

# Human Space Exploration Update (July 14-25, 2014)

### **Congress**

Continuing Resolution Seems Likely for NASA: Boehner: Vote on CR will wait until
 September
 With adjournments fast approaching in the House and Senate and deliberations on a budget for 2015 far from complete, House Speaker John Boehner points to September for a budget Continuing Resolution to keep the federal government open after the 2014 fiscal year ends on Sept. 30. NASA, like most federal agencies, awaits budget legislation.

## **International Space Station**

Astronauts Testify from ISS: House Committee members and ISS astronauts reflect on Apollo
 11, look to future NASA astronauts Steve Swanson and Reid Wiseman "appeared" Thursday
 before the House Science, Space and Technology Committee in Washington from the
 International Space Station.

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

- Orion Operations & Checkout Facility Renamed: Neil Armstrong honored 45 years after moon landing Apollo 11 commander Neil Armstrong was honored Monday in ceremonies at NASA's Kennedy Space Center that renamed the Operations & Checkout building for the late U.S. astronaut, test pilot, naval aviator and aerospace engineer.
- SLS Core Stage: World's largest spacecraft welding tool will build core stage of NASA's Space
   <u>Launch System</u> The Vertical Assembly Center will soon be ready to begin assembly of NASA's
   Space Launch System core stage. The 170 foot tall VAC is part of NASA's Michoud Assembly
   Facility in New Orleans. The SLS heavy lift rocket is in development to start U.S. astronauts on
   missions of deep space exploration. (See also: <u>NASA getting ready to test engines for Space</u>
   <u>Launch System rocket</u>)

## **Commercial Space Transportation**

- Orbital Resupplies ISS: Orbital Sciences makes second paid cargo delivery to ISS Launched from Virginia's eastern shore, the Orbital Sciences Corp. second Cygnus re-supply mission reached the International Space.
- **Dream Chaser and Japan:** SNC enlists Japan for Dream Chaser study Sierra Nevada Corp. enlists Japan for development work on the company's Dream Chaser crew transport spacecraft.

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

Safety and Human Space Flight: <u>Basic safety is not negotiable in human space exploration</u>
 Safety for the systems that will carry out future missions of human deep space exploration
 deserves serious concern, writes Doug Cooke, a former NASA associate administrator for
 exploration.

- Mars Exploration: Why we explore space Mars is the most suitable destination for the U.S. human space exploration program, writes U.S. Rep. Lamar Smith, chair of the U.S. House Science, Space and Technology Committee. (See also: The second-best plan)
- Focus on the Moon: While NASA fixates on Mars, space rivals shoot for the moon Is the U.S. now overlooking a valuable resource by setting its sights on Mars rather than a return to the lunar surface? Other nations and some U.S. experts believe so. The moon's resources include water, which could be used to make rocket fuels stored in space to foster deep space exploration.
- Space and Russian Sanctions: New Obama sanctions seem to skirt space activities, but future is unknowable U.S. President Barack Obama announced new sanctions against Russia late Wednesday, a day before a Malaysian airliner crash on the tense border between Russia and the Ukraine. Will the latest tensions affect U.S. and Russian space tensions? It's too soon to say.
- Deep-Space Training: Astronauts simulate deep-space mission in underwater lab Four Japanese, European and U.S. astronauts are sharing the cozy confines of an undersea lab off the Atlantic Coast near Key West, Fla., this week to develop tools and techniques for exploring the moon, asteroids and Mars.
- Commercial Space Launch Act: <a href="Space News">Space News</a> Rep. Steven Palazzo, chairman of the House Science space subcommittee, said, "It is my hope, before this Congress is finished, that we will be able to get some updates to the CSLA [Commercial Space Launch Act] passed." Palazzo did not specify what that would entail, but it could involve "an extension of third-party launch indemnification, an extension of current restrictions on the Federal Aviation Administration regarding regulation of safety of spaceflight participants, and allowing suborbital vehicle developers to retain an experimental permit after they receive an FAA launch license."
- **US-China Space Cooperation:** Two perspectives on U.S.-China space cooperation A hot topic within U.S. space circles, U.S/Chinese cooperation could serve to exert a positive influence over U.S./Chinese relations. Or, it could afford China too much on the technology front. Two experts, Michael Listner, attorney and space policy expert, and Joan Johnson-Freese, a national security expert, team up for an op-ed on the topic.

#### Florida Highlights

- TX vs. FL for Commercial Space Launches: Florida space agency launches new pitch for <a href="mailto:commercial rockets">commercial rockets</a> In Florida, state officials regroup in the competition for new commercial space business under the assumption SpaceX is poised to build a new launch complex in South Texas. "Texas is motivated to go after the commercial market," said Laura Seward, a space-industry advocate and adviser to Space Florida. "Whatever it costs, they will do it, and unless Florida becomes more motivated, we're going to lose this market."
- Alternatives to Shiloh: <u>Lawmakers fire up alternatives for Shiloh complex</u> Florida lawmakers urge NASA, U.S. Air Force to help establish an alternative to the environmental sensitive Shiloh for a future state sponsored commercial launch complex. Shiloh sits in the Merritt Island National Wildlife Refuge.
- SpaceX Delivers Satellite: SpaceX launch delivers Orbcomm satellites to orbit SpaceX Falcon 9 delivers a half dozen compact communications satellites to orbit.
- RD-180 Engine: White House seeking \$40 million to explore engine options White House seeks changes to its 2015 budget requests that would dedicate \$40 million to the early development of a domestic alternative to Russia's RD-180 rocket engine. Senators debate RD-180 replacement, EELV competition U.S. Senate joint hearing produces little consensus on urgency of replacing

Russia's RD-180 rocket engine with a new domestic rocket engine. Estimates on the development time line and cost range from five to eight years and \$1 billion to \$2 billion. (See also: <u>U.S. Air Force ponders accelerating Delta 4 rocket production</u>)

• New KSC Hdqts Building: NASA awards new HQ building contract NASA to construct new "green" headquarters for the Kennedy Space Center. Project expected to take two years. The new building is part of plans to replace aging industrial facilities at KSC.

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. http://www.bayareahouston.com/content/c\_s\_e/c\_s\_e