

Lockheed Martin completes MUOS waveform to improve secure communications capabilities

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Lockheed Martin has completed and delivered the software waveform for the U.S. Navy's Mobile User Objective System (MUOS). The new waveform will enable military satellite communications terminal



providers to deploy equipment that takes full advantage of enhanced MUOS capabilities.

A next-generation narrowband tactical <u>satellite</u> communications system, MUOS will provide significantly improved and secure communications capabilities, including simultaneous voice, video and data, for mobile and remote users.

MUOS satellites are equipped with a Wideband Code Division Multiple Access (WCDMA) payload that provides a 16-fold increase in transmission throughput over the current Ultra High Frequency (UHF) satellite system.

Lockheed Martin tailored a previously commercial <u>waveform</u> to be used with the new WCDMA payload. The U.S. government has made the waveform available for military <u>satellite communications</u> terminal providers through the Joint Tactical Networking Center (JTNC) Information Repository, and contractors can now integrate the waveform into their MUOS-compatible terminals to provide WCDMA capabilities for users.

"With the new WCDMA payload, MUOS is a game changer for the military worldwide," said Iris Bombelyn, vice president of Lockheed Martin's Narrowband Communications mission area. "As our government and industry partners begin deploying new communications terminals, remote and mobile tactical users will be able to quickly and securely share video, data and voice communications critical to their safety and mission success."

Each MUOS satellite also includes a legacy UHF payload that is fully compatible with the current UHF Follow-on system and legacy terminals. This dual-payload design ensures a smooth transition to the cutting-edge WCDMA technology while the UFO system is phased out.



The first MUOS satellite and associated ground system already provide initial on-orbit capability. After the second MUOS satellite is launched in July 2013 and completes on-orbit testing and check-out with the MUOS ground system and a HMS Manpack terminal certified with the MUOS waveform, the system will provide full WCDMA capability to users.

Lockheed Martin is currently under contract to deliver five MUOS satellites and the associated ground system to the U.S. Navy.

Provided by Lockheed Martin

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