

MEDIA RELEASE

50TH SPACE WING, SCHRIEVER AFB

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50th Space Wings accepts ground system upgrades

SCHRIEVER AIR FORCE BASE, Colo. – The 50th Space Wing accepted two Global Positioning System ground system upgrades during a ceremony held here at 10 a.m.

The ceremony signified a group effort among the wing, Air Force Space Command and the Space and Missile Systems Center and their continued commitment to improve and maintain the current GPS Operational Control Segment leading up to the next generation ground segment set to be deployed in 2015.

"This is a great day for GPS and its users around the world. We are committed to maintaining our current 'gold standard' level of service, as well as striving to improve service and capability through on-going modernization efforts," said Col. Wayne Monteith, 50 SW commander. "Today is the culmination of years of tireless effort between the GPS directorate, 50th Space Wing and our industry partners."

While the upgrade will likely be transparent to users, it culminates a \$1.1B effort to upgrade the original master control station here with a modern distributed architecture, called the Architectural Evolution Plan system.

"We went through a comprehensive 300-plus item checklist to make sure we delivered [a system that meets the operational requirements for flying the GPS IIF]," said John Pesapane, GPS Ground Segment Division program manager.

AEP, which has been delivered in several installments, provides the capability to fly the first GPS IIF satellite and enabled the new security architecture inherent in modern GPS user equipment. Operational testing of the first GPS IIF satellite and AEP Version 5.5 was conducted in August 2010, and Air Force testers found the system to be "mission capable." Air Force Space Command operationally accepted the AEP Version 5.5 system in January 2011.

The second ground system upgrade, a \$100M effort, accepted in today's ceremony is a command and control system for the 2nd Space Operations Squadron's GPS Launch/Early Orbit, Anomaly Resolution and Disposal Operations mission.

The first operational release of the GPS LADO system occurred in October 2007. Since then, it has been upgraded several times and used to successfully launch the last five modernized GPS IIR satellites, the first GPS IIF satellite, handled several on-orbit satellite anomalies and disposed

of two GPS IIA satellites. Operational testing of the LADO GPS IIF functionality was conducted concurrent with the launch of the first GPS IIF satellite in May 2010. AFSPC operationally accepted the LADO IIF capability in October 2010.

Fielding of the new Block II OCS has allowed the Air Force to steadily increase the size of the constellation, which currently consists of 31 operational satellites. Through AEP and LADO, in accordance with the Air Force's expanded 24-slot constellation plan, 2 SOPS is able to reposition satellites for improved navigation and timing performance.

"I'm extremely proud of what our government and industry partners have accomplished," said Col. Bernard Gruber, director of the GPS Directorate, which handled the acquisition of the Block II OCS. "Their combined efforts ensure GPS remains as the world's gold standard for positioning, navigation and timing service."

The Block II OCS now enters into full sustainment.

"We've mapped out all of our sustainment releases for the next two years," said Timothy McIntyre, the GPS Single Sustainment manager. "These include upgrades to our GPS remote sites and improvements to the OCS software requested by the 50 SW, so the GPS ground segment will continue to evolve to meet the needs of our users."

The Air Force and Air Force Space Command have been diligent stewards of GPS since its conception in the 1970s and continue its commitment to this critical component of our national infrastructure. The current GPS constellation has the most satellites and the greatest capability ever. The Air Force will continue to pursue an achievable path maintaining GPS as the premier provider of PNT information for military and civilian users around the world.

For more information, contact the 50th Space Wing Public Affairs Office at 567-5040.