Lockheed Martin GPS Spatial Temporal Anti-Jam Receiver (GSTAR) System To Be Integrated In F-35 Modernization

The GSTAR system replaces the current Antenna Electronics Unit (AEU) with the next-generation, anti-jam GPS solution.



Lockheed Martin F-35 Lightning II

OWEGO, N.Y., Oct. 29, 2019 – Lockheed Martin (NYSE: LMT) received a $25 million initial contract award for engineering and manufacturing development (EMD) for the GPS Spatial Temporal Anti-Jam Receiver (GSTAR) system that will be integrated into the F-35 as part of its modernization phase, also known as Block 4. The GSTAR system will replace the current Antenna Electronics Unit (AEU) and will provide enhanced capabilities including the next-generation, anti-jam solution and provide a significant weight and cost reduction to the aircraft.

The F-35 today is the most technologically advanced fighter ever built. As threats advance and technology evolves, the joint government and industry team is modernizing the system to ensure it remains a step ahead. GSTAR is one of several key enhancements planned across the F-35's sensors, data links, engine, mission systems, weapons and more.

"We are proud to be the supplier of choice for the F-35 upgrade program and look forward to providing the GSTAR system for years to come," said Hamid Salim, vice president, Advanced Product Solutions at Lockheed Martin Rotary and Mission Systems. "This award is a testament to our Lockheed Martin-wide focus on innovation and advanced technology for the F-35 and our warfighters."

The GSTAR is a fully digital system that provides the greatest protection against adversarial jamming and spoofing by utilizing critical GPS capabilities that can quickly adapt to meet specific platform requirements. The GSTAR system includes a dynamic range Radio Frequency (RF) front-end, digital beamformer and receiver that has been tested and proven against a variety of threat scenarios.

Lockheed Martin is a leader in the development of anti-jam GPS (AJ-GPS) technology for 20 years and has fielded more than 2,500 GSTAR systems. The GSTAR system provides highly effective digital Electronic Protection (EP) for any platform that relies on GPS for navigation.

With stealth technology, advanced sensors, supersonic speed, weapons capacity and superior range, the F-35 is the most lethal, survivable and connected aircraft in the world. More than a fighter jet, the F-35's ability to collect, analyze and share data, is a powerful force multiplier that enhances all airborne, surface and ground-based assets in the battlespace enabling men and women in uniform to execute their mission and return home safely.

For additional information, visit: www.lockheedmartin.com/ew

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