40mm Grenade Improvements Panel
Overview--Purpose
Introduction

21 May 2009

International Infantry and Joint Services
Small Arms Systems Symposium
Las Vegas, Nevada
Panel Objectives

• Demonstrate 40mm Grenade Ammunition Engineering Activity

• Confirm Attention Enhancement of 40mm Grenade Ammunition
  • Design/Performance
  • Weapon Interface

• Highlight Key Product Improvement Projects
  • Approach
  • Status
  • Production Introduction Transition

• Confirm Partnership of Government and Industry
  • System Contractor Management
  • Project Partnership with Government
  • Leader-Follower Technology Transition

• Verify the Improvement Benefits are Realized by Warfighter
Rigorous In-Depth Engineer Rationale and Design/Performance Data Base Evolving for all 40mm Ammunition Baseline Design/Performance Evolving

Attention to Implementing Priority Product Improvements Development (New Technology, Components, Cartridges) Addressing Producibility Topics Technology Insertion

Linking the 40mm Government and Contractor Community Effective IPT Teams Addressing Needs Communication of Information
40mm Grenade Improvement Participants

• US Army PM--MAS
• US Army Infantry School
• US Army JMC
• ARDEC
• PEO-Soldier Weapons
• USMC
• ARL
• ATC

• 40mm Grenade Ammunition System Management Contractors
  • AMTEC Corporation
  • DSE

• Various Support Contractors
Panel Approach

• Communicate Key 40mm Grenade Improvements
  • Technology
  • Producibility
  • Design/Performance Data Bases

• Panel Dialogue of 40mm Grenade Ammunition Improvements
  • Moderator Lead

• Questions and Answers (as time permits)
Panel Participants

Panel Moderator --Dave Broden

Panel Members--ARDEC

Peter Martin---Project Team Lead
Art Pizza--Technical Expert --40mm Ammunition

Presenters

Mann Barrel  --Adam Sorchini

Single Chamber Cartridge Case  --Matthew Millar

M385A1 Composite Projectile  --Christopher Summa

Shaped Charge Liner Assessments --James Grassi

Advanced Lethal Mechanism-40mm Grenades--
Jason Wasserman
40mm Grenade Ammunition Technology and Product Focus

• 40mm Grenade Weapons
  – Low Velocity--M203, M320 etc.
  – High Velocity--MK19 MOD 3, MK 47 etc.
  – Weapon Interfaces

• Grenade Ammunition
  – Low Velocity Family
  – High Velocity Family
  – Product Improvements
  – Producibility

• Design/Performance Baselining--
  – Interior, Exterior, Terminal Ballistics
  – Reliability
  – Safety
  – Test Methods

Establishing Interface Parameters

Establishing Technologies and Products Enabling Operational and Cost Benefits

Providing In-Depth Characterization Data Base
40mm Grenade Improvement Benefits

- Establishing Engineering Rigor to Baseline Configurations
- Addressing "Lessons Learned" Improvements
- Assessment and Application of State of Art Technology
- Enabling Enhanced Producibility--Realizing Quality and Cost

Supporting the Warfighter Objectives

40mm Ammunition

Capability, Quality, Reliability, Availability, and Affordability

Today and the Future