

# NDIA ATC Army Liaison Report

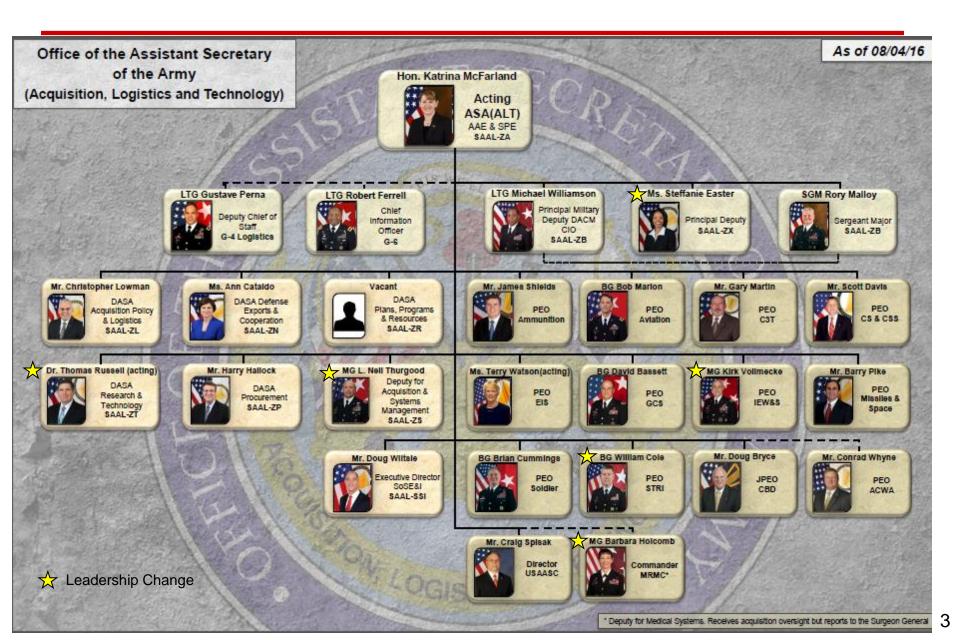
11 September 2016

**Scott Brown** 

# Agenda

- Office of Assistant Secretary of the Army
- U.S. Army's Rapid Capabilities Office
- PEO Ground Combat Systems (GCS)
  - Organization
  - Armored Multi-Purpose Vehicle (AMPV)
  - GCS Platform Modernization
- PEO Combat Support & Combat Service Support (CS&CSS)
  - Organization
  - Portfolio
  - Joint Light Tactical Vehicle (JLTV)
  - Test Measurement & Diagnostic Equipment (TMDE)
    - Portfolio
    - Next Generation Automatic Test System (NGATS)
    - NGATS Shelters
    - Acquisitions
- Picatinny Automatic Test System Division (ATSD)
  - Acquisitions
  - Activity

