### **Joint Non-Lethal Weapons Program** Brief to the Joint Services Small Arms Symposium



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# **NLW Guiding Principals**

- Range Beyond 100 Meters
- Volume of Fire
- Point & Area Munitions
  - Incapacitate Individuals / Disperse Crowds
- Tag / Mark Individuals Multi Sensory
- Duration of Effects
- Focus on NL Payload versus Launching Platform
  - Universal Effect Desired
- Fire From Existing / Developmental Weapons
- Lightweight
- Joint Service / Agency Applicability
- Extended Shelf Life



## **NL Development / Study Efforts**





Electro Muscular Disruption



Individual Servicemans NL System



Joint NL Warning Munition



MK19 NL Short Range Munition



Pulsed Energy Projectile



Portable Active Denial System



Personnel Halting and Stimulation Response



# **Airburst Non-Lethal Munition (ANLM)**



#### 25mm Low Velocity:

- XM25 Grenade Launcher
- Minimum engagement range 40 meters
- Maximum effective range 500 meters
- Semi-automatic weapon function
- Precision electronic timed airburst fuze

#### **Potential Payloads:**

- Kinetic energy
- CS
- Flash-bang
- Thermobaric
- Electromuscular disruption



#### 25mm High Velocity:

- Advanced Crew Served Weapon
- Minimum engagement range 100 meters
- Maximum effective range
  - 500 meters point fire
  - •1500 meters area fire
- Full-auto weapon function
- Precision electronic timed airburst fuze

#### **Potential Payloads:**

- Kinetic energy blunt impact
- Flash-bang
- Thermobaric



Electromuscular disruption

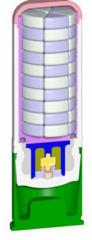
#### 40mm High Velocity: PROGRAM OF RECORD

- MK19/MK47
- Minimum engagement range 40 meters
  - Maximum effective range
    - 500 meters point fire
    - •1500 meters area fire
- Full-auto weapon function
- Proximity fuze

#### **Potential Payloads:**

- Kinetic energy
- CS
- Flash-bang
- Thermobaric
- Electromuscular disruption





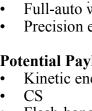
#### 40mm Low Velocity:

- XM-320 / M203 / M79
- Minimum engagement range 40 meters
- Maximum effective range
  - 150 meters point fire
  - •300 meters area fire
- Proximity fuze

#### **Potential Payloads:**

- Kinetic energy
- CS
- Flash-bang
- Thermobaric
- Electromuscular disruption









# **Non-Lethal Mission Payload Module**

### **Accomplishments**

- ➢ Milestone A decision, 7 Dec 04
- HMMWV Initial Increment (MCCDC CDD in Development)
- ➢ AoA, OMS-MP & COE underway − Completion this Summer
- 15 Jun 05 Joint Requirements IPT Meeting
- Endorsed by FCS NLW Trade Study

### **Future Activities**

- Engineering / Trade Studies & Assessments Results Jul 05
- In-Process Review with MDA, Jun 05 / MS B planned for 4QFY07
- CDD staffed for joint input prior to staffing for signature

### USMC Lead, USA, USAF, USN and USCG Interest







# **OSD Non-Lethal Roadmap**

- Functional Working Groups
  - JCIDS Evaluation
  - Policy
  - Legal & Treaty / Agreement / Convention Compliance
  - Family of Systems / System of Systems
  - Enabling Technologies
  - Test & Evaluation
  - Interagency (DoJ, DoS, DHS, etc...)
  - Legislative / Public Affairs
  - International Engagements



## **Industry Proposals**

### - BAA M67854-05-R-5009

- NL Science & Technology Applied Research & Technology Development Efforts
- <u>www.marcorsyscom.usmc.mil</u>
  - Business Opportunities
  - **Opportunities**
  - Non-Lethal