The Department of Defense Awards Program for Excellence in Performance-Based Logistics

Summary of Critical Accomplishments – Section 2

When the High Mobility Artillery Rocket System (HIMARS) successfully achieved first unit equipped status in 2005, the Precision Fires Rocket and Missile Systems (PFRMS) Project Management Office (PMO) and Lockheed Martin Missiles and Fire Control (LMMFC) were fully prepared to support this weapon system with a combined organic Army and LMMFC Performance Based Logistics (PBL) contract. This innovative solution maximizes existing Army depot and acquisition infrastructure to support the carriers and the communications equipment. It entrusts LMMFC with the full support responsibilities for the performance based specification components of HIMARS: the fire control system (FCS), and the launcher module (LM). LMMFC's PBL workshare is controlled by the HIMARS Life Cycle Contractor Support (LCCS) contract. This four-year PBL contract incorporates another innovative feature, commonality of support. The M270A1 MLRS Launcher FCS is almost identical to the HIMARS FCS. To achieve maximum economies of scale, the Army included PBL support for the M270A1 FCS as part of the HIMARS LCCS contract. The HIMARS LCCS contract includes three quantifiable performance metrics tied to performance through incentive fees. LMMFC has earned the maximum fee each quarter through delivery of 99+ percent System Status Readiness (launcher readiness for LCCS managed items) every quarter since contract award. The US Marine Corps plans to participate in the Army HIMARS LCCS concept by adding its fleet of HIMARS Launchers to LCCS in 2008. This will make HIMARS LCCS a joint service PBL contract.

Mission Success: The LCCS concept has enabled the success of deployed units in support of the Global War on Terrorism. All ninety-nine MLRS munitions fired have hit their specified, pinpoint targets. In all operational scenarios, HIMARS LCCS has provided exceptionally high system operational readiness. The outstanding performance by LMMFC field service representatives (FSRs) has proven that contractors on the battlefield are a viable solution to supporting modern ground weapon systems. At more than ten locations around the world over 250 launchers are meeting all PBL readiness goals. In fact, no launcher has ever been in a defined "down" condition even for 24 hours for PBL controlled components since measurements began in April 2005.

Weapons System Availability: LMMFC's performance in providing system availability has exceeded all requirements. LCCS managed hardware has achieved over 99 percent System Status Readiness against a goal of 92 percent. The Mission Capable (MICAP) turnaround time, a measure of customer wait time, has averaged 17 hours for CONUS units (goal of 24 hours) and one* hour for OCONUS units (96 hour goal). Repair turnaround times for field and depot have been two days (goal of five days) and 34 days (goal of 45 days), respectively. (Figure 1). The PBL team's commitment to the Warfighter, to ensure HIMARS and M270A1 units meet or exceed required readiness rates while reducing support costs, has been met by this responsive and effective PBL contract.

**MICAP delivery metric begins when the non-mission capable (NMC) requisition is received at LMMFC and ends when the spare is delivered to the Unit. OCONUS MICAP was computed based on the FSR notification to LMMFC Depot personnel of*

the NMC requirement. The spare was shipped immediately (prior to the actual receipt of the NMC requisition).

Life-Cycle Cost Management: PFRMS PMO, working jointly with LMMFC, developed a firm fixed price contract supporting peacetime operations that eliminated cost growth in O&M funding for the HIMARS/M270A1 LCCS contract. Cost savings predictions for LCCS are expected to be $412M over traditional organic support based on a 2004 Army study (using 888 HIMARS launchers). The innovative nature of the LCCS contract provides flexibility to accommodate fielding schedule and other program changes, as well as contingency deployments which are supported on a cost plus fixed fee basis. Using the Government furnished LCCS Data Management System (LDMS), PFRMS PMO and LMMFC are able to track critical logistics information (supply transactions, maintenance actions, transportation status, and configuration data) on a near real time basis. (Figure 2). This enables LCCS management to control cost and influence readiness. Additionally, LDMS interfaces with the Army Standard Management Information System (STAMIS) allowing the Warfighter to do "business as usual". LDMS has recently been upgraded to interface with the Global Exchange (GEX) and the unique item identification (UID) registry.

