



TYAD Industry Day: Depot Capabilities

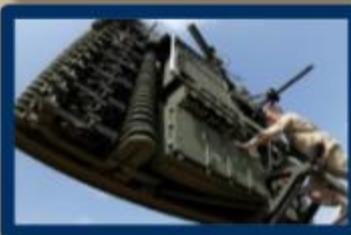
**Mr. Robert Katulka,
Director of Production Engineering**

14 Apr 16





C4ISR Systems





Tactical Satellite Systems



ANTSC-93



ANTSC-154
Secure Mobile Anti-Jam
Reliable Tactical Terminal
(SMART-T)



ANTSC-156 A/B Phoenix
Tactical SHF Satellite Terminal
(TSST)



ANTSC-167/185 STT
Satellite Transportable Terminal



LAMBDA LXGHA





Ground Radios



AN/PRC-152



AN/PRC-150 -- AN/PRC117



AN/PRC-148



SINCGARS



AN/GRC-245, HCLOS



EPLRS





Avionics



AN/ALQ-144



AN/APX-118 Transponder



**AN/AAR-57
Common Missile Warning
System**



Joint Precision Airdrop System





Command and Control



TOCNET



Forward Area Air Defense



Command Post Systems & Integration





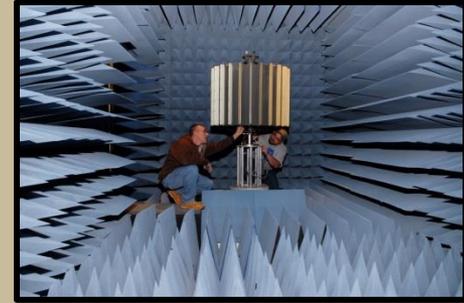
Radar Systems



AN/TPS-75



AN/TPQ-36



AN/TPQ-48



AN/MST-T1A



AN/TSW-7A



AN/MST-T1(V)



AN/TPQ-37



AN/GPN-22





Sustainment

Life Cycle
Support
Services

Engineering
Services

Public-
Private
Partnerships

Technical
Assistance

New
Equipment
Training

Systems
Fielding

- Sustaining Operational Capabilities for Joint Forces
- Restoring Balance through Sustaining C4ISR for Warfighter Readiness



Reset



Training / Ready



Available





System Overhaul

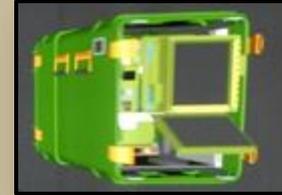
- Disassembly/LRU Repair
- Structure Repair/Corrosion Control/Refinishing
- New Technology Insertion
- Integration/Testing
- System Staging in preparation for Fielding
- Depot Maintenance Work Requirement/Statement of Work
- Modification Work Orders
- Fabrication of Obsolescent Parts
- Special Tests (Vibration, Temperature, Simulators)





Engineering Capabilities

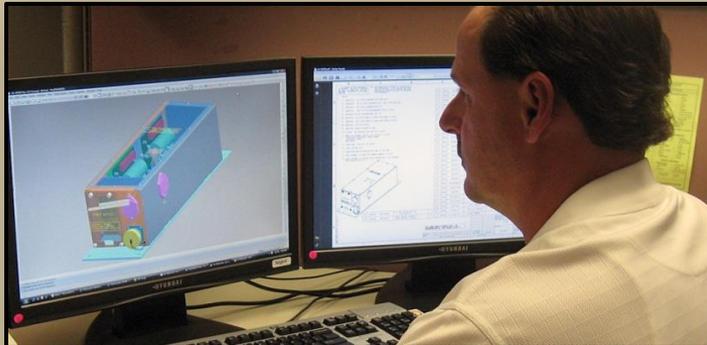
- Computer-aided Engineering
- Design and Development
- Technology Insertion
- Rapid Prototyping
- Additive Manufacturing
- Automated Test Equipment
- Interactive Electronic Technical Manuals



