

Lockheed Martin Successfully Completes End-To-End System Test Of First MUOS Satellite

SUNNYVALE, Calif., Oct. 12, 2011 /PRNewswire/ -- The first Mobile User Objective System (MUOS) military communications satellite built by Lockheed Martin (NYSE: LMT) for the U.S. Navy has successfully completed a major end-to-end system test, validating satellite performance and functionality with user ground terminals. Completion of this key milestone confirms the system meets requirements and allows the satellite to proceed to final factory test activities prior to launch.

MUOS will augment and replace the legacy Ultra High Frequency (UHF) Follow-On system (UFO) providing assured communications, including simultaneous voice, video and data, for mobile warfighters.

Each MUOS satellite features two payloads -- a wideband code division multiple access (WCDMA) payload and a legacy UHF payload. This dual payload approach is fully compatible with deployed UHF terminals that will transition to MUOS technology as existing UFO satellites reach the end of their on-orbit life. The WCDMA payload will provide an immediate 16-fold increase over legacy UHF satellite communications in the number and capacity of satellite links.

The successful test, conducted at Lockheed Martin's facility in Sunnyvale, Calif., validated the compatibility of the integrated MUOS WCDMA and legacy payloads with the current UFO constellation, existing UHF ground systems, WCDMA test terminals, and Geolocation processing systems.

A "Day-in-the-Life" test scenario with simulated MUOS terminal users, a Geolocation operator, legacy terminal operators and a satellite control operator successfully demonstrated simultaneous legacy and WCDMA communications. The scenario also simulated Geolocation operations that successfully detected, identified and located UHF interference sources.

WCDMA and Legacy communication channels were demonstrated successfully using all 16 MUOS UHF beams. The WCDMA and legacy channels were also subjected to environmental and atmospheric conditions to simulate an operational environment.

"The team executed a comprehensive end-to-end system test and the results give us high confidence that this cutting-edge satellite will meet all performance requirements," said Mark Pasquale, Lockheed Martin vice president and MUOS program manager. "The entire team is focused on delivering mission success for our customer and this milestone is another major step in our efforts to provide this much needed capability to the warfighter."

MUOS satellites are based on Lockheed Martin's flight-proven A2100 spacecraft series. The first MUOS satellite, along with the associated ground system, is on track to support launch in the first quarter of 2012.

Lockheed Martin Space Systems, Sunnyvale, Calif., the MUOS prime contractor and system integrator, is leading a team that includes General Dynamics C4 Systems, Scottsdale, Ariz., and Boeing Defense, Space and Security, El Segundo, Calif. The Navy's Program Executive Office for Space Systems, Chantilly, Va., and its Navy Communications Satellite Program Office, San Diego, Calif., are responsible for the MUOS program.

Headquartered in Bethesda, MD., Lockheed Martin is a global security company that employs about 126,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration, and sustainment of advanced technology systems, products, and services. The Corporation's 2010 sales from continuing operations were \$45.8 billion.

For low- and high-resolution JPEG image files of MUOS, please visit: <http://www.lockheedmartin.com/muos>

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