AS(AALT) Priorities

- Effectively Execute Programs
- Strive to be Efficient with Limited Resources
- Internal / External Effective Communication
- Developing Acquisition Workforce

The impact of Acquisition is felt around the globe and across combat actions. Every time a Soldier departs a FOB, every time a Stryker rolls down the road, every time an Apache releases a rocket in defense of this Nation, it’s because Acquisition personnel set the conditions for success.

- Hon. Heidi Shyu

“Effectively Execute Programs
Strive to be Efficient with Limited Resources
Internal / External Effective Communication
Developing Acquisition Workforce”
## AAW Composition

**38,239 Army Acquisition Professionals**

<table>
<thead>
<tr>
<th>Career Field</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>9,066</td>
</tr>
<tr>
<td>Contracting</td>
<td>7,873</td>
</tr>
<tr>
<td>Life Cycle Logistics</td>
<td>7,064</td>
</tr>
<tr>
<td>Program Management</td>
<td>3,208</td>
</tr>
<tr>
<td>Facilities Engineering</td>
<td>3,159</td>
</tr>
<tr>
<td>Test and Evaluation</td>
<td>1,873</td>
</tr>
<tr>
<td>Information Technology</td>
<td>1,718</td>
</tr>
<tr>
<td>Business - Financial Management</td>
<td>1,702</td>
</tr>
<tr>
<td>Production, Quality &amp; Manufacturing</td>
<td>1,385</td>
</tr>
<tr>
<td>Science and Technology Manager</td>
<td>457</td>
</tr>
<tr>
<td>Purchasing</td>
<td>422</td>
</tr>
<tr>
<td>Business - Cost Estimating</td>
<td>254</td>
</tr>
<tr>
<td>Industrial Contract Property Management</td>
<td>52</td>
</tr>
<tr>
<td>Acquisition Attorney</td>
<td>6</td>
</tr>
</tbody>
</table>

79.1% of AAW is represented in FIVE Acquisition Career Fields

### AAW Distribution

- AMC - 63%
- USACE - 14%
- USAASC - 13%
- ATEC - 5%
- Low Density Commands - 6%

*CAPMIS data 29 May 2017*
AMERICA’S ARMY: THE STRENGTH OF THE NATION

As of 2014 10 17

AAW Demographics

95% CIVILIAN
5% MILITARY

Military Acquisition Personnel concentrated in three Acquisition Career Fields (CON, PM and T&E)

GENDER RATIO

69.7% Male
30.3% Female

HIGHLY EDUCATED

16,553 Acquisition Professionals with a post-graduate degree

Doctorate < 2.4%
Masters < 40.9%
Bachelors < 44%
HS/Associates < 12.8%

17.9% RETIREMENT ELIGIBLE

The Acquisition Career Fields with the highest retirement eligible populations are in Production, Quality & Manufacturing, Program Management and Engineering - all at around 20%.

*eligibility figures based on current data

YEARS OF ACQUISITION EXPERIENCE

13 YEARS average years of experience

47 YEARS is the average age

CAPPMIS data 29 May 2017
Team Soldier Enterprise

12 Program Executive Offices

- Chemical-Biological Defense (Joint PEO)
- Command Control Communications - Tactical
- Missiles & Space
- Ground Combat Systems
- Ammunition

RDE Centers (X6)

- Armament *
  - Aviation & Missiles
  - Chemical-Biological
  - Tank-Automotive *
  - Natick Soldier *
  - Communications & Electronics

Army Materiel Command (AMC)

Contracting Centers (X6)

- TACOM *
  - Communications & Electronics
  - Aviation & Missile
  - Joint Munitions & Lethality

Army Test & Evaluation Command (ATEC)

- TRADOC Rapid Equipping Force
- Independent Test

Army Contracting Command

Defense Logistics Agency

Troop Support

Medical Research & Materiel Command

Life Cycle Management Commands (x4)

*Aligned with TACOM LCMC
## Improved Outer Tactical Vest (IOTV) Generations & Key Improvements

