

# New Missile Warning Satellite Built By Lockheed Martin Progressing In Critical Test Phase

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SUNNYVALE, Calif.

Lockheed Martin announced today that the first Space-Based Infrared System (SBIRS) geosynchronous orbit (GEO-1) spacecraft is progressing through a series of key tests that will demonstrate the integrated satellite's readiness to enter the critical environmental test phase in preparation for launch in late 2009.

SBIRS is designed to provide early warning of missile launches, and simultaneously support other missions including missile defense, technical intelligence and battlespace characterization.

The test phase, known as Baseline Integrated System Test (BIST), is conducted at Lockheed Martin's Space Systems facilities in Sunnyvale, Calif. and is designed to characterize the overall performance of the GEO-1 satellite and establish a performance baseline prior to entering environmental testing.

The first phase of BIST, which included the GEO-1 spacecraft in an expanded configuration, was completed on Jan. 23, 2008. Following the successful test, the team assembled the satellite into the flight configuration, including the GEO-1 bus and payload and other critical subsystems. A comprehensive test of the integrated satellite is now underway.

Upon the completion of BIST in May, the team will integrate the satellite's solar arrays, deployable light shade, and thermal blankets and then prepare for acoustic and pyroshock testing where the integrated spacecraft will be subjected to the maximum sound and vibration levels expected during launch into orbit.

Prior to the start of environmental testing, the team will also conduct a major test to validate that the SBIRS ground components and the GEO satellite can work together during launch and on-orbit operation.

"Our steady progress in this critical integrated satellite test phase reflects the entire team's hard work and dedication to operational excellence on this vital national security program," said Jeff Smith, Lockheed Martin's SBIRS vice president and GEO-1 program manager. "This first-of-its-kind satellite will provide unprecedented new capabilities for our warfighters and we look forward to achieving mission success for our customer."

The team was recently selected by the U.S. Air Force as its nominee for the National Aeronautic Association's 2007 Robert J. Collier Trophy for the successful development, deployment, test and on-orbit operations of the first SBIRS Highly Elliptical Orbit (HEO) payload.

Considered America's most prestigious award for aeronautical and space development, the Robert J. Collier Trophy is awarded annually for the greatest achievement in aeronautics or astronautics in America, with respect to improving the performance, efficiency, and safety of air or space vehicles, the value of which has been thoroughly demonstrated by actual use during the preceding year.

The first HEO payload has demonstrated that its performance meets or exceeds specifications. The test team safely pushed system performance so that data collection and processing results exceeded government specifications in over 95% of cases. Payload sensitivity, initial report time, pointing accuracy, potential for supporting unplanned missions, efficiency and safety were all largely improved by the multi-disciplinary approach this team undertook.

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 subcontractor. Air Force Space Command operates the SBIRS system.

Lockheed Martin is currently under contract to provide two HEO payloads and two GEO satellites, as well as the ground-based assets to receive and process the infrared data.

Headquartered in Bethesda, Md., Lockheed Martin 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 2007 sales of \$41.9 billion.

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