Another Modernized GPS Satellite Launched

A U.S. Air Force Modernized Global Positioning System Block IIR (GPS IIR-M) satellite, designed and built by Lockheed Martin, was launched successfully on 20th December from Cape Canaveral Air Force Station aboard a United Launch Alliance (ULA) Delta II launch vehicle.

Designated GPS IIR-18M, the satellite is the fifth in a series of eight Block IIR-M spacecraft that Lockheed Martin Navigation Systems has modernised for its customer, the Global Positioning Systems Wing, Space and Missile Systems Center, Los Angeles Air Force Base, Calif. The Block IIR-M series includes new features that enhance operations and navigation signal performance for military and civilian GPS users around the globe.

"The successful deployment of this high-performance satellite represents another important milestone in the modernisation of the GPS constellation and reflects our commitment to achieving mission success for our customer," said Don DeGryse, Lockheed Martin's vice president of Navigation Systems. "Our team is now focused on performing a rapid and efficient on-orbit checkout to quickly place the satellite's advanced navigational capabilities into operational service."

Representing the second successful GPS IIR-M mission in just two months, the satellite launched today joins four IIR-M satellites and 12 other operational Block IIR satellites within the current 30-spacecraft constellation.

Each IIR-M satellite includes a modernised 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.