

Project Manager Maneuver Ammunition Systems

Direct Fire Ammunition:
“Meeting Warfighter Needs for the Asymmetric Threat”



DISTRIBUTION STATEMENT A.

Approved for Public Release; distribution is unlimited.
Other requests shall be referred to the:
Office of the Project Manager for Maneuver
Ammunition Systems
ATTN: SFAE-AMO-MAS, Picatinny, NJ 07806-5000



COL Mark Rider
24 APR 07





Take Aways



- **Significant Production Ramp Up of Direct Fire Ammunition Has Met Our Warfighters' Needs**
- **Substantial New Capabilities Provided in Theater for use Against Asymmetric Threats**
- **Future Direct Fire Products Will Provide Even Greater Capabilities**
- **Direct Fire Ammunition Information to Support our Warfighters in the Asymmetric Fight**

Quantity, Capabilities, & Information to Support Warfighters' Needs



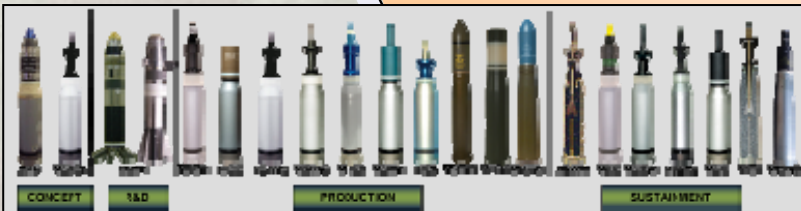
Project Manager Maneuver Ammunition Systems (MAS)-Direct Fire

PM MAS

**PM
Large Caliber**

**PM
Small & Medium
Caliber**

**PM
Medium Cannon
Caliber**



MISSION: PM MAS Provides Direct Fire Combat And Training Ammunition Capabilities To All Warfighters (Army, Navy, Air Force, Marines)

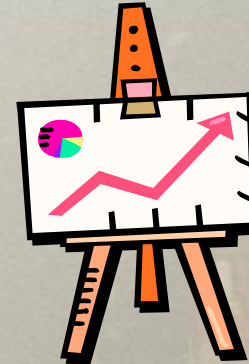
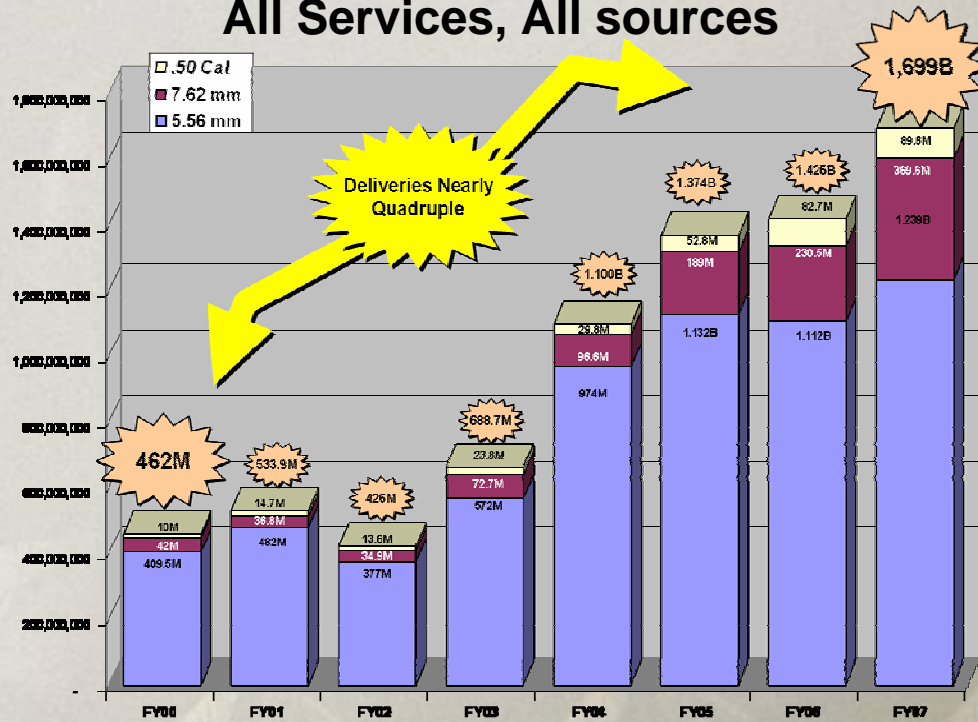