Public-Private Partnering: The HIMARS product support concept, combining organic capabilities with LMMFC provided PBL has been incredibly effective. PFRMS PMO has successfully orchestrated government and contractor entities: the Army's Aviation and Missile Command (AMCOM), the Tank-automotive and Armaments Command, the Communications and Electronics Command, Letterkenny Army Depot (LEAD), Red River Army Depot, LMMFC, Defense Logistics Agency, and others.

LMMFC's partnering relationships span from the field to the depots. LMMFC has strong ties with field units through its FSRs. AMCOM logistics assistance representatives are invaluable in facilitating movement of LCCS spares in and out of deployed units. At the depot level, LMMFC signed a general partnership agreement with LEAD in April 2004. LMMFC, as the product support integrator for the HIMARS Organic Depot Facilitization, expects to be under contract by early 2007 with an objective of completing facilitization for repair of selected FCS and LM components and beginning depot operations by 4th quarter 2009. At that time, organic depots will become a direct part of the PBL LCCS contract.

Systems Engineering Approach: The LCCS team employs a broad based system engineering process for addressing reliability, maintainability, availability, operational, and safety concerns. LMMFC FSRs notify the Dallas based technical team of field problems and an immediate engineering assessment is made identifying possible design deficiencies and systemic issues. Potential issues are documented in the System Issue Database and bi-weekly Corrective Action Board meetings attended by representatives from all functional areas. The LCCS contract contains a failure reporting and corrective action system (FRACAS) to improve system reliability. Quarterly failure scoring supports both the metrics evaluation process and the identification of areas for future improvements. A separate industrial engineering contract allows investigations for product deficiencies, obsolescence, and interoperability.

Footprint Reduction: The HIMARS and M270A1 logistics footprint is significantly reduced with the PBL LCCS concept. LCCS reduced the quantity of the MLRS

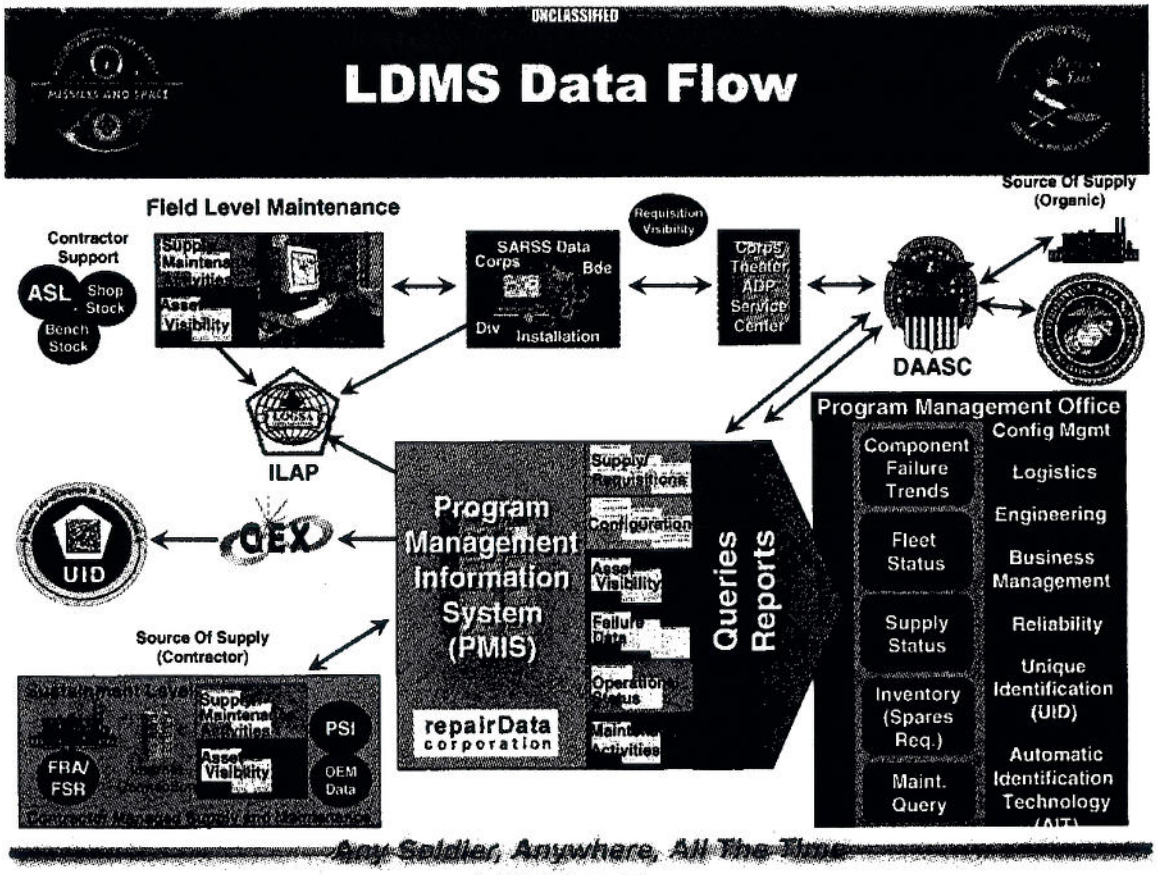
SPORT Test Program Set (MST), used for fault isolation and testing of FCS major assemblies, from six per battalion (one per direct support contact team) to one (issued to the FSR). The associated MST field level technical documentation, training efforts, and spares were eliminated. The soldier only removes and replaces components on the launcher. LMMFC is responsible for all other tasks, producing a true two-level maintenance system for the Army. This concept has been highly successful in peace and combat operations.

