



ATEC Testing In Support of the War

James B. Johnson

U.S. Army Developmental Test Command

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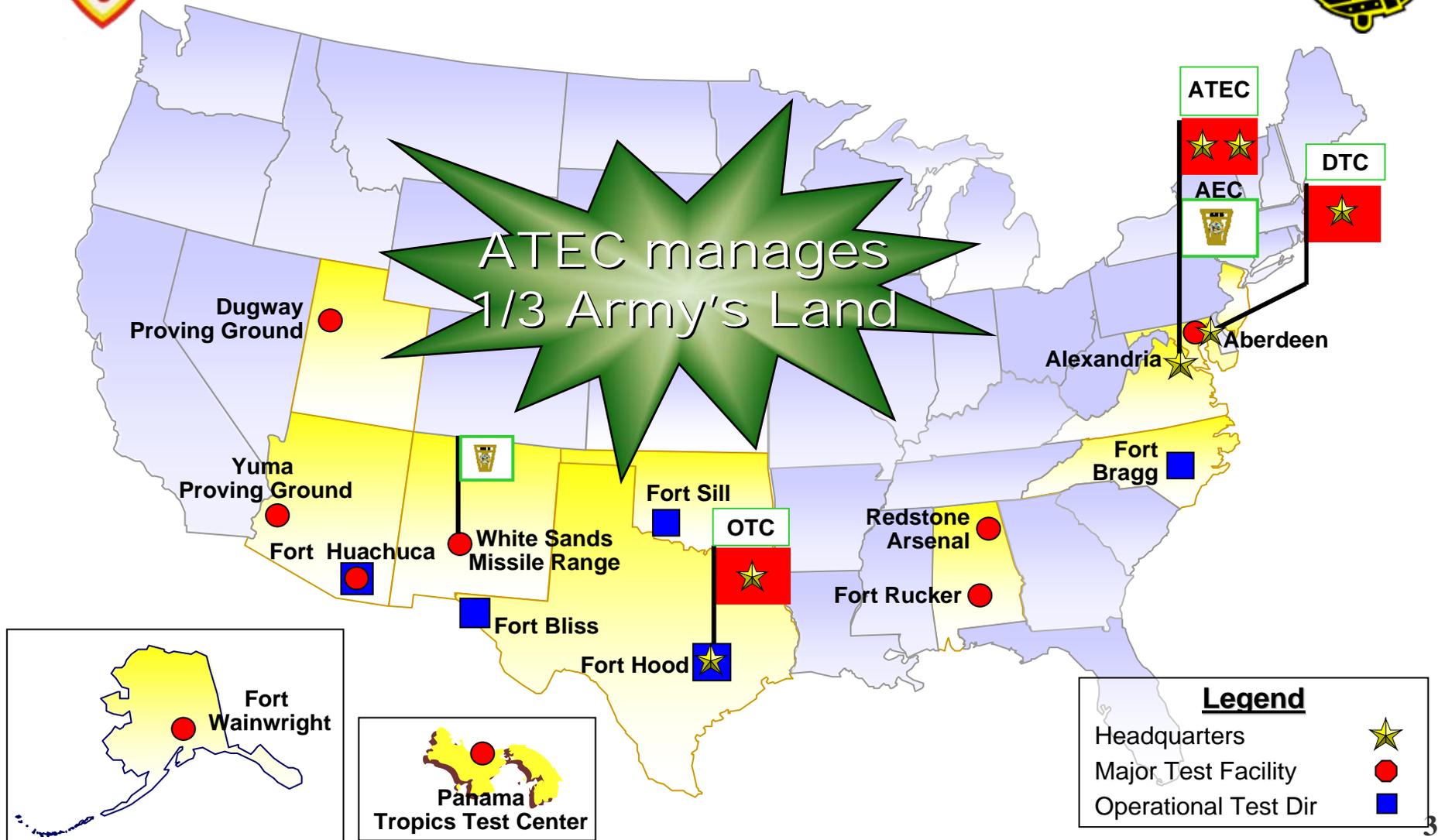


Understand Who We Are



- Full Spectrum Testing
 - ◆ All phases of testing; developmental, operational & evaluation
- Major Contributor
 - ◆ Testing and Evaluating over 400 systems
 - ◆ 1100 test events worked daily
 - ◆ ATEC Forward – Forward Operational Assessment Teams in Iraq & Afghanistan
- Large, complex organization
 - ◆ 8000+ personnel
 - ◆ 26 Locations, 17 States, Operate on 1/3 Army's Land mass...impacted by BRAC
 - ◆ Mostly reimbursable; competitive, efficient
 - ◆ \$5 Billion capital investment in facilities/instrumentation
- Value-added
 - ◆ Information for Army decision makers to ensure Warfighters have the right capabilities
 - ◆ Rapid testing in support of the Global War on Terrorism

