AAAV GUN & AMMO UPDATE

NDIA GUN AND AMMO SYMPOSIUM

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AAAV Firepower Project Officer

TARGETS OF INTEREST

- **Infantry/ATGM**
- **Lightly Armored Vehicles (1,500-2,000m)**
- **Coastal Naval Combatants (1,000 - 4,000m)**
- **Bunkers/Urban/Material Targets**

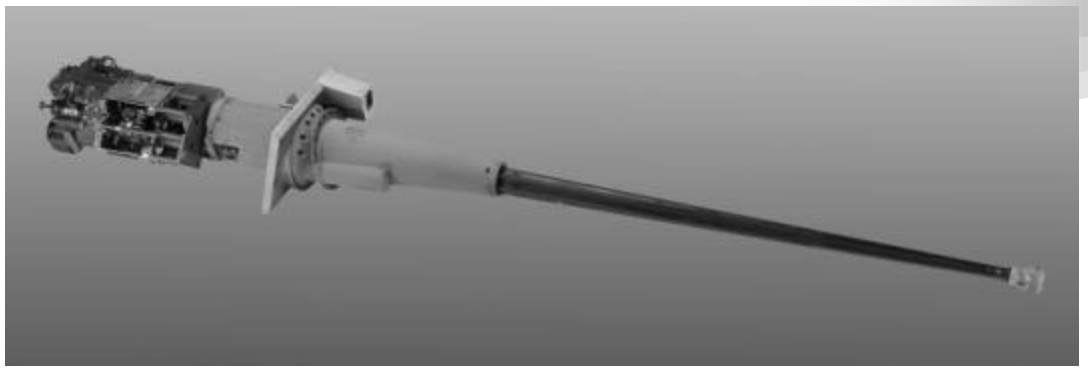
Lethality Testing Overview

Where Have We Been…….

- **AAAV adopts 30mmx173mm: July 97**
- **Worked with Boeing to Develop Mk 44 30/40mm Gun from Bushmaster II**
- **Mk 44 30/40mm Automatic Gun Qualified**
- **(16) NDI rounds of Ammunition Qualified**
- **Commenced NATO STANAG Process for 30mmx173mm**

……..All within 3 years

MK 44 Mod 1 30/40mm Automatic Gun



- **MK44 selected by AAAV, LPD-17, Norway, Switzerland, Finland**
- **Significant interest from DD-51, DD-21, FFG, and USCG**
- **Over 37,000 rounds fired through Qualification Gun with no closed bolt stoppages or chargeable failures, over 20,000 round barrel life**
- **U.S. Navy Weapon System and Explosive Safety Review Board (WSESRB) Qualified for Service Use during 4th Quarter FY00**

30mm AMMO to WSESRB

- (2) APFSDS-T
- (5) HEI w/ 3 FUZES
- (3) TP-T
- (2) TP
- (3) MPLD
- (1) APDS

APFSDS-T

- **Highly Successful FCT completed Sept 00.**
- **Both candidates met requirements.**
- **Follow-on procurement to support EMD and Joint Live Fire.**
- **Both rounds will satisfy AAAV Operational Requirements.**