### Office of the Assistant Secretary of the Army

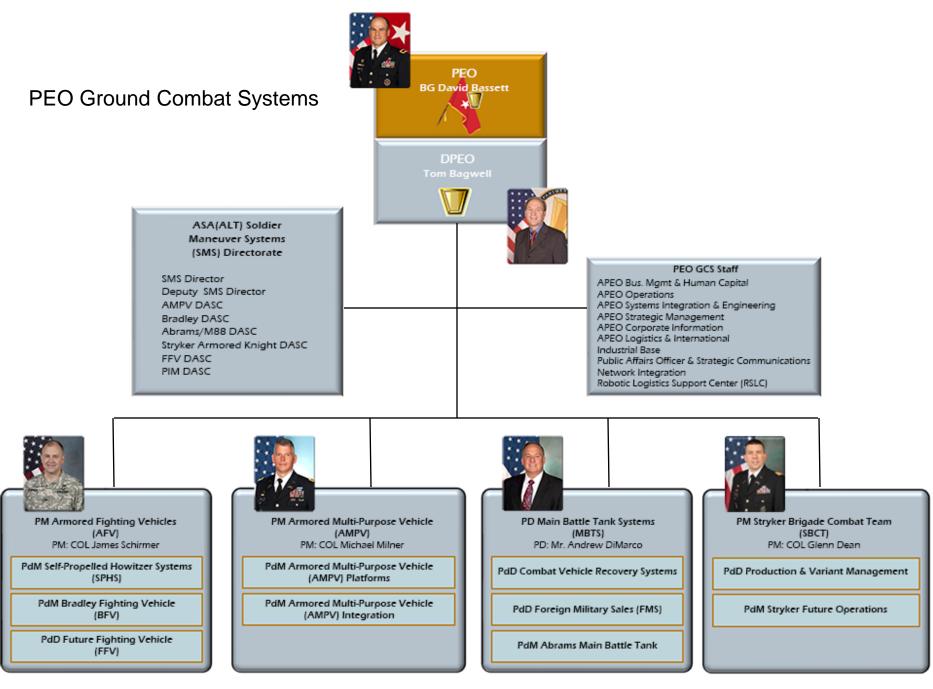


# **Leadership Changes**

- Assistant Secretary of the Army
  - Hon. Katrina McFarland remains Acting ASA (ALT)
- Principal Deputy
  - Ms. Steffanie Easter fills vacant position
- Deputy Assistant Secretary of the Army for Research & Technology
  - Dr. Thomas Russell (Acting) replaces Ms. Mary Miller
- Deputy for Acquisition & Systems Management
  - MG L. Nell Thurgood replaces MG Paul Ostrowski
- PEO Intelligence, Electronic Warfare and Sensors
  - MG Kirk Vollmecke replaces Mr. Stephen Kreider
- PEO Simulation, Training and Instrumentation
  - BG William Cole replaces MG Jon Maddux
- Commander Medical Research and Material Command
  - MG Barbara Holcomb replaces MG Brian Lein

The new office will conduct rapid materiel development and delivery efforts to address immediate, near-term, and mid-term Combatant Commanders' needs. It will focus on rapid prototyping and initial equipping of capabilities, beginning with the areas of cyber, electronic warfare, survivability and positioning, navigation and timing (PNT), as well as other priority projects that will enable Soldiers to decisively operate and win in contested environments.

The Rapid Capabilities Office will report to a board of directors led by the Secretary of the Army, and will be led on a day-to-day basis by Rapid Capabilities Office Director Douglas K. Wiltsie. Wiltsie previously served as the Executive Director, System of Systems Engineering and Integration, Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology), and as the Program Executive Officer for Enterprise Information Systems.



# Armored Multi-Purpose Vehicle (AMPV)

- AMPV Engineering and Manufacturing Development (EMD) contract awarded to BAE Systems Land & Armaments Dec 23 2014
  - Required Commercial Off-the-Shelf design that can be incrementally improved
- Provides a replacement for M113 Family of Vehicles
- Initial award 52-month base term ~\$388M
  - Includes 29 vehicles for testing
- Planned 3-year LRIP contract in 2020, ~289 vehicles
- Currently anticipate 2,897 vehicles @ \$3.7M ea., built over 13 years
- The operational maintenance cost requirement of the AMPV is up to \$90 per mile, compared to \$58 per mile for the M113.
- Currently planning TPS development using NGATS



# **Ground Combat Systems Modernization**

### GCS Modernization - Primarily Executed through the ECP Process

- Abrams
  - GDLS upgrade program in 2014, ~\$120M
  - Focus on gas mileage, sights and sensors
- Bradley
  - BAE awarded ECP 2 development contract Sep 2012, Field FY17
  - Projected Production: FY16 240, FY 17 337
- Stryker BCT
  - Phase II award to GDLS Sep 2013, Field FY18
  - Production: FY16 92, FY 17 123
- Paladin (PIM Program)
  - BAE Sole Source LRIP contract awarded in FY14
  - FRP FY17, Production Quantities: 580 sets

Major Platform Upgrades Remain a Significant Effort

# **PEO Combat Support & Combat Service Support**



### Force Projection – Organization/Leadership Changes



### **PEO CS&CSS Portfolio**

### Expeditionary Energy & Sustainment Systems (E2S2)



2kW Military Tactical Generator

3kW Tactical Quiet Generator (TQG)

Small Tactical Electrical Power



 5, 10, 15, 30, 60kW Advanced Medium Mobile Power Sources (AMMPS) 5-60kW factical Qulet Generators (TQG) Power Units/Power Plants



100/200kW Tactical Qulet Generators (TQG) 100/200kW Large Advanced Power Sources (LAMPS) Power Distribution Illumination Electrical (PDISE) Intelligent' Power' Management



Standardization of Batteries



- Cargo Airdrop Systems
- Combat Feeding Systems Field Service Systems
- Force Provider & Base Camps
- Shelter Systems & Heaters
   Mortuary Affairs Equipment

