

michoud messenger

National Aeronautics and
Space Administration



1st SLS Flight Component Weld Completed

Flight hardware for the core stage of the world's most powerful rocket, NASA's Space Launch System, finishes final welding and is moved off the 170-foot-tall Vertical Assembly Center at the agency's Michoud Assembly Facility in New Orleans. The hardware is for the

craft in 2018. The next step for the completed engine section is Cell G in Michoud's Building 114 where the engine section will be cleaned and coated with primer. Once those operations are complete, structural supports will be installed that evenly distribute the engine thrust loads



With welding complete, the first flight-ready engine section of the SLS rocket is moved off the Vertical Assembly Center. This human-rated space flight hardware is scheduled to launch in 2018, containing the RS-25 engines that will power Exploration Mission 1 into space.

engine section, and is the first major SLS flight component to finish full welding on the Vertical Assembly Center. The engine section is located at the bottom of the rocket's core stage and will house the four RS-25 engines for the first flight of SLS with NASA's Orion space-

generated at launch.

The SLS core stage will stand at more than 200 feet tall and store cryogenic liquid hydrogen and liquid oxygen that will feed the launch vehicle's RS-25 engines. A qualification version of the engine section,

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Letter from Leadership

Team,



*Bobby Watkins,
Michoud Director*

I hope everyone had a fun and safe Memorial Day weekend and enjoyed time with family and friends.

We are four months into the SACOM contract and it's evident that this new contract is making it possible for us to do exactly what NASA requires of us to do and that is to reduce maintenance and operation

costs. We are a leaner and more efficient facility as a result and in doing so, we are solidifying Michoud's future. By controlling costs and growing our tenant population we are ensuring that Michoud will be here for many generations to come.

The last couple of months have been very busy at Michoud. On April 12, we bid farewell to ET-94, NASA's last flight-certified external tank. We remembered the external tanks as the backbone of the 30-year Space Shuttle program.

The ceremony also honored the dedicated men and women who supported the external tank program. We heard stories about their outstanding technical abilities, remarkable work ethic, and team spirit. And how they showed incredible resilience and commitment through two shuttle accident investigations, numerous tank improvements, a hurricane that threatened the life of the program and finally, the end of the Shuttle program.

I'm happy to report ET-94 arrived safely in California on May 18th. Here's a picture of how it will look in its final display at the California Science Center. (see photo)

Center Director Todd May, myself, Scott Broemsen, and several other NASA employees were in Baton Rouge on May 5th for NASA day. This is one of the ways we cultivate relationships with state leg-

islators and share our long term vision for Michoud with them. We had great visits with Louisiana's Governor, Secretary of LA Economic Development, Speaker of the House, Senate President, and many additional lawmakers throughout the day. The contributions of many people from MSFC and Michoud made this day a tremendous success. I would like to thank everyone involved for all their efforts. It made a difference in what we were able to accomplish in Baton Rouge.

Finally, to commemorate Earth Day, a Willow Oak tree was planted by Gate 7. Our talented photographer Steve Seipel put together a video clip for the occasion. If you haven't seen it already, I encourage you to check it out on our Facebook page: <https://www.facebook.com/nasamaf>



Above is a scale model of the proposed Space Shuttle exhibit at the California Science Center in the Samuel Oschin Air and Space Center.

*- Bobby Watkins,
Director of Michoud
Assembly Facility*

Editor's Note: If you have a question or topic, you'd like to see Bobby address in his column, please email him at Bobby.j.watkins@nasa.gov.

NASA Goes to Baton Rouge

NASA leadership from Marshall Space Flight Center in Huntsville, Alabama, and Michoud Assembly Facility in New Orleans, Louisiana, visited the Louisiana state capitol in Baton Rouge on May 5, 2016. Their mission was to highlight the accomplishments by the Space Launch System and Orion spacecraft at Michoud.

