



michoud messenger

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Metrology Labs Revitalized at Michoud

The newly consolidated and updated metrology lab in building 318 opened Feb. 23. The project represents a full year's worth of effort from individuals spanning multiple organizations and a construction project investment by NASA of roughly \$1.4 million. The movement to create a consolidated and advanced metrology lab was started by NASA as a part of their overarching strategy to create a world class manufacturing environment for both government programs and commercial businesses. Along with other similar shared services being offered, the metrology lab's services help companies at Michoud to enhance their capabilities while lowering their overall cost of operations.

Steve Doering, NASA's acting Chief Operating Officer (COO) for MAF, said he was "absolutely impressed with the whole team" and described this as one of the first and most difficult tasks he had asked to be accomplished. The task included a tight budget, a tighter schedule and came with the mandate to maintain a consistent support of operations for the Ex-



The NASA Michoud Assembly Facility Metrology Labs were recently relocated to Bldg 318. The ribbon was cut by Steve Doering, Chief Operating Officer for MAF. From left to right: Tim Board, Dave Dorn, Vic Silecky, Malcolm Wood, Joe Noble, Mike Dawson, Steve Doering, and Cheryl Redmon.

ternal Tank program. The success of the team in turning Doering's vision into reality was a feat worthy of the celebration. "It was certainly a great day for Michoud," said Malcolm Wood, MAF's Deputy COO.

The labs are independently secured in the southern portion of building 318 and include equipment for calibrating and testing pressure, temperature and humidity, mass and torque, dimensional accuracy, electronics, and gas flow.

The new metrology lab facility incorporated new features such as tighter and more stable tempera-

ture and humidity control through specially designed HVAC systems, special non-conductive flooring, upgrade and enhancement of existing equipment and procurement of new capital equipment. These changes were focused on improving the efficiency of operations and offering additional capabilities to meet future tenant and customer requirements. The metrology lab is fully staffed and ready to support additional testing.

— Raymond Vogel,
MAF Director of Business Development

Orion GTA Departs MAF

Workers at Michoud Assembly Facility (MAF) wrapped and loaded the Orion ground test article (GTA) inside the vertical assembly building Feb. 8. Work at MAF has finished on the GTA and Lockheed Martin plans to do performance testing at its facility in Denver, Colo. The performance testing will ensure the vehicle can meet the challenges of ascent, on-orbit operations and safe landing. These tests will help validate the crew module design. Lessons learned will then be used to incorporate changes to the tools and manufacturing processes that will finally result in a human-rated production vehicle.



Discovery's Last Mission



Rising on twin columns of fire and creating rolling clouds of smoke and steam, space shuttle Discovery lifts off Launch Pad 39A at NASA's Kennedy Space Center in Florida on a picturesque, warm, late February afternoon. Launch of the STS-133 mission was at 4:53 p.m. EST on Feb. 24. Discovery and its six-member crew are on a mission to deliver the Permanent Multipurpose Module, packed with supplies and critical spare parts, as well as Robonaut 2, the dexterous humanoid astronaut helper, to the International Space Station. Discovery is making its 39th mission and is scheduled to be retired following STS-133. This is the 133rd Space Shuttle Program mission and the 35th shuttle voyage to the space station.

RTF Team Receives Award from UNO

The Return to Flight (RTF) Team was part of an extensive investigation and redesign effort following the tragic loss of space shuttle Columbia and her seven-member crew in 2003. The team's success led to the "return to flight" of the External Tank and the Space Shuttle two years later.

The John Noll Crisp Award is a prestigious award presented by the University of New Orleans (UNO) College of Engineering (COE). The award recipient is selected by the COE's Advisory Council – a group of local industry executives who either are engineers or have an interest in the engineering profession. Their mission is to foster direct professional communication between industry, engineering firms, government agencies and the COE, and in doing so, to strengthen the COE. The award is not given every year; it is only awarded if there has been a contribution to engineering that warrants such recognition.



