

Human Space Exploration Update (June 16-20, 2014)

Congress

NASA Budget in Senate Stalled: <u>Senate appropriations process hits a snag, minibus derailed</u>
 for now Efforts to win U.S. Senate passage of a "minibus" appropriations bill that includes NASA spending for 2015 has hit a procedural stalemate.

International Space Station

Research on ISS: NASA, partners announce top achievements in Space Station research
 NASA, the American Astronautical Society and the Center for the Advancement of Science in
 Space select 14 top research projects from the International Space Station. The projects have the
 potential to benefit life on Earth as well as prepare astronauts to live and work in deep space.

Orion and Space Launch System

- Missions for Orion: <u>Lockheed execs defend all-purpose Orion</u> The National Research
 Council's recent report on the future of human space flight urges a destination driven approach to
 hardware. Lockheed, NASA's contractor for Orion, defends the current approach flexible
 approach based on available funding.
- Exploration Flight Test-1: Kennedy Space Center director says Orion capsule will launch Dec. 6, defends NASA's exploration plan NASA is targeting Dec. 6 for the first unpiloted test flight of the Orion crew capsule from Cape Canaveral Air Force Station, Kennedy Space Center director Robert Cabana tells a Huntsville audience. The two orbit test flight will be launched on a Delta IV heavy rocket. (See also: http://www.khou.com/news/local/9e009a33ad5732cf4413d212c68ee700b51b7836-262981321.html)
- SLS Progress: NASA makes progress on world's largest rocket. The world's largest rocket, NASA's Space Launch System, makes strides on road to 2017 flight test. The SLS will start U.S. explorers on future missions of deep space exploration. (See also: A rare look at the space shuttle's successor Space Launch System)

Commercial Space Transportation

- Senator Shelby, Senator Nelson and White House on Pricing Provision: Shelby reiterates his support for commercial crew pricing language as Nelson seeks changes to it; Nelson wants to revisit Senate Appropriations Committee's stricter Commercial Crew oversight; and White House: NASA bill would raise costs, cause delays
- Cargo to ISS: <u>ISS cargo shippers face competition from space taxis</u> Boeing and Sierra Nevada, who are partnered with NASA under the Commercial Crew Program to develop astronaut transportation services to the International Space Station, say they plan to offer cargo options that could bring competition to SpaceX and Orbital Sciences.

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

- Asteroids: NASA announces latest progress, upcoming milestones in hunt for asteroids NASA outlines new progress Thursday in efforts to identify an asteroid target for the agency's Asteroid Redirect Mission. ARM is considered a step in future efforts to develop the rockets, spacecraft, procedures and tools for exploring Mars with humans. The space agency is aiming for a 2019 lift off of a robotic mission to capture its asteroid target.
- **Mission to Mars:** Extroverts don't belong on Mars DePaul University psychologist Suzanne Bell suggests that when selecting astronauts for a trip to Mars, quiet, resilient personalities trump extroverts, who may be perceived as "demanding of attention and intrusive," and "their level of warmth may be undesirable in a confined setting."

Florida Highlights

- Commercial Crew Contract Down-Select: Boeing preparing layoff notices in case of
 <u>Commercial Crew loss</u> Boeing, a partner in NASA's Commercial Crew Program, prepares for
 possible layoffs in Houston and Florida as the space agency nears a decision on contracts for the
 final development of crew transport services to the International Space Station. Others vying for
 the work are Sierra Nevada and SpaceX.
- CASIS: <u>CASIS Board of Directors selects Lt. General James A. Abrahamson as Chairman</u> The
 Florida nonprofit that facilities use of the U.S. National Laboratory portions of the International
 Space Station chooses Abramson as board chair.
- RD-180 Engine: <u>ULA details engine initiative, ratchets up SpaceX response</u> United Launch Alliance unveils plans to develop a domestic alternative to Russia's RD-180 rocket engine. Russia recently threatened to halt the export of the RD-180, which powers the first stage of ULA's Atlas V rocket. (See also: <u>Obama Administration opposes new money for RD-180 replacement engine</u>)

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)