



# PEO AMMUNITION

## Munitions Executive Summit

February 2012

PM Acquisition Panel

Presented by:

Mr. Shields

DPEO Ammunition



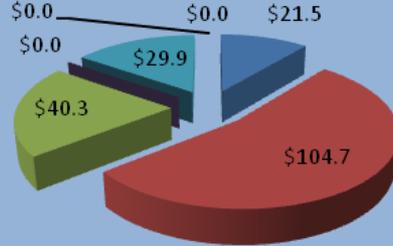


# FY 13 PEO Ammo Funding

PAA \$1,910.1 M



RDTE \$196.4 M

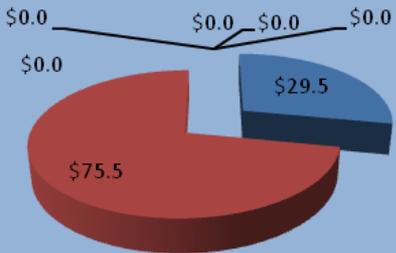


Other Services \$940.6 M

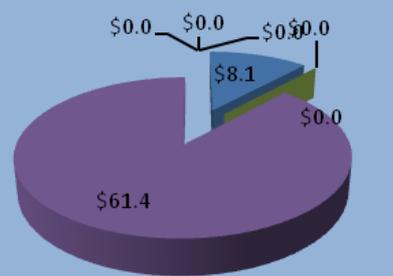


**Total \$3.2B**

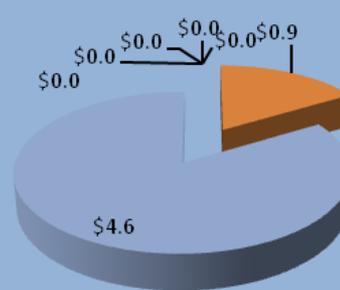
OPA \$105.0 M



WTCV \$69.5 M



OMA \$5.5



## Portfolio Summary

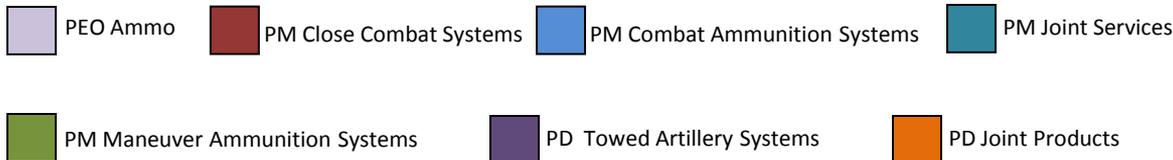
### Programs:

