Modular Fuel System (MFS)

MISSION
Provides the ability to rapidly establish fuel distribution and storage capability at any location regardless of materiel handling equipment availability.

DESCRIPTION
The Modular Fuel System (MFS), formerly known as the Load Handling System Modular Fuel Farm (LMFF), is composed of 14 tank rack modules (TRM) and two each of the pump and filtration modules, commonly known as pump rack modules (PRMs). The TRM can be used with the MFS PRMs, the Heavy Expanded Mobility Tactical Truck (HEMTT) Tankers, or as a stand-alone system. TRM, when used with the HEMTT Tanker, doubles the HEMTT Tanker capacity. The MFS is transported by the HEMTT–Load Handling System (HEMTT-LHS) and the Palletized Load System (PLS).

The TRM is air-transportable with fuel and includes a baffled, 2,500-gallon-capacity fuel storage tank that can provide unfiltered, limited retail capability through gravity feed or the 25-gallon-per-minute (gpm) electric pump. The TRM also includes hose assemblies, refueling nozzles, fire extinguishers, grounding rods, a NATO slave cable, and a fuel spill control kit.

TRM full retail capability is being developed and will include replacing the existing electric pump with a continuous operating electric 20 gpm pump, a filtration system, and a flow meter for fuel accountability. The projected date for the TRM retail capability to be fielded is 4QFY12. The PRM includes a self priming 600 gpm diesel engine-driven centrifugal pump, filter separator, valves, fittings, hoses, refueling nozzles, aviation fuel test kit, fire extinguishers, grounding rods, flowmeter, and NATO Connectors. The PRM has an evacuation capability that allows the hoses in the system to be purged of fuel prior to recovery and is capable of refueling both ground vehicles and aircraft. The MFS is capable of receiving, storing, filtering, and issuing all kerosene-based fuels.

SYSTEM INTERDEPENDENCIES
In this Publication
HEMTT Palletized Load System (PLS), LHS (for transportation)

PROGRAM STATUS
• 4QFY12: TRM Full-rate production approval
• 4QFY12: TRM Retail Engineering Change Proposal contract award

PROJECTED ACTIVITIES
• 2QFY13: Technical Manual Verification
• 2QFY13: Complete Logistics Demonstration
• 3QFY13: Type Classification/Full Materiel Release
• 3QFY13: First Unit Equipped
Modular Fuel System (MFS)

FOREIGN MILITARY SALES
None

CONTRACTORS
DRS Sustainment Systems, Inc. (St. Louis, MO)
E.D. Etnyre and Co. (Oregon, IL)