



TACOM



ARDEC

Military Operations in Urban Terrain - The Bunker Defeat Munition's Role

22 June 1999



USER & NEED

U.S. Army Forces Command
“URGENT OPERATIONAL REQUIREMENT”

CUSTOMER

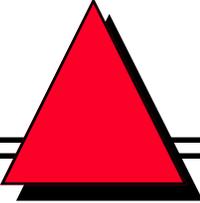
U.S. Army Materiel Command
Deputy Chief of Staff for Ammunition

CONTRACTOR

Talley Defense Systems
Mesa, Arizona

ACQUISITION STRATEGY

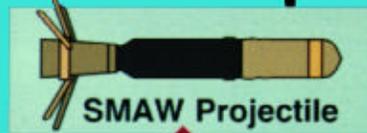
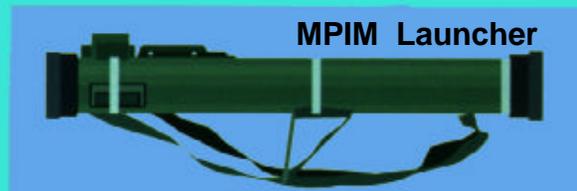
Extensive Teaming From Program
Inception
Best Value NDI Acquisition



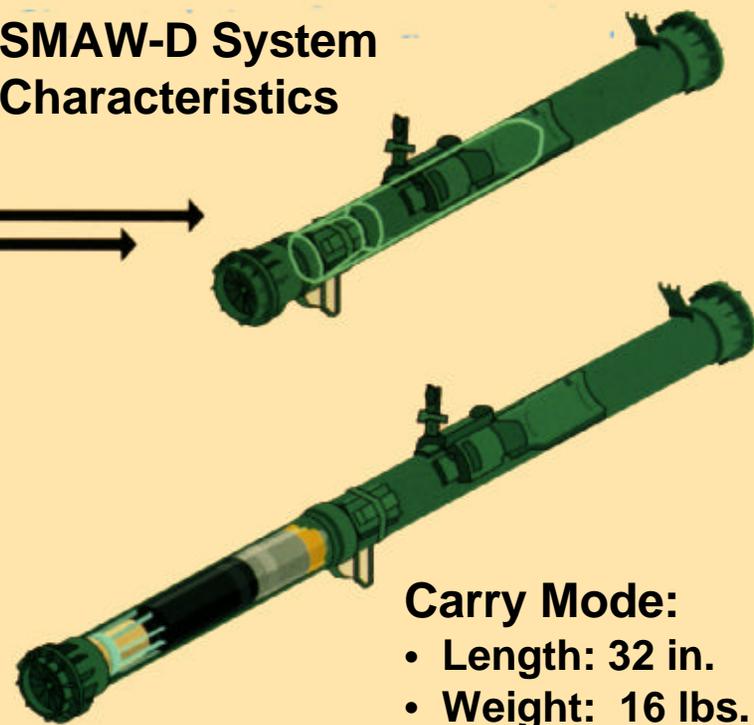
Side-by-Side Evaluation

Market Survey	Draft RFP	RFP	Contract Awards	Side-by-Side Testing
Talley SMAW-D				
Alliant AT 8				
Giat ABB				
Bofors LMAW				
Brunswick RAW				
Hunting LAW 80				
Instalanza C-90-C				
			Terminated	Failed Core Requirements
				Winner