Significant Direct Fire Production Ramp Up

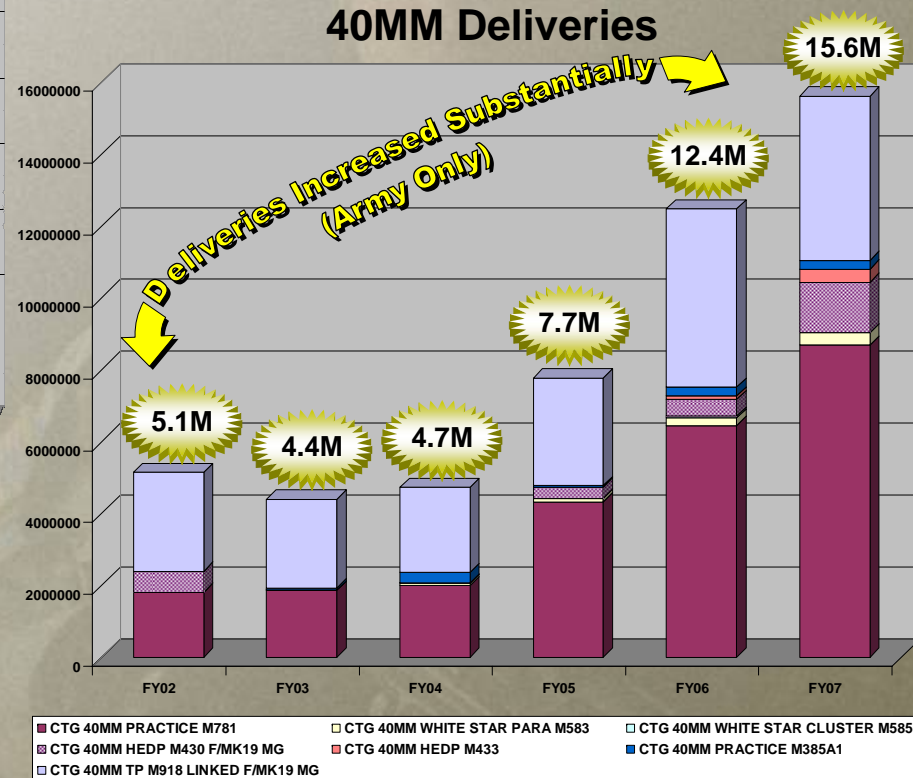


Small Caliber Deliveries

All Services, All sources



40MM Deliveries



- CTG 40MM PRACTICE M781
- CTG 40MM HEDP M430 F/MK19 MG
- CTG 40MM WHITE STAR PARA M583
- CTG 40MM HEDP M433
- CTG 40MM WHITE STAR CLUSTER M585
- CTG 40MM PRACTICE M385A1
- CTG 40MM TP M918 LINKED F/MK19 MG



