Small Caliber Ammunition
“Present and Future”

LTC Philip R. Clark
Product Manager, Small Caliber Ammunition
Small Caliber Ammunition
5.56mm, 7.62mm, .50 CAL., Pistol, Shotshell, .22 Long Rifle, DDI, CCMCK, GREM

67 Active Products

5.56mm

7.62mm

.50 Cal.

9mm 45 ACP .38 SPL

Pistol Ammo

Shotshells

.300 Winmag

CCMCK

GREM

DDI

M1037 SRTA M802 SRTA M200 M193 M855 M856A1 M895 M855A1

M1A1 Blank M33 Ball M17 Trace M20 M8 M211 M962 M903 M860 Tracer M858 Ball

M974 M993 M62 M80 Ball M82 M80 Ball Lnkd M276 M118 Ball M80A1 Mk248 Mod 0

12 Gauge Buckshot M1030 Breach .22 Long Rifle

9mm 9mm 5.56mm 7.62mm .50 Cal.
Accomplishments

- FY13 Production Deliveries: 1.4B rounds (all services)
- 7.62mm M80A1/M62A1 EPR Critical Design Review
- 5.56mm MK301 Dim Trace Full Materiel Release
- .300 WinMag MK248 Mod 0 Full Materiel Release
- Completed .30 Cal. M2 AP Test Parts Kit production & deliveries
- .38/.45 Pistol Caliber Production Contract Award
- 5.56mm M1037 Short Range Training Ammunition Production Contract Award
# Small Caliber Ammunition Roadmap

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**FY13**
- **M62**
- **M62A1**
- One Way Luminescence (OWL) Trace
- Ball w/OWL

**FY14**
- M80 Ball
- M80A1
- Lightweight Case
- Reduced Range Training Ammunition (RRTA)

**FY15**
- M856A1 Trace
- One Way Luminescence (OWL) Trace
- Ball w/OWL

**FY16**
- M855A1 Ball
- M1037 Short Range Training Ammunition (SRTA) & M1042/M1071 Close Combat Marking (CCMCK)
- MK301 Dim Trace

**FY17**
- Reduced Range Training Ammunition (RRTA)

**FY18**
- Reduced Range Training Ammunition (RRTA)

**FY19**
- Reduced Range Training Ammunition (RRTA)

**FY20**
- Reduced Range Training Ammunition (RRTA)

**FY21**
- Reduced Range Training Ammunition (RRTA)

**FY22**
- Reduced Range Training Ammunition (RRTA)

**Notes:**
- **Production**
- **R&D/Potential Future Reqt.**
## Small Caliber Ammunition Roadmap

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### Sniper
- 9mm M882 Ball & 9mm JHP
- .38 SPL & .45 ACP

### Pistol
- .300 WM MK 248

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**DISTRIBUTION STATEMENT A:**
Approved for Public Release; Distribution is unlimited
Ammo Procurement Plans

- 5.56mm/7.62mm/.50 Cal Second Source Contract (FY16)

- Sniper Ammunition
  - .300 WinMag (FY14)
  - Precision Sniper Rifle (PSR) Ammo (FY15) – Reqmt. Dependent

- Handgun Ammunition (FY16) – Acquisition strategy in development
  - 9mm M882 & JHP, .38 SPL and .45 ACP, 9mm DDI
  - Modular Handgun System (MHS): Ball, JHP and Dummy

- Training
  - 5.56mm and 9mm CCMCK (FY16)
  - 5.56mm and 7.62mm Short Range Training Ammo (FY17)

- Containers
  - M2A2 Container (FY14)
Projected Small Caliber Ammo Future Capabilities (Unconstrained)

5.56MM
- FoA CDD - FY15
  - One Way Luminescence (OWL)
  - Lightweight Small Caliber Ammunition (LSCA)
  - Reduced Range Training Ammunition (RRTA)

7.62MM
- FoA CDD - FY14
  - OWL
  - LSCA
  - RRTA

.50 Cal.
- FoA CDD - FY15
  - OWL
  - LSCA
  - All Purpose Tactical Ctg.**
  - RRTA

Sniper (PSR)
- FoA CDD - FY15
  - .338 LM: Improved Performance Round (IPR), Anti-Materiel & Subsonic
  - 7.62mm: IPR & Subsonic
  - .300 WM: IPR & Subsonic

Handgun (MHS)
- FoA CDD – FY16
  - CCMCK
  - Specialized Training Ammunition

** = Will include OWL and LSCA
Program Description

- **Objective:**
  - Develop And Demonstrate Non-pyrotechnic Full Day/Night Tracer Technology that Eliminates Shortcomings of Current Tracers

- **Strategy: Competitive Prototyping**
  - Industry Tracer Concept Defense Ordnance Technology Consortium (DOTC) Effort
  - USG Concept Development

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**Recent Milestones & Events**
- USG Material Contract Award (AUG 13)
- Industry DOTC Request For Technology Initiative (ROTI) Released (SEP 13)

**Future Milestones & Events**
- Bench-top Manufacturing At Picatinny (NOV 13)
- DOTC Contract Award (DEC 13)
Program Description:

- **Objectives:**
  - Demonstrate & qualify lightweight cartridge case technology
  - Charter Joint IPT to synchronize case efforts
  - Monitor other service efforts for possible adoption
  - Lead DOTC effort to demonstrate 7.62mm polymer
  - Draft Requirement: (T) 10% (Obj) 50%

Recent Milestones & Events:
- DOTC proposal evaluation (JUL 13)

Future Milestones & Events:
- SOCOM Improved Sniper SBIR (FY14)
- Contract award ASA(ALT) funded DOTC for polymer case (FY14)
- USMC.50 Cal Polymer case qualification (FY15)
- Government testing of DOTC polymer M80/M62 (FY15)

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**DISTRIBUTION STATEMENT A:**
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Reduced Range Training Ammunition (RRTA)

Program Description:
- Objective
  - Develop and qualify training ammunition that has a trajectory match to combat ammunition for qualification ranges with significantly shorter surface danger zones (SDZ)
  - Provide an effective solution for 360° collective training

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Recent Milestones & Events:
- N/A

Future Milestones & Events:
- Initiation (2QFY14)
- Develop Initial concept designs (3QFY14)
- Perform initial performance verification simulations (3QFY14)

Challenges:
- Performance goals (max range/effective range) may be difficult to attain simultaneously with geometric modifications (fins etc.) to projectiles
- May require non-conventional technologies to achieve goals

Notional Schedule

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Future Focus

- Managing reductions in production across Industrial Base
- Qualification and fielding of 7.62mm M80A1/M62A1 EPR
- Joint service involvement in acquisition strategies to ensure needs of all Warfighters are addressed

Future Capabilities:
- One-Way Luminescence
- Lightweight Small Caliber Ammunition
- Reduced Range Training Ammunition
- Precision Sniper Rifle & Modular Handgun System Ammo

Future of Small Caliber Ammunition taking shape NOW!