

# Lockheed Martin Team Successfully Completes Key Design Milestone For Space-Based Infrared System High Program

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The Space Based Infrared System High (SBIRS High) team, led by Lockheed Martin Corporation , today announced the successful completion of the system's Signal Processing Assembly software critical design review (CDR) with payload provider Northrop Grumman .

The Signal Processing Assembly (SPA) is a key payload component of SBIRS- High, the nation's next-generation missile warning system. Under contract to the U.S. Air Force Space and Missile Systems Center at Los Angeles Air Force Base, Calif., the team of Lockheed Martin Space Systems, Sunnyvale, Calif., the SBIRS High prime contractor, and Northrop Grumman Electronic Systems, Azusa, Calif., have developed a new hardware and software design that provides unprecedented signal processing capabilities for space infrared detection.

"The signal processing assembly software critical design review is a major program milestone, key to timely delivery of the infrared payload and subsequent launch of the first SBIRS GEO (geosynchronous orbit) satellite," said Col. Randy Weidenheimer, the U.S. Air Force's SBIRS High program manager. "The success of the SPA software CDR, the result of remarkable progress this calendar year, is direct testimony to the talents of the exceptional joint team that the contractors have assembled to tackle this tough job."

During the CDR, engineers from both companies and the U.S. Air Force's SBIRS High Program Office thoroughly reviewed and analyzed the SPA design. The SPA processes raw focal plane data. The focal planes detect infrared radiation emitted by ballistic missiles and other events of military interest. The SPA separates event data from background noise and clutter and subsequent ground processing characterizes the events and generates reports for both strategic and theater users.

The successful CDR demonstrates that the SPA flight software meets all critical design requirements and the SPA is ready for design implementation. This marks the second major achievement for the SBIRS High team this year. In August, the team delivered the first Highly Elliptical Orbit (HEO) payload to the Air Force. First delivery of the SPA will be with the infrared payload on the first SBIRS High GEO satellite, which is scheduled for launch in 2007.

In addition to serving as the nation's next-generation missile warning system, SBIRS High will provide greatly expanded capabilities for intelligence, surveillance and reconnaissance (ISR) missions.

The U.S. Air Force Space and Missile Systems Center manages the SBIRS High program, with Air Force Space Command responsible for the operation of the SBIRS system. When fully operational, SBIRS High will comprise two payloads in highly elliptical orbit, four satellites in geosynchronous orbit, as well as fixed and mobile ground-based assets to receive and process the infrared data.

## About Lockheed Martin

Headquartered in Bethesda, Md., Lockheed Martin employs about 130,000 people worldwide and is principally engaged in the research, design, development, manufacture and integration of advanced technology systems, products and services. The corporation reported 2003 sales of \$31.8 billion.

## About Northrop Grumman

Northrop Grumman Corporation is a global defense company headquartered in Los Angeles, Calif. Northrop Grumman provides a broad array of technologically advanced, innovative products, services and solutions in systems integration, defense electronics, information technology, advanced aircraft, shipbuilding, and space technology. The company has 125,000 employees and operates in all 50 states and 25 countries and serves U.S. and international military, government and commercial customers.

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