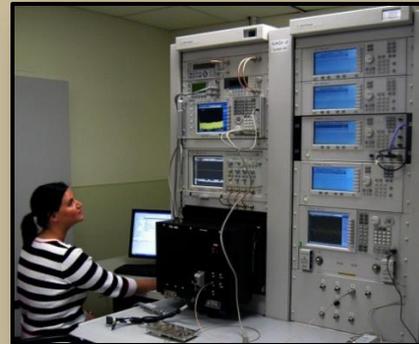
Plastic
Prototype



Rapid Prototyping Machine



Computer-aided Engineering Design



C4ISR Automated Test System



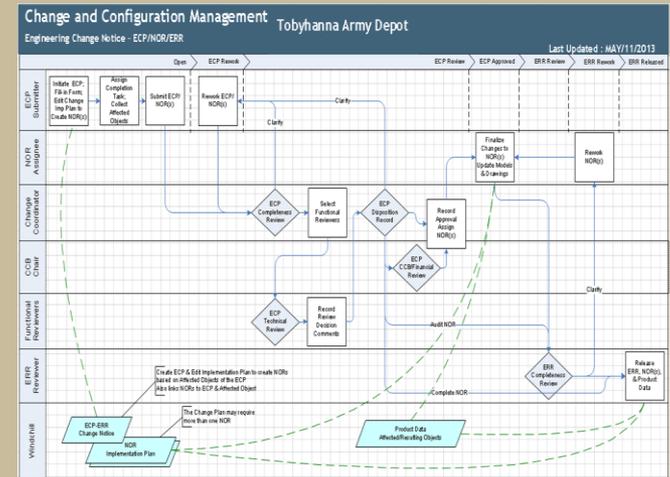
Interactive Electronic
Tech Documents



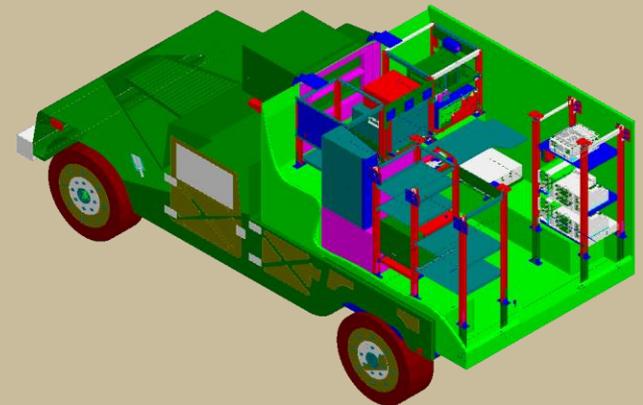


Mission IT System Engineering

- Computer Aided Engineering
 - CREO, AutoCAD
- Windchill PDMLink
 - Product Lifecycle Management
 - FRACAS (WQS)
 - Paperless Technical Data Management
- Application Software Management
 - WhereNet (RFID)
 - Keytrack
 - Cribmaster (Automated Tool Retrieval)



Engineering Change Proposal Process





Cyber Software Support

- Partnership with CECOM Software Engineering Center (SEC)
 - Apply DISA STIGs to hardware and Networking Equipment
 - Perform Scans and Remediate Findings
 - Apply IAVA Patches to Remediate Vulnerabilities
 - Develop Work Arounds
 - Document Scans, Findings, Remediation Efforts and POAMs
- Pilot Program
 - GCSS-A & MIDAS
 - Left Seat / Right Seat w/ SEC
 - March to May 15 Timeframe
- Potential Follow On Work
 - Pilot Systems, Mission Command Systems, LCMR (others)
 - TYAD Performing Patching Independently
 - Personnel IAT Level II Certified
 - System Specific Training





Fabrication

- Electronic Assemblies
 - Cable Fabrication/Assemblies
 - Power and Data Systems
 - Electronic Equipment Assemblies
- Mechanical Assemblies
 - Equipment Racks and Installation
 - Blue Force Tracking Kits
 - CROWS Diagnostic Kits
 - Advanced Combat Helmet Brackets



Cable Fabrication



Nett Warrior Cable Fabrication



Blue Force Tracking Kit



CROWS Diagnostic Kit





Systems Integration

Downsizing

Transportability

Technology Insertion

Enhanced Capability

**Common Shelter
OK-398 (V)9,
AN/TPQ-37 Firefinder Radar**



**AN/TPQ-37 Cab Kit,
M1113 HMMWV**

- Design
- Virtual Prototype
- Fabrication
- Test
- Configuration Management
- Field/Train
- Sustainment

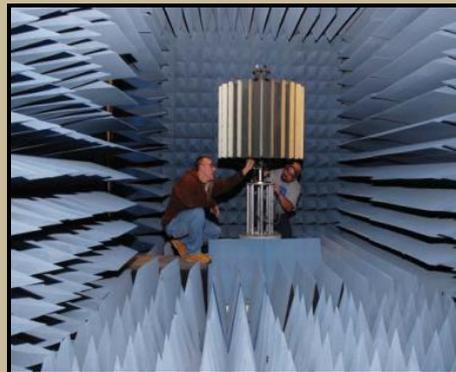




Integrated C4ISR Antenna and Radar Range Campus



- System reliability and performance verification using 12 distinct far field and open ranges
- Powder Smoke Ridge elevation facilitates line of site to target towers
- Near Field Ranges (18' x 18' scanning capability)
- 4.5M square feet with potential to expand as needed
- Buffer land adjacency
- Encroachment protection
- System accuracy verification using far field and compact ranges
- Operational system testing
 - Vibration test using modified Munson Road
 - Elevated temperature facility allows system burn-in under operational conditionals
 - Rain Test using High Tech Rain Test facility
 - Live Fire Test Simulator for Lightweight Counter Mortar Radar





At the End of the Day...



It's all about the Warfighter!