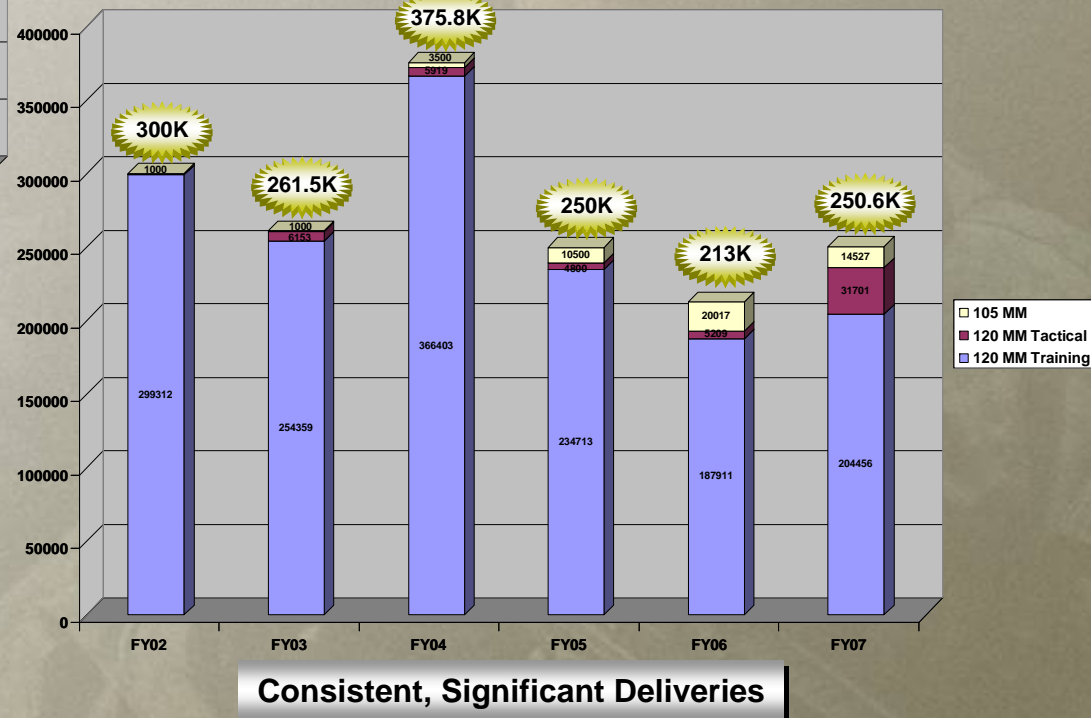
Significant Direct Fire Production Ramp Up



Medium Cannon Caliber Deliveries



Large Caliber Deliveries





New Capabilities in Theater MGS and 105mm Ammunition



M393A3 HEP

- Wall-Breaching Cartridge for Stryker Mobile Gun System (MGS)
- Requirement: Create 30"x 50"Hole In Double Reinforced Concrete Wall, Defeat Bunkers & Dismounted Infantry
- Full Rate Production



M1040 APERS

- Anti Personnel Cartridge (APERS) for Stryker Mobile Gun System (MGS)
- Requirement: Defeat Dismounted Infantry Squad In The Open From 50-500m
- >2000 Tungsten Balls
- Full Rate Production





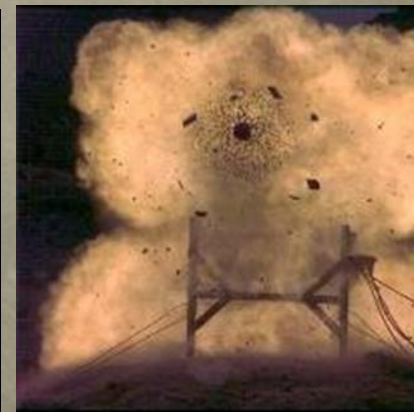
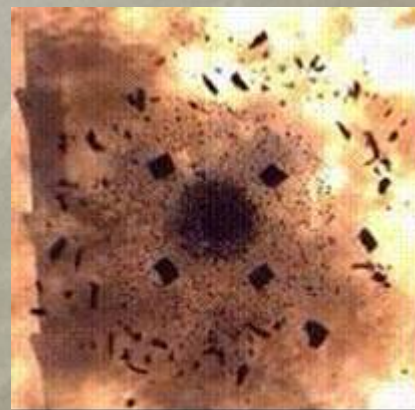
New Capabilities in Theater MGS and 105mm Ammunition



M393A3 HEP



M1040 APERS



Capabilities for the Warfighter in the Asymmetrical Fight



New Capabilities in Theater 120mm Ammunition



M1028 Anti-Personnel Cartridge



- Anti Personnel Cartridge for Abrams
- Requirement: Defeat Dismounted Infantry Squad In the Open From 200 to 500M
- Demonstrated Effectiveness Against Alternate Targets
 - Light Skinned Vehicles
 - Concrete Block Walls
 - Concertina Wire
- ~1100 Tungsten Balls
- Full Rate Production





