Mine Protection Vehicle Family (MPVF), Area Mine Clearing System (AMCS), Interrogation Arm

MISSION
Provides blast-protected platforms capable of locating, interrogating, and classifying suspected explosive hazards, including improvised explosive devices (IEDs).

DESCRIPTION
The Mine Protection Vehicle Family (MPVF) consists of the Medium Mine Protected Vehicle (MMPV), the Vehicle Mounted Mine Detection (VMMD) system, and the Mine Protected Clearance Vehicle (MPCV). All are blast protected as each of the systems in the MPVF has a blast-deflecting, V-shaped hull, and each conducts a specific mission.

The MMPV command and control vehicle is adaptable to a wide range of security and force protection activities. The MMPV Type I (Panther) will support Explosive Ordnance Disposal (EOD) Companies as the rapid response vehicle. The Panther will also support Chemical Biological Response Teams. The MMPV Type II (RG-31) will support Engineer Units in route and area clearance operations.

The VMMD is a vehicle-mounted mine-detection and lane-proofing system capable of finding and marking metallic explosive hazards, including metallic-encased IEDs. It consists of two mine detection “Husky” vehicles, and a set of three mine detonation trailers used for proofing. The system is designed to be quickly repairable in the field after a mine blast.

The MPCV is capable of interrogating and classifying suspected explosive hazards, including IEDs. The MPCV has an articulating arm with a digging/lifting attachment and camera to remotely interrogate a suspected explosive hazard and allow the crew to confirm, deny, and/or classify the explosive hazard. It also transports Soldiers allowing them to dismount to mark and/or neutralize explosive hazards.

The Area Mine Clearing System (AMCS) is a vehicle designed to clear anti-tank and anti-personnel mines by means of a rotating flail. The AMCS is a manually operated, self-powered vehicle with the capability to adjust flailing depth.

The Interrogation Arm (IA) is a mechanical counter IED asset that provides Soldiers with the capability for standoff detection and interrogation of suspected IEDs utilizing a probing/digging tool to expose objects and a visible camera to identify targets. The IA system can be utilized on the MMPV Type II (RG-31) and Husky platforms.

SYSTEM INTERDEPENDENCIES
None

PROGRAM STATUS
MMPV Type I
- 1QFY12-4QFY12: Vehicle testing
- 1QFY12: First Unit Equipped
- 1QFY12-4QFY12: Fielding

VMMD
- 1QFY12: First Unit Equipped
- 1QFY12-4QFY12: Fielding

AMCS
- 2QFY12: Transfer of system from PdM Countermine/EOD
- 2QFY12-4QFY12: Complete overhaul of logistics effort rescheduled; provisioning conferences held
- 4QFY12: Operator’s Technical Manual Validation/Verification; Acquisition Program Re-Baseline

INTERROGATION ARM
- 2QFY12: Transfer of system from PdM Countermine/EOD

PROJECTED ACTIVITIES
MMPV Type I
- 2QFY13: Full-rate production for recapitalization of RG33L+ vehicles into Panther-like vehicles, Letterkenny Army Depot (LEAD)
- 2QFY14: Full Materiel Release/Type Classification–Standard; First Unit Equipped

ACQUISITION PHASE
- Technology Development
- Engineering & Manufacturing Development
- Production & Deployment
- Operations & Support
PROJECTED ACTIVITIES (Cont.)

MMPV Type II
- 2Q-3QFY13: Pilot Build
- 3QFY13-QFY14: Production Verification Testing
- 3Q-4QFY14: Operational Test
- 4QFY14-FY18: Reset/Recapitalization

MPCV
- 1QFY13-1QFY15: Recapitalization of assets at LEAD; complete fielding to units

VMMD
- 1QFY13-1QFY15: Recapitalization of assets at LEAD; complete fielding to units

AMCS
- 1QFY13-1QFY14: Continue logistics development (Technical Manuals, provisioning) to include Logistics Demonstration
- 3QFY13: Operational Test
- 3QFY14: Full Materiel Release/Type Classification-Standard; First Unit Equipped

Interrogation Arm
- 3QFY13-3QFY14: Program of Record testing of IA mounted on the MMPV Type II (RG-31)

FOREIGN MILITARY SALES
MPCV:
- United Kingdom
VMMD:
- Canada, Kenya, Australia
IA:
- Australia

CONTRACTORS
MMPV Type I (Panther):
- BAE Systems (York, PA)
MMPV Type II (RG-31):
- General Dynamics Land Systems-Canada (Ontario, Canada)
MPCV:
- General Dynamics Land Systems-Force Protection Industries (Ladson, SC)
VMMD:
- Critical Solutions International, Inc. (Dallas, TX)
AMCS:
- Hydrema (Støvring, Denmark)
IA:
- FASCAN, International, Inc. (Sparrows Point, MD)