Left to Right: Mark Bryant, Vice President, External Tank Project, Lockheed Martin; Dr. Norma Jean Mattei, Interim Dean, UNO College of Engineering; Ryan Dardar, Rose Lalanne, Norman Elfer, Crystal Catania, Hale Davidson, Lynn Servay, Jeffery Pilet, Michelle Guillot, Glen Wadge, Stephanie Zulauf, Harry Nelson III, Kevin Montelepre, Lockheed Martin External Tank "Return to Flight" Project; Bruce Brailsford, Executive Director, National Center for Advanced Manufacturing (UNO-NCAM).

AIAA Tours MAF



National Center for Advanced Manufacturing (NCAM) Executive Director Bruce Brailsford briefs a group from the American Institute of Aeronautics and Astronautics (AIAA) Feb. 17 in front of robotic weld tool #1. The AIAA group was in town as part of space flight mechanics conference in downtown New Orleans. The group toured the model room, NCAM and the Orion and External Tank final assembly.

Moon Trees Planted



Rosemary Roosa, daughter of Apollo 14 astronaut Stuart Roosa, addressed a crowd of people at the Stuart Roosa Moon Tree Planting ceremony at Infinity's construction site in south Mississippi Feb. 3. The sycamore seeds that students planted during the ceremony flew on Apollo 14's mission in 1971. Infinity will open next year near the Stennis Space Center visitor center and will feature a state-of-the-art science hub geared toward inspiring students of all ages.

NASA Federal Law Enforcement Training



Members of NASA Federal Law Enforcement Training (NFLET) from multiple NASA Centers and Facilities held a four-week course that covered a myriad of topics, including use of force, defensive tactics, active shooter, vehicle stops and legal issues. Standing left to right: Fernando Gonzalez (MAF), Felita Robertson (MAF), Richard Smith (MAF), Robert Reichert (ARC), John Stubbe (NFLET Instructor), Keith Fields (NFLET Instructor), Samuel Green (JSC), James Ingrasin (JSC), Amber Drake (MAF), Ronald Adams (MAF), Ana Contreras (KSC).

VAB Team Recognized



MAF's Vertical Assembly Building (VAB) construction team received the Golden Eagle Award recently from the Mississippi Chapter of the Associated Builders and Contractors (ABC). The Mississippi Chapter of ABC is the largest in the country with nearly 1,500 member companies. The Mississippi State University's School of Architecture judged hundreds of projects. From left to right: Greg Lusignan (Broadmoor), James Souza (Steel Services), James Kinsberger (Broadmoor), Bernie Zagorski (Sierra Lobo), Eric Shoemaker (Jacobs), Michael Weal (Broadmoor), Steven Tillery (Steel Services).

Engineering Seminar Held at UNO



The First Joint Industry Engineering Seminar was held at the University of New Orleans (UNO) Engineering Auditorium Jan. 22. Joe Wiley from Michoud's Mission Assurance Office was one of the keynote speakers.

It was sponsored by the UNO International Alumni Association, UNO College of Engineering, American Society of Mechanical Engineers, American Society for Quality, American Petroleum Institute, Instrument Society of America, NACE, the Corrosion Society, Society of Black Engineers, Society of Women Engineers and the Society of Petroleum Engineers.

The event consisted of speakers on informational topics such as skills for successful project management, continual improvement methods and ethics. There also were short presentations by the different societies on their work, benefits of joining and opportunities for students. Forty people attended the free seminar.

Madisonville Junior High Tours MAF



116 students from teacher Renee Davis' Madisonville Jr. High 8th grade science classes toured the Michoud Assembly Facility Feb. 10-11. The students watched a movie on the Space Shuttle Program, toured the main factory and then finished with lunch in the cafeteria. "My students had a great time," said Davis, who is a member of the class of 2011 Michoud Education Fellowship program. The program is designed to show teachers how to incorporate science, technology, engineering and math into their teaching curriculum and is administered by the Louisiana State University College of Education.

Plant Exchange

Exploration Park
Thursday, March 24th,
11 a.m. to 12:30 p.m.



National Aeronautics and Space Administration

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