Station](#) Airlock difficulties forced International Space Station commander Peggy Whitson and fellow NASA astronaut Jack Fischer to abbreviate an otherwise successful spacewalk, the 200th excursion focused on the assembly and maintenance of the orbiting science lab.

Orion and Space Launch System

- **No Crew on EM-1:** <https://www.nasaspaceflight.com/2017/05/nasa-em-1-uncrewed-costs-main-reason/>; [NASA decides against putting crew on EM-1, first SLS rocket launch](#)
- **Orion Update:** <http://bit.ly/OrionAprilMonthly>
- **SLS Upper Stage Testing:** [Space Launch System \(SLS\) upper stage testing begins](#) Tests underway at NASA's Marshall Space Flight Center are intended to prepare a Space Launch System (SLS) upper stage for flight. Initiated in February, the assessment should be complete by the middle of this month. The SLS and Orion are under development at NASA to start humans on new missions of deep space exploration.

Commercial Space Transportation

- **I Will Launch America:** <https://www.nasa.gov/feature/i-will-launch-america-dana-hutcherson>

Space Policy, Missions, Benefits, International ...

- **Mars Exploration:** [Astronauts join debate on how and if humans will get to Mars](#) The discussion at the Armstrong Space Symposium on May 11 turned to humanity's next destination in space, the moon or Mars, and whether it will have government or commercial leadership. Commercial ventures "are not substitutes for national will" or "a belief by our nation that we should be preeminent in space," asserted Mike Griffin, a former NASA administrator, who was among the space agency officials and astronauts who participated. (See also: [Mars Advocates Emphasize Policy Continuity Over Uncertainty](#))
- **Gateway to Mars:** [Preparing for the Deep Space Gateway](#) NASA's Flexible Deep Space Gateway, a lunar orbiting NASA space station, would be the link between the International Space Station and future missions to the Martian environs with human explorers. In addition to testing life support systems developed to support two to three yearlong missions to Mars, the gateway would expose astronauts to the physical and mental challenges of the long missions. NASA is focused on launching its first human mission to Mars in 2033. (See also: [Risky business: NASA experts discuss threats faced by space travelers](#), [No rush for Mars](#))
- **China's Space Program:** [A growing competition: China and the U.S. space program, year by year](#) A chronology of global space exploration milestones reveals that China is catching up with plans to establish a space station and explore the moon with humans.

- **Outer Space Treaty:** [Cruz to hold hearing on updating the Outer Space Treaty](#) During a Washington forum, Senator Ted Cruz, chair of the Senate Space Subcommittee, announced plans for a May 23 hearing in which experts will address possible changes to the half century old Outer Space Treaty, which governs the staking of claim to space destinations and rights to resources. The treaty is a factor in the commercial development of space.
- **Commercial Space Launch:** [Draft bill would give commerce, not FAA, "mission authorization" function](#) Draft legislation would make the U.S. Department of Commerce's Office of Space Commerce responsible for oversight of non-government space activities rather than the FAA's Office of Commercial Space Transportation in the Department of Transportation. Three lawmakers are floating the idea, according to the report. They include Rep. Lamar Smith, chair of the House Science, Space and Technology Committee; Rep. Brian Babin, who chairs the panel's Space Subcommittee; and Rep. Jim Bridenstine, of Oklahoma.
- **NASA Education Programs/Budget:** [Cutting NASA's education funding will hurt workforce, senators argue in open letter](#) 32 Senators urge appropriators not to close NASA's \$115 million a year office of education, part of President Trump's proposed topline 2018 budget for the space agency. The space agency's educational initiatives contribute significantly to STEM education, according to those who signed the letter.
- **Becoming an Astronaut:** [How I became an astronaut: Victor Glover](#) Navy test pilot Victor Glover discusses his 2013 NASA astronaut selection and how he got where he is and where he's going. "Be a life-long learner," he advises. "This is not an entry level job."
- **Robots to Mars:** [Meet Valkyrie, NASA's space robot](#) Standing six foot two, Valkyrie is a humanoid robot developed at NASA's Johnson Space Center that could be part of missions launched to Mars ahead of the first human explorers and commanded to help assemble sheltering. Valkyrie is among 20 competitors headed for the Space Robot Challenge in June.

Citizens for Space Exploration – a pro-space, taxpayer, grassroots advocacy group (www.citizensforspace.org) – has travelled to Washington, D.C. the past 26 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 to provide an easy, quick way to stay abreast of key human space exploration program and policy developments.