EFV Gun and Ammunition Acquisition Strategy Update

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Agenda

• PM AAA Program Status
• Recent and Future Activities
• Gun and Ammunition Priorities
• PABM Update
“Just like the Osprey, I believe that the Expeditionary Fighting Vehicle is going to revolutionize the battlefield. The EFV has a whole host of critics, who simply do not understand its importance. The United States Marine Corps, the Navy and, arguably, Army paratroop units represent the nation’s forcible-entry capability. The EFV is inextricably linked to that capability and an absolutely critical requirement for us.”

“Our Corps’ position remains unequivocal: The Expeditionary Fighting Vehicle is essential to what we do and is our top acquisition priority”

-James T. Conway, 34th Commandant of the Marine Corps
Recent EFV Program Activity

- 2nd Generation Development Demonstration (SDD-2) vehicle official roll out (4 May)
- These 7 new prototypes will be evaluated during the upcoming Operational Assessment (OA) scheduled for summer 2011.
- The SDD-2 vehicles represent more than 400 design and engineering changes and are expected to be on a predicted reliability growth path of more than 20 hours MTBOMF.

LtGen Flynn Speaking at the SDD-2 Roll Out Ceremony
Recent and Future Gun and Ammo Activity

• **Recent Activity (last 6 months)**
  – Continued sponsorship of MK310 PABM qualification (successful component demonstration on 23 April validated Naval qualification will begin on 19 May)
  – MK317 TPDS-T Cataloguing

• **Near term acquisition goals (<6 months)**
  – MOA with NSWC Crane establishing them as EFV’s MK44 TDA/ISEA and Acquisition Engineering Agent
  – MOA with PM Ammo and NSWC Dahlgren codifying the transition of 30mmX173 ammunition procurement
  – Established a TPDS requirement in the USMC TMR which in turn could enable a domestic TPDS qualification
  – Evaluation of assorted 30mmX173 ammo (to include PABM) against Urban “Qualas” targets (June 2010 Germany)
  – EFV hosts co-located Gun and Ammo IPT and NATO ToE Meetings In Washington D.C. (October 2010)

• **Long term acquisition goals (>6 months)**
  – PABM FTQ (Spring 2011)
  – MK44 LRIP Procurement Contract awarded via NSWC Crane (October 2012)
EFV’s Top Gun and Ammo Acquisition Priorities

1. Final Type Qualification of the MK310 PABM
2. MK46 PABM Turret Integration
3. MK44 LRIP Contracting and Procurement
PABM Fielding: Priority #1

Why PABM?

- Per CASFOREM 1997 “PABM is the most effective means for the EFV to move from its threshold to objective lethality requirement”.
- Lethality increase over HE
- Target Set Overlap
- Decreased Life Cycle Costs
- Increased Turret MTBOMF
- Better addresses threats of today’s IW environment

PABM round set on airburst detonating above an infantry target array.
Ammo Opportunity vs Target Set

- Infantry
- Lt. Fort. Pos/Material
- Unarm Veh/Watercraft
- Lt Armored Vehicles
- IFV/BMP

- HE
- AA89 DODIC Linked One to One
- MPLD
- APFSDS
- Airburst

Linked One to One

Airburst
PABM Road Ahead

PABM Fielding:
Priority #1.

- Begin Government Qual (May 2010)
- MOUT Trials/Qualas Demonstration (June 2010)
- WSES RB Review (Nov 2010)
- Final Type Qualification (May 2011)
- Seek POM-14 Funding for MK46 PABM Integration (FY’12)

PABM round set on delay, penetrating and detonating inside a common urban target.
2010 MOUT Trials

A good demonstration of 30mmX173 Ammunition against “Qualas” Targets
Clay Walls (av. 80cm thick); Sundried, mixed with stones and other materials
TFU Experiences

25mm Ammunition (IFV)

1 rnd
No penetration

3 rnds
Penetration

25mm APFSDS-T
NOT very effective against Quala targets
Effective at ranges > 2,000m (other type of targets)
TFU Experiences

AT4 and LAWM72A1

Special Forces

AT 4

M72A1

Not effective against Quala’s
TFU Experiences

Gill

High Cost System

Very effective to defeat Quala’s
Alternative: Apache / Art support
but that takes more time
120mm Tank Ammunition
155mm Artillery Ammunition

In planning:
Gill, Hellfire (?),
Medium Caliber (25, 30, 35, 40)
Others?

MOUT Experiment

35mm IFV Ammunition
AT/AS Panzerfaust Family

International Data Exchange
GER, TV28
USA, DEA1182
DNK, CH, CAN
PABM Road Ahead

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Questions?