

U.S. Army Armament Research, Development & Engineering Center Picatinny, NJ



FCT and SOCOM Shoulder Fired Weapons

PRESENTED BY:
Keith Martin
SOCOM
Deputy-PM Shoulder Fired Weapons

05 May 2005 (REV 0)



MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON SYSTEM (MAAWS)

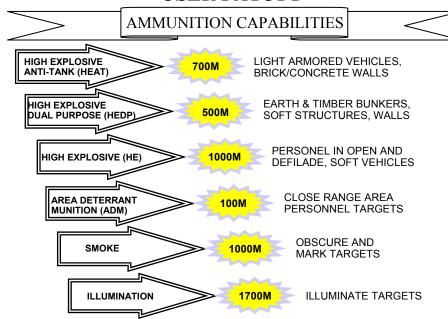


- REUSABLE 22 POUND, 42 INCH LAUNCHER
- FULL FAMILY OF AMMUNITION
- FIELDED TO 75TH RR 1990, NAVSPECWARCOM 1997
- FIELDING TO SF COMMAND UNDERWAY

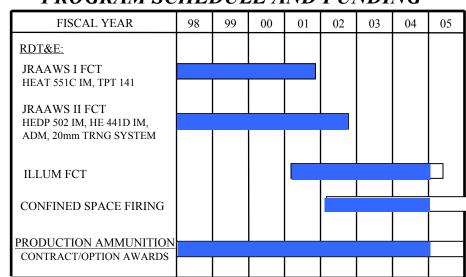
ACQUISITION SUMMARY

- USSOCOM PROGRAM
- CURRENT MDA: USSOCOM PEO-SP
- NDI SYSTEM FROM BOFORS, SWEDEN
- EVOLUTIONARY SYSTEM UPGRADES TO IMPROVE SAFETY AND CAPABILITY
- SYSTEM MANAGER AT RDECOM-ARDEC LEADS JOINT SERVICE IPT (ARMY/NAVY/SOCOM/OSD)

USER PAYOFF



PROGRAM SCHEDULE AND FUNDING



M3 Reusable Rifle

CARL-GUSTAF M3





HIGH EXPLOSIVE ANTI-TANK (HEAT 551C IM) ROUND



- ⇒ ADVANCED SHAPED CHARGE WARHEAD
- ⇒ SIGNIFICANT ARMOR PENETRATION (RHA)
- ⇔ MIL-STD FUZING

HIGH EXPLOSIVE DUAL PURPOSE (HEDP 502 IM) ROUND



- SHAPED CHARGE WARHEAD, FRAGMENTING SHELL BODY
- ⇔ MIL-STD FUZING
- **⇒** DELAY MODE
 - **♥ DEFEAT EARTH AND TIMBER BUNKERS**
 - ♥ PENETRATE WALLS AND DETONATE BEHIND
- ➢ IMPACT MODE: ALUMINUM LINER FOR HEAT/PRESSURE
 EFFECT BEHIND LIGHT ARMOR & OTHER TARGETS

HIGH EXPLOSIVE (HE 441D IM) ROUND

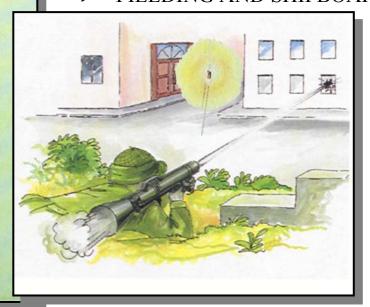


- ⇒ OPERATOR CHOOSES AIRBURST OR IMPACT FUNCTION
- ⇒ FIRE THROUGH WINDOWS FOR BUILDING OCCUPANTS
- ⇔ MIL-STD FUZING

mm HE 44

OT FFV 86051

⇒ FIELDING AND SHIPBOARD STORAGE WITHOUT RESTRICTIONS



AREA DETERRANT MUNITION



- CANNISTER FLECHETTE ROUND
 - ♦ OVER 1000 FLECHETTES
 - ♥ EFFECTIVE IMMEDIATELY AFTER MUZZLE EXIT
 - ♦ COMPLIMENTS HE 441 ROUND
- PRIMARY TARGET: PERSONNEL IN OPEN





