

EXPLORATION BEGINS HERE







PROGRAM HIGHLIGHTS • APRIL 2015

At NASA's Kennedy Space Center in Florida, the Ground Systems Development and Operations (GSDO) Program Office is leading the center's transformation from a historically government-only launch complex to a spaceport bustling with activity involving government and commercial vehicles alike. GSDO is tasked with developing and using the complex equipment required to safely handle a variety of rockets and spacecraft during assembly, transport and launch. For more information about GSDO accomplishments happening around the center, visit http://go.nasa.gov/groundsystems.

First Work Platform for SLS Arrives at Kennedy

The first half of a new set of work platforms that will be used to access, test and process the Space Launch System (SLS) rocket and Orion spacecraft arrived April 10 at Kennedy Space Center. The platform is half of a pair that will be installed in High Bay 3 of the Vehicle Assembly Building that NASA has used to prepare rockets for launch since the Apollo program.

The SLS will send astronauts aboard Orion to explore deepspace destinations, including an asteroid placed into orbit around the moon, and eventually Mars.

"Arrival of the first platform marks a major milestone for the future of NASA and spaceflight," said Edsel Sanchez, PE, the GSDO Program VAB site project manager.

A total of 10 levels of new platforms--20 platforms altogether--will surround the rocket and spacecraft and provide access for testing and processing in High Bay 3. The platforms were designed to move in and out, and translate up and down as needed to accommodate different configurations of the SLS



A flatbed truck, carrying the first half of a new set of work platforms, nears the Vehicle Assembly Building at Kennedy Space Center on April 10. Photo credit: NASA/Jim Grossmann

and other government and commercial vehicles.

This platform, designated "K," will be located about 86 feet above the VAB floor. Both halves will provide access to the SLS core stage and solid rocket boosters. Working from the top down, the other platform levels are A through H and J.

Twenty new elevator landings and access ways are in the process of being constructed for each platform level. The high bay also will accommodate the 355-foot-tall



An artist illustration of the new work platforms surrounding NASA's Space Launch System and Orion spacecraft in High Bay 3 of the Vehicle Assembly Building at Kennedy Space Center. Image credit: NASA

mobile launcher that will carry the rocket and spacecraft atop the crawler-transporter to the launch pad.

New platforms will continue to arrive at Kennedy throughout the year, helping to transform High Bay 3 into the starting point for NASA's exploration missions to deep-space destinations.

To read the complete story, visit http://go.nasa. gov/1ba5T6V

Kennedy Tests SLS Ground Support Component

Testing recently was completed on ground support equipment that will provide electrical power and data connections to the Space Launch System (SLS) rocket until it lifts off from its launch pad.

The Launch Equipment Test Facility (LETF) tested the first of two umbilicals that will connect to the rocket at the bottom outer edge of the booster, referred to as the aft skirt. The umbilical underwent a series of tests using the facility's Data Acquisition System and Vehicle Motion Simulator.

The team at Kennedy ramped up for the tests March 2, which began with some basic umbilical functions to exercise the umbilical's systems and a functional check of the lifting and lowering actuators. During the next couple of weeks, the team completed a simulated connection of the umbilical to the mobile launcher. The test was similar to the procedures that will be run in the Vehicle Assembly Building to connect the umbilicals during assembly of each SLS rocket.

Testing became more involved on the Vehicle Motion Simulator as the umbilical was attached to a representation of the flight umbilical carrier plate - the connection point on the booster - to test the range of motion of the umbilical's compliance mechanism. A series of launch and separation tests followed to simulate liftoff of the SLS.

The Ground Systems Development and Operations Program at Kennedy is overseeing the tests to verify that the umbilical meets all of the Space Launch System Program's specifications for the entire umbilical system as NASA prepares for the first integrated launch of SLS and Orion, Exploration Mission-1.

To read the complete story, visit http://go.nasa.gov/1HNVjPT.



