

U.S. Marine Corps (Ground) Liaison Report

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DMC
CORPORATION



USMC ATE Overview

- AN/USM-657 - Third Echelon Test System (TETS)
- AN/USM-717 - Virtual Instrument Portable Equipment Repair/Test (VIPER/T) System
- AN/USM-718 - Ground Radio Maintenance Automatic Test System (GRMATS)
- Future Test Activities

USMC ATE Systems



- AN/USM-657 - Third Echelon Test System (TETS)
 - 228 systems
 - 25 Core (Analog/Digital)
 - 165 RF
 - 38 EO
 - Upgrades in process (from VIPER/T program)
 - Instrument Controllers (replacement) – 228
 - Power Distribution Units (replacement) – 164
 - Synchro/Resolver Simulator (added capability) – 26
 - Field locations
 - Supporting USMC MEFs, MAWs, Depots and Maintenance Centers



USMC ATE Systems



- AN/USM-717 - Virtual Instrument Portable Equipment Repair/Test (VIPER/T) System
 - 127 VIPER/T Systems total ordered to date
 - 45 RF
 - 44 RF/EO
 - 38 EO
 - 62 VIPER/T Systems delivered to date
 - 22 RF
 - 39 RF/EO
 - 17 EO



USMC ATE Systems



- AN/USM-717 - VIPER/T (Cont'd)
 - Systems provided as GFE for development
 - Picatinny Arsenal – New Jersey
 - 3 RF Systems
 - TPS Development for M1A1 CCAs and LAV-25 A2 LRUs
 - General Dynamics Land Systems – Tallahassee, FL
 - TPS development for Expeditionary Fighting Vehicle LRUs
 - » Factory Level to field deployable TPSs
 - Fleet fielding scheduled to start in March 2009

USMC ATE Systems



- AN/USM-717 - VIPER/T (Cont'd)
 - Retrofit Kits for legacy TETS
 - Instrument Controllers – New laptop, docking station and Windows XP-based operating system with modified system software
 - 228 modification kits ordered
 - 20 kits delivered (awaiting GFE to deliver additional kits)
 - Power Distribution Units - New single box PDU with modified system software
 - 164 turn-key kits ordered
 - 63 kits delivered
 - Synchro/Resolver Simulators - NAI Synchro/Resolver Simulator VXI card and cables with modified system software
 - 26 kits ordered
 - 5 kits delivered



Platforms/TPSs

- Current platforms supported by TETS and/or VIPER/T
 - AN/MRC-142 Mobile Radio Terminal Set
 - AN/TPQ-46A Firefinder Radar
 - AN/TRC-170 Radio Terminal Set
 - LAV-25 Light Armored Vehicle 25mm Turret LRUs
 - TOW II System and Missile Guidance Set
 - AN/PAS-22 Long Range Thermal Imager
 - M-777A2 (LW155) Light Weight 155 Digital fire Control System LRUs



Platforms/TPSs

- Current platforms in development on TETS and/or VIPER/T
 - M1A1 CCAs and LAV-25 A2 LRUs
 - Currently in development on VIPER/T by Picatinny
 - DIM-36TH Marine Corps Thermal Optics System
 - Currently in development on VIPER/T by DME
 - General Support of Tactical Handheld and Weapons Mounted Optics and Laser Aiming Devices
 - Enhancements to existing AN/PSM-117 APS
 - ECP's to current VIPER/T system configuration
 - Thermal, Image Intensified, and Laser Devices
 - Assault Amphibious Vehicle (AAV)
 - AAV LRU/CCA Diagnostics



Platforms/TPSs

- Future platforms to be supported by TETS and/or VIPER/T
 - AN/TRC-170 enhancements
 - Light Armored Vehicle Instrument Panel, Annunciator Panel and Head-Up Display
 - Expeditionary Fighting Vehicle (EFV)

AN/USM-718 - Ground Radio Maintenance Automatic Test System



- USMC MARCORSYSCOM Quantico
- RFP issued 16 December 2008
 - RFPs due 3 February 2009
 - Proposals are currently in evaluation by USMC
- Test and diagnostic functions for both current and future software-defined, tactical radios
- ID/IQ contract with up to 700 units
- Two phase evaluation process
 - GRMATS demonstration unit required to advance to Phase 2



USMC Future Test Activities

- “2012” Tester - Future ATE System
 - Successor to TETS and VIPER/T
 - Smaller, lighter, new technology
 - Requirements generation in process
 - Reconfigurable for specific deployments
- EO Test Requirements
 - Joint Army – Marine Corps EO (JAMEO) effort to define requirements
 - Completed
 - Identifying requirements/solutions for small portable tester. Will use hand held optics (e.g. image intensifiers) as baseline candidates.
- Identifying requirements for a Cable Tester
 - On-vehicle testing of cable assemblies