ACAT I	1
ACAT II	4
ACAT III	645+
QRCs	22

### Product Phases\*:

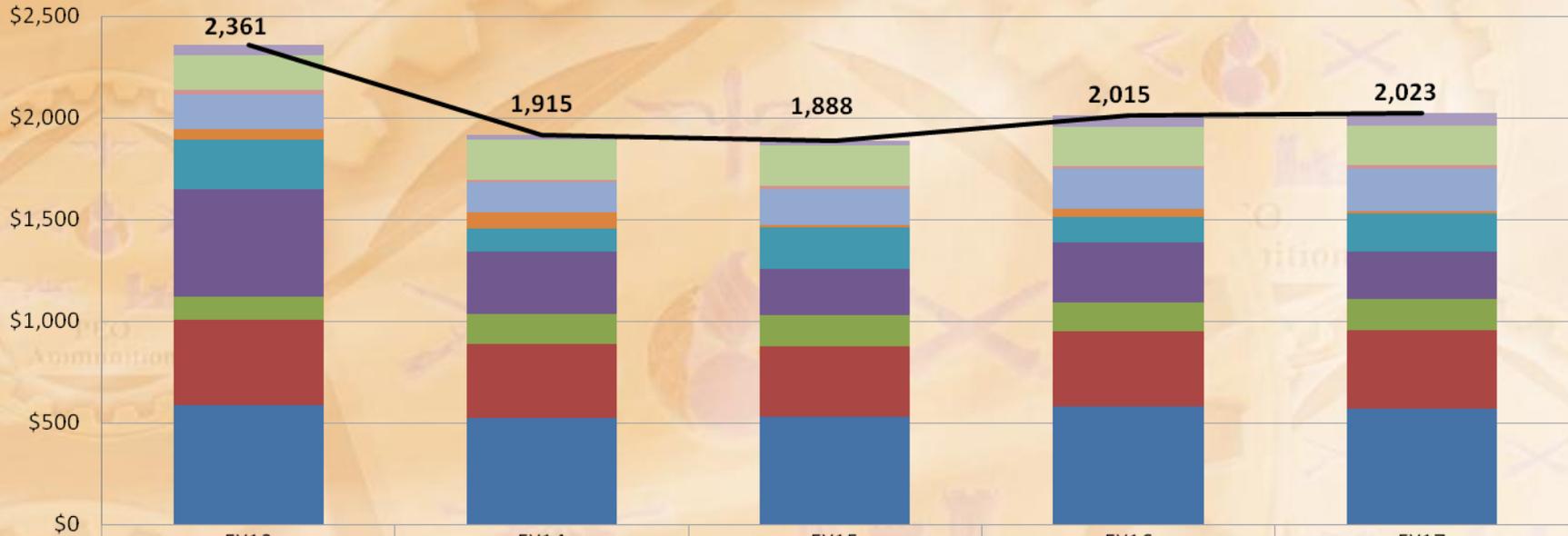
Pre-System Acquisition	22
Eng & Mfg Dev	2
Prod & Dep	272
Operations & Support	376+

