U.S. Air Force Set To Launch First Modernized GPS Satellite Built By Lockheed Martin

The U.S. Air Force is preparing to launch the first modernized Global Positioning System (GPS) satellite built by Lockheed Martin aboard a Delta II rocket on Sept. 25, from Cape Canaveral Air Force Station, Fla. 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, designated GPS IIR-14 (M), 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.

The modernized series will offer a variety of enhanced features for GPS users, such as 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 civil users with an open access signal on a different frequency.

The current GPS constellation of 28 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 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. GPS IIR-M production occurs at Lockheed Martin facilities in Valley Forge, Pa. The modernized navigation payload is provided by ITT Industries in Clifton, N.J.

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.

Low- and high-resolution JPEG image files of a modernized GPS IIR satellite are available at: http://www.lockheedmartin.com/GPS .

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