

Human Space Exploration Update (Sept 1-5, 2014)

Congress

- (The U.S. House and Senate remain in recess through Sept. 8)
- Hearing on Asteroids Act: House subcommittee to hold hearing on Asteroids Act on September 10 The proposed legislation featured in a U.S. House Space Subcommittee hearing would extend property rights to those who commercially explore the asteroids, a potential incentive for the acquisition of deep space resources.

International Space Station

• Sarah Brightman to ISS: Sarah Brightman to start training for Space Station journey in January British singer will train in January for trip to the International Space Station. Brightman will pay \$52 million to spend 10 days on the Space Station, possibly launching in September 2015.

Orion and Space Launch System

- Orion Ocean Testing: NASA's new Orion spaceship makes a splash in ocean tests Joint sea trials between NASA and the U.S. Navy for the recovery of NASA's Orion capsule in the Pacific Ocean off the California coast will continue in September. NASA and the Navy are prepping to recover an unpiloted Orion capsule following the first orbital test flight of the spacecraft designated to start U.S. explorers on future missions of deep space exploration. The launch of Exploration Flight Test-1 is planned for Dec. 4.
- Moving Forward with SLS: Let's continue the progress on SLS NASA is in a more favorable posture than it may seem with regard to developing the Space Launch System heavy lift rocket, a cornerstone in the agency's bid to resume human deep space exploration, writes Doug Cooke, in an op-ed. Cooke is a former NASA associate administrator for exploration. Conservative appraisals of NASA's future budgets may have caused the agency to look as far out as November 2018 for the first unpiloted test launch of the SLS, Cooke explains. The target date emerged from NASA's latest project review, one that authorized the SLS to transition from planning to production.

Commercial Space Transportation

SpaceX to Deliver 3D Printer: World's first 3D printer in space will launch this month SpaceX is primed to set off on the next U.S. commercial re-supply mission to the International Space Station in September. The cargo will include a collaboration between NASA and Made in Space, a 3-D printer, the first in space to assess the potential for fabricating spare parts and new components in space, rather than launching them.

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

Russian Rocket: Russia to begin building record-setting super-heavy space rocket Russian
President Valery Putin delivers preliminary approval for development of a yet-to-be-named super
rocket capable of delivering 150 tons of cargo to Earth orbit. Similar programs are underway in

the U.S., the Space Launch System, and in China, the Long March 9. Private sector SpaceX plans a powerful rocket as well. Russia's Deputy Prime Minister Dmitry Rogozin delivered the news after touring the Vostochny cosmodrome with Putin. Construction could begin in 2020.

- Asteroid Redirect Mission: 7 questions about NASA's asteroid redirect mission. The two
 publications look for answers to fundamental questions about NASA's proposed Asteroid Redirect
 Mission. The adventure looks to new capabilities including the Space Launch System heavy lift
 rocket and Orion crew capsule to carry out the end game, an encounter between U.S. astronauts
 and an asteroid maneuvered into lunar orbit, by the mid-2020s.
- Citizens Forum on Asteroids: <u>Citizen forums on asteroids you're invited!</u> NASA joins with Arizona State University to sponsor a series of public forums on the asteroid impact hazards and the future of human deep space exploration. The discussions will include online participation.

Florida Highlights

RD-180 Rocket Engine: U.S. aims to fund alternative to Russian rocket engine in 2016 The
Pentagon's chief weapons purchaser says U.S. government will add funding to the 2016 budget to
develop a domestic alternative to imports of Russia's RD-180 rocket engine for the United Launch
Alliance Atlas 5. The Pentagon will look to a government/industry partnership as a possible
development solution. The comments came in response to still growing tensions between
Washington and Moscow over the Ukraine.

Citizens for Space Exploration – a pro-space, grassroots advocacy group, supported by the Cocoa Beach 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. http://www.bayareahouston.com/content/c s e/c s e