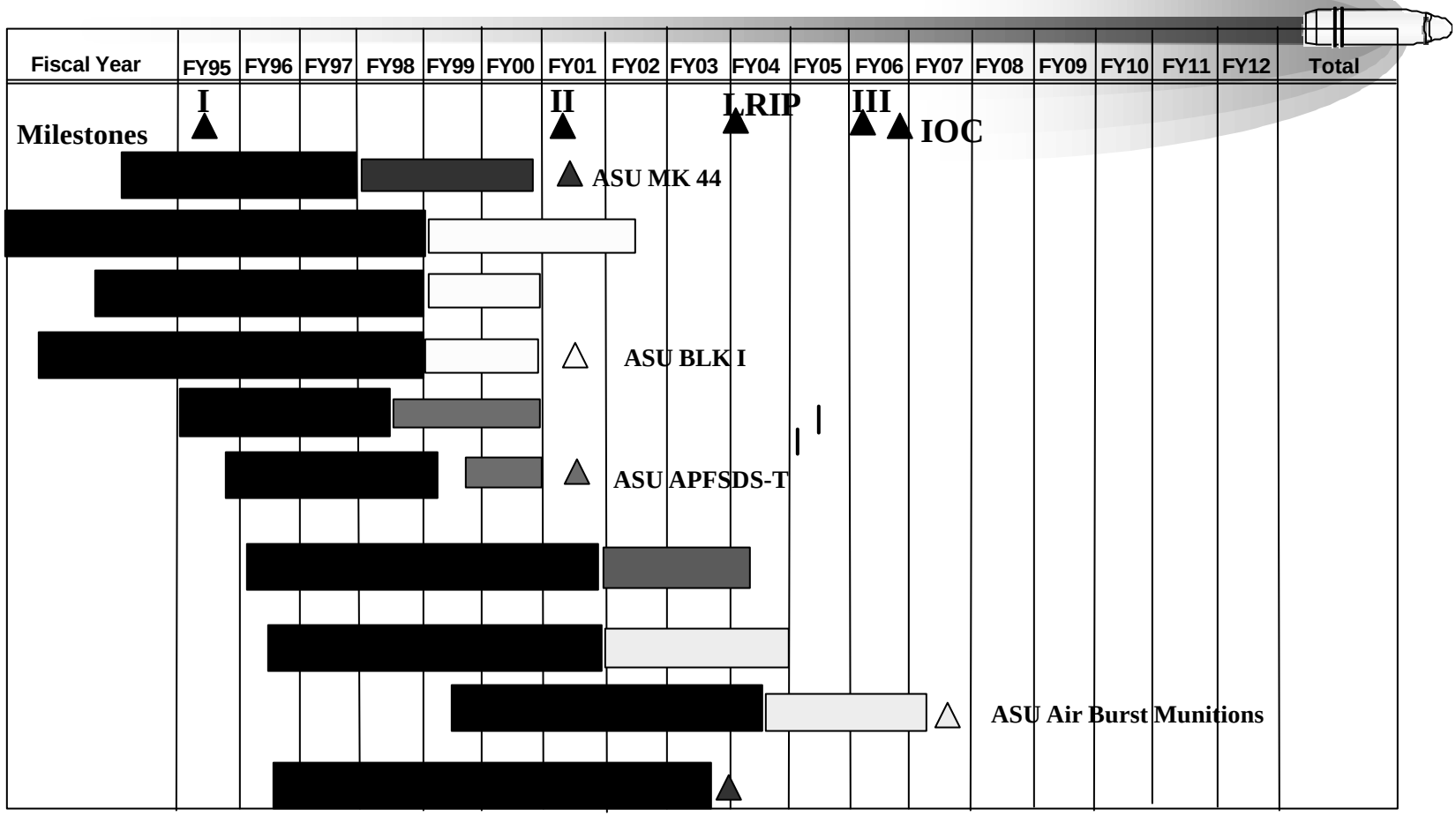
HE AMMUNITION

- **Only until Airburst is fielded.**
- **Continuing to evaluate various MPLD, HEI, and SAPHE rounds.**
- **Decision will be based on best NDI round or combination of rounds balancing cost against lethality across the AAAV HE target matrix.**

AIRBURST

- **Will provide dramatic increase in lethality against primary target: *INFANTRY*.**
- **FCT proposal submitted for FY 02 start to evaluate two foreign candidates.**
- **Concurrent evaluation of one or two domestic candidates.**
- **Contract in 1st Qtr FY 02.**
- **Commence testing in 2nd Qtr FY03.**
- **Down select at end of FY04.**

