LOXSAT Payload Rolls Out to KSC for Testing

Eta Space completes the assembly and integration of their cryogenic payload.

Eta Space LOXSAT Team with the Fully Assembled Payload

ROCKLEDGE, FL, UNITED STATES, October 22, 2024 /EINPresswire.com/ -- Eta Space, the leading provider of Cryogenic Fluid Management (CFM) technology for space and energy applications, is excited to announce that assembly and integration of the LOXSAT payload is complete. The payload has officially rolled out to Kennedy Space Center where it will undergo environmental testing.

LOXSAT– a technology demonstration mission funded by NASA Space Technology Mission Directorate under a Tipping Point award, is set to demonstrate critical technologies in orbit that will enable orbital transfer vehicles to be refueled and reused. Upon successful conclusion of the environmental tests, the payload will be delivered to Long Beach California for integration with the rest of the spacecraft, built by Rocket Lab USA. The entire payload will then be sent to New Zealand for launch in late 2025.

“We are thrilled to meet this major milestone on the path towards launch”, said Eta Space CEO William Notardonato. “As we transition from the fabrication and integration phase of the project to system testing and checkout, our team is excited to start more mission planning in detail. We can’t wait to show that cryogenic propellants can be efficiently stored and transferred in microgravity.”

Cryogenic fuels are safer and offer higher performance than other fuel alternatives but have perceived issues with boil off losses of the super cold fluid. Having proven long term zero boil off storage on Earth, Eta Space will prove they can be stored, and managed, for indefinite periods in space environment. Other testing will demonstrate the ability to transfer propellants

from one tank to another. This capability will enable the deployment of fueling stations in orbit to allow for rapid maneuvering of large spacecraft across major orbit changes.

After proving key CFM technologies on LOXSAT, Eta Space will use the data and lessons learned to create a fully commercial orbiting fuel depot called Cryo-Dock™. This depot will have a standardized, agnostic interface to provide refueling of cryogenic upper stages and orbital transport vehicles in cis-lunar space. Once fuel is no longer a launch constraint, expect dramatically lower mission costs, reusable upper stages and easier access to other planets.

About Eta Space: Founded in 2019 by former NASA personnel , Eta Space is a technology development company that specializes in applying advanced cryogenic systems to solve critical problems in the new space age and the future hydrogen energy economy. Working on projects from the north pole of the moon to your local airport, Eta Space is truly Fueling Future Exploration. https://etaspace.com

William Notardonato
Eta Space
+1 321-282-3855
info@etaspace.com
Visit us on social media:
Facebook
X
LinkedIn
YouTube
