



NDIA ATC Army Liaison Report

September 16, 2018

Agenda

- **PEO Combat Support & Combat Service Support (CS&CSS)**
 - **Organization**
- **Test Measurement & Diagnostic Equipment (TMDE) Overview**
 - **Next Generation Automatic Test System (NGATS) Overview**
 - **NGATS**
 - **NGATS Shelters**
 - **NGATS Mission Areas**
 - **TMDE Acquisitions**
- **Picatinny Automatic Test System Division (ATSD)**
 - **Engineering Services**
- **TPS Army Activity**
- **Automatic Test System industry Day**

PEO Combat Support & Combat Service Support



Test Measurement & Diagnostic Equipment Overview



TMDE Product Teams

- APATS - At-Platform Automated Test Systems
- OPATS/NGATS - Off-Platform Automated Test Systems
- TEMOD - Test Equipment Modernization
- CALSETS - Calibration Sets
- FMS - Foreign Military Sales

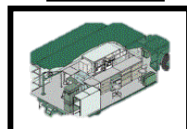
What is NGATS?

NGATS - DOD / Army Standard

A single system for Field, Sustainment, and Depot Maintenance supporting current and future systems IAW DoD, ASA(ALT), and Army Policy

Replaces Legacy AT

DSESTS



• Abrams/Bradley

BSTF



• Ground Missile Systems
• Kiowa Electronics

EOTF



• Kiowa/Apache Electro-Optics

NGATS (DoD/Army Standard)



Automatic Test Equipment
(ATE) Shelter



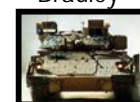
Test Program Set (TPS) Shelter

Supports Current and New Systems

Abrams



Bradley



Stryker



CROWS



LW155



TPQ-53



CH-47

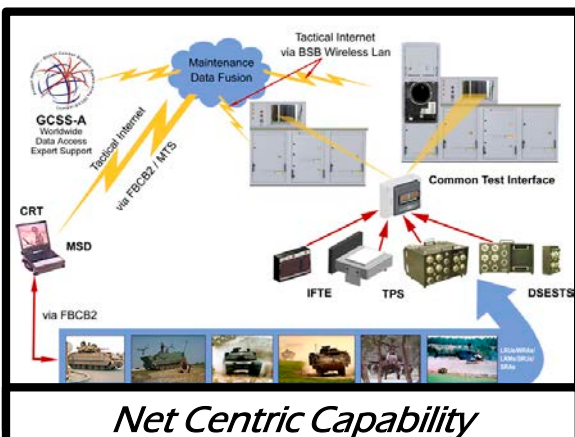


Reduces Total Logistics Burden

- Enables Information Superiority
- Reduces Obsolescence / NEOFs
- Enables Closed Loop Diagnostics
- Supports CLOE-SALE(LMP/GCSS-A)
- Consolidates ATS
- Consolidates MOS 91G to 94Y

Increases Operational Benefits

- JCIDS Validated / ATEC Tested
- NET Ready
- Decreased TPS Diagnostic Times
- C130 Transportable
- Reconfigurable
- Open Source Architecture
- Field level, Sustainment level (equipment Synergy w/ Depots)



TMDE Programs – Next Generation Automatic Test System (NGATS)

- **First Article Test completed Sept 2015**
- **Current production supporting TPS development/rehost**
- **Army Reliability Test completed May 2017**
- **Logistics Demo. completed May 2017**
- **Rail Impact Tests completed Aug 2018**
- **Mobility Test completed Apr 2018**
- **Materiel Release anticipated 1-2QFY19**



TMDE Programs – NGATS Shelters

- **Currently Producing 8 Sets of Shelters (ATS, TPS)**
- **Shelter ATP Completed October 2016**
- **First Shelter Delivered January 2017**
- **First NGATS Shelter Installation Completed February 2017**
- **Rail Impact Tests completed Aug 2018**
- **Mobility Test completed Apr 2018**
- **Production moved to Goldsboro, NC – new First Article**
- **CSC Testing Completed**



