User Testing Begins On Third AEHF Satellite As Ultra-Secure Communications Payload Activated For First Time

Flawless Journey to Orbit Used Industry's Most Powerful Electric Propulsion System

SUNNYVALE, Calif., March 26, 2014 /PRNewswire/ -- The third Advanced Extremely High Frequency (AEHF) satellite has begun transmitting using its protected communications payload, joining two other satellites undergoing system test in orbit with a suite of user terminals. AEHF satellites are produced by Lockheed Martin [NYSE: LMT] for the U.S. Air Force.

Launched on Sept. 18, 2013, AEHF-3 arrived in its final orbit position and began transmissions in January. The first two satellites have been doing well in limited user testing, and other nations are now using the system. Canada and the Netherlands connected in 2013, and an announcement of a first connection by theUnited Kingdom is expected this year. Now the third satellite will increase capacity and coverage as the international partners grow their user testing community.

"First transmissions on AEHF-3 were exactly what we expected, and orbit-raising was a textbook example of how to deliver a satellite to geostationary orbit," said Mark Calassa, vice president of Protected Communication Systems at Lockheed Martin. "The satellite's journey after launch went precisely as planned. We took advantage of the industry's highest thrust electric propulsion, which was used during 95 percent of the transfer orbit period."

AEHF is a hybrid spacecraft that uses both chemical and Hall Current Thruster electric propulsion to arrive at its geostationary position. Lockheed Martin has continually evolved and improved its electric propulsion for 30 years on the company's A2100 satellite buses. Using electric propulsion helps satellites efficiently and precisely arrive on station and maintain their orbit positions.

AEHF is the most secure communications satellite system used by the U.S government. Its jam-proof communications are resilient against enemy forces, including nuclear attack, and a single satellite provides greater capacity than the entire legacy five-satellite Milstar constellation. AEHF's five-fold increase in data rates speed up secure, survivable tactical military communications, such as real-time video, battlefield maps and targeting data, and improve links for national leaders and troops alike.

The four-nation AEHF program is led by the U.S. Air Force Space and Missile Systems Center at Los Angeles Air Force Base, Calif., with international partners Canada, the Netherlands and the United Kingdom. Lockheed Martin is under contract to deliver the Mission Control Segment and six AEHF satellites, which are assembled at the company's Sunnyvale, Calif., facility.

Headquartered in Bethesda, Md., Lockheed Martin is a global security and aerospace company that employs approximately 115,000 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 net sales for 2013 were $45.4 billion.

Note to Editors:
AEHF video and high-resolution photos are available at www.lockheedmartin.com/aehf

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