

Lockheed Martin Receives Contract To Develop Compact Airborne High Energy Laser Capabilities

Contract funds development of high power laser to be tested on tactical fighter jet

BOTHELL, Wash., Nov. 6, 2017 /PRNewswire/ -- The Air Force Research Lab (AFRL) awarded Lockheed Martin (NYSE: LMT) \$26.3 million for the design, development and production of a high power fiber laser. AFRL plans to test the laser on a tactical fighter jet by 2021. The contract is part of AFRL's Self-protect High Energy Laser Demonstrator (SHIELD) program, and is a major step forward in the maturation of protective airborne laser systems.

"Lockheed Martin continues to rapidly advance laser weapon systems and the technologies that make them possible," said Dr. Rob Afzal, senior fellow of laser weapon systems at Lockheed Martin. "We have demonstrated our ability to use directed energy to counter threats from the ground, and look forward to future tests from the air as part of the SHIELD system."

The SHIELD program includes three subsystems:

- SHIELD Turret Research in Aero Effects (STRAFE), the beam control system, which will direct the laser onto the target
- Laser Pod Research & Development (LPRD), the pod mounted on the tactical fighter jet, which will power and cool the laser
- Laser Advancements for Next-generation Compact Environments (LANCE), the high energy laser itself, which can be trained on adversary targets to disable them

LANCE is designed to operate in a compact environment, and as such, the Lockheed Martin team focused on developing a compact, high efficiency laser within challenging size, weight and power constraints.

"Earlier this year, we delivered a 60 kW-class laser to be installed on a U.S. Army ground vehicle. It's a completely new and different challenge to get a laser system into a smaller, airborne test platform. It's exciting to see this technology mature enough to embed in an aircraft," said Afzal. "The development of high power laser systems like SHIELD show laser weapon system technologies are becoming real. The technologies are ready to be produced, tested and deployed on aircraft, ground vehicles and ships."

Lockheed Martin has more than 40 years of experience developing laser weapon systems. The LANCE contract leverages technology building blocks from internal research and development projects, including the [ATHENA](#) system and [ALADIN](#) laser, as well as contract experience gained from programs such as the U.S. Army's [Robust Electric Laser Initiative \(RELI\)](#) program.

For more information, visit: www.lockheedmartin.com/directedenergy.

About Lockheed Martin

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