<table>
<thead>
<tr>
<th>GEN I</th>
<th>GEN II</th>
<th>GEN III &amp; FIOTV</th>
<th>GEN IV</th>
<th>SPS TEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
<tr>
<td>• 2007</td>
<td>• 2009</td>
<td>• 2013</td>
<td>• 2016</td>
<td>• 2018</td>
</tr>
<tr>
<td>• Increased Area of Coverage from legacy body armor</td>
<td>• Stiffened sides for comfort</td>
<td>• 20% reduction in weight</td>
<td>• Modular and Scalable System Provides a Concealable, Low Profile, Plate Carrier, and Full Tactical Vest in one system.</td>
<td></td>
</tr>
<tr>
<td>• First quick release</td>
<td>• Multiple yoke &amp; collar sizes</td>
<td>• Another 10% reduction in ballistic material weight.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Added TAP attachment</td>
<td>• SPS-TEP ballistic requirements adopted in Purchase Description.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Universal side panels (no left/right)</td>
<td>• SPS-TEP forward compatibility testing in FY16.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Adjustable side plate positions</td>
<td>• Increased mobility, especially in the arms/shoulders</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Expanded Sizes (11 Total)</td>
<td>• Groin Protector Replaced by Pelvic Protection System</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Improved Cummerbund</td>
<td>• Focus on increased mobility</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• OCP Conversion Kits</td>
<td>• Weight Reduction (10-40%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>31.09 lbs</strong></td>
<td><strong>31.09 lbs</strong></td>
<td><strong>30.78 lbs</strong></td>
<td><strong>29.92 lbs</strong></td>
<td><strong>22.46 lbs</strong></td>
</tr>
</tbody>
</table>

**Notes:**
- Discontinued 2018
Future Bridging System Initiatives

**Joint Assault Bridge (JAB):**
- 4QFY17 - Program Management Review
- 4QFY17 - Force Protection Mod: Installation effort on LFTE systems
- 4QFY17 - Start of 3 LFTE Asset Deliveries
- Late 1QFY18 LFTE Shots: Tentative

**Armored Vehicle Launched Bridge (AVLB) Chassis and Bridge Uprate**
- On-going - Replace M48A5 chassis with M60A1 launchers to APS, NGB, USAR - pending funding decisions
- 4QFY17 - Testing to assess an increase to the AVLB Bridge to a higher MLC rating to support Abrams weight growth. Structural testing successful at MLC 95 and a “Caution Crossing” of MLC 100.
- 4QFY17 – 3QFY18 - Durability Test being planned and executed

**Dry Support Bridge (DSB):**
- 4QFY17 - RRAD PLS Rebuild Start-up for European Deterrence Initiative
- 4QFY17 – Final Fieldings for 40m DSB Variant
- 1QFY18 - Proof of Concept for ECP 182 – Hydraulic Kit
- 2QFY18 46m Retrofit at 2225th, Marrero, LA
- On-going - PLS A0 Obsolescence: Working with RRAD on rebuilding components

**Bridge Erection Boat (BEB):**
- 4QFY17 - Full Rate Production Decision, Type Classification- Standard, Full Materiel Release
- 1QFY18 - First Unit Equipped (FUE)
## Rapid Acquisition Comparisons - Contrasts