Non-Developmental Item



SMAW-D System Characteristics



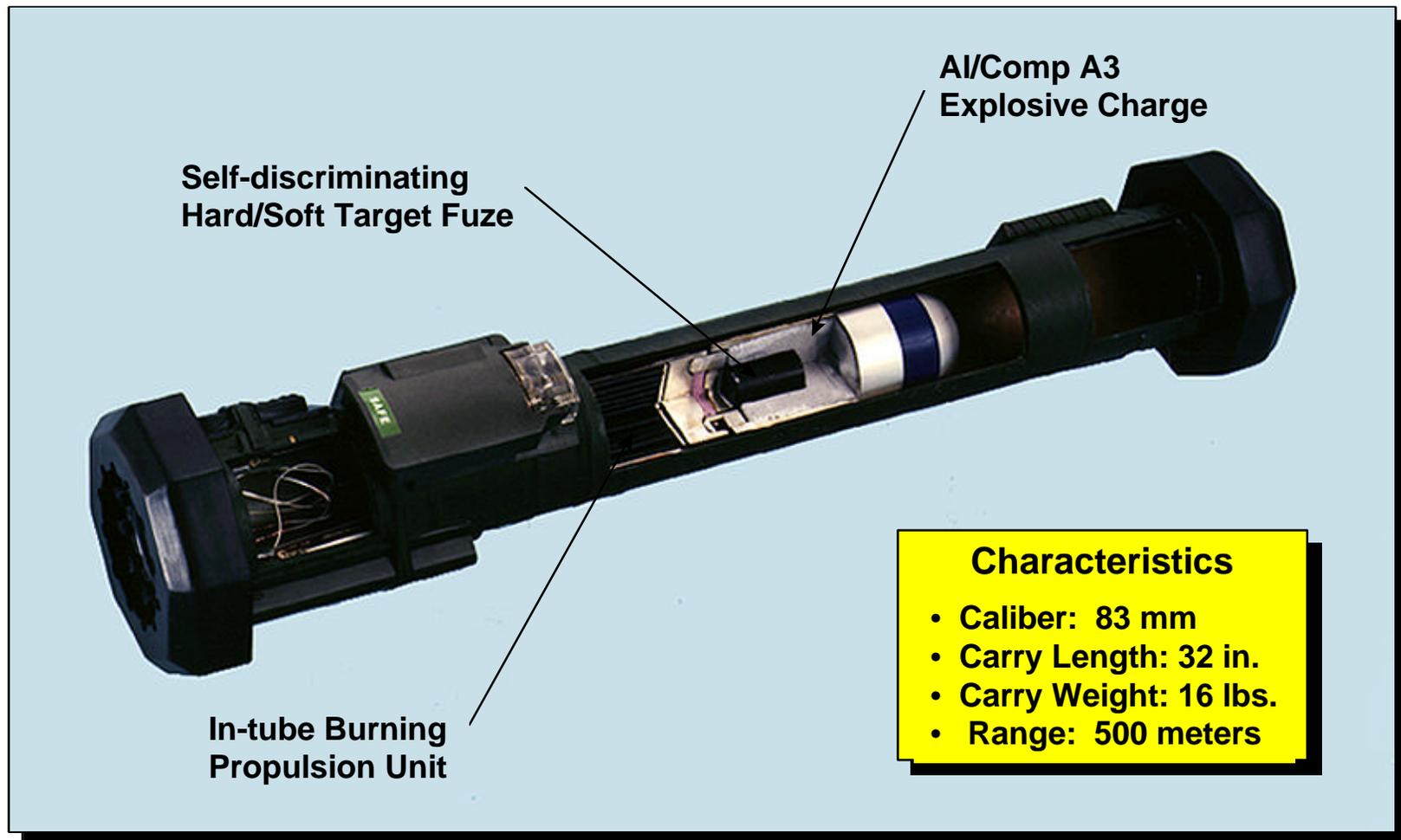
Carry Mode:

- Length: 32 in.
- Weight: 16 lbs.

