

New Lockheed Martin-Built Military Communications Satellite Completes Environmental Testing

PRNewswire
SUNNYVALE, Calif.

The first of a new generation of military communications satellites built by Lockheed Martin for the U.S. Air Force has successfully completed final thermal vacuum testing at the company's Sunnyvale, Calif. facilities.

Known as the Advanced Extremely High Frequency (AEHF) program, the system will provide global, highly secure, protected, survivable communications for all warfighters serving under the U.S. Department of Defense. The AEHF constellation will also serve international partners including Canada, the Netherlands and the United Kingdom.

Final thermal vacuum testing of the first AEHF satellite was conducted between June 7 and July 13, and is one of several critical environmental test phases that validate the overall satellite design, quality of workmanship and survivability during space vehicle launching and on-orbit operations.

The successful test demonstrated spacecraft performance and functionality in a complete test-like-you-fly environment where the satellite was stressed at the extreme hot and cold temperatures it will experience in space throughout its 14-year design life.

"Our highly successful test and analysis gives us high confidence that we have a robust spacecraft that will meet all performance requirements once on-orbit," said John Miyamoto, Lockheed Martin's AEHF vice president. "We look forward to our continued progress on this vitally important program that will usher in a new era of high-speed, protected communications to aid our military personnel and allies worldwide."

With the completion of spacecraft thermal vacuum testing, the team of Lockheed Martin Space Systems, Sunnyvale, Calif., the AEHF prime contractor, and Northrop Grumman Aerospace Systems, Redondo Beach, Calif., the payload supplier, will now 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 2010 in preparation for launch aboard an Atlas V launch vehicle. The second and third AEHF satellites are also progressing through final integration and test activities and are on track for launch in 2011 and 2012 respectively.

A single AEHF satellite will provide greater total capacity than the entire Milstar constellation currently on-orbit. Individual user data rates can be up to five times higher than Milstar's highest speed. The higher data rates will permit transmission of tactical military communications, such as higher-quality real-time video and faster access to battlefield maps and targeting data. In addition to its tactical mission, AEHF will also provide the critical survivable, protected, and enduring communications to the National Command Authority including presidential conferencing in all levels of conflict.

Lockheed Martin is currently under contract to provide three AEHF 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.

Media Contacts:
Steve Tatum, 408-742-7531; e-mail, Stephen.o.tatum@lmco.com
Samantha Un, 408-742-3516; e-mail, Samantha.un@lmco.com

NOTE TO EDITORS: for low- and high-resolution JPEG image files of Advanced EHF, please visit:
<http://www.lockheedmartin.com/AEHF>

First Call Analyst:
FCMN Contact:

SOURCE: Lockheed Martin

Web Site: <http://www.lockheedmartin.com/>

<https://news.lockheedmartin.com/2009-07-20-New-Lockheed-Martin-Built-Military-Communications-Satellite-Completes-Environmental-Testing>