First Modernized GPS Satellite Built By Lockheed Martin Declared Operational

Upgrades to Provide More Power, Greater Accuracy for Navigation Users Worldwide

A joint U.S. Air Force/Lockheed Martin team announced today that the first modernized Global Positioning System (GPS) satellite has been declared fully operational for GPS users around the globe following extensive on-orbit testing of the spacecraft's new military and civilian signals.

Launched on Sept. 25 from Cape Canaveral Air Force Station, Fla. the GPS IIR-14 (M) satellite is the most technologically advanced GPS satellite ever developed. The spacecraft features a modernized antenna panel that provides increased signal power to receivers on the ground, two new military signals for improved accuracy, enhanced encryption and anti-jamming capabilities for the military, and a second civil signal that will provide users with an open access signal on a different frequency.

"With this launch, we're truly launching a new era of GPS services for our military and civil users around the globe," according to Col Allan Ballenger, System Program Director for the Navstar GPS program at Los Angeles Air Force Base. "This modernized satellite will broadcast the first new GPS signals since the GPS constellation became fully operational over a decade ago."

The satellite was declared operational on Dec. 16 by Air Force Space Command's 2nd Space Operations Squadron (2 SOPS) at Schriever Air Force Base, Colo., which manages and operates the GPS constellation for both civil and military users.

"As 2 SOPS celebrates its 20th year of operating the GPS constellation, it's fitting that we embark upon the next generation of GPS satellites," said Lt. Col. Steve Hamilton, 2 SOPS commander. "Our operations team is thrilled to be part of this monumental achievement."

The GPS IIR team is now gearing up for the launch of the second modernized IIR satellite scheduled for liftoff in early 2006 from Cape Canaveral. Lockheed Martin is under contract to modernize eight IIR satellites for its customer, the Navstar GPS Joint Program Office, Space and Missile Systems Center, Los Angeles Air Force Base, Calif.

"The entire GPS team should be very proud of this significant milestone in the GPS program," said Leonard F. Kwiatkowski, vice president and general manager of Military Space Programs at Lockheed Martin Space Systems Company.

"We are extremely pleased with the on-orbit performance of the first modernized satellite and look forward to providing a major improvement in navigation capability for both military and civilian users of the worldwide system," added Kwiatkowski.

The modernized navigation payloads are being built by ITT in Clifton, N.J. The satellite upgrades along with final assembly, integration and test is being performed at Lockheed Martin facilities in Valley Forge, Pa.

"We are proud to be a part of the team modernizing this global asset," said Dick Arra, vice president and director, navigation, ITT Space Systems Division. "Built on 25 years of GPS payload development, the IIR payloads are designed to meet the rigors of space and operate in a radiation contaminated environment while providing precise three dimensional position, time and velocity information on a 24-hour worldwide basis."

The Global Positioning System enables properly equipped users to determine precise time and velocity and worldwide latitude, longitude and altitude to within a few meters.

Headquartered in Bethesda, Md., Lockheed Martin employs about 135,000 people worldwide and is principally engaged in the research, design, development, manufacture and integration of advanced technology systems, products and services. The corporation reported 2004 sales of $35.5 billion.

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