New Capabilities in Theater 120MM Ammunition



M1028 Anti-Personnel Cartridge

BEFORE



BEFORE



BEFORE



AFTER

AFTER

AFTER

Capabilities for the Warfighter in the Asymmetrical Fight

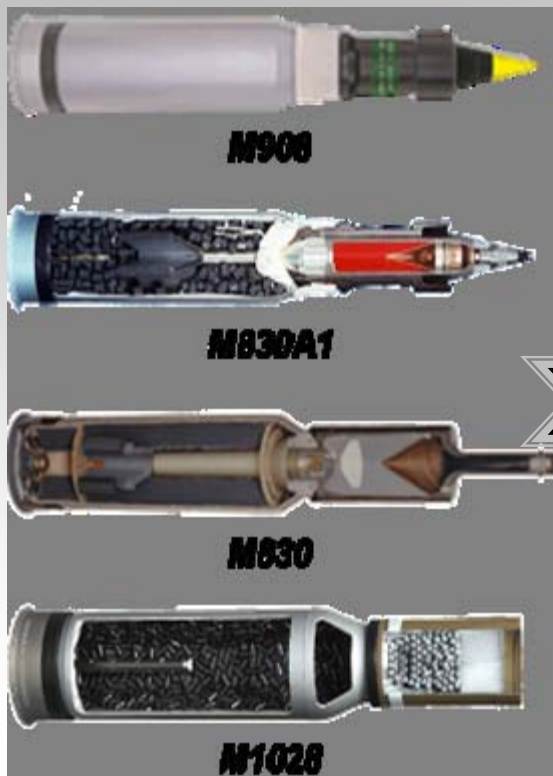


Future Capabilities 120MM Ammunition

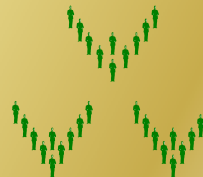


Advanced Multi-Purpose

PRESENT: 4 ROUNDS



TARGET SET



FUTURE: 1 ROUND

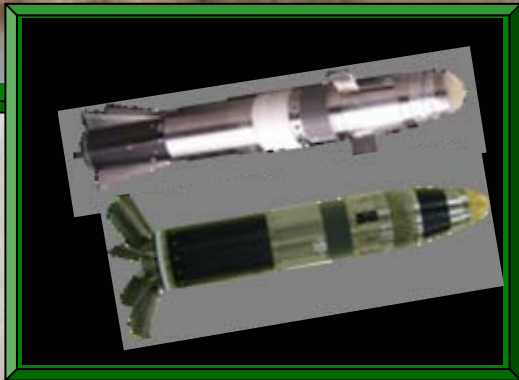


Combines capabilities of M1028, M830A1, M908 and M830 into ONE Round

Providing the Warfighter Improved Lethality and Operational Flexibility

Future Capabilities 120MM Ammunition

Mid Range Munition (MRM)



System Characteristics:

- 120mm Precision Tank Cartridge For FCS Vehicle MCS
- Designed To Defeat High Value Fleeting Targets (Tanks, APCs, Artillery, Etc.)
- Incorporates MMW And/Or I2R Seekers and Laser Seeker
- Operates In Line-of-Sight Or Beyond Line-of-Sight Modes
- Operates Autonomously And/Or With Designation



Warfighter Ammunition Information Program (WAIP)



Problem Statement

Users Not Aware of Specific Ammunition Capabilities

- **Direct Fire Ammunition Operational Focus**
 - Classes / Forum Established
 - Train the Trainer Approach
- **Several Units Instructed on Small, Medium, and Large Caliber Direct Fire Ammunition**
 - 25th ID, 3rd ID, 82 ABN, 11th ACR, 3rd ACR
 - Marines, National Guard, Master Gunner Classes, SMA Classes, Warrant Officer Classes, etc..
- **Links All Soldiers to Ammunition Experts Within the Government & Industry**
- **POC: Mr. Steve D'Ostroph, WAIP Team Leader, PM MAS, steven.dostroph@benning.army.mil**

Objective

Develop Program to Address Ammunition Informational Gaps



Assists Warfighters in Understanding Operational Capabilities of Their Ammunition Against Asymmetric Threats



Summary



- **Significant Production Ramp Up of Direct Fire Ammunition Has Met Our Warfighters' Needs**
- **Substantial New Capabilities Have Been Provided in Theater for use Against Asymmetric Threats**
- **Future Direct Fire Products Will Provide Even Greater Capabilities**
- **Direct Fire Ammunition Information to Support our Warfighters in the Asymmetric Fight**

Quantity, Capabilities, & Information to Support Warfighters' Needs