- (STEP) 60K BTUH IECU 9K, 18K, 36K IECU
- 120K IECU

### Force Projection Equipment

Bridging Bridges / Bridge Erection Bridge Transporters M9 Armover/Assault Breacher	Combat Engineer/Material Container Handling Engineers Cranes Dozers Excavators	Petroleum & Water Sveteme • Fueling Systems • Water Systems	Sets, Kits, Outfits & Tools Sets, Kits & Outfits • Engineer Combat Support Eg • Diving Eguipment • Sheter Mounted Sets, kits & Outfits • Shop Set Equipment	Diag. Calibration Sets (CALSETS)	Appliqué & Large Unimained Ground	Unmanned Ground     Johlaka     Small Unmanned     Ground Vehicle (SUGV)     Route Reconnaissance     and Clearance (R2C)     Man Transportable     Robotic System (MTRS)     Common	
			<ul> <li>Shöp" Set" Eğulpment</li> </ul>	(CALSETS) • IFTE Off Platform Automatic Test Systems • General Purpose Electronic Test Equipment (GPETE) • Maintenance Support Device (MSD-V3) • Next Generation Automatic Test Station (NGATS	• MY80'Robotic Light Mine Flail	Robotic System (MTRS) • Common Robotic System-Individual (CRS- I)	

### **PEO CS&CSS Portfolio**

### Joint Light Tactical Vehicles

Joint Light Tactical Vehicles



### Mine Resistant Ambush Protected Vehicles

Mine Resistant Ambush Protected Vehicles



Max Pro Dash ISS
 Max Pro LWB Ambulance





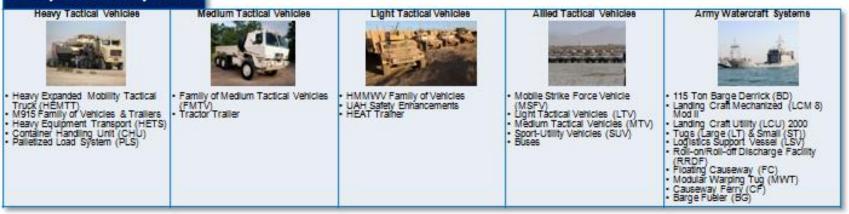
#### **Buffalo**

Mine Clearance Vehicle (MCV) Explosive Hazard Pre-detonation

- Husky (Vehicle Mounted Mine Detector (VMMD)

MMPV Type II (RG31) MMPV Type I (Panther)

### Transportation Systems



Assured Mobility Systems

# Joint Light Tactical Vehicle

- Oshkosh awarded Production Contract on 25 Aug 2015
  - \$6.7B (17,000 vehicles)
  - Procurement thru ~2040, ~55,000 Total
    - Total Program Cost dropped from ~\$30B to ~\$25B, due to realised savings vs estimates, updates to purchasing profile...
- Army's first order March 2016 657 systems
- May '16 Army disclosed JLTV to be used for Light Reconnaissance Vehicle (LRV) rather than new system





# **TMDE Overview**



At-Platform Test Equipment: Maintenance Support Device (MSD), Internal Combustion Engine Kit (ICE, SWICE) Off-Platform Test Equipment: BSTF, Next Generation Automatic Test System (NGATS) General Purpose Electronic Test Equipment Modernization (TEMOD) Calibration Sets (CALSETS): Calibration Instruments & Standards



Used by all weapon systems maintainers at Field and Sustainment Levels to perform At platform maintenance.





Supports repair of Line Replaceable Modules at Field and Sustainment Levels for multiple weapon systems.

Provides Field and Sustainment Level testing of weapon systems operational tolerances.

Performs Sustainment Level calibration / quality assurance for General Purpose Electronic Test Equipment that supports weapon systems.

Innovation for Today and Tomorrow's Expeditionary Forces

### **Next Generation Automatic Test System**



Automatic Test Station







**TPS Storage** 



### **Description:**

A highly mobile, rapidly deployable, general-purpose, reconfigurable automatic test system which directly supports testing and screening of Army weapon systems to maintain their readiness to shoot, move, and communicate. **Designated to replace Direct Support Electronic Systems Test Set (DSESTS), Base Shop Test Facilities (BSTF), versions 3 and 5, and other legacy ATE.** 

