National Aeronautics and Space Administration

michoud messenger

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Michoud Team Recognized as Orion EFT-1 Leaves for Kennedy Space Center

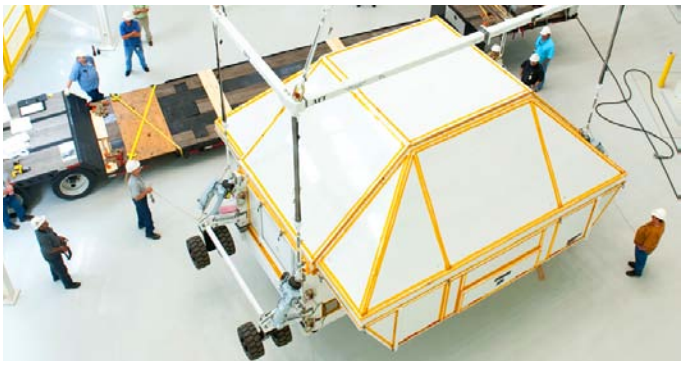
On June 14, NASA's Orion Program took the opportunity to recognize the outstanding work done by the Michoud Orion team in meeting this major milestone for NASA's Human Exploration Program. The program hosted an employee recognition event for the Michoud team members. Orion Program Manager Mark Geyer was on hand to give the awards and offer his personal thanks for the dedication and commitment of the team working to build the next generation of American spacecraft.

In addition to the awards, Geyer gave an overview of Orion progress and the work under way to prepare for NASA's Exploration Flight Test-1 (EFT-1), scheduled for 2014. Space Launch System (SLS) Program Manager Todd May also gave an update on the SLS, NASA's next-generation, heavy-lift rocket that will launch Orion to deep-space destinations. Cleon Lacefield, Orion Program Manager for Lockheed Martin, also was on hand to thank employees for their accomplishments.

The Michoud team completed Orion's final weld on June 21. The capsule then was inspected and prepared for delivery to Kennedy Space Center's Operations and Checkout Building, where it will join the Orion Ground Test Article previously produced at Michoud. Once there, the systems needed for the test flight will be installed.

The EFT-1 flight will take Orion to an altitude of more than 3,600 miles, return home at a speed of over 20,000 miles per hour, and endure temperatures up to 4,000 degrees Fahrenheit upon re-entry.

Image above: The team at the Michoud Assembly Facility poses in front of the completed Orion structure for the EFT-1 flight scheduled to launch in 2014. The team was commended by the Orion Program for successfully reaching the milestone in an awards ceremony held on June 14. Image below: The cargo container encapsulating the EFT-1 vehicle structure is being loaded onto the truck bed in preparation for its delivery to Kennedy Space Center where it will be outfitted for flight in the historic Operations and Checkout Building.



Letters from Leadership

This past month has been an incredibly busy one for Michoud. We have had a large number of high-profile events highlighted in this issue, and I'd like to take this opportunity to thank everyone for their service and support that contributed to the overwhelming success of these events. Every employee at Michoud is an ambassador for the facility and shares in our collective success.

Of particular note, I'd like to thank everyone working on the Orion Program who labored to produce the Orion Ground Test Article (GTA) and the Exploration Flight Test One article (EFT-1). Producing spaceflight hardware is what Michoud does best and after more than three years of design and development work, the GTA and EFT-1 symbolize our facility's dedication to NASA's human space exploration goals. We anxiously await the results from the tests performed using these units and anticipate the EFT-1 flight in 2014 as we watch our handiwork travel past the moon and return to Earth safely.

We have also taken another large step forward on the Space Launch System program. The core stage's system requirements, design concepts and production approach have received validation by NASA technical reviewers as well as an independent review board. This means the program can now transfer the requirements into build blueprints. The core stage is the heart of the heavy-lift launch vehicle and will be built here at Michoud. Once complete, the core stage will stand more than 200 feet tall with a diameter of 27.5 feet. Michoud also will integrate four RS-25 engines into the core stage before delivery to Kennedy Space Center.

Finally, I've noticed many employees in the manufacturing common areas wearing safety glasses. According to the National Institute for Occupational Safety and Health, approximately 2,000 eye injuries occur each week in the workplace. I'd like to applaud these employees' safety-conscious behavior, which demonstrates a commitment to creating an accident-free/injury-free workplace at Michoud. Please continue to stay safe and look out for each other.

– Robert Champion, Michoud Deputy Director

K.I.T.A. Visits Michoud

A delegation from the Korean International Trade Association (K.I.T.A.), led by Dr. Deok-Su Han, former ambassador to the United States and former prime minister of the Republic of Korea, visited Michoud on June 21. The visit, organized by the Louisiana Economic Development, allowed the participating Korean companies to become acquainted with Michoud's capabilities.

