

Joint Non-Lethal Weapons Program (JNLWP) Update to the NDIA Small Arms Symposium



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On behalf of the

Joint Non-Lethal Weapons Directorate



Blunt Impact Munitions

- 12 ga Shotgun (Except JSS)
 - Fin stabilized rubber projectile
 - Drag stabilized sock rounds
- 40 mm M203 Rounds
 - Wood & Foam Baton Rounds
 - Crowd Dispersal Cartridge – 48 -.48 cal stingballs
 - Sponge grenade





Non-Lethal Grenades



- **MK-141 (USMC) and MK-84 (USA & USAF)**
 - Application: Clear facility operations
 - Achieves 2-4 second distraction/disorientation from flash-dazzle, deafening sound, and overpressure effects

- **Clear A Space – Distract / Disorient (In Development)**

- 30 Seconds to 2 Minutes Duration
- Scaleable
- Multi-Sensory Grenade
- PM – MARCORSSCOM FP/NLW – Quantico, VA



- **Stingball Grenades (USA & USMC)**

- Application: Crowd control
- A hand-thrown or shotgun launched grenade producing a deterring flash-bang with distribution of ~100 .28 cal stingballs





Non-Lethal Grenades / Munitions

➤ **66mm VLNLG's** – 3 Flash-Bang or Stingball Munitions dispensed from Discharger / Aiming Bracket



➤ **MCCM** – 600 0.32 cal stingballs, w/ flash/bang effects



➤ **Hand Emplaced NL Munition** – Taser Payload for Area Denial





MK-19 NL Munitions

- **MK19 NL Short Range Munition**

- Application: Crowd control, Force Protection
- 10 to 50+ meter effective range
- Sting-ball payload
- Accelerated fielding possible w/signed UNS
- Fielding in FY07
- PM – Army RDECOM – Picatinny Arsenal, NJ

- **MK19 NL Long Range Flash Bang Munition**

- Application: Force Protection, Deny an Area to Personnel
- Fixed Range Flash-bang Payload
 - Range yet TBD by Users
- Fielding in FY07
- PM – Army RDECOM – Picatinny Arsenal, NJ





TUGV NL Mission Payload Module

- **TUGV Downselect this Summer, IOC in FY08**
 - **TUGV Joint Program Office – Huntsville, AL**
- **Area, Point and Hailing / Warning Capabilities**
- **Remotely employ NLW Payloads**
- **Joint Service Requirements Being Evaluated:**
 - **HMMWV & Truck Mounts**
 - **Ground Mount**
- **PM – Marine Corps Systems Command – FP / NLW**





Joint Non-Lethal Warning Munitions

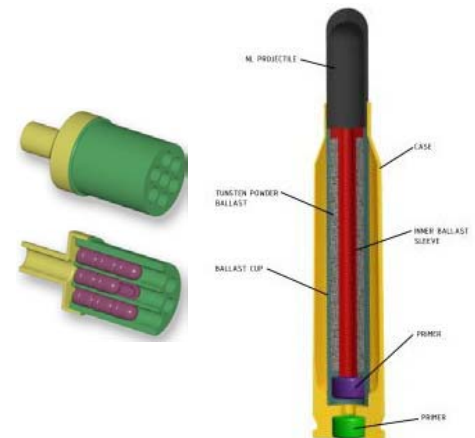
- **Type Classify 12 Gauge Flash Bang Rounds**
 - **100, 200 & 300 Meter Ranges**
- **Type Classify 40mm Flash Bang Rounds**
 - **100, 200 & 300 Meter Ranges**
- **M203 / M79 Grenade Launchers**
- **Joint Service Participation:**
 - **USA, USN & USCG**
- **Field Capabilities in Late FY05**





Individual Infantry NL System (I2NLS)

- Provide NL Capability for M16 & M4 Rifles
- Control / Disperse Crowds out to 100M
- MASS & FN303 Urgently Fielded
- Requirements Definition & AoMC Underway
- PM – Army RDECOM – Picatinny Arsenal, NJ

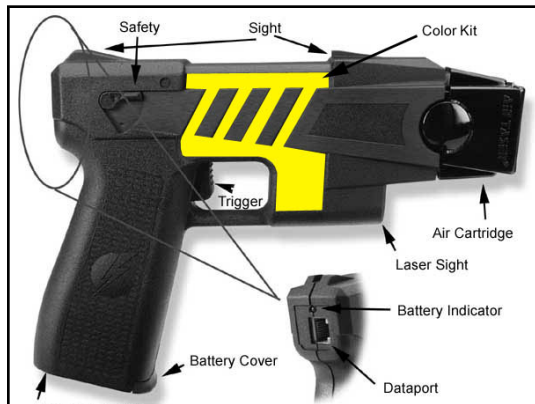




M26/X26 Taser



- Uses electric charge to cause muscle tetanus
 - Fires darts to contact clothing/skin to deliver charge
 - Causes instantaneous incapacitation to individual
- Range: 13 ft optimal, 21 ft max
- Fixed (M26) and Variable (X-26) Pulse Rates
- Laser Aiming & White Light Illumination





Airburst NL Munition

- Davis Gun Concept
- Rapid Fire NL Munitions out to 250 Meters
- 25mm Applications:
 - XM-25 Grenade Machine Gun
 - XM-29 Integrated Airburst Weapon System
 - XM-307 Advanced Crew Served Weapon System
- Technology Scaleable to 40mm (MK19 / MK47)
- Payload Determination in FY05





Human Effects

- **Electromuscular Disruption**: Characterizing muscle contraction response and cardiac effects from “T-waves”; long duration effects
- **Directed Energy Technologies**: Studies supporting bioeffects assessments of directed energy technologies
- **Riot Control Agents**: Develop a standardized test battery for RCAs, potency of pepper sprays, perform comparative RCA toxicology
- **Flash Bang, Acoustics and Ocular Stimuli**: Flash and percussive sound bioeffects, and assessment of intense continuous sound
- **Crowd Behavior Modeling**: Foundation model based on law enforcement experience.
- **Advanced Total Body Model**: Greatly improved thoracic and abdomen blunt impact injury models; draft pain model



JNLWP Desired Capabilities

- **Separate combatants from non-combatants**
- **Deter Human Shields**
- **Clear a Facility Without Entry**
- **Long-Range, Instantaneous, Effective Incapacitation**
- **Counter-Material & Counter-Capability missions**
- **Counter-Swimmer Operations**
- **Understand Human Effects to NL Stimuli**



Ongoing Efforts

- NLW FAA / FNA / FSA
- JNLWP Critical Self Assessment
- Council on Foreign Relations Report



Summary

- Numerous requests from the field for NLW
- Several non-lethal capabilities can be accelerated to the field
- The need for NLWs is real and continuous
 - DoD must fully embrace NLWs from “cradle to grave” to ensure that our warfighters have this important capability fully available to them to support military operations across the spectrum of conflict