<table>
<thead>
<tr>
<th>Criteria</th>
<th>SEP</th>
<th>REF</th>
<th>RFI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mission</strong></td>
<td>Evaluate</td>
<td>Equip</td>
<td>Issue</td>
</tr>
<tr>
<td><strong>Focus</strong></td>
<td><strong>Dismounted Soldier</strong></td>
<td>Warfighter Functional Areas</td>
<td>Soldier/Unit</td>
</tr>
<tr>
<td><strong>End State</strong></td>
<td>Terminate, Inform Future Reqmt, POR Recommendation,</td>
<td>Terminate, Sustain, Inform Future Reqmt, PEO Recommendation</td>
<td>Equipment Issued to Deployed/Deploying Forces</td>
</tr>
<tr>
<td><strong>Requirement Origination</strong></td>
<td>SEP Initiatives List</td>
<td>REF 10-Liner, Directed Reqmt</td>
<td>RFI Equipment List</td>
</tr>
<tr>
<td><strong>Requirement Approval Process</strong></td>
<td>Bi-annual</td>
<td>Continuous</td>
<td>Annual</td>
</tr>
<tr>
<td><strong>Mean Requirement Approval Cycletime</strong></td>
<td>38 Days</td>
<td>Immediate</td>
<td>270 Days</td>
</tr>
<tr>
<td><strong>Cycletime to Deliver Product</strong></td>
<td>&lt;360 days (to evaluate)</td>
<td>&lt;180 days (to equip)</td>
<td>&lt;180 days (to issue)</td>
</tr>
<tr>
<td><strong>PMO Funding Received</strong></td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Evaluation Personnel</strong></td>
<td>PMO Supported</td>
<td>REF Assessment Team</td>
<td>PMO Supported</td>
</tr>
<tr>
<td><strong>Equipment Distribution</strong></td>
<td>Flexible</td>
<td>Flexible</td>
<td>Deployed/Deploying Units</td>
</tr>
<tr>
<td><strong>Procurement Limit</strong></td>
<td>Up to one BCT</td>
<td>None/Budget Constrained</td>
<td>RFI List Prescribed</td>
</tr>
<tr>
<td><strong>Equipping and Sustainment</strong></td>
<td>No</td>
<td>Yes, Limited</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Product Assessment Output</strong></td>
<td>Unit Evaluation Report</td>
<td>Unit Evaluation Report/Forward Area Assessment/Other Assessment</td>
<td>Unit Evaluation Report</td>
</tr>
<tr>
<td><strong>Contract Restrictions/Limitations</strong></td>
<td>None</td>
<td>None</td>
<td>FFP Only</td>
</tr>
<tr>
<td><strong>Materiel/Service Restrictions</strong></td>
<td>None</td>
<td>No Ammunition/Aviation/Weapons</td>
<td>None</td>
</tr>
</tbody>
</table>
Never Send a Soldier Into A Fair Fight!
Back Up
Joint Assault Bridge (JAB)

Replaces M48/M60 chassis based Armored Vehicle Launched Bridge (AVLB)

Major components:
- M1A1 Abrams Chassis
  - with A2 heavy suspension
- Military Load Classification (MLC)-85 AVLB bridge,
- New Bridge Launch Mechanism

JAB will provide:
- Supportability: System availability/unit readiness improved commonality of parts with Abrams tank chassis.
- Maneuverability: Keep pace with ABCT
- Survivability: Crew protection equal to M1A1 Abrams chassis
- Integrates current suite of communications and situational awareness capabilities (FBCB2, BFT2, DAGR, SINCGARS)

AAO: 337

Milestones:
- MS C: 5 May 2016
- FRP Decision: 3QFY19

BLM – Bridge Launch Mechanism
NDI – Non Developmental Item
TUSK – Tank Urban Survivability Kit
ARAT – Abrams Reactive Armor Tile
JAB – Joint Assault Bridge
MLC – Military Load Classification
FBCB2 – Force XXI Battle Command, Brigade and Below
SINCGARS – Single Channel Ground to Air Radio System

ARAT I
AUTOFLUG Driver’s Seat
Bridge Launch Mechanism (BLM)

NEW BLM
JAB IPT Hull Ammo Compartment Kit (HACK)
M1A1 w/ED Chassis

TIGER Full Up Power Pack
M1A2 Suspension
JAB Chassis

Existing MLC 85 Bridge

RVSS – Rear Viewer Sensor System
TIP – Tank Infantry Phone
TIGER – Total Integrated Engine Revitalization
AIM – Abrams Integrated Management
ED – Embedded Diagnostics
O&S – Operations and Sustainment
HACK – Hull Ammo Compartment Kit
DAGR – Defense Advanced GPS Receiver
BFT2 – Blue Force Tracker v2

