Small Caliber Ammunition State of the Union

COL Mark Rider
17 MAY 05

Reliable, Precise, Lethal
Take Aways

• Meeting the Warfighters’ Needs

• Must Continue Emphasis and Progress with:
  – Production Facilities
  – Products
  – Life Cycle Management
Agenda

• Mission
• Scope
• State of the Union-Small Caliber Ammunition
• Summary
PM MAS Provides Direct Fire Combat And Training Ammunition Capabilities To Warfighters (Army, Navy, Air Force, Marines) And Government Agencies To Support Dismounted Soldiers, Combat Vehicles, Helicopters, Naval Vessels, And High Performance Aircraft. The PM Does This Through Life Cycle Program Management Of Ammunition In The Following Categories:

- Small Caliber
- Medium Caliber
- Large Caliber
- Smart Munitions
Ammunition Products

<table>
<thead>
<tr>
<th>Caliber</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>100</td>
</tr>
<tr>
<td>Medium</td>
<td>69</td>
</tr>
<tr>
<td>Large</td>
<td>20</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>189</strong></td>
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</tbody>
</table>
# PM MAS

## FY05 Production Quantities Projection

<table>
<thead>
<tr>
<th>Caliber Type</th>
<th>Size</th>
<th>Product</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Small Caliber</strong></td>
<td></td>
<td>5.56MM</td>
<td>1,271M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.62MM</td>
<td>273M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.50 Cal</td>
<td>80M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9MM</td>
<td>75M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MISCELLANEOUS</td>
<td>11M</td>
</tr>
<tr>
<td><strong>Medium Caliber</strong></td>
<td></td>
<td>20MM</td>
<td>4M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25MM</td>
<td>1M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30MM</td>
<td>5.5M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40MM</td>
<td>11M</td>
</tr>
<tr>
<td><strong>Large Caliber</strong></td>
<td></td>
<td>105MM</td>
<td>.02M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>120MM TRAINING</td>
<td>.2M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>120MM TACTICAL</td>
<td>.013M</td>
</tr>
</tbody>
</table>
Small Caliber Ammunition
State of the Union

Assessment: We Are Meeting the Warfighters Needs!

Advances In Each Of the Three Areas

Production Facilities

Life Cycle Management

Products
Small Caliber Ammunition
State of the Union

• Robust Production Funding/Large Production Volumes
  – Very Good Funding Position Now and Into the Future
  – Delivering Over 1.4B Rounds Annually Right Now, Trend Is Going Up
  – Placing on Order Over 1.7B Rounds
  – Very Strong Support For Ammunition From Senior Army Leadership!

Great Growth in Production!
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(All Services, All Sources)

Increased Capabilities For Warfighters

Deliveries

- .50 Cal
- 7.62mm
- 5.56mm

Deliveries More Than Tripled

CY-2000: 457.4M
CY-2001: 643.2M
CY-2002: 628.6M
CY-2003: 791.1M
CY-2004: 1.053B
CY-2005: 1.496B

Increased

5/24/2005
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Production Facilities

• Balancing Organic and Commercial Capabilities
  – Achieving 1.2 B Rounds at Lake City
  – Receiving Over 300M Rounds From FY04 Urgent Buys
  – Finalizing Second Source Award for 300M Rounds

• Investing in Modernization and Capacity Expansion of Lake City
  – Modernization = Production Readiness = Assured Supply…Have Strong Leadership Support
  – Securing Funds to Ensure Lake City Retains its Strategic Capability
  – Already Increasing its Capacity From 1.2 to 1.5B by Mar 06
  – Commercial Sector Will Still be an Important and Significant Source of Augmentation to Lake City
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Concerns

- Modularity Impacts (7.62 and .50 Caliber) – Are We Positioned?

- Armor Piercing and Trace Production Capability – Number of Vendors….

- Supplemental Has Benefited Ammunition Greatly…What Happens When Hostilities End?
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- **Updating Technical Data Packages (TDPs)**
  - Setting up Process to Eliminate Antiquated and Contradictory Changes in TDPs
  - Consolidating Changes for Updated TDPs
  - Scrubbing to Ensure Critical Defects are Indeed “Critical”

- **Developing Packaging Improvements**
  - Aggressively Developing Modern Materials and Processes for Ammunition Packaging
  - Focusing on Both Packaging Effectiveness and Efficiencies
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Products

• Lethality Study
  – Understanding the Effects of Current Ammunition on Soft Targets…. What Makes Rounds More Lethal?
  – Establishing Common Standards and Procedures for Lethality Assessment
  – Getting Back Into the Science of Terminal Effects
  – With Science Known, Will Use Modeling and Simulation to Improve Capabilities of Current Ammunition

• Green Ammunition
  – Initiated Phase 2 of Study
  – Will Balance Cost, Performance, and Environmental Factors to Determine Potential Candidates

Building Lethality Tools!
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• No Significant Development Funding for Small Caliber Ammunition
• Life Cycle Management Command (LCMC) Creation
  – Moving Acquisition, Logistics, and Sustainment Areas Closer
  – Ammunition Enterprise: PEO Ammunition, Joint Munitions Command, and ARDEC
  – PM as Life Cycle Manager
    • Continually Reviewing Stockage Levels at Depot
    • Close Coordination With Theater Ammunition Personnel
    • Sustainment / Readiness Considerations Part of Acquisition Decisions

• Significant Support to Theater
  – Massive Quantity of Munitions Shipped in Support of Operations
  – Warfighters Are Well Fed in Terms of Small Caliber Ammunition
## Contributions to War on Terrorism (US Army Only)

### Life Cycle Management

<table>
<thead>
<tr>
<th>Rounds</th>
<th>5.56mm</th>
<th>7.62mm</th>
<th>.50 Cal.</th>
<th>Other Small Cal.</th>
<th>Total Small Cal.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIF (Sep 02-May 05)</td>
<td>403 M</td>
<td>88 M</td>
<td>32 M</td>
<td>15 M</td>
<td>538 M</td>
</tr>
<tr>
<td>OEF (Oct 01-May 05)</td>
<td>15 M</td>
<td>6 M</td>
<td>2 M</td>
<td>2 M</td>
<td>25 M</td>
</tr>
</tbody>
</table>

**Total:** 563 M

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5/24/2005
• Balancing Acquisition Management Risk Versus Industrial Base
  – All Decisions Balance Best Value/Price and Industrial Base Concerns
  – Continually Weigh the Effects on Industrial Base
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State of the Union

Life Cycle Management

Concerns

• Ammunition Asset Visibility
  – Overall, Must be Much Better
  – Great Need for Automation/Advanced Information Technologies
  – Distribution, Transportation, and Production Impacts

• Requirements Prognostics
  – Must Have Ability in Department of the Army to Anticipate Requirements Faster and Earlier

• Greater Synchronization of Industrial Base Strategy and Acquisition Decisions
Summary

• Meeting Warfighters’ Needs

• Must Continue Emphasis and Progress with:
  – Production Facilities
  – Products
  – Life Cycle Management