

## First Modernized GPS Satellite Built By Lockheed Martin Launched Successfully By The U.S. Air Force

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CAPE CANAVERAL AIR FORCE STATION, Fla.

The first modernized Global Positioning System (GPS) satellite built by Lockheed Martin for the U.S. Air Force, was successfully launched yesterday at 11:37 p.m. EDT from Cape Canaveral. The satellite is the most technologically advanced GPS satellite ever developed and will provide significantly improved navigation performance for U.S. military and civilian users worldwide.

The satellite is the first in a series of eight GPS IIR satellites that Lockheed Martin is modernizing for its customer at the Navstar GPS Joint Program Office, Space and Missile Systems Center, Los Angeles Air Force Base, Calif.

"Lockheed Martin takes great pride in providing these enhanced capabilities for the U.S. military's global positioning requirements as well as civil users worldwide," said Leonard F. Kwiatkowski, Lockheed Martin's vice president and general manager of Military Space Programs. "The GPS IIR satellites on orbit today have enabled significantly improved navigation performance around the globe and we look forward to providing even better capabilities such as increased GPS power, accuracy and integrity with the modernized spacecraft."

The current constellation of 28 GPS spacecraft includes 12 fully operational Block IIR satellites, which were developed to improve global coverage and increase the overall performance of the global positioning system. The modernized series designated GPS IIR-M, will offer a variety of enhanced features for users of the navigation system once initial operational capability is reached, including:

- \* A modernized antenna panel that will provide increased signal power to GPS receivers on the ground.
- \* Two new military signals that will allow for improved accuracy, enhanced encryption and anti-jamming performance for the military.
- \* A second civil signal that will provide civil users with an open access signal on a different frequency.

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. Air Force Space Command's 2nd Space Operations Squadron (2SOPS), based at Schriever Air Force Base, Colo., manages and operates the GPS constellation for both civil and military users.

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

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 2004 sales of \$35.5 billion.

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