Obsolescence Management: LMMFC has an outstanding obsolescence management program supporting the LCCS effort. LMMFC routinely monitors Government-Industry Data Exchange Program and uses Total Parts Plus, Q Star, and TACTRAC to monitor industry activity and solicit obsolescence information from industry and vendors. LMMFC has resolved obsolescence issues in several components, identified alternate parts, and supported specific redesign efforts.

Reliability, Maintainability and Supportability Improvements: Since system reliability and maintainability (R&M) drives logistics demand, the HIMARS PBL effort includes continuous collection, analysis, and feedback of key R&M parameters. R&M data is collected by the FSRs and reported via LDMS. As a result, the HIMARS PBL team has near real time insight into the operational tempo, failure and repair history, failure trends, and hardware configuration of fielded launchers. This data is utilized by HIMARS PBL team to identify and prioritize corrective actions, reduce maintenance demands, and generally enhance support to the Warfighter. To date, reliability assessments using LCCS data show that HIMARS launchers meet or exceed the Warfighter's reliability requirements.

	Required	Apr - Jun 2005	Jul - Sep 2005	Oct - Dec 2005	Jan – Mar 2006	Apr - Jun 2006
System Readiness Rate	92%	99.99%	99.97%	99.96%	99.97%	99.98%
Mission Capable Deliveries						
CONUS Average	24 Hours	13 Hours	17 Hours	24 Hours	16 Hours	13 Hours
OCONUS Average	96 Hours	0 Hours	5 Hours	0 Hours	0 Hours	0 Hours
Repair Turnaround Average						
LRU Field Repairs	5 Days	4 Days	2 Days	1 Day	1 Day	1 Day
LRU Vendor Repairs	45 Days	23 Days	35 Days	26 Days	43 Days	41 Days

HIMARS LCCS Contract Metrics Performance Outstanding in Every Quarter
Figure 1



LDMS Data Flow
Figure 2

The Department of Defense Awards Program for Excellence in Performance Based Logistics Achievements – Section 4

Beginning at first unit equipped in April 2005, the HIMARS Precision Fires Rocket and Missile Project Management Office and Lockheed Martin Missile Missiles and Fire Control (LMMFC) team were fully prepared to support the weapon system with a combined organic Army support for the carrier and communication equipment and the LMMFC performance based logistics (PBL) Life Cycle Contractor Support (LCCS) contract for support of the fire control system (FCS) and launcher module. To achieve maximum economies of scale, the Army also included PBL support for the almost identical M270A1 FCS in the HIMARS contract. Costs savings predictions for LCCS are expected to be $412 million over organic support based on a 2004 Army study. The HIMARS public-private product support concept will be expanded as organic depots are facilitized for repair of selected FCS and LM components and depot operations begin by 4th quarter 2009 as a direct part of the PBL LCCS contract. To date, LMMFC has delivered performance exceeding all contract requirements including a 99+ percent System Status Readiness against a goal of 92 percent. No launcher (in both peace and combat operations) has ever been defined "down" even for 24 hours for LCCS controlled components since measurements began in April 2005. The HIMARS team's commitment to the Warfighter, to ensure HIMARS and M270A1 units meet or exceed required readiness rates, has been met by this responsive and effective PBL contract