

NASA Ships Shuttle Fuel Tank To New Orleans For Modification

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Less than a month after being hit by Hurricane Katrina, NASA's Michoud Assembly Facility in New Orleans is gearing up to restart processing space shuttle fuel tanks. The work will address foam loss during Space Shuttle Discovery's launch in July.

External tank #119, which is expected to be used in the next shuttle mission, departed NASA's Kennedy Space Center in Florida Tuesday. The huge, orange external tank is being transported by NASA's solid rocket booster retrieval ship Freedom Star.

It will travel down Florida's Banana River en route to the Gulf of Mexico-Mississippi River outlet on its 900-mile journey. It's expected to arrive at Michoud in four or five days.

"The facility is ready to receive the tank and the Michoud team is eager to get their hands on it," said External Tank Project Manager Sandy Coleman.

Michoud workers will begin limited testing on the tank as soon as it arrives. Hurricane recovery efforts at the facility have progressed better than anticipated. Power has been restored to the entire Michoud complex, and temporary repairs have been made to damaged buildings. External tank #120 will be shipped from Kennedy to the facility in the next few weeks.

The external tank, 27.6 feet wide and 154 feet tall, is the largest element

of the shuttle system, which also includes the orbiter, main engines and solid rocket boosters. Despite the tank's size, its aluminum skin is only one-eighth-inch thick in most areas, but withstands more than 6.5 million pounds of thrust during liftoff and ascent. The tank is the only shuttle component that cannot be reused.

During a launch, the external tank delivers 535,000 gallons of liquid hydrogen and oxygen propellants to the three main engines, which power the shuttle to orbit. The tank is covered by polyurethane-like foam, with an average thickness of about one inch. The foam insulates the propellants, keeps ice from forming on the tank's exterior and protects its aluminum skin from aerodynamic heat during flight.

The Space Shuttle Propulsion Office at NASA's Marshall Space Flight Center manages the tank project. Lockheed Martin Space Systems Co., New Orleans, is the primary contractor.

Photos of the external tank's departure are available online. Additional photos will be added to the page as they are available at:

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