NDIA Forum
12 November 2013
Picatinny Arsenal

Presented by:
BG McGuiness
PEO Ammunition
Picatinny Arsenal
“DoD Joint Center of Excellence for Guns & Ammunition”

- Employees 5,955
  - 1,258 advanced degrees
- Over $4.6B annual budget
- Acres 6,493
- Structures 1,010
- Armaments laboratories 64
- Over 1 million square feet of research space

- Technologies transitioned to the Joint Warfighter:
  - 59 Full and 95 Urgent Materiel Releases since 2008
  - Enabled fielding of 234 new weapons and equipment since 9/11
- Partnered with Industry, Academia, and other gov't agencies - 140 Cooperative Research & Development Agreements

“This is a unique facility with a critically important mission; there really is no other government or industry counterpart to Picatinny.” Sec Army John McHugh, Sept 2013

DISTRIBUTION STATEMENT A: Approved for Public Release
We Support the Joint Warfighter and . . .

Defense
- Joint Improvised Explosive Device Defeat Organization
- Defense Ordnance Technology Center
- US Northern Command
- Defense Threat Reduction Agency
- US Special Operations Command
- Defense Advanced Research Projects Agency

Other Government Agencies
- Department of Justice
- Department of Homeland Security
- Federal Bureau of Investigation
- State Department
- Transportation Security Administration
- New Jersey Department of Transportation
- New Jersey State Police
- Department of Energy

Every Joint Warfighter is equipped with world-class Picatinny lethality!
A world class organization delivering the most capable and affordable ammunition, weapons and counter IED products to the Joint Warfighter as efficiently as possible.

Single Manager for Conventional Ammunition
### PEO Modernization Strategy

#### Emerging Technology (next 6 Years)

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<tbody>
<tr>
<td>Precision Guidance Kit</td>
<td>Precision Mortar w/6 DOF Ballistics</td>
<td>Modernized Demolition Initiators (MDI)</td>
<td>120MM, Advanced Kinetic Energy</td>
<td>One Way Luminescence (OWL)</td>
<td>Individual Non-Lethal System (INS)</td>
<td>Individual Assault Munition (IAM)</td>
<td>Mounted Detection and Marking</td>
<td>Enhanced IM with Benign Smoke</td>
<td>Ammunition Plant Modernization</td>
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<td>Extended Range Ammo</td>
<td>Extended Range Ammo</td>
<td>Affordable, Anti-Jam Precision</td>
<td>Advanced Multi-Purpose</td>
<td>40mm Non Dud Prod.</td>
<td>40mm &amp; 12ga Improvements</td>
<td>Spider Improvements &amp; Remote Emplacements</td>
<td>Robotic Dismount Detection and Marking</td>
<td>Fuze &amp; Primer Improvements</td>
<td>Lighten the Logistics Load</td>
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<td>Environmentally Benign Smoke Mortars</td>
<td>Modernized Demolition Initiators (MDI)</td>
<td>Depleted Uranium (DU) Replacement</td>
<td>Med Cal Extended Range</td>
<td>40mm Airburst</td>
<td>Passive and Covert Target Marking</td>
<td>Standoff Entry Breaching and Asset Neutralization</td>
<td>Increased Speed and Stand-off</td>
<td>Dual Mode (Lethal/N-L) Grenade</td>
<td>Design for Demil</td>
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<tr>
<td>Affordable, Anti-Jam Precision</td>
<td>Lightweight Fire Control</td>
<td>Depleted Uranium (DU) Replacement</td>
<td>30mm Airburst For Apache</td>
<td>40mm Airburst</td>
<td>Extended Range</td>
<td>Next Gen Networked Munitions</td>
<td>Automated Standoff Explosive Detection, Marking &amp; Neutralization</td>
<td>Multi-Purpose Smoke</td>
<td>Enhanced Equipment and Process for Demilitarizing IM Explosives</td>
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<td>Lightweight FC</td>
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<td>Standoff Substance Identification</td>
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#### Future Concepts (16+ years)

- Extended Range Autonomous Weapons
- Swarming Munitions
- Non-Kinetic Engagement
- Remote Emplacement & Initiation
- Scalable/Tunable Effects
- Long Range Scalable Effects
- Autonomous Systems
- Non-Kinetic Engagement
- Scalable Effects / Swarming Munitions
- Non-Kinetic Engagement
- Ammo on Demand
- Information Dominance / Reduced Detection
- Longer Range – Advanced Target IAM
- Non-Kinetic Engagement
- Automatically Anticipate, Detect, Mark and Identify/Classify, and Neutralize Explosive Hazards
- Lighter Weight
- Greater Effects
- Non-Kinetic
- Flexible Production Lines/On-site production
- Automated Condition Monitoring, Distribution & Re-Arm
- Integrated Life-Cycle Design for Demil
- Advanced Bio-Demil Technologies
PEO Ammunition FY14 Budget

Operating under CRA until Jan 2014

Key Program Metrics

Programs (Army Only):
- ACAT I: 1
- ACAT II: 4
- ACAT III: 156
- QRCs: 18

Product Phases*:
- Pre-System Acquisition: 2
- Eng & Mfg Dev: 6
- Prod & Dep: 237
- Operations & Support: 679

*Some programs in multiple phases

Source: FY14PB
Conventional Ammunition
Fiscal Outlook (FY13-18)

Source: 14 Pres Bud dated Feb 2013

DISTRIBUTION STATEMENT A: Approved for Public Release
FY13 – FY14 Funding Comparison by Ammo Families ($ in K)
Key Ammo Industrial Base
Risks/Challenges & Opportunities

Risks/Challenges:
• Support the Warfighter
• Financial viability of ammo supply chain
• Loss of defense unique 2nd/3rd tier suppliers
• Increase in Single Point Failure suppliers & higher unit costs long term due to a lack of competition
• Less economical production rates & stretched schedules resulting in higher unit costs short term
• Reduction of industry investment in new technology
• Loss of uniquely skilled production engineering workforce
• Loss of capacity for future surge requirements

Opportunities:
• Consolidation of oversized capacity
• Leaning of manufacturing operations
• GOCO AAP Tiger Team cost reduction initiatives
• Foreign Military Sales / Direct Commercial Sales
We’re Meeting Joint Warfighter’s Needs!