

# Leidos Tapped by AFRL for Integrated Threat Warning Research

*By Richard Scott*

The US Air Force Research Laboratory (AFRL) has contracted Leidos to develop and demonstrate new advanced integrated threat warning systems designed to protect air platforms from multi-spectral guided weapons, hostile fire and directed energy weapon systems.

Under a \$39 million Electro-Optic Sensing Defensive Electronic Warfare (EOS-DEW) contract awarded last month, Leidos will mature integrated multi-spectral threat warning solutions combining EO missile sensing, laser sensing, and hostile fire sensing, while also advancing test and developmental risk reduction methodologies. The latter include exploring new techniques for multi-spectrum simulation, multi-threat simulation, and sensing technology evaluation, together with enhanced testing and evaluation techniques to support research and development.

According to the statement of objectives laid out by the AFRL's Sensors Directorate, the EOS-DEW project will focus on five technical areas/objectives: multi-spectral threat sensor development, including component hardware, algorithm development/evaluation and evaluation of emerging technologies; multi-spectral threat simulation development to support evaluation of sensors/systems in hardware-in-the-loop (HITL) laboratory and field settings; modelling and simulation supporting sensor development/evaluation and multi-spectral threat simulation in HITL laboratory and field settings; experiments, characterizations and infrastructure operations to support risk reduction experiments of threat warning

systems using HITL techniques; and test and demonstration events as part of multi-spectral threat sensor development and evaluation.

The four-year EOS-DEW contract, extending through to December 2026, will develop and demonstrate prototype advanced integrated threat warning systems. Flight test and field events may include operation of government-provided threat surrogate systems, government provided threat warning systems, instrumented threat sensors and seekers, search/track sensors, other countermeasures, and portable laser equipment.