

# Lockheed Martin Launches GPS III Satellite, Paving The Way For Next-Generation GPS IIIIF Spacecraft

*The final GPS III satellite delivers major upgrades in constellation resilience and accuracy, including a crosslink demonstration payload, as the next-gen GPS IIIIF series is in production.*

CAPE CANAVERAL, Fla., April 21, 2026 /PRNewswire/ -- Early this morning, Lockheed Martin (NYSE: LMT) and the U.S. Space Force strengthened the [Global Positioning System](#) (GPS) constellation to its highest level ever achieved with the launch of GPS III Space Vehicle 10 (SV10), the final satellite in the GPS III series.

SV10 adds essential resiliency and accuracy enhancements to the GPS constellation, including an [optical crosslink demonstration](#) payload. With this payload, GPS III SV10 will demonstrate optical communication capabilities that will play a crucial role in the future strength of the constellation. The optical crosslinks allow GPS satellites to be able to directly communicate with each other in space, increasing on-orbit resiliency.

The GPS III SV10 launch marks the fourth consecutive GPS launch on an accelerated schedule, demonstrating Lockheed Martin's rapid delivery of on-orbit capabilities to warfighters.

GPS III SV10 launched from Cape Canaveral Space Force Station at 2:53 a.m. Eastern time. It secured signal acquisition soon after and is currently managed at Lockheed Martin's Denver Launch & Checkout Operations Center pending formal acceptance into the GPS operational control network.

## Why it matters

This spacecraft paves the way for the advanced [GPS IIIIF generation](#), which will bring even stronger anti-jamming capabilities for warfighters and improvements for its six billion civilian users. GPS III satellites deliver critical advancements over legacy spacecraft, including three-times greater accuracy, eight-times stronger anti-jamming capability, and secure M-Code signals for warfighters worldwide.

For military users, these improvements provide dependable positioning, navigation, and timing in contested or hostile environments. For civilian users, GPS III enhances everyday smartphone navigation, speeds up emergency response location, and supplies more precise timing for financial markets and telecommunications networks.

"The final GPS III deployment is an important milestone as we continue strengthening the GPS constellation," said Fang Qian, vice president of GPS at Lockheed Martin. "By launching SV10 into orbit, we're not only adding to the resiliency of today's GPS capabilities – we're opening the door to the next generation of GPS IIIIF satellites that will provide greater resiliency and serve as the backbone of the GPS constellation for years to come."

In addition to the crosslink demo, the satellite is also equipped with a demonstration Digital Rubidium Atomic Frequency Standard clock, an advanced atomic clock that will provide reliable and precise time-keeping capabilities.

## Preparing for a new era of GPS

With GPS III SV10 in orbit, Lockheed Martin is now focused on production of GPS IIIIF satellites. Deploying these next-generation spacecraft is essential for preserving reliable global coverage, and the IIIIF block will add a new suite of capabilities that further harden the constellation's resilience.

Among the upgrades, GPS IIIIF will feature Regional Military Protection, delivering more than a 60-fold boost in anti-jamming performance for warfighters. This dramatic increase in resistance to hostile interference helps U.S. forces stay ahead of evolving electronic warfare threats.

Lockheed Martin is actively producing GPS IIIIF spacecraft at its Denver, Colorado facility. The company is integrating emerging technology, including augmented reality and digital twins, to accelerate GPS satellite production. Lockheed Martin is currently under contract to build 12 GPS IIIIF satellites, demonstrating the company's long-term commitment to a resilient and robust navigation infrastructure.

Today, more than 30 GPS satellites operate in orbit, delivering crucial positioning, navigation and timing services to warfighters, civilians and commercial users. Overall, GPS remains the world's most trusted space-based navigation

system, serving billions of people.

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