



## Charlie Bolden's final visit to NASA's Michoud Assembly Facility

NASA Administrator Charles Bolden visited NASA's Michoud Assembly Facility in New Orleans on Jan. 6 to view progress being made on the new Space Launch System (SLS) vehicle. The most powerful rocket ever built, the SLS will carry astronauts deeper into space than ever before, including missions to Mars. The trip marked Bolden's last visit to Michoud Assembly Facility before his eight-year tenure as NASA administrator ended Jan. 20.



*NASA Administrator Charles Bolden made his final visit to the Michoud Assembly Facility in New Orleans on January 6. He spoke about the progress we are making on the Space Launch System and the Orion, and how proud we should all be.*

During his visit, Bolden was able to see firsthand the progress that has been made on the SLS, Orion spacecraft and even toured the Pegasus.

Michoud employees should all be very proud of the work being done on the SLS and the Orion spacecraft, Bolden said. It is becoming a reality thanks to the workforce and tools at the facility.

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# Letter from Leadership

Team,



*Bobby Watkins,  
Michoud Director*

As January moves in quietly, our spirits are filled with hope for a brand new year. It's a time to look back at all

we were able to accomplish and to chart a future with great expectation.

When I reflect upon my time as Director of this remarkable facility, I am awestruck by the great program milestones

we achieved, the faces of new tenants who moved into our "city within a city" and the commitment of our people who make Michoud the jewel that it is.

Together, we have been able to realize many goals. You have brought us closer to the first flight of SLS and exploration of deep space than this nation has ever seen. Let me encourage you to continue this quest. What you do every day at Michoud is changing our world and the lives of generations to come. Cling to the vision of being pioneers. It

is a dream that can be realized with your help.

Continue to hold yourselves to the high standards that have characterized SLS, Orion and the other programs you support. Each piece of hardware bears your signature.

You have made a commitment to America, and it will be with great pride that I watch it unfold.

*- Bobby Watkins,  
Director of Michoud  
Assembly Facility*

## Ochsner Clinic coming to Michoud

On Nov. 1, 2016, NASA's Michoud Assembly Facility and Ochsner Clinic Foundation reached an agreement that will provide for the opening of Ochsner Health Center-Michoud, a privately run, primary care clinic located onsite. The approximately 2,200-square-foot layout will be both privately funded and run by the Ochsner Clinic Foundation, using unoccupied space within Building 101.



Ochsner Health Center-Michoud will offer fulltime primary care services as well as specialty and rehabilitation services on a rotational basis to both the campus population and the surrounding community. The specialty and rehabilitation services tentatively planned include cardiology, behavioral health, dermatology and smoking cessation, as well as other health-based initiatives. The initial five-year agreement calls for the clinic to begin full-scale operations during early summer 2017, after a nearly six-month build-out effort. The construction will be a joint effort, with Holly and Smith Architects performing the architectural and engineering function and Syncom Space Services (S3) acting as the prime construction contractor.

Please join us in honoring those heroes we have lost.

**Hero's Way Event Area**

**Thurs, January 26, 2017 | 1:00 PM – 2:00 PM**



Day of  
*Remembrance*

# NASA Completes Plug Welding on Fuel Tank



*Robotic Plug Welding on the liquid hydrogen tank for NASA's Space Launch System at the Michoud Assembly Facility in New Orleans.*

A work team prepares a robot – the yellow machine attached to the liquid hydrogen tank for the Space Launch System rocket – for friction

plug welding here at NASA's Michoud Assembly Facility. Friction plug welding is a technique developed by engineers at NASA's Marshall Space Flight Center in Huntsville, Alabama. It uses a robot to fill holes left after the tank goes through assembly in a larger robotic welder. The liquid hydrogen tank is more than 130 feet long and is the largest part of the new SLS core stage – the backbone of the rocket. The liquid hydrogen tank, along with a liquid oxygen tank, will provide 733,000 gallons of fuel for the first integrated mission of SLS with NASA's Orion spacecraft in 2018. SLS will be the world's most powerful rocket and will take astronauts in Orion to deep space, including on the Journey to Mars.

## Toys for Tots 2016 Success



*Thank you to all the employees here at the Michoud Assembly Facility who helped make the 2016 toy drive a success.*

Thanks to all the employees at NASA's Michoud Assembly Facility who donated toys during the 2016 Toys for Tots campaign. The drive was a tremendous success. A group of U.S. Marine's visited the facility Dec. 16 to personally thank everyone and pick up the gifts. The Marines packed and delivered the donated toys to children in the New Orleans area. Way to go Michoud! Everyone should be proud in helping area children have a Merry Christmas.

## Bolden visits Michoud

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*During his tour at MAF, Charlie Bolden, along with Patrick Whipps, NASA's SLS Manufacturing manager, and Boeing manager, Jackie Nesselroad, take a look at the plug welding being done on the Liquid Hydrogen tank.*

Bolden encouraged everyone to send a strong message to young people about the importance of the work being done at Michoud and the importance of not only starting, but also staying with STEM studies in schools and universities. Bolden said it is his belief that America's future astronauts are now in grade school and high school.

# Construction Complete: Stand Prepares to Test SLS's Largest Fuel Tank



Robert Bobo, left, and Mike Nichols talk beneath the 221-foot-tall Test Stand 4693, the largest of two new Space Launch System test stands at NASA's Marshall Space Flight Center in Huntsville, Alabama. Bobo manages SLS structural strength testing, and Nichols is lead test engineer for the SLS liquid hydrogen tank.

Major construction is complete on NASA's largest new Space Launch System structural test stand, and engineers are now installing equipment needed to test the rocket's

biggest fuel tank. The stand is critical for ensuring SLS's liquid hydrogen tank can withstand the extreme forces of launch and ascent on its first flight, and later on the second flight, which will carry up to four astronauts in the Orion spacecraft on a journey around the moon, into the deep-space proving ground for the technology needed for the journey to Mars.

"There is no other facility that can handle something as big as the SLS hydrogen tank," said Sam Stephens, an SLS engineer working on the tests at NASA's Marshall Space Flight Center in Huntsville, Alabama. "There are few places in the world like NASA's Michoud Assembly Facility that could build these things, and even fewer that can test them."

The liquid hydrogen tank test article will travel by barge from Michoud to Marshall. When testing begins the stand will simulate the powerful dynamics of launch and flight by pushing, pulling and bending

the SLS liquid hydrogen qualification test article, recently constructed by Boeing at NASA's Michoud Assembly Facility in New Orleans. The 149-foot-long (45.4 meters) test article consists of a liquid hydrogen tank and equipment attached at each end to simulate the other parts of the 212-foot-long (64.6 meters) core stage, the backbone of the rocket. Together, the SLS liquid hydrogen and liquid oxygen tanks will feed 733,000 gallons (nearly 3 million liters) of super-cooled propellant to four RS-25 engines, producing a total of 2 million pounds of thrust at the base of the core stage.

Careful attention to construction of the stand and the comprehensive testing is vital because every weld, every bolt, every connection, every measurement is important. "Everyone working on this knows that even the smallest things matter in such a big project," Stephens said.

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**messenger**

January 2017  
Volume 8, Issue 1

The Michoud Messenger is the official publication for the NASA Michoud Assembly Facility. Each issue is published bi-monthly for civil servants, contractors, and site tenants. For suggestions or submissions, please contact Susan Wilson at [mary.s.wilson@nasa.gov](mailto:mary.s.wilson@nasa.gov).

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