

U.S. Air Force And Lockheed Martin Complete Environmental Testing Of The Nation's Next Missile Warning Satellite

SUNNYVALE, Calif., Dec. 13, 2011 /PRNewswire/ -- Lockheed Martin [NYSE: LMT] has successfully completed thermal vacuum testing of the U.S. Air Force's second Space Based Infrared System ([SBIRS](#)) geosynchronous (GEO-2) satellite. The milestone represents the spacecraft's most significant achievement to-date on the path to launch.

SBIRS satellites deliver vastly improved missile warning capabilities for the nation while simultaneously improving the military's missile defense, technical intelligence and battlespace awareness mission areas.

During thermal vacuum testing, SBIRS [GEO-2](#) was thoroughly tested at the extreme hot and cold temperatures it will experience in space to verify its functionality and performance. 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 launch and on-orbit operations.

"The GEO-2 team has done a tremendous job in utilizing lessons learned from GEO-1 in order to streamline the GEO-2 test schedule and deliver this essential asset to the user as quickly as possible," said Colonel Troy Brashear, the SBIRS Engineering and Manufacturing Development Program Manager. "The SBIRS government and industry team understands the importance of the SBIRS mission and is committed to delivering this spacecraft efficiently to provide life-saving capabilities to the warfighters."

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. GEO-2 will then be delivered to Cape Canaveral Air Force Station where it will undergo final processing and preparation for launch aboard an Atlas V launch vehicle.

"With the completion of environmental testing on GEO-2, the government and industry team is well positioned to deliver this vital spacecraft for launch," said Dave Sheridan, Lockheed Martin's SBIRS deputy program director. "As we continue building dedicated SBIRS satellites and hosted payloads, we are committed to driving even greater efficiency and affordability into the program while delivering maximum value to the government."

SBIRS GEO satellites include highly sophisticated scanning and staring sensors that deliver improved infrared sensitivity and a reduction in area revisit times over the heritage constellation. The scanning sensor provides a wide area surveillance of missile launches and natural phenomena across the earth, while the staring sensor can be tasked to observe smaller areas of interest with superior sensitivity. The dual independent sensors enhance early warning of missile launches around the globe, support the nation's ballistic missile defense system, greatly expand our technical intelligence gathering capability, and bolster situational awareness for warfighters on the battlefield.

SBIRS [GEO-1](#), [launched on May 7](#), has completed its initial calibration and testing activities, and is performing as expected. Lockheed Martin's original SBIRS contract includes two highly elliptical orbit (HEO) payloads, two geosynchronous orbit (GEO) satellites, as well as ground-based assets to receive and process the infrared data. The team is also under a follow-on production contract to deliver additional HEO payloads and the third and fourth GEO satellites, and associated ground modifications.

The SBIRS team is led by the [Infrared Space Systems Directorate](#) at the U.S. Air Force Space and Missile Systems Center. [Lockheed Martin](#) is the SBIRS prime contractor, [Northrop Grumman](#) is the payload integrator. [Air Force Space Command](#) operates the SBIRS system.

Headquartered in Bethesda, Md., Lockheed Martin is a global security company that employs about 126,000 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 2010 sales from continuing operations were \$45.8 billion.

Note to Editors:

SBIRS video and high-resolution images are available for download at www.lockheedmartin.com/sbirs

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