Lockheed Martin Begins Critical Environmental Test Of First Advanced EHF Military Communications Satellite

Steady Progress Continues on Second and Third Advanced EHF Spacecraft

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PARIS AIR SHOW -- Lockheed Martinannounced today that the first Advanced Extremely High Frequency (Advanced EHF) military communications satellite is now undergoing final thermal vacuum testing at the company's Sunnyvale, Calif. facilities.

Meanwhile, the Lockheed Martin-led team has recently completed successful thermal vacuum testing of the second Advanced EHF satellite and has mated the spacecraft core structure and the payload module for the third spacecraft. As the result of the team's continuous process improvement initiatives, preparations for the successful mate milestone were accomplished in one-third of the time than that of the previous Advanced EHF satellite.

One of the most critical program milestones, thermal vacuum testing will verify Advanced EHF spacecraft functionality and performance in a vacuum environment where the satellite is stressed at the extreme hot and cold temperatures it will experience in space throughout its 14-year design life.

"As we steadily progress on this critical program, these key integration and environmental test milestones represent significant achievements for the entire government-industry team," said John Miyamoto, Lockheed Martin's Advanced EHF vice president and program manager. "We look forward to executing a successful thermal vacuum test and delivering the unprecedented communications capabilities that Advanced EHF will provide to our military."

Following completion of spacecraft thermal vacuum testing, the team of Lockheed Martin Space Systems, Sunnyvale, Calif., the Advanced EHF prime contractor, and Northrop Grumman Space Technology, Redondo Beach, Calif., the payload supplier, will perform final integrated spacecraft and system test activities necessary to prepare the vehicle for flight.

The first spacecraft is planned for delivery to the Air Force in early 2010 in preparation for launch aboard an Atlas V launch vehicle. The second and third Advanced EHF satellites are planned for launch in 2011 and 2012 respectively. The U.S. Air Force's Advanced EHF system will provide global, highly secure, protected, survivable communications for all warfighters serving under the U.S. Department of Defense.

A single Advanced EHF satellite will provide greater total capacity than the entire Milstar constellation currently onorbit. Individual user data rates will be five times improved. The higher data rates will permit transmission of tactical military communications, such as real-time video, battlefield maps and targeting data. In addition to its tactical mission, Advanced EHF will also provide the critical survivable, protected, and endurable communications to the National Command Authority including presidential conferencing in all levels of conflict.

Lockheed Martin is currently under contract to provide three Advanced EHF satellites and the Mission Control Segment to its customer, the Military Satellite Communications Systems Wing, located at the Space and Missile Systems Center, Los Angeles Air Force Base, Calif. The program is in the early stages of adding a fourth spacecraft to the planned constellation.

Headquartered in Bethesda, Md., Lockheed Martin is a global security company that employs about 146,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The corporation reported 2008 sales of \$42.7 billion.

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