Northrop Grumman in Frame for US Army's ITDS

The US Army has approved Northrop Grumman (Rolling Meadows, Ill.) to continue into Phase II of an Other Transaction Agreement (OTA) for the Improved Threat Detection System (ITDS) missile warning solution.

This follows the completion of Phase I testing performed at the Army's Aberdeen Proving Ground earlier this year. Northrop Grumman's ITDS technical solution is based on its Advanced Tactical Hostile Engagement Awareness (ATHENA) sensor.

Intended to provide Army Aviation with a next-generation of missile detection and threat warning system to provide platform protection across the full range of military operations, the ITDS will combine a higher resolution two-color infrared sensor suite with a "threat agnostic" approach to aircraft survivability that uses Artificial Intelligence and Machine Learning (AI/ML) algorithms to help cue countermeasures. The multifunctional system – which will offer increased detection ranges, improved detection in clutter, and threat agnostic algorithms to rapidly respond to emerging threats – is intended to equip current and future Army rotary-wing types, with priority given to the AH-64 Apache and MV-75 Future Long Range Assault Aircraft (FLRAA).

Lockheed Martin and Northrop Grumman last year both entered into OTA Phase I agreements with the Army's Project Manager Aircraft Survivability Equipment (PM ASE) and Army Contract Command-New Jersey for ITDS test and evaluation. The OTA is a five-year streamlined contracting mechanism constructed with options for Phase II and Phase III to allow for vendor downselects, integration with additional platforms, and rapid acquisition.

The Phase I OTA focused on technology demonstration and maturation, including extensive flight and live-fire testing, including replications of tactics used in current combat operations. Testing completed in May 2025, with over 51 hours of actual flight time.

According to PM ASE, the ITDS Phase II scope of effort will focus on initial delivery of ITDS prototypes. Work will focus on design, demonstration testing, architecture concepts, prototype application hosting, missile warning sensor characterization, performance in flight testing, and aircraft operational demonstration and integration.

The ITDS Abbreviated Capability Development Document (A-CDD) was approved in July this year, with the program set to transition to the Middle Tier of Acquisition rapid prototyping pathway in the first quarter of FY 2026. The A-CDD outlines a requirement for 10 prototypes to support test and integration activities and 100 fieldable systems.

The Army intends that ITDS will offer superior protection against air threats, and a multi-functional sensor and open systems architecture for advanced situational awareness and data enabled formations through Next Generation Command and Control data layer integration. ITDS will detect, classify, declare, and cue Class I-IV unmanned aerial systems, anti-tank guided missiles, rocket-propelled grenades, surface-to-air missiles, man-portable air defense systems, air-to-air missiles, anti-aircraft artillery, laser-guided weapons, and small arms. — *R. Scott*