

MUOS-4 secure communications satellite responding normally to ground control post-launch

September 3 2015



MUOS-4, the next satellite scheduled to join the U.S. Navy's Mobile User Objective System (MUOS) secure communications network, launched this morning from Cape Canaveral Air Force Station, Florida and is responding normally to ground control.

The U.S. Navy's fourth Mobile User Objective System (MUOS-4)

satellite, built by Lockheed Martin, is talking from space to the satellite control team at the Naval Spacecraft Operations Control facility here after its Florida launch this morning. MUOS-4 will enable near-global coverage for a new secure military communications network offering enhanced capabilities for mobile forces.

The MUOS-4 [satellite](#) launched at 6:18 a.m. EDT this morning aboard a United Launch Alliance Atlas V rocket from Cape Canaveral Air Force Station, Florida. A Lockheed Martin-led initialization team, stationed at Naval Base Ventura County, Point Mugu, California, is operating the satellite from its transfer orbit to its test slot.

The Navy's Program Executive Office for Space Systems and its Communications Satellite Program Office responsible for the MUOS program are based in San Diego. Lockheed Martin assembled and tested MUOS-4 at its Sunnyvale, California facility.

MUOS-4 is the latest addition to a network of orbiting satellites and relay ground stations that is revolutionizing secure communications for mobile military forces. Users with operational MUOS terminals can seamlessly connect beyond line-of-sight around the globe and into the Global Information Grid. MUOS' new smart phone-like capabilities include simultaneous, crystal-clear voice, video and mission data, over a high-speed Internet Protocol-based system.



Lockheed Martin-built MUOS-4 satellite prior to shipping to Cape Canaveral.

The addition of MUOS-4 completes the initial constellation and provides the MUOS network with near-global coverage, extending the reach of communications further toward the North and South poles than ever before.

This morning, the MUOS-4 satellite separated from its Atlas V rocket approximately three hours after its successful launch. Over the next few days, MUOS-4 will transition to reach its geosynchronous orbit location approximately 22,000 miles (37,586 km) above the Earth. The satellite's solar arrays and antennas will then be deployed, and on-orbit testing will start for subsequent turn-over to the Navy for test and commissioning to service.

"The most dangerous part of a satellite's life is launch and getting into orbit. I really want to thank our entire team whose hard work prepared

MUOS-4 for this mission-critical event and the Atlas team who ultimately carried us safely to our transfer orbit," said Iris Bombelyn, vice president of Narrowband Communications at Lockheed Martin. "We look forward to completing our on-orbit health checks and delivering this important asset to the U.S. Navy and these new capabilities to our mobile forces."

In June, Lockheed Martin completed and shipped the MUOS-4 satellite from California to the Cape. In August, technicians encapsulated the satellite in its protective launch fairing.

The MUOS-4 satellite joins a network, which already includes MUOS-1, MUOS-2 and MUOS-3, launched respectively in 2012, 2013 and January 2015, and four required MUOS ground stations already completed. Once fully operational, the MUOS network will provide comparatively 16 times the capacity of the legacy ultra high frequency communications satellite system, which it will continue to support, and eventually replace.

More than 55,000 currently fielded radio terminals can be upgraded to be MUOS-compatible, with many of them requiring just a software upgrade.

Provided by Lockheed Martin

Citation: MUOS-4 secure communications satellite responding normally to ground control post-launch (2015, September 3) retrieved 26 April 2024 from <https://phys.org/news/2015-09-muos-satellite-ground-post-launch.html>

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.