ILLUM 545C ROUND

- MIL-STD FUZE, SELECTABLE BURST RANGE WITH ADDED IMPACT FUNCTION
- ⇔ CURRENT VISIBLE CANDLE
- ⇒ ONGOING FOREIGN COMPARATIVE TEST PROGRAM

SMOKE 469C ROUND

- ➢ MIL-STD FUZE TO REPLACE CURRENT DESIGN
- FUTURE EFFORT NOW IN PLANNING STAGES

TPT 141 TARGET PRACTICE TRACER ROUND



- ⇒ TRAINING TARGET ENGAGEMENT TO RANGE OF 300m
- ⇒ TRACER COMPOSITION TO TRACK FLIGHT

MAAWS SYSTEM STATUS

ITEM (DODIC)	<u>FUZE</u>		WARHEAD <u>MATERIAL</u>	EVALUATION <u>STATUS</u>
M3 RECOILLESS RIFLE				COMPLETE
553B SUBCALIBER ADAPTER 7.62mm TRAINING ROUND BACKBLAST SIMULATOR PRIMER CAP WITH HOLDER				COMPLETE COMPLETE COMPLETE COMPLETE
*HEAT ROUND				
HEAT 551	FFV-551	\bigcirc	OCTOL _	N/A
HEAT 551 IM	FFV-551	\bigcirc	PBXN-110	COMPLETE
HEAT 551C RS	FFV-751		PBXN-110	COMPLETE
*HE ROUND				
HE 441B	FFV-447		COMP-B	N/A
HE 441D RS	MILTEC F451		PBXN-110	COMPLETE
*HEDP ROUND				
HEDP 502	FFV-502		OCTOL _	N/A
HEDP 502 RS	FFV-502		PBXN-110	COMPLETE
**SMOKE				
SMOKE 469B	FFV-957	\bigcirc	TITANIUM TETRACHLORIDE 🔵	COMPLETE
SMOKE 469C	MILTEC F550		TITANIUM TETRACHLORIDE 🔵	FUTURE FCT EFFORT
*ILLUMINATION				
ILLUM 545B	ZTZ DM 42A1		MAGNESIUM, SODIUM NITRATE	COMPLETE
ILLUM 545C	MILTEC F555		MAGNESIUM, SODIUM NITRATE 🔵	FY04 FCT ongoing
*ADM ROUND				COMPLETE
*TRAINING AMMUNITION				
TP 552				COMPLETE
TPT 141	CEPTABLE (IM)	_ T TI	MITED ACCEPTANCE = ACCEPTA	COMPLETE

AT4 Confined Space (CS) Reduced Sensitivity (RS)



AT4-CS RS PERFORMANCE OVERVIEW

ARMOR

FIRE FROM ENCLOSURE

NIGHT SIGHT RAIL

IM FILL

DUAL SAFE FUZE

CHARACTERISTICS

- ⇒ DISPOSABLE SYSTEM
- ⇒ LENGTH: APPROXIMATELY 1 METER
- ❖ WARHEAD DIAMETER 84mm
- WEIGHT
 - » UNIT WEIGHT 17 lbs.
- ⇒ DEFEAT MECHANISM: SHAPED CHARGE WARHEAD

PROGRAM HIGHLIGHTS

- ⇒ FIELDING & PRODUCTION STATUS
 - » AT4-CS RS

AIR DROP CERTIFIED

» AT4-CS RS CURRENTLY IN PRODUCTION FOR SOCOM & U.S. ARMY

»AT4-CS RS FIELDING TO SOCOM UNDERWAY

SAFETY CERTIFICATION STATUS - AT4-CS RS

- » ALL TEST COMPLETED SUCCESSFULLY
- » APPROVE D BY SURGEON GENEAL

Operational Test AT4 CS RS