MK 44 Gun and Ammo Master Plan



MK46 on PB 777

MK46 Space Claim

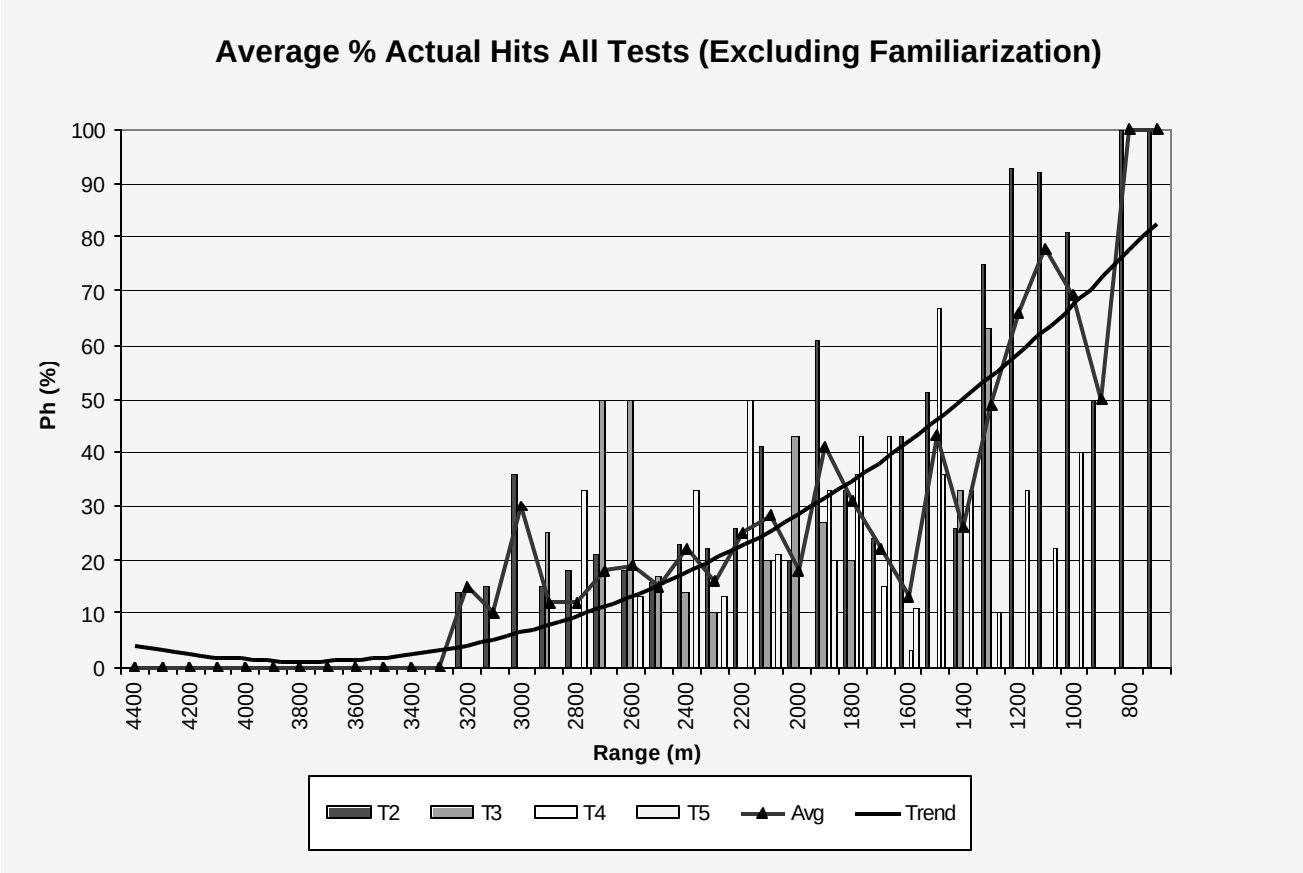
PB777 Targets

- **16’ X 16’ Billboard Target**

- **Improved Surface Towed Target (ISTT)**

- **QST -33 Seaborne Powered Target (SEPTAR)**

PB 777 Percent Actual Hits



PB 777 Demo Summary

- **34 test runs; 2,000 rds fired; 25% hits**
- **All targets hit multiple times prior to keep out of 1000m**
- **"..Mk46 demonstrated approximately twice the engagement range and twice the Ph when compared to systems previously tested under similar test plans."** **(pg 35, NSWCCDD/MP-00/110)**

Questions?

Http://www.aaav.usmc.mil