NGATS Mission Areas

M2A3
M3A3 BFIST



M1A2 SEP



Apache



CH-47



Stryker



M777



Firefinder



CROWS



STRI



M2A2 ODS/SA
M7 BFIST SA



JBC-P
(MFoCS)



Gray Eagle



NVDs



*NGATS will be Capable of
Supporting Existing and
Future
Army Platforms*

M109A6 (Rehost),
M109A7 (New TPSs)
Paladin



MML



M1A1 SA



Avenger



TPS Engineering Development
Completed
In Process
Planned
In Discussion

TPQ-53



CREW Duke



Hellfire



Shadow



Husky
HDMS



TMDE Acquisitions – Misc.

- **Various General Purpose Electronic Test Equipment Modernization projects (TEMOD) - anticipated Contract Awards**
 - TS-4544/U Telecommunications Test Set (1QFY19)
 - TS-4549/T Radio Test Set (2QFY19)
- **Multiple Calibration Instruments / Calibration Standards Acquisitions:**
 - 5730A Multifunction Calibrator 1QFY19 / 3 QFY19
 - 96040A Low Phase Noise Signal Generator 1QFY19 / 3 QFY19
 - Instrument Controller Replacement 3QFY19
 - AN/GSM-421A(V)2 Mobile Maintenance Shop 4QFY19
- **Maintenance Support Device (MSD) & Smart Wireless Internal Combustion Engine (SWICE)**
 - MSD-V4 (Rugged) contract award anticipated 4QFY18
 - MSD-V4 (Light) RFP contract award anticipated 4QFY18
 - WATS LRIP 2QFY19

Picatinny ATSD – Engineering Services

- **ATE Engineering Services IDIQ – Large Business IDIQ**
 - Continuing to release tasks

- **ATE Engineering Services IDIQ – Small Business 5 yr IDIQ**
 - Contract awarded June 2018 (3 vendors)
 - Releasing tasks

- **ARDEC WSEC IDIQ – Small Business 5 yr IDIQ**
 - Contract awarded May 2018 (5 vendors)
 - Releasing tasks
 - Contains ATSD requirements as well other WSEC and ARDEC requirements

TPS Army Activity

➤ **ATSD Working with West Point to update the Army's ATE/NGATS Study**

- Finished OCONUS trip for data gathering
- Adding phase on NEOFs in Army

➤ **Rehosting/developing numerous TPSs for NGATS**

- MFoCS TPS development awarded August 2018 - ARDEC
- Discussion on Blackhawk migration – AMRDEC
- Rehosting of Avenger TPSs – AMRDEC
- Rehosting Hellfire TPSs – AMRDEC
- Discussion with AN TPQ53 Radar – ARDEC/TYAD
- Discussion on MML TPSs – AMRDEC
- Discussion with AN/ASN-128 Radar – TYAD
- Begun New Development of TPSs for M109A7 – ARDEC
 - In-house/contractor
- Discussing TPS requirements with JAB – ARDEC
- Continue TPS development with STRYKER - ARDEC

- Three Army ATE/TPS Centers
 - ARDEC ATSD
 - AMRDEC
 - TYAD

➤ **Working on Army CBM+/HMS (NxOMS) efforts**

➤ **Continuing to study/develop an Electro-Optic Test Subsystem**

➤ **Continuing the development of an RF Subsystem**

Automatic Test System Industry Day

- **Fedbizopps Solicitation Number: N68335-18-RFI-0245**
- **Schedule – October 16 – 18, 2018**
- **Location – Arlington, VA**
- **Topics of Army Interest**
 - **New ATE and TPS Technology in the following areas:**
 - **Intermittent Fault Detection**
 - **FPGA Instrumentation/testing**
 - **RF instruments**
 - **Embedded (Test, Debug and Diagnostics)**
 - **Boundary Scan**
 - **Cyber Security (ATE and TPSs)**
 - **TPS Tools**

