

NASA marks major programmatic milestone for spaceport of the future

March 27 2014, by Rachel Kraft

NASA achieved a major milestone this month in its effort to transform the agency's Kennedy Space Center in Florida into a multi-user spaceport by successfully completing the initial design and technology development phase for the Ground Systems Development and Operations (GSDO) Program.

The major program milestone on March 20, called the Preliminary Design Review, provided an assessment of the initial designs for infrastructure at Kennedy and allowed development of the ground systems to proceed toward detailed design. The thorough review has validated the baseline architecture is sound and aligns with the agency's exploration objectives.

"We've pushed the boundaries of space exploration for more than 50 years and are making progress getting ready to move the frontier even further into the [solar system](#)," said Dan Dumbacher, deputy associate administrator for exploration system development at NASA Headquarters in Washington. "The work being done to transform our abilities to prepare and process spacecraft and launch vehicles at Kennedy is a critical piece of our efforts to send astronauts in Orion on top of the Space Launch System to an asteroid and ultimately Mars."

Unlike previous work at Kennedy focusing on a single kind of launch system, such as the Saturn V rocket or space shuttle, engineers and managers in GSDO are preparing the spaceport's infrastructure to support several different spacecraft and rockets in development for

human exploration. This includes NASA's development of the Space Launch System (SLS) rocket and Orion spacecraft. They will provide an entirely new capability for [human exploration](#) beyond low-Earth orbit with the flexibility to launch spacecraft for crew and cargo missions to destinations in the solar system, including an asteroid and Mars.

"The [preliminary design review](#) is incredibly important, as it must demonstrate the ground systems designs are on track to process and launch the SLS and the Orion from Kennedy," said Mike Bolger, GSDO program manager.

In December 2012, the GSDO Program completed a combined system requirements review and system definition review to determine the center's infrastructure needs for future programs and establish work plans for the preliminary design phase. That successful completion confirmed the groundwork needed to launch the SLS and Orion spacecraft.

Provided by NASA

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