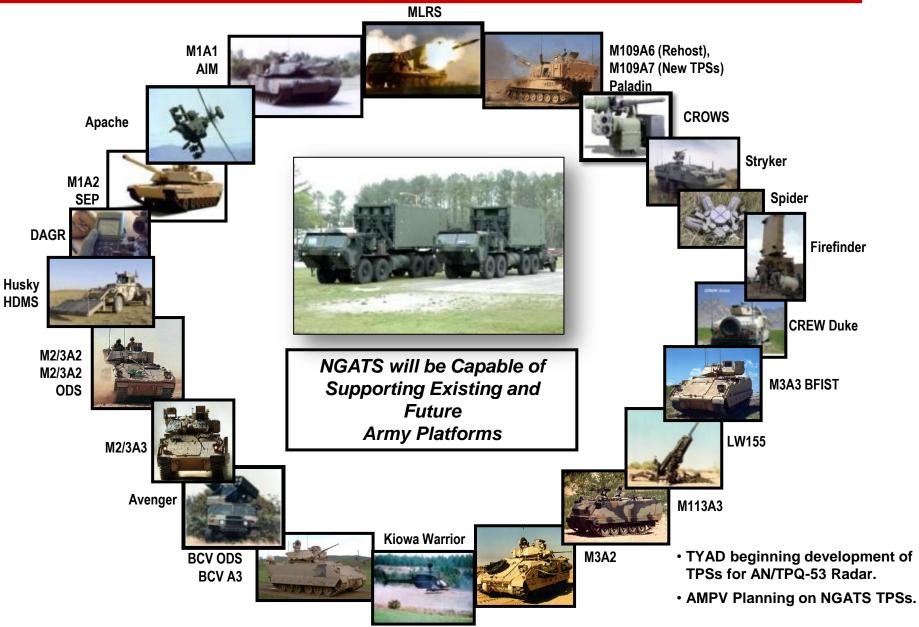
### NGATS Fielding:

- NGATS will replace legacy ATE
- Projected AAO is 184 systems

### **NGATS Status:**

- Console contract awarded September 2014
- First Article Test completed September 2015
- NGATS Shelter contract awarded February 26, 2016

### Current and Future Major Weapon Systems Supported by an Off Platform Test System



# TMDE Programs – Next Generation Automatic Test System (NGATS)

- Console/System Integration Full Rate Competition
  - Awarded Sept 2014 to Boeing
- First Article Test Complete Sept 2015
- Army Reliability Test Event
  - October 2016 (Free Standing)
  - January 2017 (Shelter Configuration)



### **TMDE Programs – NGATS Shelters**

- NGATS Shelter (ATE, TPS Shelters)
  - Contract awarded February 2016 to AAR Manufacturing Inc.
  - Currently Producing 2 Set of Shelters (ATS, TPS)
  - Shelter ATP October 2016, delivery December 2016



# **TMDE Acquisitions – Misc.**

- Various General Purpose Electronic Test Equipment Modernization projects (TEMOD) – anticipated FY17 Contract Awards
  - ME-572()/U Ammeter (2QFY17)
  - OS-305/U Oscilloscope (2QFY17)
  - OS-307/U Oscilloscope (2QFY17)
  - TS-4548/P RF Power Meter (2QFY17)
  - TS-4544/U Telecommunications Test Set (3QFY17)
- Multiple Calibration instruments & standards acquisitions
- Maintenance Support Device & SWICE Production
  - MSD-V4 (Rugged) RFP anticipated release 3QFY17
  - MSD-V4 (Light) RFP anticipated release 4QFY17
  - SWICE production ongoing

# Picatinny ATSD Army Acquisitions – ATE Engineering Services IDIQ

- ATE Engineering Services IDIQ Large Business IDIQ
  - Continuing to release tasks
    - NGATS RF Subsystem
    - Computer Upgrade
    - Acquiring Data
    - Hemispherical Active Expeditionary Detect/Defeat System (HAEDS)
    - F-35
    - Health Management System
- ATE Engineering Services IDIQ Small Business IDIQ
  - Continuing to release tasks
  - ATSD had the ceiling raised on the current contract
  - Anticipate new contract RFP early CY 17
    - ATSD developing new contract for its Directorate (Fire Control), which includes all 5 Divisions

# **Picatinny ATSD Army Activity**

- Current NGATS TPS rehost/development activity
  - Abrams/Bradley (all variants)
  - STRYKER (all variants)
  - STRYKER MGS
  - CREW DUKE/THOR (V4/V5)
  - FireFinder
  - Paladin PIM
  - CROWS (new variants being developed: Abrams, Paladin, Navy)
  - M777
  - Husky
  - Spider
  - AN/TPQ-53
- Other
  - Army Field level maintenance study in-process
  - Army CBM+/HMS (NxOMS) efforts
  - Electro-Optic Test Subsystem

