PERFORMANCE BASED LOGISTICS

The U.S. Army initiated a Performance Based Logistics (PBL) contract for M-TADS/PNVS in 2007, which continues to provide exceptional value today. PBL enhances system affordability and has a proven supply availability rate of over 95 percent through efficiencies in supply chain management, valued engineering services, depot-level maintenance and retrograde infrastructure. The PBL process includes forwarded spares management, complete system inventory management, depot level repairs, unit level technical assistance, procurement management, modifications/field retrofits, proactive obsolescence management and an aggressive reliability improvement program. The program received the 2011 and 2013 U.S. Secretary of Defense PBL of the year awards, recognizing government/industry teams that demonstrate outstanding achievements in providing our warfighters with affordable and creative logistics solutions and exceptional operational capability.

WE'RE ENGINEERING A BETTER TOMORROW

Lockheed Martin Missiles and Fire Control
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(407) 356-2000

APACHE FIRE CONTROL

Lockheed Martin Apache Fire Control products include electro-optical sensors and radar technologies for the AH-64D/E Apache helicopter. Our products provide aircrews with enhanced situational awareness and greater performance and survivability.

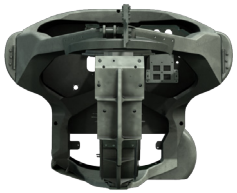
LOCKHEED MARTIN
We never forget who we're working for®

M-TADS/PNVS

The Modernized Target Acquisition Designation Sight/Pilot Night Vision Sensor (M-TADS/PNVS) system is the advanced electro-optical fire control system used by AH-64D/E Apache helicopter pilots for targeting and pilotage in day, night and/or adverse-weather missions. Fielded in 2005, M-TADS/PNVS provided immediate performance improvement over the legacy system, increasing standoff ranges while providing aircrews with greater resolution for targeting, pilotage and enhanced situational awareness in night and low-light conditions. More than 1,300 systems have been delivered to U.S. Army and international customers. Lockheed Martin is focused on upgrading the M-TADS/PNVS system through technological advancements including the Modernized Day Sensor Assembly (M-DSA) and High Reliability Turret.

M-DSA

M-DSA continues the modernization of the M-TADS system. With M-DSA, Apache pilots can now see either color or near infrared high resolution imagery on cockpit displays. Aircrews can more quickly and accurately identify targets at further standoff ranges using the ultra-narrow field of view and the XR® extended range picture-in-picture capability, which helps them stay out of harm's way. A new eye-safe Training Laser Designator (TLD) is added to the system to support the Tactical Engagement Simulation System. The embedded TLD provides Apache units with an affordable approach to training at home station and combat training centers.



HIGH RELIABILITY TURRET

The High Reliability Turret replaces the legacy TADS turret assembly as the structure that interfaces with the Apache aircraft and houses both the targeting and pilotage sensors. It also contains the motors that drive the azimuth and elevation movement of the sensors. High Reliability Turret provides reliability and maintainability improvements, resulting in operation and support cost savings of more than $500 million over the life of the U.S. Apache fleet. It provides performance improvements that help the pilot track targets more effectively and mitigate the effects of aircraft vibration on the M-TADS/PNVS system.

LONGBOW FCR

The LONGBOW® Fire Control Radar (FCR) is built by a joint venture between Lockheed Martin and Northrop Grumman. For more than a decade, the LONGBOW FCR has provided Apache aircrews with automatic target detection, location, classification and prioritization. It enables rapid, multi-target engagement in all weather, over multiple terrains and through battlefield obscurants. Target coordinates are automatically available to other sensors and weapons for target confirmation, rapid engagement and reduced fratricide. Target data is digitally available through the data modem for real-time transfer to other platforms and command posts. The self-contained Radar Frequency Interferometer provides rapid and accurate identification and azimuth to enemy air defense units. High system reliability and two-level maintenance maximize operational availability and reduce support costs. On the AH-64E Apache, the LONGBOW FCR Radar Electronics Unit provides reduced size, weight, maintenance and power requirements for the radar system.