\*Some programs in multiple phases





# FY13 PresBud FYDP by Ammunition Families (in \$M)

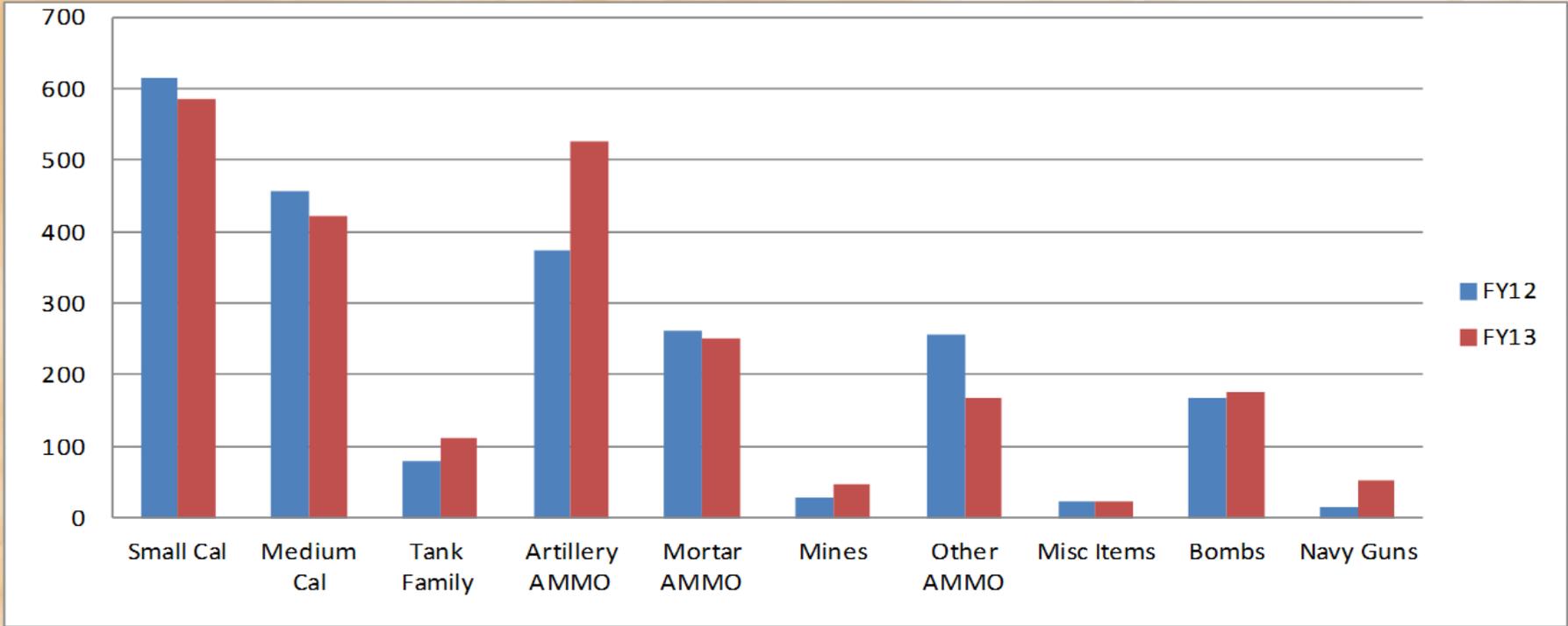


	FY13	FY14	FY15	FY16	FY17
Navy Guns	51	25	25	60	59
Bombs	174	194	199	191	196
Misc Items	23	14	13	16	18
Other AMMO	169	149	180	195	211
Mines	48	76	10	40	11
Mortar AMMO	249	117	206	125	184
Artillery AMMO	525	309	226	296	237
Tank Family	112	145	154	140	151
Medium Cal	422	363	346	374	386
Small Cal	585	524	528	577	569
<b>Total</b>	<b>2,361</b>	<b>1,915</b>	<b>1,888</b>	<b>2,015</b>	<b>2,023</b>

\*Data Source: B&P System PBD13 cycle, funding requirements for all SMCA services. \*This data excludes FMS, Production Base and Demil.  
\*FY13 includes OCO in the amount of \$450M.



# Comparison of FY12 vs. FY13 by Ammunition Families FY13 PresBud (in \$M)



	Small Cal	Medium Cal	Tank Family	Artillery AMMO	Mortar AMMO	Mines	Other AMMO	Misc Items	Bombs	Navy Guns	Total
<b>FY12 (M)</b>	614	456	79	373	262	29	255	23	169	15	<b>2,275</b>
<b>FY13 (M)</b>	585	422	112	525	249	48	169	23	174	51	<b>2,361</b>
<b>\$ (M) Change</b>	(28)	(34)	34	153	(13)	19	(86)	(0)	6	36	<b>86</b>
<b>% Change</b>	(4.62%)	(7.40%)	43.00%	41.02%	(4.85%)	63.57%	(33.82%)	(1.39%)	3.36%	243.64%	<b>3.8%</b>

\*Data Source: B&P System PBD13 cycle, funding requirements for all SMCA services. \*This data excludes FMS, Production Base and Demil.  
 \*FY12 includes OCO in the amount of \$386M. \*FY13 includes OCO in the amount of \$450M.



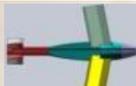
# PEO Ammo Portfolio Reviews

- First Session: PM / PD, TRADOC, contracting centers, ARDEC, JMC, and other Services
  - Prioritizes efforts and results in identification of opportunities to modify or terminate requirements where capability redundancy exists, and/or reduce/stop production and/or delay development
- Second Session: Includes HQDA representatives from G3, G4 and G8
  - Recommendations from HQDA and feeds the Ammunition Management Processes
  - Controls redundancy and supports the POM build
- Third Session: GO/Executive level review
  - Assess/Agree: capability roadmaps and Warfighter modernization S&T efforts
  - Assess/Agree: should-cost, requirements, capability redundancy, opportunities to reduce production quantities

Ensures a common understanding and full visibility of requirements driving fiscal investment across R&D, procurement, and sustainment



