

USMC (Ground) Liaison Report

September 21, 2003



National Defense Industrial
Association Automatic Testing
Subcommittee Meeting

John J. Ressa, USMC Liaison

USMC ATE - Third Echelon Test System - TETS



Computer Controlled, Automated Test Equipment
Providing Diagnostic and Repair Capability in
Forward Locations

TETS: Capable of Supporting a Variety of Weapons Systems



TETS



LAV - AD

Avenger

AAAV



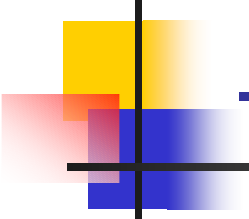
TETS (AN/USM-657) System Status –229 Fielded

- 63 Core TETS (V)1 - Delivered
- 166 RF TETS (V)2 - Delivered
- 4 EO TETS LRIPs - Delivered
- 2 EO TETS (V)3 - FAT
(April 04)
- 32 EO TETS (V)3 - Production
(4/ month)



TETS (AN/USM-657) Upgrades (complete)

- 6 TETS - Upgrade to a Heavy Metal Variant (HMV) to support AAVV Program
- Upgrade provides 6 new interfaces:
 - Fiber Distributed Data Interface (FDDI)
 - Controller Area Network (CAN)
 - Synchro/Resolver Simulator (SRS)
 - Secure protocol – Tactical Communications Interface Modem (SP-TCIM)
 - Giga-bit Ethernet (IEEE802.3 compliant)
 - MIC



TETS (AN/USM-657) Upgrades

– Under Evaluation

- System Controller Upgrade
 - additional PCI cards slots
 - updated PC
 - PC independent
- System Power Supply Upgrade
 - input power protection –imbalance between phase, over/under voltage, reversed or missing phase.



TETS Field Locations

- Camp Pendleton, 29 Palms, Seal Beach, and Miramar CA
- Camp Lejune and Cherry Point, NC
- Beaufort, SC
- Yuma, AZ
- Aurora, CO
- Wichita, KS
- NAVSEA, Crane IN
- TMDE Schools



Application Program Sets (APS) Status – Fielded

- MRC-142 Radio
- TPS-63 L-Band Search Radar
- ULCS –Unit Level Circuit Switch (Switchboard)
- LAV-25 Light Armored Vehicle Variant 25
- TPS-59 Radar
- AN/TAS-4C TOW subsystem
- AN/TRC-170, Microwave Radio Terminal Set



Application Program Sets (APS) Status- In Development

- TOW2 Missile and Night Vision Sight (NVS)
- Light Armored Vehicle (LAV-25)
- Avenger
- AN/TPQ-46A, Fire Finder Weapon Locating System
- AN/TYQ-23, Tactical Air Operations Module
- TOW2 Missile Guidance System



Application Program Sets (APS) Status- Pending

- AN/ARC-210 Sincgars Radio



Any Questions?

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LANTIRN MID-LIFE UPGRADE



- Phase I, Contractor LMIS
 - Addressed obsolescence in electro-optical (E/O) bench
 - Provides stand-alone pod testing capability
 - Facilitates independent testing of pods and line replaceable units (LRUs)
 - Able to deploy pod repair, independent of LANTIRN mobility shelter
- Status:
 - Three systems delivered under basic contract and 7 systems delivered under option 1, 11 systems are scheduled to be delivered under option 2 beginning in Oct 03
 - Four additional units scheduled for delivery under option 3, FY05

LANTIRN MID-LIFE UPGRADE



- Phase II, TAMSCO Team (ManTech/PEI)
 - Addresses obsolescence and throughput issues in the four Line Replaceable Unit (LRU) test stations, affecting 12 LRUs and Self Test/Calibration Test Program Sets (TPSs)
 - Downsizes LANTIRN test suite from eight bays to four
 - Environmental control unit Test Set remains stand-alone (PEI Electronics)
 - Power Supply Test Set, RF Augmentation Test Set and Intermediate Automatic Test Set combined into a single three-bay test station (AURORA 9000) Improved Intermediate Automatic Test Equipment (ILIATE) (ManTech)
- Status: TPS demonstration on schedule for October – December 2003