2009 NDIA International Infantry & Joint Services Small Arms Systems Symposium

OSD Perspective

Anthony J. Melita
OUSD (Acquisition, Technology & Logistics)
Deputy Director, Portfolio Systems Acquisition,
Land Warfare and Munitions
Discussion Topics

- OSD / AT&L Organization
- Budget Trends
- Small Arms Joint Assessment Team
Budget Trends
Planning, Programming, Budgeting, and Execution

4 Administration Years with 2-year PPBE Cycle
Past and Projected Resources for Defense

(Billions of 2009 dollars)

Past and Projected Resources for Defense Investment

(Billions of 2009 dollars)

Small Arms & Ammunition
Joint Assessment Team
• **Objective** – Conduct an objective assessment of the Department’s approach to satisfying small arms and ammunition capability requirements

• **Tasking** – review current and projected Small Arms and Ammunition (SAA) requirements; assess performance of current SAA against requirements; establish acquisition and life-cycle costs; determine cost premium drivers on current and future weapons; evaluate cost and capability of current development and procurement plans; and consider future requirements and capabilities that can be acquired today, and that which requires R&D

• **Membership** – All DoD stakeholders
<table>
<thead>
<tr>
<th>JAT Membership</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OSD AT&amp;L (4)</strong></td>
</tr>
<tr>
<td><strong>OSD Policy</strong></td>
</tr>
<tr>
<td><strong>OSD Comptroller</strong></td>
</tr>
<tr>
<td><strong>OSD PA&amp;E</strong></td>
</tr>
<tr>
<td><strong>OSD DOT&amp;E</strong></td>
</tr>
<tr>
<td><strong>Joint Staff, J-8</strong></td>
</tr>
</tbody>
</table>
• Definitions of Small Arms & Ammunition

– **Small Arms**: Man portable, individual, and crew-served weapon systems used mainly against personnel and lightly armored or unarmored equipment. *(JP 1-02)*

– **Small Arms Ammunition**: Ammunition for small arms, i.e., all ammunition up to and including 20 millimeters (.787 inches). *(JP 1-02)* and 40mm grenades.
Small Arms Joint Analysis Approach

Define Problem

Which weapons systems and munitions acquisitions are most needed to improve Joint Force capabilities?

Research Questions

What weapon systems and munitions acquisitions are planned? What improvements are expected? What are the expected costs? How are we buying presently?

MOEs

Assess current MOEs: Lethality, Range, Maintainability, Reliability, Sustainability, Human Systems Integration, Cost. Additional MOEs can be added as needed.

Collect Data


Analyze Data

Apply combat models and simulations to a broad spectrum of scenarios to assess the operational effectiveness and logistics implications of alternatives. Examine alternatives for alleviating the capability gaps and determine their efficacy as joint solutions.
Analysis Process

- JUONS Service/SOCOM ONS
- CBAs
- Emerging Capability Docs
- Theater Assessments
- Service/SOCOM ONS

Gather Capability Gaps → Correlate Common Gaps → Identify DOTMLPF Solutions

- Weapons
- Enablers/Optics
- Ammo
- DOTmlPF

Current Status Requirement → Planned Upgrade Requirement → Technology Opportunities

Quad Chart Per Solution
**Quad Chart Example**

**Improved Night/Day Observation/Fire Control Device (INOD Block 2) (AN/PVS-26)**

**Description:** Provides the SOF sniper with a lightweight, low signature, fire control and observation device which allows the sniper to detect, acquire, and engage targets out to the weapon’s maximum effective range under day/night conditions.

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Cost / Affordability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Authorization/Validation:</strong> USSOCOM INOD ORD 25 June 2003</td>
<td><strong>Authorization:</strong> INOD</td>
</tr>
<tr>
<td><strong>LRIP Deliveries:</strong> 3rd QTR FY06</td>
<td><strong>Unit Cost:</strong> $8,000.</td>
</tr>
<tr>
<td><strong>Production Delivery:</strong> 4th QTR FY07</td>
<td><strong>BOI:</strong> 1875</td>
</tr>
<tr>
<td><strong>LRIP Fielding:</strong> 2nd QTR FY07</td>
<td><strong>IOC:</strong> FY09 (1875)</td>
</tr>
<tr>
<td><strong>FOC:</strong> FY11 (2018)</td>
<td><strong>FOC:</strong> FY11 (2018)</td>
</tr>
</tbody>
</table>

**Capability / Performance**

- Single Weapon mounted for heavy sniper and crew served weapons (INOD Block 2 - .50 caliber and crew served weapons).
- The INOD allows the sniper to go from day to night operations without re-zeroing.
- Clip-on design with dedicated day optics.
Small Arms Capability Gap Areas

- Engage Threat
- Acquire Targets
- Avoid Detection
- Operate & Maintain
- Breach
JAT Analysis Process

1. Acquire Targets
2. Gap A
   - Quad Charts
   - Findings
3. Gap B
   - Quad Charts
   - Findings
4. Gap C
   - Quad Charts
   - Findings
5. Gap D
   - Quad Charts
   - Findings
JAT Analysis Process (cont.)

Findings

Conclusions

Recommendations
Small Arms JAT Conclusions – Themes

• Measurable standards to support requirements definition

• Factors and challenges that impact system optimization and decisions regarding potential materiel and non-materiel solutions

• The impact of training on small arms effectiveness

• Availability of COTS/NDI materiel solutions
Questions?