

## Los Angeles Air Force Base Media Release



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AEHF-1 Journey to Geosynchronous Orbit Crosses Half-way Mark

## LOS ANGELES AIR FORCE BASE, El Segundo, Calif. – The first Advanced

Extremely High Frequency satellite crossed the half-way mark to geosynchronous orbit March 22, with its perigee climbing above 17,893 km. altitude.

As of today, AEHF-1 has crossed the 20,000 km. perigee mark.

Orbit-raising for AEHF-1 is successfully continuing as planned, according to Dave Madden, director of the Military Satellite Communications Systems Directorate, here.

Shortly after the launch Aug. 14, 2010, the orbit-raising plan was modified as a result of an anomaly with the bi-propellant propulsion system, which was intended to place the spacecraft near its operational orbit.

The new plan entails two phases: one phase using hydrazine thrusters, which is now complete; the other using AEHF's Hall Current Thruster electric propulsion system. The HCT electric propulsion system has achieved more than 2,100 hours of successful operation.

The satellite is safe, continues to operate as planned and is expected to reach geosynchronous orbit in late summer 2011. "Throughout the anomaly recovery, replanning, and orbit-raising operations, a government and contractor team has demonstrated incredible technical expertise and innovation to work around the anomaly and create the opportunity to achieve mission success for this critical national asset," said Madden.

Upon reaching its planned orbit, AEHF-1 will provide a significant enhancement to our nation's survivable communications infrastructure by allowing operators to communicate in a wide range of environmental conditions. AEHF will provide tactical and strategic satellite communications to Army, Navy, Air Force and Marine users, as well as a host of other agencies. AEHF will extend the capabilities of the operational Milstar satellite constellation with an order of magnitude increase in protected communications capability.

AEHF is developed by the MILSATCOM Systems Directorate, which develops, acquires and sustains space-based global communications in support of the President, Secretary of Defense and combat forces. The MILSATCOM enterprise consists of satellites, terminals and control stations and provides communications for over 16,000 air, land and sea platforms.

Media representatives can submit questions for response regarding this topic by sending an e-mail to smcpa.media@losangeles.af.mil. Get the latest Los Angeles Air Force Base News at www.losangeles.af.mil 'Space and Missile Systems Center – Building the Future of Military Space Today'

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