Preparations are underway April 2 to test the aft skirt electrical umbilical (ASEU) at the Launch Equipment Test Facility at Kennedy Space Center. Power lines have been connected from the ASEU to the LETF simulated flight vehicle interface. Photo credit: NASA/Kim Shiflett



A ground support technician works on hardware in between the front of the crawler-transporter 2 (CT-2) treads in High Bay 2 inside the Vehicle Assembly Building at Kennedy Space Center on March 31, 2015. GSDO is overseeing the upgrades to the 50-year-old CT-2. New gear assemblies and jacking, equalizing and leveling (JEL) hydraulic cylinders are being installed, and other components have been upgraded to ensure the crawler's ability to handle the load of NASA's Space Launch System and Orion spacecraft on the mobile launcher as it travels to the launch pad. Photo credit: NASA/ Dimitri Gerondidakis

GSDO Team Recognized at Orion Flight Test Overview

Mark Geyer, Orion Program manager at NASA's Johnson Space Center in Houston, praised the NASA and contractor teams at Kennedy Space Center for a job well done during an Orion flight test overview April 6. During the event, NASA and contractor teams, individuals and managers received Commendation Awards from the Orion program managers for their contributions to the Orion Exploration Flight Test-1 launch and recovery.



GSDO Program Manager Mike Bolger, right, accepts a medallion flown aboard Orion on Exploration Flight Test-1 from Orion Program Manager Mark Geyer during the Orion All Hands meeting April 6. Photo credit: NASA/Frankie Martin

GSDO individual award recipients were Tammy Annis, Louie Garcia, James Hamblin, Sharolee Huet and Terri Ryan. Leadership award recipients were Jeremy Graeber and Roland Schlierf. Five teams were recognized with team awards. Accepting on behalf of the EFT-1 Crew Module Ammonia Servicing System Team was Victor Blum, for the NASA Orion Production Operations Team was Glenn Chin, for the GSDO Orion Recovery Team was Michael Generale, for the GSDO Orion Transportation Team was Ken Nowak, and for the NASA/Lockheed Martin Inline and Embedded Support Team was Nicole Otermat.



Jennifer Kunz, deputy manager for the GSDO Program at Kennedy Space Center, welcomes employees to the Orion All Hands meeting on April 6 in the Training Auditorium. Photo credit: NASA/Frankie Martin



Kennedy Space Center Director Bob Cabana, center, holds an American flag flown aboard Orion on Exploration Flight Test-1. He accepted the flag for Kennedy during the Orion All Hands meeting April 6. Photo credit: NASA/Frankie Martin

Employee Spotlight: Juan Gordon

Juan Gordon is a program analyst in the Ground Systems Development and Operations (GSDO) Program at Kennedy Space Center.

He is the lead analyst establishing program planning and control processes for budget development and execution. He performs programwide financial analyses, integrates the entire GSDO budget, and develops responses to external stakeholder requests, including the Office of Management and Budget, Congress, NASA Headquarters and others.

"The coolest part of my job is knowing that it's larger than myself. It's larger than the day-to-day work, presentations, actions or tasks," Gordon said. "It's about expanding humans' capability for deep-space exploration. It's about the broader impact that we have on society and furthering our exploration capabilities."

One of his most memorable achievements was receiving the Silver Snoopy Award in 2012.



Juan Gordon

"It was one of my proudest moments and also my most humbling moment," Gordon said.

He hopes NASA will continue on its path to explore deep space. That we continue to challenge ourselves, both as an agency and as a country.

Gordon has been married to his wife, Monica, for one year. He has two pets: a cat named Matthew, and a dog named Jaekov.

His first car was a 1993 Toyota Tercel. His hobbies include reading, playing hockey, going to the gym and staying physically active.





Mike Bolger, manager of Ground Systems Development and Operations at Kennedy Space Center, updated media on the Program's progress as well as the ongoing work on the new mobile launcher to support the Space Launch System rocket. The briefing April 13 was part of a space center tour for members of the news and social media. They were shown progress Kennedy is making in becoming a 21st century, multi-user spaceport and achieving goals set by President Barack Obama during his remarks at the center's Neil Armstrong Operations and Checkout Building on April 15, 2010.

Photo credit: NASA/Kim Shiflett