

# NASA moves liquid hydrogen tank to Huntsville for testing

December 14 2018, by Rebecca Santana

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NASA is moving a massive liquid hydrogen tank to Huntsville, Alabama, for testing as part of its plans to eventually return to the moon.

The 149-foot-long tank is part of the Space Launch System.

The version moved Friday from NASA's Michoud Assembly Facility in New Orleans is a test model, meaning it won't actually be launched into space.

It was moved—slowly and horizontally on its side—out of the factory where it was constructed to a barge called the Pegasus. From there it will travel up river to the Marshall Space Flight Center in Huntsville, where it will undergo strenuous testing designed to mimic the conditions of traveling into space.

The testing is intended to make sure that the tank design can withstand the worst-case conditions, said Sam Stephens, test manager for the Space Launch System's core stage. NASA also runs computer models to simulate all the conditions the tank might encounter, Stephens said.

"We will test it until it fails, until it cracks," said Stephens. "We are going to subject it to stuff we never want the flight vehicle to see."

The tank weighs more than 100,000 pounds, said Stephens.

"It's a pretty good size. It is the biggest tank we've ever built and it's

going to go on the largest launch vehicle we've ever built," he said, referring to the U.S.

The tank holds 537,000 gallons of liquid hydrogen that along with liquid oxygen will help propel the rocket and its cargo into space.

The information learned from the testing will help scientists as they're building future tanks for the Space Launch System.

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