Upgraded GPS Satellite Shipped To Cape For July Launch As Lockheed Martin Team Achieves New Record For On-Orbit Readiness

As the U.S. Air Force prepares to launch its third Global Positioning System (GPS) satellite this year, prime contractor Lockheed Martin has set a new record for operational checkout of the recently-launched GPS IIR-9 satellite.

Following the March 31 launch of GPS IIR-9, Lockheed Martin executed an accelerated on-orbit payload initialization in just 11 days -- a record for any GPS satellite -- so that the satellite could be quickly placed into service in support of the current military operations. Two months earlier, the team achieved a 20-day check out of GPS IIR-8, which was launched on Jan. 29.

The next satellite, designated GPS IIR-10, was recently shipped to Cape Canaveral from Lockheed Martin's facilities in Valley Forge, Pa. for a scheduled launch in late July. The satellite features significant performance upgrades, including a modernized antenna panel and increased power for GPS receivers. There are eight new-generation GPS IIR spacecraft currently on orbit out of a total GPS constellation of 28 satellites.

"Turning over a spacecraft 11 days after liftoff is a tremendous achievement and I congratulate the entire GPS IIR team on a job well done," said Dave Podlesney, Lockheed Martin GPS program director. "Lockheed Martin is extremely proud of the on-orbit performance of the GPS IIR spacecraft and we look forward to extending our mission success record for our Air Force customer."

GPS IIR satellites are designed to improve global coverage and increase the overall performance of the GPS constellation. Lockheed Martin has delivered 21 of these satellites to the U.S. Air Force Space and Missile Systems Center, Los Angeles Air Force Base, Calif. After the IIR-10 mission, eleven more satellites will be launched to sustain the GPS constellation.

The Global Positioning System allows any properly equipped user to determine precise time and velocity and worldwide latitude, longitude and altitude to within a few meters. Although originally designed as a guidance and navigational tool for the military, GPS has proven beneficial in the commercial and civil markets for transportation, surveying and rescue operations.

The GPS IIR satellites are compatible with the current system and provide improved navigation accuracy, achieved by using an ITT Industries payload system. Additionally, increased autonomy and longer spacecraft life are inherent in the Lockheed Martin satellite design.

To bring new capabilities to the GPS constellation, Lockheed Martin is under contract to modernize eight existing GPS IIR spacecraft already built and in storage. These spacecraft, designated GPS IIR-M, will incorporate two new military signals and a second civil signal, thus providing military and civilian users of the navigation system with improved capabilities much sooner than previously envisioned.

GPS modernization is being performed at the Space & Strategic Missiles - Valley Forge, Pa. facilities and ITT Industries, Clifton, N.J. facilities. The first launch of a GPS IIR-M satellite is scheduled for July 2004. The U.S. Air Force Space and Missile Systems Center, El Segundo, Calif., is the contracting agency.

Space & Strategic Missiles is part of Lockheed Martin Space Systems Company, headquartered in Denver, Colo., one of the major operating units of Lockheed Martin Corporation. Space Systems designs, develops, tests, manufactures and operates a variety of advanced technology systems for military, civil and commercial customers. Chief products include space, launch and ground systems, remote sensing and communications satellites for commercial and government customers, advanced space observatories and interplanetary spacecraft, fleet ballistic missiles and missile defense systems.

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