Munitions Executive Summit

COL Gutierrez
PM MAS Family of Products

Development

Production

Small Caliber

Medium Caliber

Large Caliber

DISTRIBUTION STATEMENT A: Approved for Public Release
Priorities & Focus

1. Future Capabilities
   - Five family of ammunition CDD’s in staffing
   - Three family of ammunition CDD’s documents in draft

2. Production – Support to Joint Warfighter
   - FY14 deliveries = 1.1B rounds

3. Maintain Industrial Base While Managing Inventory

Development / Qualification Programs Underway

- Modular Handgun Ammunition (Collaboration w/PM-SW)
- One Way Luminescence (OWL)
- Lightweight Ctg. Cases for Small Caliber Ammo
- 40mm Day/Night Thermal (DNT)
- 120mm Advanced Multi-Purpose (AMP)
- 25mm XM25 (Collaboration w/PM-SW)

Potential FY17-21 Development Programs

- Improved Sniper Ammo
- Reduced Range Training Ammo (RRTA)
- Advanced 40mm Grenades
- .50 Cal All Purpose Tactical Ctg.
PM-MAS
PB16 Budget Outlook
(FY16-FY20)

Spending Forecast:
- Increasing
- Consistent
- Decreasing

<table>
<thead>
<tr>
<th></th>
<th>5.56MM</th>
<th>7.62MM</th>
<th>HANDGUN</th>
<th>.50 CAL</th>
<th>20MM</th>
<th>25MM</th>
<th>30MM</th>
<th>40MM</th>
<th>TANK</th>
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Industrial Base Posture
Key Trends

Small Caliber
- High volume products in relatively good position
  - Reaping benefits of moderate to high commercial demand
  - Boutique Items – Close Combat Mission Capability Kit (CCMCK), Short Range Training Ammunition (SRTA) etc. are more dependent on other service buys

Medium Cannon Caliber (20mm, 25mm, 30mm)
- 20mm-25mm consistent buys in out years
- HE LW30mm production declining fast as we reach War Reserve
- TP LW30mm Production Steady
- 30x173mm totally dependent of A-10 long-term viability

Medium Caliber (40mm Grenades)
- New emerging requirements could increase out year demand
  - Low Velocity Improved Range Anti Personnel (IRAP) Ctg. Development
  - Potential Adoption of 40mm Door Breaching Ctg.
  - Potential High Velocity Anti-Personnel Capability on MK19

Large Caliber Tank Ammo (120mm)
- Increased consumption of training rounds has resulted from reconstitution of armor units
- Steady low rate of tank training production, drawing down stockpile; expect to turn corner in 2019 with increases in new production
# PM MAS FY15 / FY16

## Competitive Opportunities

<table>
<thead>
<tr>
<th>FY15 / FY16</th>
<th>FY15</th>
<th>FY16</th>
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<tbody>
<tr>
<td><strong>Program/ Item/ Description</strong></td>
<td><strong>Projected RFP Release</strong></td>
<td><strong>Projected Award Date</strong></td>
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<td>CTG 20MM PGU 28A/B SAPHEI BP</td>
<td>MAY/FY15</td>
<td>JUL/FY15</td>
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<td>CTG 20MM PGU 27A/B TP BP</td>
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<td>CTG 20MM APDS MK244-0 LNKD</td>
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<td>CTG 30MM LINKED TP PGU-15 A/B</td>
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<td>Small Caliber Second Source</td>
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<td>Pistol Family (9mm, .38 cal, .45 cal)</td>
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<td>9mm DDI</td>
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<td>CTG 25MM HEI PGU-25/U</td>
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<td>CTG 25MM TP PGU-23/U SGL RND W/O TRACER</td>
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*Competitive (C), Small Bus Set-Aside (SBSA), National Tech. & Industrial Base (NTIB), Sole Source (SS), Competitive Delivery Order (DO), etc…

**Firm Fixed Price (FFP), Indefinite Delivery/ Indefinite Qty. (IDIQ), Cost Plus Fixed Free (CPFF), etc…
PM-MAS Request for Industry Input

• Potential Emerging U.S. Army requirement for additional 120mm High Explosive (HE) ammunition
  ✓ “Bridging the gap” until AMP is in production

• PM-MAS is requesting industry input on how quickly industry can supply HE ammunition via a TDP or NDI solution

• PM-MAS does not have R&D funds for development

• NDI solutions may be evaluated via a performance specification

• Industry input will be considered in developing the acquisition strategy
Maneuver Ammunition Systems
Technology Needs

• Lightweight Small Caliber Cartridge Case

• One Way Luminescence (OWL)

• 40mm Grenade Improvements (High and Low Velocity HV/LV)
  ✓ Anti-Defilade Capability
  ✓ Increased Range
  ✓ Increased Effects

• Small Cal Ammo improvements
  ✓ Automated primer manufacturing
  ✓ Lead Free replacement for lead styphnate in primers
  ✓ Corrosion protection for 5.56mm and 7.62mm EPR penetrators
  ✓ Mercury free Stress Corrosion Cracking test for brass cartridges
  ✓ .50 Cal All Purpose Tactical Cartridge (APTC)
  ✓ Subsonic sniper cartridges
  ✓ Reduced Range Training Ammunition
  ✓ Improved Sniper Ammunition
Message to Industry

- Overall FY15 likely to be low point in Direct Fire Ammunition, production will slowly rise thereafter
  - Majority of production has shifted to training ammunition
  - War Reserve in most cases fully stocked

- Request Industry input on 120mm HE Ctg. Production

- Multiple R&D projects initiated FY15 in Small, 40mm and 120mm tank ammunition with more R&D programs expected in out-years
  - Chance for Industry to bring new ideas / innovations for development to the attention of PM-MAS for possible development & production