

Human Space Exploration Update (August 4-8, 2014)

International Space Station

• Sleep Deprivation Research: <u>http://www.nasa.gov/content/study-compiles-data-on-problem-of-sleep-deprivation-in-astronauts/</u>

Orion and Space Launch System

- Orion Recovery Testing with the Navy: <u>The U.S. Navy just fished NASA's Orion spaceship out</u> <u>of the Pacific (photos)</u> NASA and the U.S. complete recovery operation trials for the Orion capsule near San Diego. The recovery activities, as shown in the photos, will play a key role in Exploration Flight Test-1.
- SLS Rocket Testing: <u>Space shuttle relics ready to roar again in Mississippi</u> NASA readies ground testing of one time space shuttle rocket engines for a new mission -- flight testing of the Space Launch System, the heavy lift rocket designated by U.S. policy makers and Congress to start future U.S. space explorers on missions of deep space exploration.

Commercial Space Transportation

- Dream Chaser Tests: <u>Sierra Nevada on track for restart of lifting body flight tests</u> Sierra Nevada is ready to resume flight tests this fall with the Dream Chaser, the winged space plane. Sierra is one of three companies vying funds to complete the final development phase of NASA's Commercial Crew Program. Sierra envisions an orbital flight test ion November 2016. (See also: Lockheed unveils their concept for future of manned space travel)
- CST-100 Propulsion Testing: <u>Aerojet Rocketdyne completes CST-100 work for Commercial</u> <u>Crew integrated capability contract</u> Aerojet Rocketdyne completes service module and launch abort propulsion system work for Boeing's CST-100 commercial crew capsule.

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

- **Moon or Mars:** <u>The Moon or Mars?</u> With the National Research Council's recent report on the future of U.S. human exploration as context, essayist Eric Hedman contends NASA's near term focus should be on the moon because of strong international interest and affordability. Hedman is chief technology officer of Logic Design Corporation. The NRC's *Pathways to Exploration*, released June 4, was in response to a request from Congress in 2010.
- Asteroid Mission: <u>NAC wants independent cost and technical estimate of ARM before down</u> <u>select</u> NASA should seek independent assessments of the cost and technical challenge of the Asteroid Retrieval Mission, the NASA Advisory Council concluded after a two day session. Established as an outside advisory panel to the agency's administrator, the NAC said NASA should obtain the results before it chooses between a strategy that would robotically capture a small asteroid and steer it into orbit around the moon or grab a boulder from a larger asteroid.

Florida Highlights

- ULA Launch: <u>Atlas 5 rocket deploys new GPS navigation satellite</u> United Launch Alliance launched a U.S. Air Force GPS satellite late Friday (August 1) from Cape Canaveral, Fla., atop a United Launch Alliance Atlas V.
- "I am building Orion" Profile: NASA KSC Neil Armstrong Operations and Checkout Building https://www.facebook.com/NASAOrion/photos/a.451624111573993.1073741825.1295629704467 77/660347597368309/?type=3&theater
- **SpaceX Chooses TX:** <u>Texas, SpaceX announce spaceport deal near Brownsville</u> State of Texas joins California based SpaceX in announcing plans for a Brownsville area commercial space port. SpaceX chose the South Texas location over competing sites in Georgia, California, Virginia, Alaska, Puerto Rico and Florida. Launches of satellites and potentially spacecraft for NASA could begin in 2015.
- Senator Rubio on Orion and SpaceX: Florida Today Sen. Rubio (R-FL) discussed SpaceX's decision to locate a commercial launch site in Texas with reporters at the Kennedy Space Center Visitor Complex on Wednesday. Rubio said, "Other states are going to want a piece of the action. ... But as far as Cape Canaveral and the Kennedy Space Center are concerned, I still anticipate that Florida will be the central location and the hub of space activity for this country." While supporting Space Florida's proposed Shiloh launch complex, Rubio said he would endorse "anything we can do to spur NASA and the Air Force and others to move a little bit quicker on opening up and making it a more friendly environment for commercial space to pick Florida over Texas or anywhere else." Meanwhile, Rubio said that the upcoming test flight of the Orion capsule will remind the public of "what we used to do in the 70s and 60s during the Apollo program." (See also: Despite SpaceX plans, Nelson pushes for Brevard launches)
- ULA Access to Russian Engines: <u>Space News</u> United Launch Alliance (ULA), told attendees at AIAA's Space and Astronautics Forum and Exposition (Space 2014) that the recent sanctions imposed by the U.S. and Europe on Russia for the downing of an airliner over Ukraine should not disrupt the sale of RD-180 engines through 2017.

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