Where We Are

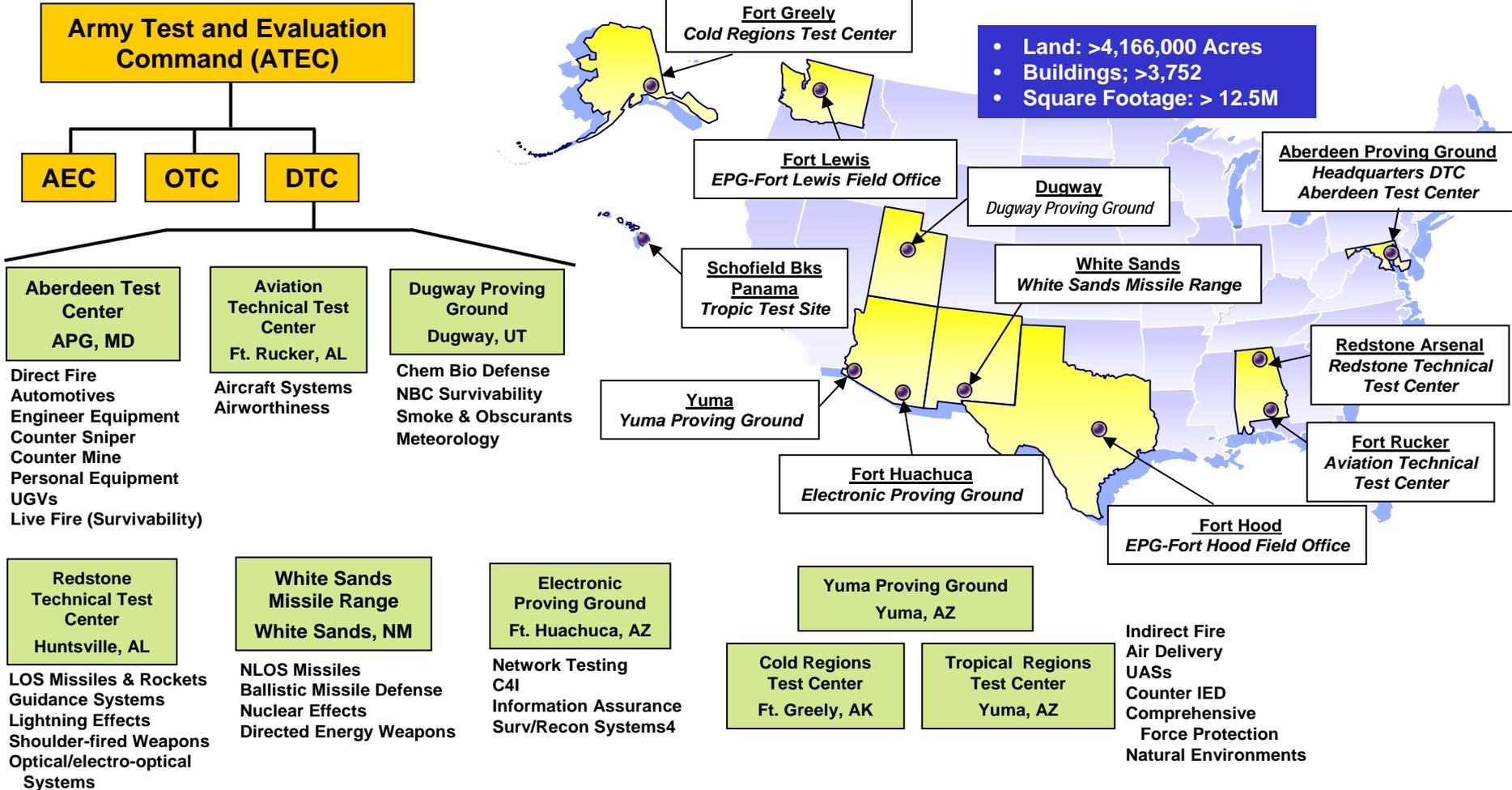




DTC – Who We Are



Ranges and Test Sites



Diverse test services to ensure effectiveness, interoperability, and safety



Items Being Tested by DTC



Mine Rollers



IED Defeat



Munitions Testing



UGV

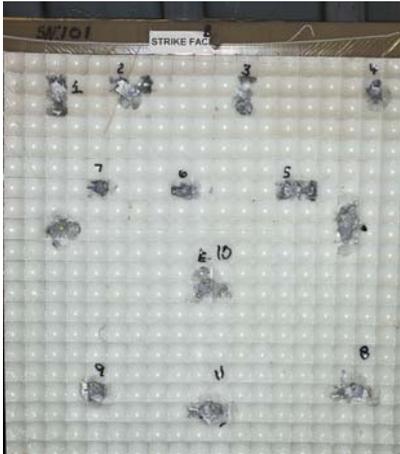




Tactical Wheeled Vehicle Up-Armoring Test Effort



Ballistic Testing



Coupons



Blast Mines



Roadside IEDs



Tactical Wheeled Vehicle Up-Armoring Test Effort

Automotive Testing



Roadway Simulator

NATO Lane Change



Brake Testing



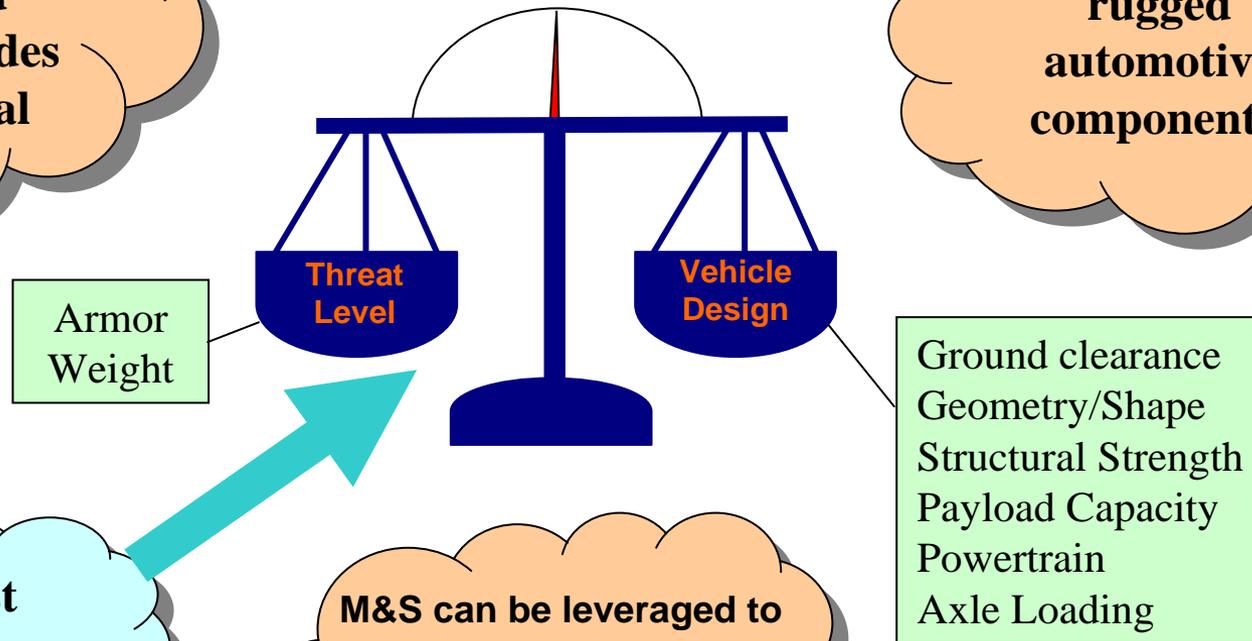
Tactical Wheeled Vehicle Up-Armoring Test Effort Trade-Offs



Consider armor weight and future upgrades during initial design.

Choose more rugged automotive components.

← Performance →



Vehicle must stay in balance.

M&S can be leveraged to

- Optimize armor design
- Make performance vs. Protection tradeoffs



Example of Successful Team Effort

(Long Term Armoring Strategy – LTAS)



- Classified ballistic performance specification developed up-front (PMO, ATEC, ARL).
- PMO hosted Industry day at Selfridge ANGB (29 Nov 05)
- IPT formed to coordinate T&E (PMO, OEM/subs, ARL, ATEC, others)
 - ◆ Design reviews open to IPT (forum to share ideas and work problems)
 - ◆ Army T&E and R&D communities had opportunity to provide input
 - Modeling to help optimize armor designs
 - Lessons learned from testing many systems (*Free Advice!*)



Advice / How We Can Help You



- Obtain security clearances (personnel and facility)
- Access to Developmental Test Command Proving Grounds
 - ◆ Thru PMO for Government Sponsored Programs
 - ◆ Testing for Private Industry
 - Design maturation/R&D (Controlled Access to data)
 - ◆ Requests for Test Services
 - Thru IPT Coordination Process
 - Direct Requests thru DTC website (www.dtc.army.mil)



Keys for Success



- Clearly Articulated Requirements
- Leveraging Previous Testing and Hardware in the Loop Simulation
- Early involvement of IPT members (team effort)
- Allocate realistic time and resources for T&E

*Testing is an
integral part of
the design
maturation
process!*