Riggins Fabricates Crew Module for NASA
MLAS Successfully Tested

Customer
NASA

Services
Fabrication, Specialty Welding

NASA has been working with Riggins Company for over twenty years. Most of the work is predominantly fabrication and welding, particularly large sized projects. Their most recent project was the fabrication of the crew module for the Max Launch Abort System (MLAS), which

was launched at 6:26 a.m., EDT, on July 8, 2009. The project was managed by the NASA Engineering and Safety Center.

NASA designed the crew module, which Riggins fabricated. It was developed according to the design philosophy of Max Faget, who focused on innovative engineering design solutions, which were rapidly built and tested during the '60's. In fact, the project was named the Max Launch Abort System in his honor. Faget holds the patent to the tower launch abort system design used on Apollo and planned for Constellation.

The crew module houses the crew during the mission. The Launch Abort System is designed to save the astronauts' lives during a catastrophic event. The crew would be able to escape inside this module. It was one of four parts that required completion before the test launch.

Verified Expertise

"I have the luxury of dealing with extremely capable contractors, and Riggins is one of them," notes Tom Arboneaux, task manager at NASA. "They are included on a list of qualified, preselected contractors who we have had experience with. There are fewer than twenty companies on this list, and they all don't do the same kind of work. For each of these contractors, we have made site visits to see their capabilities and determine their level of expertise and experience.

"The crew module project was given to Riggins because we know they are a competent contractor that could meet our aggressive schedule. We have a blanket purchase agreement that covers a list of prequalified contractors, which includes Riggins.

"Riggins' location is very convenient to the Langley Research Center. It was important for this project that they were nearby, so that we could have access to their facility. During the fabrication of the crew module, I visited Riggins' facility almost daily. At one point, they even offered an office to me!"
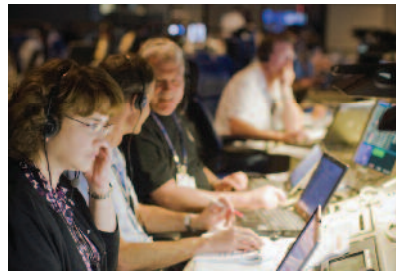
Anyalytical and Physical Testing Completed
Responsive to Demanding Schedules

Excellent Quality

"There was analytical testing throughout the project and some physical testing," continues Arboneaux. "The welds were all inspected. During the fabrication, the stress engineers looked at load calculations and safety considerations and were changing the specifications in the middle of the project to increase strength. Everyone at Riggins was responsive and willing to work with us to meet our schedule.

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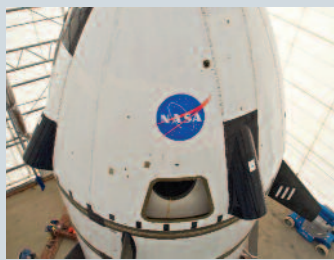
"There were extremely tight fabrication tolerances for the project," says John Munford, president at Riggins. "We had to watch the budget, which was also tight. There

were adjustments as the project progressed, and we were able to help tweak and tune up the original design. The expertise that Riggins brings to the table is critical to the success of a project like this. It required the integration of our engineering, design and fabrication capabilities. We were adaptable to changes that NASA needed throughout the project. Riggins feels fortunate to be part of this program."

On Time Delivery

"The original schedule required about three and one-half months to complete the project, but finishing it was like hitting a moving target," concludes Arboneaux. "The final scope of work was changing frequently. In fact, we made revisions that should've added six weeks of additional work, but Riggins was able to deliver just two weeks after the original delivery date. It was a tribute to Riggins' flexibility that they were able to complete the project in this timeframe. They are always responsive and able to meet our demanding schedules."