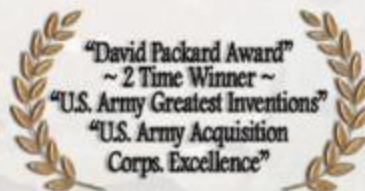




# Munitions Executive Summit

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**COL Gutierrez**





# PM MAS Family of Products



OWL  
ADVAP



M1037 SRTA  
M200  
M193  
M855  
M856A1  
M855A1 Ball



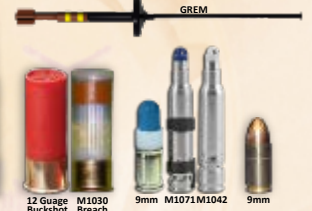
M973 SRTA  
M974 SRTA  
M62  
M62A1  
M80 Ball  
M80A1  
M82  
M276  
M118 Ball  
MK248 Mod 0



M1A1 Blank  
M33 Ball  
M17 Trace  
M20  
M8  
M211  
MK257



9mm  
5.56mm  
7.62mm  
.50 Cal



DDI  
GREM

12 Gauge Buckshot  
M1030 Breach  
9mm  
M1071  
M1042  
9mm

## Development

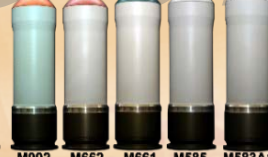
## Production



DNT-HV  
DNT-LV  
IRAP



M430A1  
M918A1  
M385A1  
M781  
M433



M992  
M662  
M661  
M585  
M583A1



MK244  
M940  
PGU27  
PGU28  
PGU30



M791  
M792  
M793  
M910  
PGU23  
PGU25  
PGU32  
M919  
M788  
M789



MK239  
MK266  
PGU14  
PGU15  
PGU13B  
L60

## Development

## Production



AMP  
M829E4  
M724A1E1  
KEWA1  
M1002  
M865  
IM HE-T



57mm Rocket  
40mm RPG  
73mm HE Recoilless  
120mm Artillery  
82mm Mortar  
120mm Mortar  
40mm Frag  
40mm Frag  
40mm Smoke  
12.7 x 108mm  
14.5x114mm  
23x152mm  
7.62mm x 54R  
7.62x39mm

## Development

## Production

NOT TO SCALE



# 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

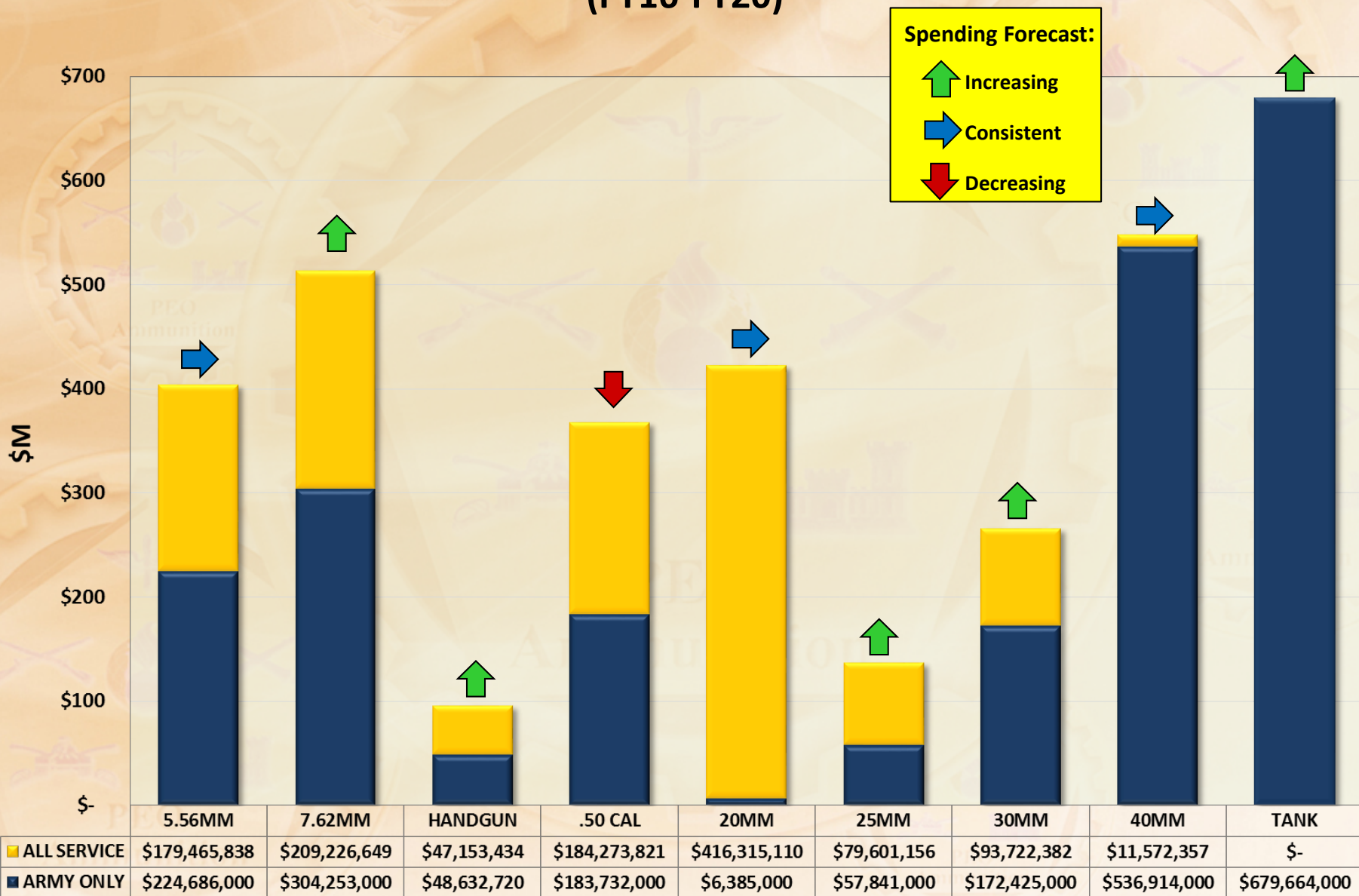
- Modular Handgun Ammunition (Collaboration w/PM-SW)
- One Way Luminescence (OWL)
- Lightweight Ctg. Cases for Small Caliber Ammo
- 40mm Day/Night Thermal (DNT)
- 120mm Advanced Multi-Purpose (AMP)
- 25mm XM25 (Collaboration w/PM-SW)

