

Fourth Lockheed Martin-Built GPS III Satellite's On Board Engine Now Propelling It To Orbit

GPS III SV04 will be the 23rd M-Code enabled satellite in the GPS Constellation

DENVER, Nov. 5, 2020 /PRNewswire/ -- The fourth Lockheed Martin (NYSE: LMT)-built Global Positioning System III (GPS III) satellite is now headed to orbit under its own propulsion. Following a successful launch earlier this evening, GPS III Space Vehicle 04 ([GPS III SV04](#)) separated from its rocket and is now using onboard power to climb to its operational orbit, approximately 12,550 miles above the Earth.

About 89 minutes after a 6:24 p.m. EST liftoff from Cape Canaveral Air Force Station, Florida, U.S. Space Force and Lockheed Martin engineers at the company's Denver Launch & Checkout Operations Center declared GPS III SV04 "separated" from its SpaceX Falcon 9 rocket and "flying" under their control.

In the coming days, [GPS III SV04's](#) onboard liquid apogee engine will continue to propel the satellite towards its operational orbit. Once it arrives, the engineers will send the satellite commands to deploy its solar arrays and antennas, and prepare GPS III SV04 for handover to Space Operations Command.

GPS III SV04 is the latest next-generation GPS III satellite Lockheed Martin designed and built to help the U.S. Space Force modernize [today's GPS satellite constellation](#) with new technology and capabilities. GPS III satellites will provide significant capability improvements over previous GPS satellites, including:

- Three times better accuracy;
- Up to eight times improved anti-jamming capabilities; and
- A new L1C civil signal, which is compatible with international global navigation satellite systems, like Europe's Galileo, to improve civilian user connectivity.

GPS III SV04 will also be the 23rd Military Code (M-Code) signal-enabled GPS space vehicle on orbit, continuing the Space Force's plan to fully field the more-secure, harder-to-jam and spoof GPS signal for military forces.

"With GPS III we are focused on rapidly fielding the best capabilities to the Space Force's Positioning, Navigation and Timing (PNT) Mission," said Tonya Ladwig, Lockheed Martin's Acting Vice President for Navigation Systems. "We are proud of our industry-government team on the launch of GPS III SV04. GPS III SV05 is already 'available for launch' and just waiting to be called up."

In early July, the Space Force also declared that the GPS III Follow On ([GPS IIIF](#)) program had fulfilled Milestone C, allowing the program to enter its production phase. GPS IIIF satellites will add even more capabilities, including:

- A Regional Military Protection Capability, which will increase anti-jam support in theater to ensure U.S. and allied forces cannot be denied access to GPS in hostile environments;
- an accuracy-enhancing laser retroreflector array;
- A fully digital navigation payload; and
- A new search and rescue payload.

"So many people rely on [GPS](#) every day. Continuing to invest in GPS by adding new capabilities like those coming with GPS III/IIIF will ensure GPS remains the world's 'gold standard' for PNT and just makes sense," Ladwig added.

GPS is part of the U.S.'s critical national infrastructure, driving an estimated \$300 billion in annual economic



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benefits and responsible for \$1.4 trillion since its inception. Globally, more than four billion military, civil and commercial users depend on GPS' positioning, navigation and timing signals.

Lockheed Martin is proud to be a part of the GPS III team led by the Space Production Corps Medium Earth Orbit Division, at the U.S. Space Force's Space and Missile Systems Center, Los Angeles Air Force Base. The GPS Operational Control Segment sustainment is managed by the Enterprise Corps, GPS Sustainment Division at Peterson Air Force Base. The 2nd Space Operations Squadron, at Schriever Air Force Base, manages and operates the GPS constellation for both civil and military users.

For additional GPS III information, photos and video visit: www.lockheedmartin.com/gps.

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