Shoulder-Launched Multipurpose Assault Weapon - Disposable (SMAW-D)•



Tactical Rocket



Bunker Defeat Munition

Operational Capabilities

**Destroys
Earth & Timber Bunkers**

Breaches Masonry Walls

Defeats Light Armor



Key Characteristics



83 mm	Direct Fire
Man-Portable	No Maintenance
Night Vision Capable	Air Deployable
Self-Sensing Fuze	15.7 lbs
32 Inches	Range - 15 - 500M
Disposable	Single Shot

Programmatics

ACAT IV - ARDEC System Manager
Modified NDI Acquisition
Type Classified - Limited Procurement -
Conditional Materiel Release - 3QFY
Full Materiel Release - 3QFY99
Contractor - Talley Defense System

SMAW-D Production

- **Program Overview**

- NDI Competitive Shoot-off
- Disposable Version Of SMAW
- Interim MPIM Weapon System
- Requirement for 37,585 rds
- Procurement Capped at 6,000 by Congress

- **Program Status**

- 1,955 rds Delivered
- 1,334 rds Ready to Ship
- 2,123 rds Delivery - July '99
- New Contract In-Process

- **Significant Events**

- System Type Classified Limited Procurement
- Safety and Reliability Improvements Made to Navy Fuze
- New Equipment Training Completed, Material Release In Progress



SMAW-D Weapon System

SMAW-D Growth Potential

- Terminal Effects
 - Follow-through Grenade Round (SCFT)
 - High Impulse Thermobaric (HIT) Round
 -
- Propulsion
 - Adapt USMC SMAW Confined Space (CS) Soft Launch Propulsion Unit

Follow Through Grenade

Contractor Concept Demonstration Program SMAW-D Shaped Charge Follow Through Grenade Warhead

- Program Overview
 - SMAW-D with SCFT Warhead
 - Targets Brick and Concrete
 - Contractor Funded RDT&E
- Program Status
 - Rounds at TECOM
 - Conduct Testing Jul 99



Shaped Charge Follow Through Grenade

- Program Objectives
 - Determine Feasibility of Adapting SCFT Warhead SMAW-D
 - Achieve High Degree of Personnel Incapacitation Behind Target
 - Evaluate SCFT Warhead Effectiveness Against Brick and Concrete Walls

High Impulse Thermal

MOUT ACTD Concept Demonstration Program SMAW-D High Impulse Thermobaric Warhead

- Program Overview
 - SMAW-D with HIT Warhead
 - Targets Brick and Concrete
 - Testing at RTTC and Socorro
 - ARDEC JSSAP Program

- Program Status
 - TECOM Testing Jul 99
 - Socorro Testing 4QFY99

- Program Objectives
 - Determine Feasibility of Loading HIT in SMAW-D Warhead
 - Determine Hit Blast Effects on Triple Brick and Concrete Walls
 - Define Feasibility of Using HIT Thermobaric Warheads in MOUT Environment



SMAW-D With HIT Blast Warhead

Confined Space Propulsion

USMC Demonstration Validation Program SMAW/SMAW-D (SMAW-CS) Confined Space Propulsion

