



Human Space Exploration Update (August 24-28, 2015)

2016 Presidential Election

- **The Space Candidate:** [Who is the 2016 Presidential race's space candidate?](#) A look at comments from the candidates so far suggests U.S. Sen. Ted Cruz is the staunchest supporter of NASA's exploration mission, while Maryland Gov. Martin O'Malley supports NASA's investments in commercial space.

Congress

- **Commercial Space Legislation:** [Edwards: No progress on reconciling commercial launch bills](#) The Senate and House have yet to reconcile their separate approaches to commercial space law, U.S. Rep. Donna Edwards informs a Maryland Space Business Roundtable luncheon on Aug. 25. Edwards is the ranking Democrat on the House Science, Space and Technology Committee. A key difference in the two measures regards restrictions on FAA regulation of commercial space, which are set to expire Oct. 1. The Senate version would extend the limitations for another five years, the House version another 10 years.

International Space Station

- **Cosmic Ray Detector:** [Second cosmic ray detector delivered to Space Station](#) CALET, a high energy cosmic ray observatory, was among the equipment delivered to the six person International Space Station on Monday, August 24, as Japan's HTV-5 cargo capsule berthed to the station's U.S. segment. CALET will be positioned on the outside of the Japanese Kibo lab. CALET complements the Alpha Magnetic Spectrometer, which was installed outside the station in 2011 to study cosmic rays and search for the origins of dark matter. (See also: [Cargo ship delivers much-needed supplies to Space Station](#))

- **Water Transfers to ISS -- Update:** [Photos: NASA re-enters retired shuttles to remove tanks for Space Station](#) The task of salvaging water storage tanks from the shuttle Endeavour while on public display at the California Science Center draws to a close. The tanks will join those salvaged from the shuttle orbiter Atlantis and head for the International Space Station to play a key role in the life support of astronauts. (See also: [Taking Endeavour's tanks: Retired shuttle donating water tanks for Space Station](#) and technology demonstrations.

Orion and Space Launch System

- **Orion Parachute Testing at Yuma:** [Orion parachute test: When failure means success](#) NASA's Orion crew exploration capsule cleared a demanding parachute recovery system test in the Arizona desert this week. The four astronaut capsule designed for future deep space missions descended 35,000 feet onto the U.S. Army's Yuma Proving Ground to demonstrate its robustness even with intended parachute failures.(See also: [Orion parachute test evaluates failed chute scenarios](#))
- **SLS Engine Testing at NASA Stennis:** [Stennis completes first SLS RS-25 test series, prepares next engine](#) NASA and Aerojet Rocketdyne marched through their latest ground test firing of the prototype rocket engine that will help to power the space agency's Space Launch System heavy lift rocket. The test engine has ties to the rocket engines that helped to launch NASA's space shuttle. The milestone test firing at NASA's Stennis Space Center spanned 535 seconds, or to full duration. The SLS is under development to start humans on future missions of deep space exploration.

Commercial Space Transportation

- **Commercial Crew "Up to the Minute" – C3PF Makeover:** <https://blogs.nasa.gov/commercialcrew/2015/08/28/c3pf-makeover/>
- **NASA Responds to Questions about Falcon 9 Investigation:** [NASA says no special treatment for SpaceX in Falcon 9 investigation](#) In a letter to Congress, NASA Administrator Charles Bolden explains the space agency has not given SpaceX special treatment in an investigation into the June 28 SpaceX Falcon 9 launch failure. Members of a Congressional oversight panel questioned NASA over whether NASA was favoring SpaceX over rival Orbital ATK, which experienced a launch failure on Oct. 28, while also launching a NASA contracted resupply mission bound for the International Space Station. NASA is involved in a rigorous review of its own into both incidents, Bolden writes in a response to the House Science, Space and Technology Committee.

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

- **Private Space Stations:** [Private Space Stations could be a reality by 2025](#) The Space Frontier Foundation's NewSpace 2015 conference in July offered a forum for a discussion on what follows the International Space Station. NASA's course would hand off the development to the private sector, with the agency as a key customer.
- **Setting Goals for Mars Exploration:** [Setting arbitrary cost, schedule will never get people to Mars](#) It's time to end the starts and stops that have prevented previous efforts of reaching Mars with humans from maturing, writes Jerry Grey, former Princeton University professor of engineering and director of science and technology policy at the American Institute of Aeronautics and Astronautics. NASA is structured to implement the mission with its present annual budget without derailing space science and aeronautics as long as policy makers agree not to lock in a date, says Grey.

Florida

- **Buzz Aldrin at FL Tech:** [Buzz Aldrin joins FIT, shares plan to colonize Mars](#) Apollo 11's Buzz Aldrin joined the faculty of the Florida Institute of Technology on Thursday and shared his long range plan to settle Mars within 25 years. Through the school's new Buzz Aldrin Space Institute, the former Apollo astronaut hopes to pursue progressive missions to asteroids, the Martian moon Phobos and the surface of the red planet. Aldrin, 85, is pushing for a Mars settlement on the 70th anniversary of the Apollo 11 moon landing, or 2039. Initial settlers could expect to spend a decade on the red planet before returning to Earth.

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 23 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.