F.A.S.T. Open House

Lockheed Martin hosted an Open House for industry and stakeholders in the Future-responsive Access to Space Technologies, or FAST program. The program, managed by the Air Force Research Laboratory, seeks to mature space launch technologies to be used on a variety of future vehicles. The group is standing in front of the Composite Airframe test article which soon will undergo testing at Michoud.

Hurricane Hotlines

When a storm approaches and an evacuation is called or once the storm has passed, you can get the latest information from these sources:

- MAF information line – (800) 611-3116 or (504) 257-1MAF
- MAF Status website – http://mafstatus.com
- Local news media

Tip: Program the numbers into your cell phone and bookmark the website in your personal computers now!

Bring Your Child to Work Day 2012

This year's Bring Your Child to Work Day, held June 7, was a great success. Sponsored by NASA and organized by Jacobs Technology, Michoud Assembly Facility hosted more than 600 children and parents from across the facility's tenants. The participants enjoyed touring the facility, communicating with Senator David Vitter and meeting NASA Astronaut Tony Antonelli.

Malcolm Wood, NASA Michoud deputy chief operating officer, welcomed visitors and kicked off the day's celebrations. He thanked Michoud's tenants for their participation and encouraged students to pursue education in science, technology, engineering and math. Louisiana Senator David Vitter called in for a video chat and spoke to the children about the importance of education and their role in building tomorrow's workforce. The children were given goodie-bags filled with shirts, posters and memorabilia of the day.

Guided tours of the facility demonstrated Michoud's many capabilities and services. The demonstrations from Michoud's Test Labs were a big hit. Team members created foam samples that captivated the children and parents alike. They also used liquid nitrogen to demonstrate the effects of temperature changes on everyday objects.

Middle school students from Saint Angela Merici, their "S.A.M.'s Robotics Team" and Northshore High School's robotic team, "Team Combustion," were on hand to demonstrate their robots and encourage the children to participate in FIRST Robotics, a program designed to engage students in solving engineering challenges using science and math. Participants also were able to take photos in a spacesuit, interactively communicate between a mock mission control and the International Space Station, and fly through a 3-D computer model of the solar system.

Michoud employee Lance Spiers helps children understand polymers by mixing the 2 components used to make the foam insulation applied to cryogenic pressure vessels like the Space Shuttle's External Tank.

NASA Astronaut Tony Antonelli signs an autograph for children participating in Bring Your Child to Work Day.

Participants also were granted close-up viewings of Michoud's spaceflight products, the Orion Exploration Flight Test Article One and External Tank 94, the last remaining external tank in the Space Shuttle program.

Outside the facility, the children examined the Coast Guard's helicopter and sat in the cockpit. The Coast Guard also brought out their boats for the kids to explore and turn on the sirens. The New Orleans Fire Department showcased their fire engine, and the Michoud Protective Services car was on display for the kids to sound off alarms. One of the favored activities for the children proved to be stomp rockets. The kids were able to build and decorate their paper rocket, then launch it more than 30 feet in the air.

The day was capped off by a surprise visit from NASA Astronaut Tony Antonelli, who flew on two missions to space. Antonelli presented a video with mission highlights and then held a question-and-answer session with the kids, along with a photo opportunity. Many children reported they wanted to become an astronaut just like Antonelli. Barry Pearson, an employee of Jacobs Technology, said the astronaut was "a big hit with my daughter and she talked about it the rest of the day." The day was a rewarding experience for all the participants.

Goldman Visits MAF

On June 14, Marshall Space Flight Center Acting Director Gene Goldman addresses Michoud employees. Goldman spoke about Michoud's bright future building the Space Launch System and opened up the floor for questions from employees.

Civil Air Patrol Visit

Cadets from the Civil Air Patrol's Pontchartrain Composite Squadron toured Michoud on June 26. The Civil Air Patrol , a volunteer organization, is an auxiliary of the Air Force and performs services such as disaster relief, search and rescue, and aerospace education for youth.

Xavier's LEAP Visits Michoud

Students participating in the Louisiana Engineering Advancement Program (LEAP) at Xavier University took a field trip to visit Michoud on June 1. LEAP is a competitive honors program designed to encourage high school students to consider a career in engineering. Over the summer, students take advanced classes in math and science as well as an Introduction to Civil Engineering class.

A to Z Campers

Jacobs Technology Intern Shauntel Vallelungo recently met with summer campers at A to Z Pre-School in Lacombe to talk about Michoud's role in building rockets for NASA and assisted the students in assembling paper "stomp" rockets.

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