The NASA delegation included Astronaut Steve Bowen, Seth Statler, associate administrator of NASA's Office of Legislative and Intergovernmental Affairs; Todd May, Marshall Center director; and Bobby Watkins, Michoud director. The delegation met with Gov. John Bel Edwards and spoke to both the

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ET-94 Embarks on New Mission

The last remaining complete external tank, ET-94 has been assigned a new mission - to inspire future generations of scientists and engineers as part of a complete shuttle stack on



ET-94, after departing Michoud's port on April 12th, heads east on the Intra-Coastal waterway through the gates of the Inner Harbor Navigation Canal Surge Barrier.

display at the California Science Center in the Samuel Oschin Air and Space Center. In what promises to be an impressive display, ET-94 will be stacked with two solid rocket boosters and the orbiter Endeavour in the vertical launch configuration.

On Sunday, April 10, the transporter carrying ET-94 rolled down Saturn Blvd. and paused at the end of Michoud's east dock, as the barge's deck was prepared for accepting the tank. ET-94 was then loaded onto the barge and welded down to the deck to ensure a safe passage.

Michoud held a Send-Off Ceremony for ET-94 on Tuesday, April 12 at Hero's Way inside Building 103. At the ceremony, NASA officials signed the paperwork that transferred ownership of the tank to the California Science Center.

After the transfer ceremony was concluded, the ET-94 departed Michoud's port and began the journey south toward the Panama Canal.

Having transited west through the Panama Canal, ET-94 turned north toward the California coast. Arriving at Marina Del Rey, ET-94 moved through the streets of Los Angeles to the California Science Center. ET-94 will eventually be displayed in the CSC's Samuel Oschin Air and Space Center, expected to open in 2019.

ACS Moves into Building 318

Advanced Cutting Solutions, a commercial tenant operating at Michoud recently expanded their footprint into Building 318. ACS specializes in kit-cutting composite materials like fiberglass, Kevlar, dry carbon and pre-preg materials. The company needed the extra space to install advanced CNC cutting tables designed to accommodate large roll materials.

Advanced Cutting Solutions creates products used in multiple industries like FRP, or Fiberglass Reinforced Plastic, pressure ves-



Advanced Cutting Solutions employees prepare a cutting table and load the optimal cutting pattern into the machine to trim the material according to customer specifications. .

sels, wind energy, marine applications, and aerospace composites. They minimize material waste with an advanced pattern nesting software and CNC cutting machines. They build custom material kits according to client specifications for use in manufacturing. They also cut core materials like balsa, PVC, urethane, honeycomb and other materials for inclusion in the kits.

More information about Advanced Cutting Solutions can be found at www.acscuts.com

Annual Crawfish Boil



NASA Contractors and Michoud tenants all sat down together to a Louisiana feast of crawfish, corn and boiled potatoes at the 2nd Annual Tenant Crawfish boil held April 7th. Over 5,000 pounds of crawfish were boiled and distributed during the event, which is a great opportunity to build community inside of Michoud's gates with all of the diverse work happening at the facility.

1st SLS Weld

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which also has completed welding on the Vertical Assembly Center at Michoud, will be shipped later this year to NASA's Marshall Space Flight Center in Huntsville, Alabama, to undergo structural loads testing on a 50-foot test structure currently under construction. All welding for the core stage of the SLS Block I configuration -- including confidence, qualification and flight hardware -- will be completed this summer. Traveling to deep space requires a large vehicle that can carry huge payloads, and SLS will have the payload capacity needed to carry crew and cargo for those exploration missions, including Mars.

Baton Rouge

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Louisiana House of Representatives and the Louisiana Senate about Louisiana's contributions that power the Journey to Mars.

NASA exhibits displayed in the Capitol Rotunda gave public audiences a look at work underway



Marshall Space Flight Center Director Todd May addresses the Louisiana House of Representatives on May 5 to highlight the work being performed at Michoud Assembly Facility.

on the Space Launch System, Orion spacecraft and other NASA projects, including some of the NASA-related educational initiatives at Louisiana universities and schools. NASA Rover Challenge teams from Louisiana State University and Scotlandville Magnet High School were on hand to display human-powered rovers they designed and built for competition, and Woodlawn High School displayed NASA-sponsored robotics work.

Astronaut Steve Bowen ventured away from the Capitol building to visit both Scotlandville Magnet High School and the Boys and Girls Club of Baton Rouge to speak to students about his experience aboard the International Space Station.

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