### 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)





# 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



FY15 / FY16					
FY15					
Program/ Item/ Description	Projected RFP Release	Projected Award Date	(\$M) Amount	Contract Strategy	Contract Type
CTG 20MM PGU 28A/B SAPHEI BP	MAY/FY15	JUL/FY15	\$19.20	DO	IDIQ
CTG 20MM PGU 27A/B TP BP	MAY/FY15	JUL/FY15	\$21.00	DO	IDIQ
CTG 20MM APDS MK244-0 LNKD	MAY/FY15	JUL/FY15	\$18.00	DO	IDIQ
CTG 30MM LINKED TP PGU-15 A/B	MAY/FY15	JUL/FY15	\$29.50	DO	IDIQ
CTG 30MM HEI-T MK266-1 W/LK MK15	MAY/FY15	JUL/FY15	\$5.40	DO	IDIQ
FY16					
Small Caliber Second Source	MAY/FY15	MAR/FY16	\$580.0	NTIB	FFP
Pistol Family (9mm, .38 cal, .45 cal)	JUL/FY15	MAR/FY16	\$99.2	C	IDIQ
9mm DDI	OCT/FY15	MAR/FY16	\$1.8	C	FFP
Non Standard Ammunition	JUL/FY15	MAR/FY16	\$234.0	C	IDIQ
CTG 20MM PGU 28A/B SAPHEI BP	MAY/FY16	JUL/FY16	\$16.7	DO	IDIQ
CTG 20MM PGU 27A/B TP BP	MAY/FY16	JUL/FY16	\$30.5	DO	IDIQ
CTG 20MM APDS MK244-0 LNKD	MAY/FY16	JUL/FY16	\$21.1	DO	IDIQ
CTG 30MM LINKED TP PGU-15 A/B	MAY/FY16	JUL/FY16	\$24.8	DO	IDIQ
CTG 25MM HEI PGU-25/U	MAY/FY16	JUL/FY16	\$7.2	DO	IDIQ
CTG 25MM TP-T M793	JAN/FY16	MAR/FY16	\$0.3	DO	IDIQ
CTG 30MM TP M788	JAN/FY16	MAR/FY16	\$22.0	DO	IDIQ
CTG 30MM HEDP M789	JAN/FY16	MAR/FY16	\$8.2	DO	IDIQ
CTG 25MM TP PGU-23/U SGL RND W/O TRACER	MAY/FY16	JUL/FY16	\$4.4	DO	IDIQ
*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 Fee (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