

Modular Fuel System (MFS)

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance



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 transported by the Heavy Expanded Mobility Tactical Truck-Load Handling System (HEMTT-LHS) and the Palletized Load System. It 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 HEMTT Tankers, or as a stand-alone system. TRM when used with the HEMTT Tanker doubles the HEMTT Tanker's capacity. 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 the fourth quarter of FY12. The PRM includes a self priming 600 gpm diesel engine-driven centrifugal pump, filter separator, valves, fittings, hoses, refueling nozzles, aviation fuel test kits, fire extinguishers, grounding rods, flow meter, 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. MFS is capable of receiving, storing, filtering, and issuing all kerosene based fuels.

SYSTEM INTERDEPENDENCIES

Other Major Interdependencies

MFS TRM is interdependent with HEMTT Palletized Load System (PLS) and LHS for transportation

PROGRAM STATUS

- **3QFY08:** CS&CSS approved MFS HEMTT/TRM interface
- **1QFY09:** ASA(ALT) signed un-termination letter restoring the MFS as an active program.
- **2QFY09:** Completed MFS-TRM interface hardware
- **3QFY10:** Completed MFS-TRM interface logistics and First Article Test
- **1QFY10:** MFS-TRM initial operational test

PROJECTED ACTIVITIES

- **2QFY11:** MFS-TRM type classification and Full Materiel Release
- **3QFY11:** MFS-TRM Retail Capability Operational Requirement Document Amendment Approved
- **1QFY12:** MFS-TRM Retail Capability and MFS PRM Full-Rate Production and MFS-TRM and MFS PRM Production Contract Award
- **4QFY12:** MFS TRM Retail Capability and MFS-PRM Type Classification and Full Materiel Release

ACQUISITION PHASE

Technology Development

Engineering and Manufacturing Development

Production and Deployment

Operations and Support



Modular Fuel System (MFS)

FOREIGN MILITARY SALES

None

CONTRACTORS

DRS Sustainment Systems Inc. (St. Louis, MO)

E.D. Etnyre and Co. (Oregon, IL)