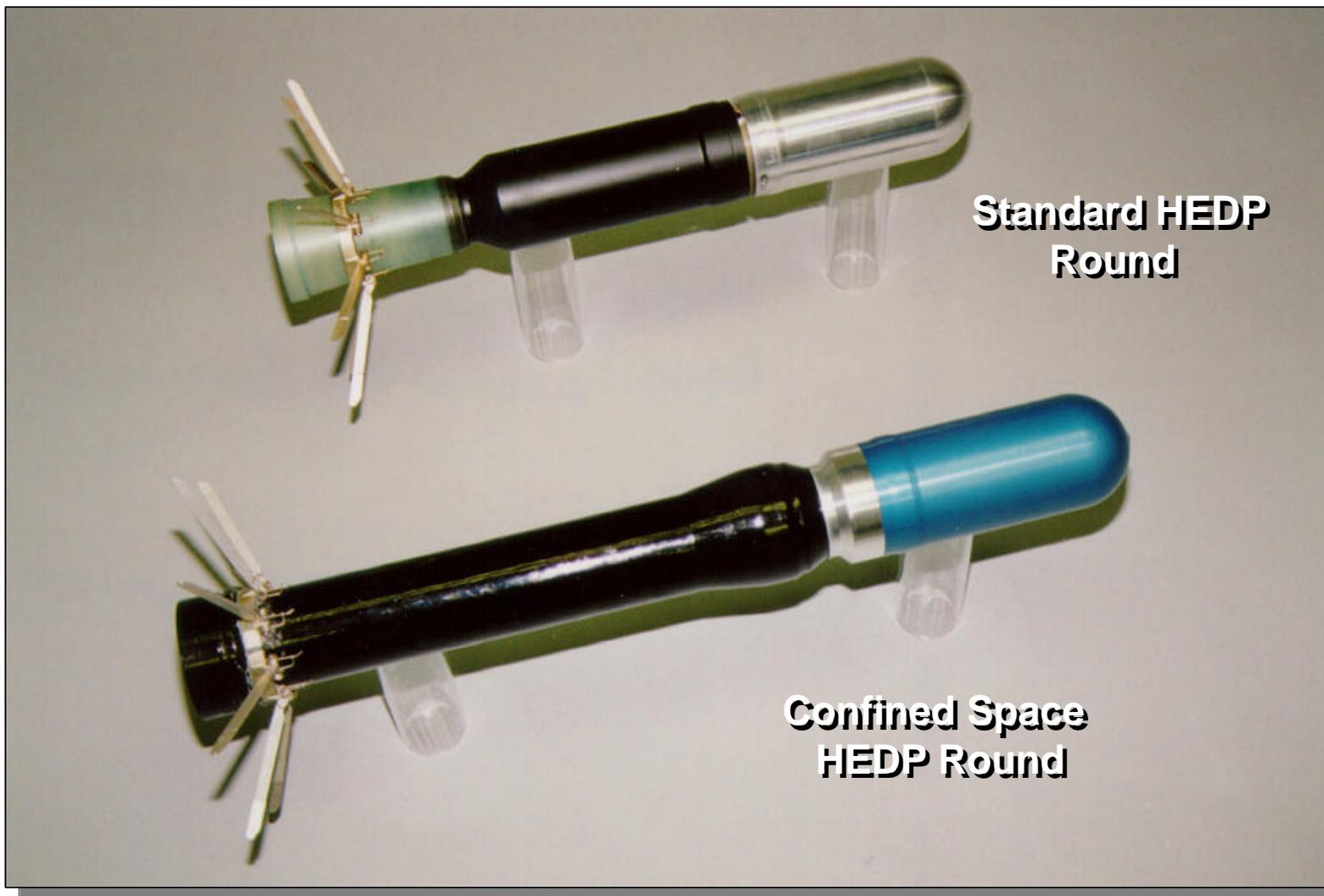
- Program Overview
 - Phase I Concept Feasibility
 - Phase II DEMVAL Testing
 - Phase III Pre-Qual Testing
- Program Status
 - Phase I Completed
 - Phase II Began Oct 99
 - Phase III Pre-Qual Planned



