

Last space shuttle fuel tank in existence begins its journey to LA

April 11 2016, by Hailey Branson-Potts, Los Angeles Times

The journey began early Sunday when crews delicately pushed the 15-story space shuttle fuel tank from its outdoor perch outside NASA's Michoud Assembly Facility onto an ocean barge bound for Los Angeles.

These were the first tiny steps in what will ultimately be a giant leap for the rust-colored behemoth dubbed ET-94.

The tank - the last flight-qualified external tank in existence - will travel by barge, traverse the Panama Canal, dock in Los Angeles' Marina del Rey and drive along city streets before arriving next month at the California Science Center, where it will be permanently displayed with the shuttle Endeavour.

"That's awesome," NASA spokesman Chip Howat said to himself when the diesel engines started roaring on the pushback tractor that would inch the tank forward. "Here we go."

Sitting atop large, wheeled dollies, the 66,000-pound tank crept across the Michoud property, traveling along Saturn Boulevard with a crew of hard hat-wearing workers walking along both sides, maneuvering the wheels with remote controls.

Beneath a bright blue sky, ET-94 passed through open fields blooming with wildflowers. NASA officials warned those on hand to watch for snakes and crocodiles, and they weren't kidding.

California Science Center President Jeffrey Rudolph, standing atop a grassy hill, smiled widely as the tank passed below.

"It's really cool," he said. "This is the piece we were least sure we were going to get. The last piece of our shuttle stack. What I'm feeling good about is that it looks good out here, but people are going to be so excited about it in L.A."

NASA agreed last year to donate ET-94, called a lightweight tank, to the science center. It is the last of its kind for good reason: the external tanks, which attach to the shuttle's belly, detached and burned up in the atmosphere shortly after liftoff.

ET-94, the "sister" to the space shuttle Columbia's external tank, was built at Michoud and completed in 2001, but it was never used.

The Columbia burned up on re-entry in 2003, killing the seven astronauts on board. The mission was doomed when a piece of foam broke off the [external tank](#) during launch, causing catastrophic damage to the shuttle. ET-94 was used extensively to study what went wrong, with pieces of its foam dissected and analyzed to understand how it behaved.

ET-94 could hold up to 1.6 million pounds of liquid hydrogen and liquid oxygen and thrust the shuttle into outer space with astonishing force. On Sunday, it took more than an hour for it to roll a mile to a Michoud dock.

At the dock, where there was an Endeavour flag flapping in the wind, the tank was slowly driven over steel plates onto an ocean barge called Gulfmaster I. A white "work tug" boat that helped push the barge against the dock was dubbed the Dani Lynn.

The tank's transporter will be chained and secured to the barge before Tuesday, when it is scheduled to set sail. It will be launched into the Intracoastal Waterway, where it will be pushed by a river tugboat, and then out to the Gulf of Mexico, where the river tug will be replaced by a 96-foot ocean tugboat.

Bobby Watkins, the director of the Michoud facility, called Sunday a "bittersweet day" as he stood near the dock, in the shadow of the tank. For years, when he'd give tours of the facility, where so many important [space shuttle](#) pieces had been built, he'd point to the big tank outside. People's faces would light up. They'd take photographs with it.

Watkins will certainly miss seeing it. But he said he knows future generations will be inspired by it in Los Angeles.

"This is a piece of our history from a NASA program, a very key piece of our history," Watkins said. "You think of all the thousands of men and women that actually worked on it, it's very emotional."

©2016 Los Angeles Times

Distributed by Tribune Content Agency, LLC.

Citation: Last space shuttle fuel tank in existence begins its journey to LA (2016, April 11) retrieved 20 April 2024 from

<https://phys.org/news/2016-04-space-shuttle-fuel-tank-journey.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