# PEO Modernization Strategy

Emerging Technologies Programs (next 5 Years)	Future Trends (5+ years)
<p><b>Artillery Munitions and Weapon Systems</b></p> <p>Precision Guidance Kit  M795 Extended Range  Laser Ignition Systems  DPICM Alternative </p>	<p>Affordable, GPS Denied Precision  Advanced Lightweight Position Navigation  Non-Toxic, Non-Incendiary Smoke  Extended Range Guided Projectiles </p>
<p><b>Mortar Munitions and Weapon Systems</b></p> <p>MAPAM  Lightweight Mortar Systems 60mm/81mm  Accelerated Precision Mortar Initiative </p>	<p>Affordable, GPS Denied Precision  Non-Toxic, Non-Incendiary Smoke  Extended Range Guided Projectiles </p>
<p><b>Direct Fire</b></p> <p>120MM, Advanced Kinetic Energy </p>	<p>Embedded Propellant Temperature Sensor </p>
<p><b>Small &amp; Medium Caliber</b></p> <p>Lightweight Ammo  7.62 EPR  40mm Non Dud Prod. </p>	<p>30mm Airburst  Advanced Armor Defeat  40mm Airburst  Imperceptible Trace </p>
<p><b>Non-Lethal</b></p> <p>Individual Non-Lethal System (INS)  Dual Mode (Lethal/N-L) Grenade </p>	<p>Passive and Covert Target Marking </p>
<p><b>Close Combat Systems</b></p> <p>Individual Assault Munition (IAM)  Spider Improvements </p>	<p>Next Gen Networked Munitions  Non-Toxic, Non-Incendiary Multi-Spectral Smoke  Standoff Entry Breaching and Asset Neutralization </p>
<p><b>IED Defeat &amp; Counter Mine</b></p> <p>Counterbomber PBIED Detection System  Passive Infra-red IED Pre-Detonation System </p>	<p>Standoff Explosive Neutralization  Standoff Substance Identification </p>
<p><b>Industrial Base</b></p> <p>New NC Facility Radford AAP  Sm. Cal. Modernization Lake City AAP  A2B move Holston AAP  TATB Production Holston AAP </p>	<p>Solventless Propellant Line Radford AAP  Flexible Manufacturing Facility </p>
<p><b>Demilitarization</b></p> <p>Disassembly and Energetic Destruction Technologies </p>	<p>Enhanced Autoclave Equipment and Process for Demilitarizing IM Explosives </p>



# PEO Ammo Technology Focus Areas

- Lightweight Small Cal Ammo
- Imperceptible Small Cal Tracer
- Advanced Small Cal Armor Piercing
- Non-Lethal Force Application
- Low cost/small package Wireless Initiation Devices
- Next Generation Mounted/Dismounted Breaching Devices



# PEO Ammo Technology Focus Areas (cont)

- Extended Range Artillery & Mortars
- Anti-Jam, GPS Denied & Alternate (non-GPS), and M-Code GPS Affordable Precision
- Electronic Countermeasures to disrupt enemy electronics
- Non-Toxic, Non-Incendiary Smoke
- Increased HE Capability and Cannon Cluster Munition replacement technologies



# Contracting Opportunities

- DoD Ordnance Technology Consortium (DOTC)
  - Focal point for ordnance system technology research and development <http://www.nwec-dotc.org/>
- National Small Arms Technology Consortium (NSATC)
  - Research, development and engineering of small arms weapons systems and munitions <http://nationalsmallarmscenter.com/>
- DoD Small Business Innovation Research (SBIR)
  - <http://www.acq.osd.mil/osbp/sbir/index.shtml>
- RFI for Enhanced Lethality for Light, Medium and Hard Targets
  - Develop additional background info to support the artillery lethality roadmap – Release To be Announced



# Key Ammo Industrial Base Risks/Challenges & Opportunities

## Risks/Challenges:

- Loss of Defense Unique 2nd/ 3rd tier and Single Point Failure suppliers
- Reduction of industry investment in new technology
- Increased unit prices
- Reduced ability to surge quickly
- Financial viability of ammo supply chain
- Overarching industrial base strategy agreement w/ implementation of Better Buying Power initiatives
- Risk Mitigation of Single Point Failures
- Modernizing AAPs without disrupting production and logistics operations

## Opportunities:

- Consolidation of oversized capacity
- Leaning of manufacturing operations
- Large company Merger and Acquisition of 2nd and 3rd tier suppliers



# Key Ammo Ind Base Challenges

1. Financial viability of ammo supply chain
2. Overarching industrial base strategy agreement w/ implementation of Better Buying Power initiatives
3. Risk Mitigation of Single Point Failures
4. Modernizing AAPs without disrupting production and logistics operations

