Family of Medium Tactical Vehicles (FMTV)

Executive Summary

• The Army conducted a follow-on operational test of armored cab-equipped Family of Medium Tactical Vehicles (FMTV) cargo variants at Fort Campbell, Kentucky, from October 9 to November 2, 2007. The cargo variants met the user’s reliability and maintainability requirements.

• The Army conducted a Limited User Test on the 10-Ton Dump Truck at Fort Bragg, North Carolina, from October 19 to November 15, 2007. Test results indicate that the 10-Ton Dump Truck exceeds its Key Performance Parameter of transporting and dumping a payload of not less than 8 tons at 5 cubic yards.

• Two systemic 10-Ton Dump Truck-specific failures impeded mission accomplishment. The instrument panel lights flash when operators apply the brakes in the blackout drive mode, and failures of the hydraulics system cause the dump bed to be stuck in the “up” position. The Army is implementing corrective actions for these failures, but without adequate verification testing of the hydraulic system failure solution.

System

• The Medium Tactical Vehicle 10-Ton Dump Truck is mounted on an enhanced FMTV 5-Ton wrecker chassis. It includes a 14-foot high strength, dump body with a 10 cubic yard capacity. It is capable of transporting and dumping bulk construction materials weighing up to 20,000 pounds. The vehicle is capable of accepting a cover kit and troop seats for dual application as a troop carrier, and is certified to transport ammunition and materials with appropriate blocking, bracing, and tie downs.

• This is the last planned variant of the FMTV fleet to be tested.

• The Army intends the 10-Ton Dump Truck to replace the existing FMTV 5-Ton Dump Truck and legacy M900 Series 5-Ton Dump Truck.

• The program manager designed armor protection kits for the 2.5-ton and 5-ton cargo variants.

Mission

• Heavy Combat Engineer Battalions and Combat Engineer Companies of Heavy Brigade Combat Teams will use the 10-Ton Dump Truck to transport and dump bulk construction material (e.g., dirt, sand, gravel, blast rock, and other construction material) in support of mobility, counter-mobility, and survivability missions on both linear and non-linear battlefields. The Army will also use the truck to transport up to 12 Soldiers, engineer squad equipment, and ammunition.

• The Army operates the FMTV worldwide for multi-purpose transportation and unit mobility by maneuver, maneuver support, and sustainment units. Land force units use the FMTV at battalion and company level with missions of maneuver, maneuver support, and sustainment.

Prime Contractor

• BAE Systems

Activity

• The Army conducted a Limited User Test on the 10-Ton Dump Truck at Fort Bragg, North Carolina, from October 19 to November 15, 2007.

• The Army conducted a follow-on operational test of armored cab-equipped FMTV cargo variants at Fort Campbell, Kentucky, from October 9 to November 2, 2007.

• The Army completed FMTV ballistic cab testing and system-level testing in FY08.

• The program manager is recompeting a five-year contract for an additional 20,000 in FY09.

Assessment

• The 10-Ton Dump Truck:
  - The truck exceeds it’s Key Performance Parameter of transporting and dumping a payload of not less than 8 tons at 5 cubic yards.
  - Instrument panel lights flash when operators apply the brakes in the blackout drive mode limiting mission effectiveness under blackout drive conditions. The Army has tested and implemented an adequate solution.
  - The failures of the hydraulics system cause the dump bed to be stuck in the “up” position significantly impeding mission
accomplishment. The Army implemented a solution without adequate verification testing.
- The Field-Level Maintenance Training Manual/Integrated Electronic Technical Manuals (TM/IETMs) are inaccurate and the vehicle is currently not maintainable when using the Army wheeled vehicle maintenance standards and practices. The Army continues to appropriately update TM/IETMs.
- Load-sensor procedures were cumbersome, accuracy was sporadic, and the test unit routinely ignored sensor readings during the Limited User Test. There is potential for Soldiers not to use the load sensor in combat environments.
• The armored cab-equipped FMTV cargo variants:
  - The FMTV 2.5-ton variant met its user’s requirement for reliability in the follow-on test.
  - The armored cab-equipped FMTV cargo variants met their maintainability requirement.

Recommendations
 • Status of Previous Recommendations. There were no previous recommendations.
 • FY08 Recommendations.
  1. The Army should conduct additional testing that includes sufficient miles and dump cycles to appropriately verify the correction of hydraulic system failures.
  2. The program manager must submit an updated Test and Evaluation Master Plan reflecting recompetition.