SMAW-CS Propulsion Subsystem

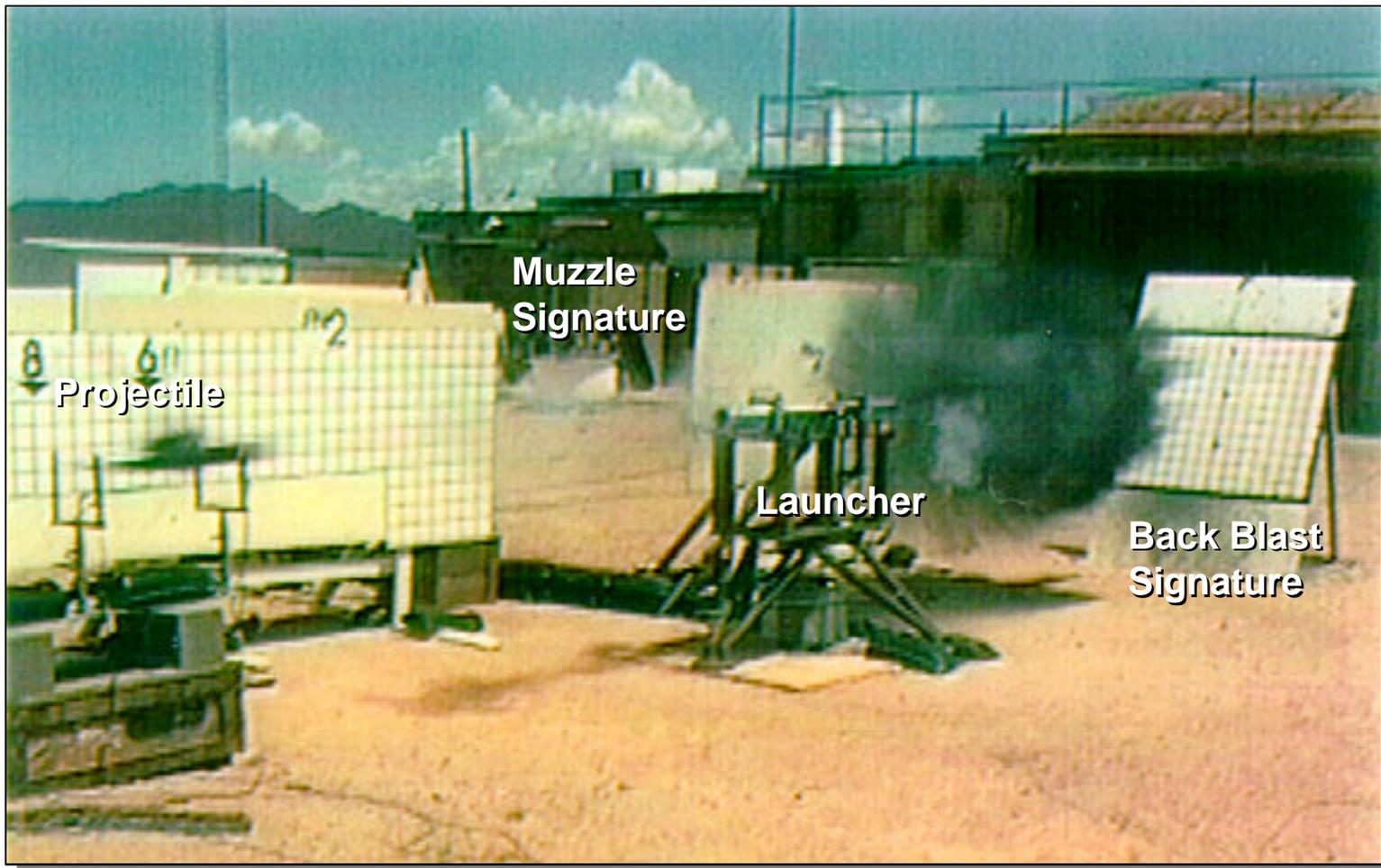
- Significant Events
 - Existing Velocity of 710 ft/sec can be Achieved
 - System can be Safely Fired from MPIM Enclosure
 - Significant Noise Reduction Experienced in the Free Field
 - FY99 Congressional Plus-up Obtained to Continue Program

SMAW-CS Projectile



Firing Signature

Launch Signature....No Muzzle Flash or Back Blast



Summary

- Materiel Availability
 - Current Procurement is for 5,412 Rounds
 - Rounds Stocked at Blue Grass for Contingency Operations
 - Current Inventory 1,955 Balance (3,457) Delivered by Jul 99
 - Additional Rounds to be Procured with FY99 Funding
- New Equipment Training
 - 29th Infantry Regiment @ Ft. Benning will be the NETT
 - NETT Will Provide Training to any Receiving Unit
 - Troops Will Be Trained When Rounds are Deployed

**BDM...More than a Bunker Buster...Fills the
Void for a Multipurpose Urban Assault Weapon**