VA
Armored Vehicle Launched Bridge (AVLB)

MLC 85 Bridge Notes / Status:
- Initially the AVLB Scissors Bridge was fielded as an MLC-60.
- 1990’s: Conversion program adds stronger materials and design changes resulting in an MLC-70 classification. 2012: MLC 70 reclassified to MLC 85 after a series of successful structural and durability testing was completed to see if the bridge could be rated at MLC 85.
- Current: TARDEC conducting testing to determine if the bridge can be reclassified to MLC 95 'Normal’ and MLC 100+ “Caution” or higher. This will allow for crossings by future Abrams variants.
- Next Milestone: In Post Production and Deployment Phase: Bridge Uprate on-going
Bridge Erection Boat (BEB)

- **Improved Reliability/Maintainability with Embedded Diagnostics**
- **Interfaces with the Bridge Adaptor Pallet (BAP)**
- **Improved Survivability with Crew Protection Kit (CPK)**
- **Wide Beam Hull with Generous Freeboard Providing Excellent Load Carrying Capacity and Stability**
- **20 Year Life Expectancy**
- **Uses NAMJET for Propulsion, 25 Knots in Full Load Condition in Water Deeper Than 23 Feet**
- **The Tier III Cummins QSB 6.7 Engines Meet All Requirements Using Jet Propellant (JP)-8, F-24 Conus and Ultra Low Sulfur Diesel (ULSD) Fuels**

**AAO = 407**

Next Milestone: Full Rate Production/Type Classification Standard, Full Material Release 1QFY18
**Dry Support Bridge (DSB)**

Replaces Medium Girder Bridge (MGB). 1 DSB system consist of 1 DSB Launcher Vehicle and 7 flat-rack loads of bridge components.

- **AAO**: 112
- **Phase**: Production & Deployment
- **Milestone**: NA
- **Next ECP**: 40-46m

**Major components:**
- M1075 PLS bear Chassis
- Bridge components
- DSB Launcher mounted on PLS
- Military Load Classification (MLC)-96(W)
  - Normal, 120(W)
  - Caution 80(T)

**DSB improves:**
- The DSB provides the maneuver force with a capability to span obstacles of up to a 46 meter gap.
- A DSB company set consists of 4 DSB Systems that include 4 Launch Vehicles and 28 flat-rack loads of bridge components.
- The 40 Meter DSB provides a capability to span four 40 meter or eight 20 meter gaps and the 46 Meter DSB provides a capability to span four 46 meter or eight 28 meter gaps.
Acquisition Strategies

High Cost, Low Schedule, Low Risk Acquisition, No Overmatch, No Data Rights, Yes USA Made, COTS meets (T) Req’t, Yes Market Driven (RDTE $), No Competition, Yes Government Driven (RDTE $)

- Low Cost, High Schedule, High Risk Acquisition, Maybe Overmatch, Maybe Data Rights, Yes USA Made, No COTS meets (T) Req’t, No Market Driven, No Competition, Yes Government Driven (RDTE $)

Commercial Off the Shelf (COTS/NDI) vs Developmental.
**PEO Soldier**

**MISSION:** Develop, acquire, field, and sustain affordable, integrated, state-of-the-art equipment to improve Soldier dominance in Army operations today and in the future.

- **PM Soldier Weapons**
  - Individual Weapons
  - Crew-Served Weapons

- **PM Soldier Warrior**
  - Air Warrior
  - Ground Soldier

- **PM Soldier Protection & Individual Equipment**
  - Soldier Protective Equipment
  - Soldier Clothing & Individual Equipment

- **PM Soldier Sensors & Lasers**
  - Soldier Maneuver Sensors
  - Soldier Precision Targeting Devices

- **PM Rapid Equipping Force**
  - C-UAS
  - Squad ISR
  - Denied GPS SA & Comms
  - Cube
  - CSISR
  - COP/FOB
  - Force Protection

