



## **Human Space Exploration Update (May 19-30, 2014)**

**2014 Citizens for Space Exploration D.C. Trip - May 20-22, 2014 Trip Summary:** The 2014 DC Trip was a success and helped advance support for human space exploration and demonstrate a large, grassroots constituency for space exploration. The 23rd annual trip included 110 travelers (up from 97 last year) representing 34 states (up from 28 states last year) who conducted 354 congressional office visits. The diverse group of travelers included elected officials, 34 university students majoring in engineering or related technical fields of study, industry representatives and community leaders. The Congressional reception was well attended and included remarks from 9 Members of Congress and attended by over 60 staffers.

### **Congress**

- **House Passes NASA Budget:** [House passes FY2015 CJS appropriations bill funding NASA and NOAA](#) The U.S. House passes Commerce Justice Science appropriations measure early Friday, which includes \$17.896 billion for NASA in 2015, or \$435 million more than the White House requested. (See also: [House passes FY2015 CJS appropriations bill funding NASA and NOAA](#))
- **Rep. Ralph Hall:** [Ralph Hall's loss will leave a hole on science panel](#) Hall, 91, loses bid for re-election to Congress from his East Texas district. A longtime member of the House Science, Space and Technology Committee, Hall is also a former chairman.

### **International Space Station**

- **Twin Experiments:** [Twin astronauts offer up selves for space science](#) Twins Scott and Mark Kelly to break ground as NASA astronaut Scott Kelly embarks on year-long mission to the International Space Station in March 2015. Mark Kelly, a retired NASA astronaut, has volunteered to be a subject in many of the same medical experiments as his brother, affording researchers a chance to study effects of spaceflight on genetics.

### **Orion and Space Launch System**

- **Orion – SLS On Track:** [Making progress, and seeking stability, with SLS and Orion](#) At the just concluded National Space Symposium, NASA's Space Launch System and Orion contractor teams urge stability from policymakers for their programs to develop new human deep space exploration capabilities. On several key fronts, development teams are ahead of schedule with milestones for a key 2017 uncrewed flight test. (See also: [NASA's new mega-rocket, Orion capsule on track for future test flights](#))
- **Orion Heat Shield:** [Orion Heat Shield Attached](#) The world's largest heat shield, measuring 16.5 feet in diameter, has been successfully attached to the Orion spacecraft.
- **SLS Testing:** [NASA testing next-generation rocket in Huntsville](#) Scaled version of NASA's Space Launch System heavy lift rocket undergoes acoustic testing at the Marshall Space Flight Center.

- **Solid Rocket Booster Testing for SLS:** [ATK brings NASA's Space Launch System one step closer to 2017 flight](#) ATK completes structural testing of the SLS forward skirt attach points for a pair of solid rocket boosters. The 2017 unpiloted test flight would combine Orion and the SLS heavy lift rocket in flight for the first time. ATK is furnishing the SLS boosters as well as the forward skirt integration.

### Commercial Space Transportation

- **Dream Chaser:** [Dream Chaser completes another critical CCIcap milestone with latest series of wind tunnel tests](#) Sierra Nevada, with latest wind tunnel milestone, is on track to complete its Commercial Crew Integrated Capabilities agreement with NASA by the end of 2014. The company plans to transport astronauts to and from the International Space Station. (See also: [Dream Chaser passes wind-tunnel testing](#))
- **Boeing CST-100:** [Apps in space! Boeing looking at mobile tech for new astronaut taxi](#) Boeing and Samsung team to incorporate mobile technology and apps into the CST-100 commercial crew capsule. Boeing is competing with Sierra Nevada and SpaceX to develop commercial spacecraft to transport astronauts to and from the International Space Station and other orbital destinations. The two companies discuss their plans at this week's National Space Symposium in Colorado Springs.

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

- **Mars:** [NASA: Humans on Mars by 2035 is 'primary focus'](#) NASA says humans can reach Mars by 2035. The international space community must step up to make it happen, according to participants in a London mid-May conference.
- **Asteroid Mission:** [The Planetary Society supports NASA's asteroid initiative](#) The pro exploration organization weighs the objectives of NASA's Asteroid Redirect Mission, then offers strong support. Additional cost information is needed, the Planetary Society adds in its endorsement.
- **Russia and China:** [Russia develops manned space program to replace ISS](#) Russia turns to China, Europe for potential partnerships in space exploration beyond the International Space Station, Roscosmos Deputy Chief Sergei Savelyev informs news media gathered at the 18th St. Petersburg International Economic Forum, in Russia, last week.

### Florida Highlights

- **Atlas 5 Launch:** [Atlas 5 launches payload for intelligence community](#) United Launch Alliance Atlas V rocket lifts off early Thursday from Cape Canaveral Air Force Station, Fla., with a U.S. national security payload.
- **Morpheus Testing at KSC:** [Morpheus completes last planned test flight at KSC](#) NASA's prototype planetary lander for future human as well as robotic deep space missions concludes final planned test flight for 2014. Guidance issues over the final test flight landings, however, may prompt additional flights.
- **SpaceX and TX Launch Site:** [SpaceX cleared for Texas launch site](#) Required Environmental Impact Statement suggests SpaceX favors South Texas among its list of potential new commercial launch complexes.
- **Money for Space:** [Florida lawmakers OK \\$42.5 million for space projects](#) Florida legislative investments will bring upgrades to NASA's shuttle runway at the Kennedy Space Center for

commercial users. They are part of an overall \$77.1 billion state budget for the 2015 fiscal year that begins July 1.

- **Space Museum:** [Space museum ready for new Titusville location](#) U.S. Space Walk of Fame Museum finds plenty to offer public in new Central Florida location.
- **RD-180 Engine:** [U.S. moves to break from Russian rocket dependence](#) U.S. Senate Armed Services Committee on Thursday approves five year plan to develop a U.S. alternatives to Russia's RD-180 rocket engine. A top Russian government official has threatened to halt the export of the RD-180 to the U.S. as retaliation against economic sanctions linked to the annexation of Crimea. (See also: [Shelton: time for "pause" in RD-180 debate](#))

**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](http://www.citizensforspaceexploration.org))