

US Special Operations Command



2009 NDIA Small Arms Joint Service Small Arms Synchronization Team Panel

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Target Engagement Systems
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The overall classification of this briefing is:
UNCLASSIFIED



Technology Development Objectives Weapons Systems

- **Improved Weapon Suppression**
 - **Signature Reduction**
 - **Size and Weight Optimization**

- **Enhanced Weapon Accessories**
 - **Day/Night Sight Improvements**
 - **Enhanced Hardening of Devices**
 - **Device Signature Reduction**
 - **Anti-Tampering**



Improved Weapon Suppression

- **Current State of the Technology**
 - **1909 Silencer Patent**
 - **1950 Baffle Technology**
 - **Present: Incremental Improvement of 1950's Technology**

- **Ongoing Efforts**
 - **National & Service Laboratories (Modeling/Materials)**
 - **Legacy Weapon Suppressors Procurement**
 - **PEO-Soldier – Small Arms Suppression Technologies**
 - Infantry School drafting Joint Capabilities Development Document



Improved Weapon Suppression (cont.)

- **Where We Want To Be**
 - **Aural and Visual Reduction**
 - **Reduction in Size and Weight**
 - Innovative Materials
 - Optimized Design Geometries from Assault to Crew Served Weapons
 - **Maintain Weapon Accuracy**
 - **Reduce Life Cycle Costs**



Enhanced Weapon Accessories

- **Current State of the Technology**
 - **Systems Limited to Single Sensor**
 - Image Intensification (I²) Clip-on Night Vision Devices
“Tube Production & Technology Limitations”
 - Thermal (IR) Clip-on Night Vision Devices
 - **Optics Not Interchangeable Due to Different Shock & Vibration Environments associated with SOF Weapons**
 - **Limited to Legacy Technologies**
 - Aiming Optics
 - Laser Pointers/Markers – Visible and Infrared
 - Rail Interface System (RIS)
- **Ongoing Efforts**
 - **Fused I²/IR (Analog) Clip-on Night Vision Device**
 - **Service Lab Efforts in Shock Modeling & Testing**



Enhanced Weapon Accessories (cont.)

■ Where We Want To Be

- **Clip-on Night Vision Devices** – Fusion (Digital & Hardened)
- **Aiming Optics** – Watershed, Adaptive Optics, Signature Reduction, Wireless Activation
- **Laser Pointers** – Multi-spectral, Rangefinding, Thermal, Signature Reduction, Wireless Activation
- **Hardened Universal Devices** – Survive Broad Shock and Vibration Environment for All SOF Weapons
- **Rail Interface System** – Barrel Cooling Capability, Signature Suppression, Shock Reduction
- **Device Anti-Tampering** – Eliminate Potential Reverse Engineering, Protects Critical US Technology



Questions



PEO SOF Warrior