---

**Workforce**
- Civilian: 198
- Matrix: 740
- Military: 62
- Contractor: 499

**Current Focus Areas:**
- Soldier System Integration – reducing Soldier load
- Small Arms - XM17, ICSR, SDMR
- Rapid Acquisition – REF/SEP/RFI
- Body Armor & Personnel Airdrop Equipment
- Nett Warrior & Air Soldier System
- Sensors & Lasers – JETS, LLDR, FWS-I, FWS-CS, FWS-S, ENVG, NVGs
- Soldier Borne Sensors
- Human Capital - TM

**Current Issues:**
- Persistent Congressional & media interest in portfolio - small arms (XM17/M4A1), body armor, and uniforms/camouflage patterns
- Persistent Industrial base challenges – clothing & textiles, body armor
- Integrating squad into the lower tactical network (Nett Warrior/radios)
- Terminated XM25 program – unprecedented squad capability
- Designating OPR for Soldier Borne Sensors
- SETA Contract

**FY16 Appropriated Budget**
- Base: $881M
- OCO: $291.5M
- Total: $1,172.5M
Army Rapid Acquisition

- Rapid Equipping Force (REF)
- Soldier Enhancement Program (SEP)
- Rapid Fielding Initiative (RFI)
QUESTION: Why would DOD “NOT” spend $16M (~1.5%) and 3 years to compete and test before investing $600M* to field 450,000 systems (gun, ammo and magazine) that will be in Army, Air Force, Navy, Coast Guard inventories for 30 years?

* Estimate: ~ $150M gun + $450M ammo (50% Army AAO 238,000)

CONDITIONS: An individual buying “a handgun” DOES NOT have to get requirement approval, request (and receive CRA) money from Congress, use a FAR contract, compete, sustain a protest, be place on DOTE test oversight, operate reliably in worldwide environmental condition by population in the 5th-95th percentile or support training, supply and maintenance systems in TRADOC and AMC.
Requirements

- Before JAG Law of Warfare opinion (May 2015), **lethality** requirement driving program to .40 or .45 caliber **ball ammo** solution while **reliability and accuracy** requirements are achieved with a 9mm solution.

- Conscious decision to delay RFP release twice:
  - Jan 2015 to July 2015: Allow **frangible ammo** to meet all KPPs
  - July 2015 to August 2015: Review Intellectual Property Rights

---

Non Developmental Item (NDI): Integration of developed guns with ammo/magazines
Story Board Timeline

- **Air Force-7 years**
- **2 yr of a 4 yr schedule – Army**

**Oct 2013**
- Army Adopts Air Force CPD Requirement
- **Accuracy KKP** (Adjusted)

**Jan 2015**
- RFP
- MS C

**Feb 2016**
- Industry Proposals w/ Bid Samples

**Nov 2017**
- First Unit Equipped

**May 2015**
- JAG Opinion Frangible Ammo

- **1 – Year Mark**

- **Air Force CPD (Requirement) 2006**
- **7 Years**
**Mission:** REF *equips* COTS, GOTS, NDI nonstandard equipment across most Warfighter functional areas to address urgent capability gaps for a specific time, place and unit

**Origin:** VCSA established in 2002 with January 2004 HQDA DCS G3 Charter

**Requirement:** REF 10-Liner

**Requirement Approval Process Time:** Immediate

**Timeframe to Equip:** Within 180 Days

**Procurement Ceiling:** None, budget constrained

**Supported Organizations:** Deployed or deploying forces, Global Response Force, and Regionally Aligned Forces

**Execution Support:** Self-contained Equipping Teams and support (Contracting, Testing, Logistics)

**End-State:** Solve urgent operational needs and capability shortfalls, Inform future requirement, sustain in place, terminate, POR recommendation, transition to RFI List
**Mission:** SEP evaluates Soldier and industry submitted ideas for off the shelf items to improve weapons and support equipment to enhance the infantry Soldier’s combat effectiveness (Buy, Try, Decide)

**Origin:** Congressionally established by the FY90 NDAA as an enduring process

**Requirement:** SEP Council of Colonels approved and DCS G3/5/7 validated SEP Initiatives List (Semi-Annual and Out of Cycle when required)

**Requirement Approval Process Time:** Average 38 days

**Timeframe to Evaluate:** 365 days or less

**Procurement Ceiling:** Generally limited to one BCT

**Supported Organizations:** Infantry Soldiers, PMOs, industry, and other government agencies

**Execution Support:** PMOs, industry, and other government agencies

**End-State:** Inform future requirement, no further action, transition to existing POR, POR recommendation, transition to RFI List, transition to REF, etc.

