U.S. Air Force/Lockheed Martin-Led Team Successfully Complete Environmental Testing Of First-Of-Its-Kind Missile Warning Satellite

A joint U.S. Air Force/Lockheed Martin-led team announced today that it has successfully completed thermal vacuum testing of the first Space Based Infrared System (SBIRS) geosynchronous (GEO-1) satellite, one of the most significant program milestones that validates spacecraft performance in a simulated space environment.

The U.S. Air Force's SBIRS program is designed to provide early warning of missile launches, and simultaneously provide important capabilities to other missions, including missile defense, technical intelligence and battlespace awareness.

Conducted inside Lockheed Martin's Dual Entry Large Thermal Altitude (DELTA) chamber, the test verified spacecraft functionality and performance in a vacuum environment where the satellite was thoroughly tested at the extreme hot and cold temperatures it will experience in space.

Thermal vacuum testing represents the last 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.

"Successful completion of environmental testing gives us high confidence in the capabilities of this technically complex satellite and represents the culmination of years of hard work by a government/industry team dedicated to achieving mission success on this vitally important program," said Col Roger Teague, the U.S. Air Force's SBIRS Wing Commander. "We are on track with our remaining work ahead and look forward to the delivery of this first-of-its-kind satellite, which will provide substantially improved surveillance capabilities for the warfighter."

With the completion of spacecraft environmental testing, Lockheed Martin will now perform final factory work on the satellite and execute a series of integrated spacecraft and system tests to ensure the vehicle is ready for flight. The first SBIRS GEO spacecraft is planned for delivery to Cape Canaveral Air Force Station in late 2010 where it will then undergo final processing and preparation for launch aboard an Atlas V launch vehicle.

"The team performed a thorough and disciplined test and we fully expect this cutting-edge spacecraft will meet or exceed our customer's expectations," said Jeff Smith, Lockheed Martin's SBIRS Vice President. "Our team is now focused on successfully executing the final integration and test activities to verify system integrity in preparation for delivery next year."

The SBIRS team is led by the Space Based Infrared Systems Wing at the U.S. Air Force Space and Missile Systems Center, Los Angeles Air Force Base, Calif. Lockheed Martin Space Systems Company, Sunnyvale, Calif., is the SBIRS prime contractor, with Northrop Grumman Electronic Systems, Azusa, Calif., as the payload integrator. Air Force Space Command operates the SBIRS system.

Lockheed Martin's SBIRS contract includes the two highly elliptical orbit (HEO) payloads now on-orbit, two geosynchronous orbit (GEO) satellites, as well as ground-based assets to receive and process the infrared data. The team was recently awarded a $1.5-billion contract for the third HEO payload, the third GEO-3 satellite and associated ground modifications. The program has also begun advanced procurement of long-lead components for a fourth HEO payload and a fourth GEO satellite.

Headquartered in Bethesda, Md., Lockheed Martin is a global security company that 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 2008 sales of $42.7 billion.

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