US Munitions Industrial Complex – Readiness and Resource Perspectives
The “Theme”

Perspectives on the US Munitions Industrial Complex as they apply to readiness issues from an enterprise viewpoint.
Panel Members

Mr. Donald Chrans, HQDA DCS G-8

Mr. Paul Heidenreich, VP/GM - Esterline Defense Technologies

COL Charles Kibben, Commander, Crane Army Ammunition Activity

CSM David Puig, JMC, Command Sergeant Major

Mr. Bill Sanville, Deputy PM, PM MAS
The Customers Perspective
Our Service Members have faith in the ammunition and ordnance that they carry and use.

I never once doubted that when I engaged the enemy, the ammunition that I used was going to be effective and lethal.
The Korengal Valley
Readiness Risks

- Our Service Members hold faith they will always receive the ammunition and ordnance they need, on time, every time.

- We owe it to our customers to never break that faith.
The Project Management Perspective
New Administration Thrusts

- Push to achieve greater competition
  - Less Sole Source contracts
  - NTIB restrictions still OK
  - Opportunities for new sources
  - With more competition – Good proposals will be key

- Aggressive auditing by DCAA
  - Auditors are no longer accepting issues as they have in the past
  - Auditing is taking far longer than in the past
  - IB: Needs to listen carefully to the DCAA and pay more attention to detail

- Risks PM’s will be facing:
  - New Sources
  - Changes in contract types
  - Unlimited or Government Purpose Rights
What’s Next

- Ammunition Inventories Replenished
  - Stockpiles full and in some cases more than full leading to reduced buys in FY12-17
  - In general look for smaller buys
    - Exceptions: High Priority Items like 30mm M789 & 40mm M430A1
  - Some buys will be made to protect the IB but the IB must change to reflect the new warfighting reality.
    - The Cold War IB is morphing to reflect today's realities.
    - Continuous to Batch Processing
  - Significant improvements in effectiveness, reliability, etc can be reason to build additional rounds. Opportunities exist for improved munitions to fill a new War Reserve requirement
Old Requirements

- 20-85 Years old and some cases non-existent
- Leads to inefficiency and in some cases inability to meet mission requirements

Current requirements don’t always require defeat of modern well equipped forces
- No modern body armor defeat requirement
- Current requirements don’t take advantage of current technologies
  - Lightweight cases

PIPS vice new start R&D programs
Joint Munitions Command’s Mission

- **Make it**
  - $2.9B in FY08

- **Manage it**
  - 19 Gov’t sites
  - 154 commercial

- **Store it**
  - Value = $42.1B

- **Transport it**
  - Road
  - Rail
  - Air
  - Sea

- **Demilitarize it**
  - 135,000 inspections

- **Train**
  - 35,000 annually
  - distance, on campus and on-site

- **Support it**
  - 6,000 Gov’t personnel
  - 7,285 commercial

- **Inspect it**
  - 135,000 inspections

- **6,000 Gov’t personnel**
- **7,285 commercial**

- **50,000 tons annually**
Strategy:

- Continued modernization is critical to meeting National Military Strategy

- A steady state of resourcing avoids catastrophic production failures, supply disruptions, and improves operating efficiencies

Two imperatives:

- Steady-state funding for modernization
- Consistent workload, sufficient to sustain capabilities
Organic Base Logistics Capabilities

### Installations

<table>
<thead>
<tr>
<th>Installation</th>
<th>Storage</th>
<th>Daily Outload</th>
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</thead>
<tbody>
<tr>
<td>Blue Grass AD</td>
<td>1.8M sq ft</td>
<td>320 containers</td>
</tr>
<tr>
<td>Crane AAA</td>
<td>4.9M sq ft</td>
<td>302 containers</td>
</tr>
<tr>
<td>Letterkenny MC</td>
<td>1.7M sq ft</td>
<td>111 containers</td>
</tr>
<tr>
<td>McAlester AAP</td>
<td>5.2M sq ft</td>
<td>434 containers</td>
</tr>
<tr>
<td>Tooele AD</td>
<td>1.8M sq ft</td>
<td>338 containers</td>
</tr>
</tbody>
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### Ammunition Logistics Mission

- Joint Service contingency ammunition outload mission: 450K tons in 16 weeks (approx 45 ships)
- Support Air Force, Marine Corps, Navy, SOCOM training missions
- Support 78 Army CONUS training installations
- Store training and War Reserve ammunition
- Explosives safety and security

### Logistics Base Facts

- 11,000 ammo magazines built in WWII: $10B replacement cost
- Demil capacity: 66k – 136k tons per year
- Store 1.8M tons
- Maintain/Renovate training and War Reserve ammunition
- Unique explosives safety and security requirements

- Primarily deep stowage of excess/unserviceable ammo

### Total: 22.7M sq ft = 473 Football Fields
**Outcome:**
Responsive, Reliable and Efficient Facilities that Provide Quality Ammunition that Meet the Joint Warfighter’s Requirements

**Situation:**
- Critical Capabilities are At-Risk
- National Military Strategy objectives will be at risk

**What We Are Doing For Ourselves:**
- Modernizing with available funds
- Using Lean Six Sigma Principles
  - Competitive Acquisitions
  - Strategic Planning
  - BRAC Implementation
- Optimizing ammo supply network

**What We Need:**
- Steady State of Funding to modernize
- Increased Funding for Demilitarization efforts
- Adequate Operations and Maintenance, Army Funding (vice Supplemental)
- Consistent Levels of Ammunition Procurements

**What We Are Doing For Ourselves:**
- Modernizing with available funds
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The Resource Management Perspective
Modernization Projects
Notional “1-to-N” Process

PRIORITIZATION FACTORS

- Operational Continuity & Quality 35%
- Safety 25%
- Environmental 15%
- Financial Benefit 15%
- Strategic Initiatives & Programs 10%

Which projects are the most critical?
Modernization Example
Lake City Army Ammunition Plant
5.56, 7.62 and .50 cal Small Arms Ammo

Output to the Warfighter !!

BEFORE – 400M rounds/yr

AFTER – 1.6B rounds/yr

Vintage 1970s equipment
Buying replacement parts on Ebay
Quality limitations
Lack of safety equipment
WWII Final Inspection Equipment (Gage and Weigh)
Inefficient & unable to meet war fighter requirements

Updated equipment
Enhanced quality
Safer operations
New test/inspection equipment
Improved efficiency and capacity

$219.2M funded (FY05-09)
Remaining Requirement $114.1M (FY10-15)
The Civilian Ammunition Base Perspective
U. S. Munitions Industrial Complex
- Readiness and Resource Issues
“an industry perspective”

Presented by
Paul Heidenreich
VP/GM - Esterline Defense Technologies
Readiness and Resource Issues
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**TEAMWORK/CULTURE**
Ever Vigilant
IPTs, Teams
What is Next?

**FLEXIBILITY**
“Monuments”
Partnering/JV’s, etc.
A bridge too far?
Long term commitment

**BUDGETS, BUDGETS, BUDGETS**
201x? – it will happen
Soft Landing or Hard Fall?
Running out of time

**KNOWLEDGE and CAPABILITIES**
Tribal Knowledge Retention
Critical Technical Capability
Increased R&D funding
Product Improvements

**FORECASTS**
2010 blind spot
Critical to planning
Critical to investing

**DATABASE USAGE**
IBAT/MSR, etc.
Next Step – SMCA budget review

**Today is better than the 1990’s**
Better Prepared ICAP, MIBTF, IBAT, MSR, etc.
Ammunition Readiness Rating, etc.

**Industry/Gov’t needs to work together**