

U.S. Navy Accepts Fifth Lockheed Martin-Built MUOS Satellite For New Secure Global Military Cellular Network

MUOS-5 Supports Legacy UHF Comms; Serves As Spare For New Capabilities

NAVAL BASE VENTURA COUNTY, POINT MUGU, Calif., Nov. 16, 2017 /[PRNewswire](#)/ -- The U.S. Navy's Communications Satellite Program Office, PMW 146, and Lockheed Martin (NYSE: LMT) handed over full operational control of the fifth [Mobile User Objective System \(MUOS\)](#) satellite to the Naval Satellite Operations Center (NAVSOC).

The October 11 milestone followed the successful completion of the MUOS-5 satellite's on-orbit testing and delivery of all operational products needed to "fly" the satellite. In [April](#), the Navy, working with Army Forces Strategic Command (ARSTRAT), configured one of MUOS-5's two communications payloads – its legacy Ultra High Frequency (UHF) payload – for testing.

The handover of [this satellite](#) to NAVSOC clears the final hurdle allowing for ARSTRAT to provide the payload's final configurations to support the Navy's legacy UHF satellite communications mission.

"Today, every Combatant Command in aircraft, ships, submarines, ground vehicles, as well as by troops in the field and special operations, rely upon secure, beyond-line-of-sight UHF satellite communications provided by the Navy," said Mark Woempner, Lockheed Martin's director for Narrowband Communications. "ARSTRAT's final configuration of MUOS-5's UHF legacy payload allows the satellite to fully support our military forces in these Combatant Commands."

Eventually, legacy narrowband UHF communications will transition to next generation Wideband Code Division Multiple Access (WCDMA) capabilities. To facilitate that transition, all five on-orbit MUOS satellites were intentionally designed with two communications payloads to support both Legacy UHF and WCDMA.

Early combatant commander testing of the on-orbit WCDMA payloads began in July 2016. The [new MUOS capabilities](#) will revolutionize communications for mobile forces with simultaneous, crystal-clear voice, video and mission data over a secure high-speed Internet Protocol-based system. Users with new MUOS terminals will be able to seamlessly connect beyond line-of-sight around the world and into the Global Information Grid, as well as into the Defense Switched Network, as part of the Navy's worldwide cellular network.

Once fully operational, the MUOS network of five on-orbit satellites and four relay ground stations will provide more than 10 times the communications capacity of the legacy UHF satellite system. MUOS' network already provides near-global coverage, including [communications into polar regions](#). MUOS also has demonstrated successful communication of Integrated Broadcast Service (IBS) messages.

"We continue to receive great and constructive feedback on MUOS' capabilities as more users try it out. Similar to a civilian cellular phone service, upgrades to this new secure global military cellular network are ground-based and designed in an AGILE software development environment. We continue to make upgrades to the system based on user needs and look forward to bringing its full capabilities to our warfighters," Woempner said.

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



Lockheed Martin handed over full operational control of MUOS-5 (pictured above) to the U.S. Navy.

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, California. Lockheed Martin assembled and tested all five now-on-orbit MUOS satellites at its Sunnyvale, California, facility.

For additional MUOS information, photos and video visit: www.lockheedmartin.com/muos

About Lockheed Martin

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