---

**Flowchart:**

1. **Receive and Screen Proposals** ➔ **Submit to Council of Colonels (CoC) for Approval** ➔ **DCS-G3/5/7 Validates SEP List** ➔ **Buy Item** ➔ **Try Item** ➔ **Evaluation Report Decide Item Utility** ➔ **Inform Future Reqmt, etc.**
What is RFI?

- The RFI leverages current procurement programs, commercial-off-the-shelf technology, and lessons learned from ongoing operations in Iraq and Afghanistan to enhance the survivability, lethality, and mobility of Soldiers deployed in support of Overseas Contingency Operations.

- To maintain its currency and relevance, the list of RFI equipment fielded to Soldiers is updated regularly by the U.S. Army Training and Doctrine Command and approved by Headquarters, Department of the Army (HQDA).

- Every Soldier, regardless of their unit type, is assessed as a system and issued equipment necessary to execute a specific mission. For example, every M249 squad automatic rifleman receives the appropriate optics, short barrels, collapsible butt-stock, Modular Lightweight Load-carrying Equipment, and ammo packs required by a light machine gunner.
**RFI Process**

**Step 1:** Validation & Requirements
- HQDA G3 – Requirements
- HQDA G8 - Funding

**Step 2:** Schedule
- PEO-LCL Campaign Plan/ Master Fielding Schedule

**Step 3:**
- PM SPIE Patch Chart

**Step 4:**
- Fielding Teams
- BCT Fielding:
  - 5 TACOM SMEs
  - 3 CIF personnel
  - 26 SM from FORSCOM

**Step 5:** Configure, Ship and Field Equipment
- RLSC Lansing, MI
- Fielding Teams
- Units
- Accountability via PBUSE or CIF-ISM

**Step 6:** Satisfy Shortages
- RLW/KWAT STOREFRONT
- BAGRAM STOREFRONT

**Step 7:** After Fielding Event, Shortages and follow-on/fillers:
- Retouch/Due-out Event
- E-Order
- Fixed Issue Points/CRC
  - (Ft Bliss & Ft Hood)
- Theater Storefronts

**Coordination Visit**
- 300 days prior to LAD

**Lock Fac and dates**
- 280 days prior to LAD

**Unit Bulk**
- (Unit Equip)
  - 240 days prior to LAD

**Soldier Issue**
- (Soldier Equip)
  - 180 days prior to LAD

**FIELDING WINDOW**
- MRE
- Retouch
- LAD
- 30 days prior to LAD

For Official Use Only
# Hard Armor Plate Evolution

<table>
<thead>
<tr>
<th>Systems</th>
<th>SAPI</th>
<th>ESAPI</th>
<th>ESBI</th>
<th>ESBI</th>
<th>XSAPI</th>
<th>XSBI</th>
<th>VTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Weight (M)</td>
<td>8.1 lb. set</td>
<td>10.9 lb. set</td>
<td>5.1 lb. set</td>
<td>6X6: 3.28lbs. set 6X8: 4.38lbs. set</td>
<td>12.0 lb. set</td>
<td>6.0lb. set</td>
<td>ESBI - 10% ESAPI - 10% XSBI - 14% XSAPI - 7%</td>
</tr>
</tbody>
</table>

* Fielded in very limited quantities to OIF Soldiers
Locations Include:
- Military Installations / Forward Operating Bases
- Laboratories
- Research Centers
- University Affiliated Research Centers