Enhancing War Fighter Shoulder Fired Weapon Training

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Talley supports NATO’s Militaries!

- Focusing on Defense Since 1947
  - New Nammo Products/Technologies Benefit NATO Armed Forces
- We Develop, Produce, and Integrate
  - Systems, Subsystems, Components
- Complete Product Life Cycle Capabilities
  - Energetics, Pyrotechnics, Fuzing, Warheads, Propulsion
  - Research, Engineering, Testing, Qualification, Production, Training
- Reliable and Dependable One Shot Devices
  - Lethal Shoulder-Launched Munitions
  - Gas Generators, Actuators, Dispersion Systems, Rocket Motors
- Nammo Talley
  - Only US producer of Shoulder-Launched Munitions
Introduction - Subcaliber Training

• Subcaliber Rocket
  • Close replication of tactical round firing
    • Blast overpressure
    • Back blast
    • Recoil

• Why Train with Subcaliber Munitions?
  • Provides for more realistic training
  • Improved gunner target hit percentage with tactical weapon
  • Lower cost than tactical
  • Environmentally friendlier to training bases/installations
Shoulder Launched Munition Training

M72 LAW
Shoulder Launched Munition Training

M141 Bunker Defeat Munition (BDM)
M72 LAW - Weapon Characteristics

- Caliber: 66 mm
- Carry Length: 30.5 in.
- Firing Length: 38.6 in.
- Weight: 7.9 lbs
- Range: 10 to 500 m
- Max Effective: 350 m
M72 LAW History

M72 LAW has been used in every United States conflict since Vietnam.
M72 LAW - Subcaliber Rocket Trainer

Caliber ............. 21 mm
Carry Length ....... 30.5 in.
Firing Length ...... 38.6 in.
Weight .............. 7.9 lbs
Range ............... 15 to 250 m
M72 Trainer Weapon Overview

• Duplicates Tactical Weapon Features in Reusable Form:
  – Compact and lightweight (constructed from used tactical launcher)
  – Fires both right or left handed without modification
  – Identical gunner interfaces, weight and center of gravity

• Replicates Tactical Weapon Performance:
  – All propulsion occurs within the launcher tube
  – Trainer round ballistically matched with tactical rounds

• Training System Type Classified by US Army and Navy
M141 BDM - Weapon Characteristics

- Caliber: 83 mm
- Carry Length: 32 in.
- Firing Length: 54 in.
- Weight: 15.7 lbs
- Range: 15 to 500 m
- Max Effective: 300 m
M141 BDM - Subcaliber Rocket Trainer

Caliber ........... 21 mm
Carry Length .... 32 in.
Firing Length ..... 54 in.
Weight ............ 15.7 lbs
Range ............. 15 to 250 m
A Common 21 mm Trainer Rocket
21mm Training Rocket Overview

- Trainer Rocket

Issued as round of ammunition, requires no maintenance or tools
Prepackaged at the factory in protective, throw-away aluminum tube
Transport by rail, air, sea, road - tactical tracked or wheeled vehicles
Certified for air delivery - individual parachutist or air-dropped pallet
Same round used for M72, BDM, and USMC SMAW
M72 Training Overview

- Replicates tactical acoustic signature without full energy content
- Permits more than 100 shots/day with single hearing protection
- Replicates back blast field, but safer for training environment
Training with Subcaliber System

• Classroom and Field Learning Objectives:
  – Familiarization with training weapon and ammunition
  – Perform pre-fire serviceability inspection
  – Prepare weapon for firing
  – Firing positions and correct sight picture
  – Engaging stationary and moving targets
  – Misfire procedures
  – Reloading and unloading of trainer weapon
  – Returning weapon to carry configuration
Training Program Summary

• Nammo Talley has developed a pair of 21-mm sub-caliber training systems that approximate the 66-mm M72 LAW and 83-mm M141 BDM (SMAW-D) and USMC SMAW tactical round firing effects for gunner training purposes.

• These training systems complement classroom instruction with field handling trainers and allow for a cost-effective alternative to training with the tactical round with inert warheads.

• Nammo Talley offers a comprehensive training curriculum designed to enhance the benefits of training under the military’s currently established doctrine, tactics, and techniques.
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