New Military Communications System Progressing At Lockheed Martin

3rd AEHF Spacecraft Core Delivered Six Months Early

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Lockheed Martin is progressing steadily on the Advanced Extremely High Frequency (AEHF) military communications system, most recently delivering the core propulsion module for the third space vehicle (SV-3) six months ahead of the planned schedule. The U.S. Air Force's AEHF system will provide global, highly secure, protected, survivable communications for all warfighters serving under the U.S. Department of Defense.

The AEHF core propulsion module contains the integrated propulsion system as well as panels and other components that serve as the structural foundation of the satellite. The AEHF propulsion system is essential for maneuvering the satellite during transfer orbit to its final location as well as conducting on-orbit repositioning maneuvers throughout its mission life.

The integrated system was delivered to Lockheed Martin Space Systems facilities in Sunnyvale, Calif. from the company's Mississippi Space & Technology Center, an advanced propulsion, thermal, and metrology facility located at the John C. Stennis Space Center.

The successful delivery allows the team of Lockheed Martin Space Systems, Sunnyvale, Calif., the AEHF prime contractor, and Northrop Grumman Space Technology, Redondo Beach, Calif., the payload supplier, to prepare for the SV-3 spacecraft and payload mate planned for early 2009, followed by environmental and acceptance testing of the completed satellite in preparation for launch in late 2010.

"Our team continues to make solid progress in the final assembly, integration and test activities as we work expeditiously to deliver the unprecedented communications capabilities that this essential program will provide to our military," said Leonard Kwiatkowski, Lockheed Martin vice president and general manager of Global Communications Systems. "AEHF represents a new era of global protected communications that will provide significantly improved, assured connectivity for the warfighter and we look forward to achieving mission success for our customer."

The first AEHF space vehicle (SV-1) is currently in the midst of thermal vacuum testing to verify 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. Following completion of spacecraft thermal vacuum testing, the team will perform environmental test data analysis and remaining integration and test activities necessary to prepare the vehicle for flight.

The second AEHF spacecraft core structure and the payload module were recently mated and the integrated space vehicle (SV-2) is now being readied for the start of Baseline Integrated System Test (BIST). This extensive test will characterize the performance of the integrated satellite and established a performance baseline prior to entering environmental testing.

Based on Lockheed Martin's flight-proven A2100 spacecraft series, one AEHF satellite will provide greater total capacity than the entire Milstar constellation currently on-orbit. 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, AEHF 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 employs about 140,000 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 2007 sales of $41.9 billion.

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