



EFV Gun and Ammunition Acquisition Strategy Update



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Expeditionary Fighting Vehicle Program



EFV Demo May 2009





Agenda

- PM AAA Program Status
- Recent and Future Activities
- Gun and Ammunition Priorities
- PABM Update





PM AAA Program Status



A couple quotes from our Commandant...

“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



Gen Conway on the EFV assembly line in Lima, OH.



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?



PABM round set on airburst detonating above an infantry target array.

- 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



Ammo Opportunity vs Target Set



Infantry



**Lt. Fort. Pos/
Material**



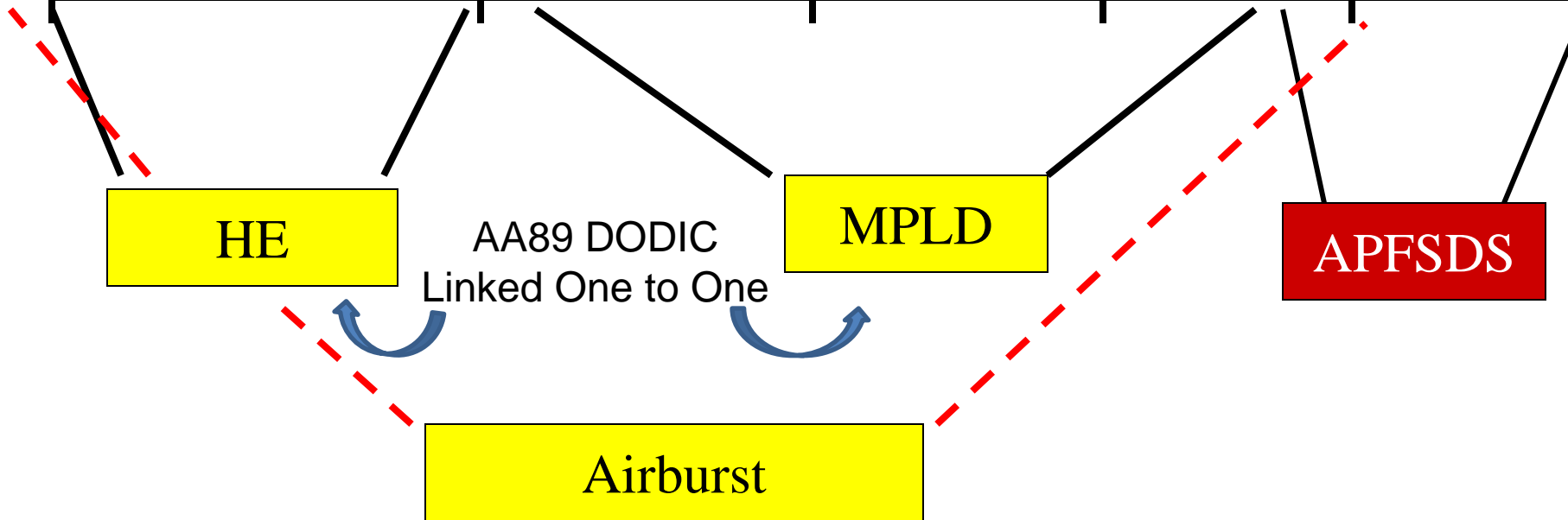
**Unarm Veh/
Watercraft**



**Lt Armored
Vehicles**



IFV/BMP





PABM Road Ahead



PABM Fielding: Priority #1.



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

- Begin Government Qual (May 2010)
- MOUT Trials/Qualas [Demonstration](#) (June 2010)
- WSESRB Review (Nov 2010)
- Final Type Qualification (May 2011)
- Seek POM-14 Funding for MK46 PABM Integration (FY'12)



2010 MOUT Trials

A good demonstration of 30mmX173
Ammunition against “Qualas” Targets



TFU

Experiences

MOUT Targets

Quala's



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 LAW72A1



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

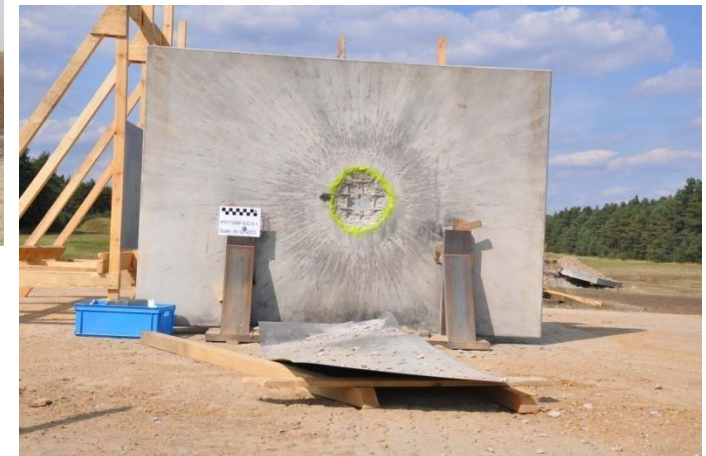




MOUT Experiment

120mm Tank Ammunition
155mm Artillery Ammunition

35mm IFV Ammunition
AT/AS Panzerfaust Family



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

International Data Exchange

GER, TV28

USA, DEA1182

DNK, CH, CAN



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Questions?

