



United States Army



Rapid Response  
to  
Urgent Non-Lethal Weapons Requirements



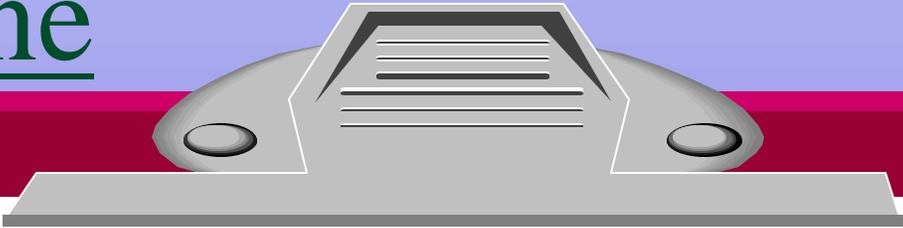
*NDIA Non-Lethal Defense IV*  
*Tysons Corner, VA*  
*21 March 2000*

John J. Cline  
Systems Manager,  
AMC Non-Lethal Materiel Program  
973-724-7317

**Tank-automotive & Armaments COMmand**

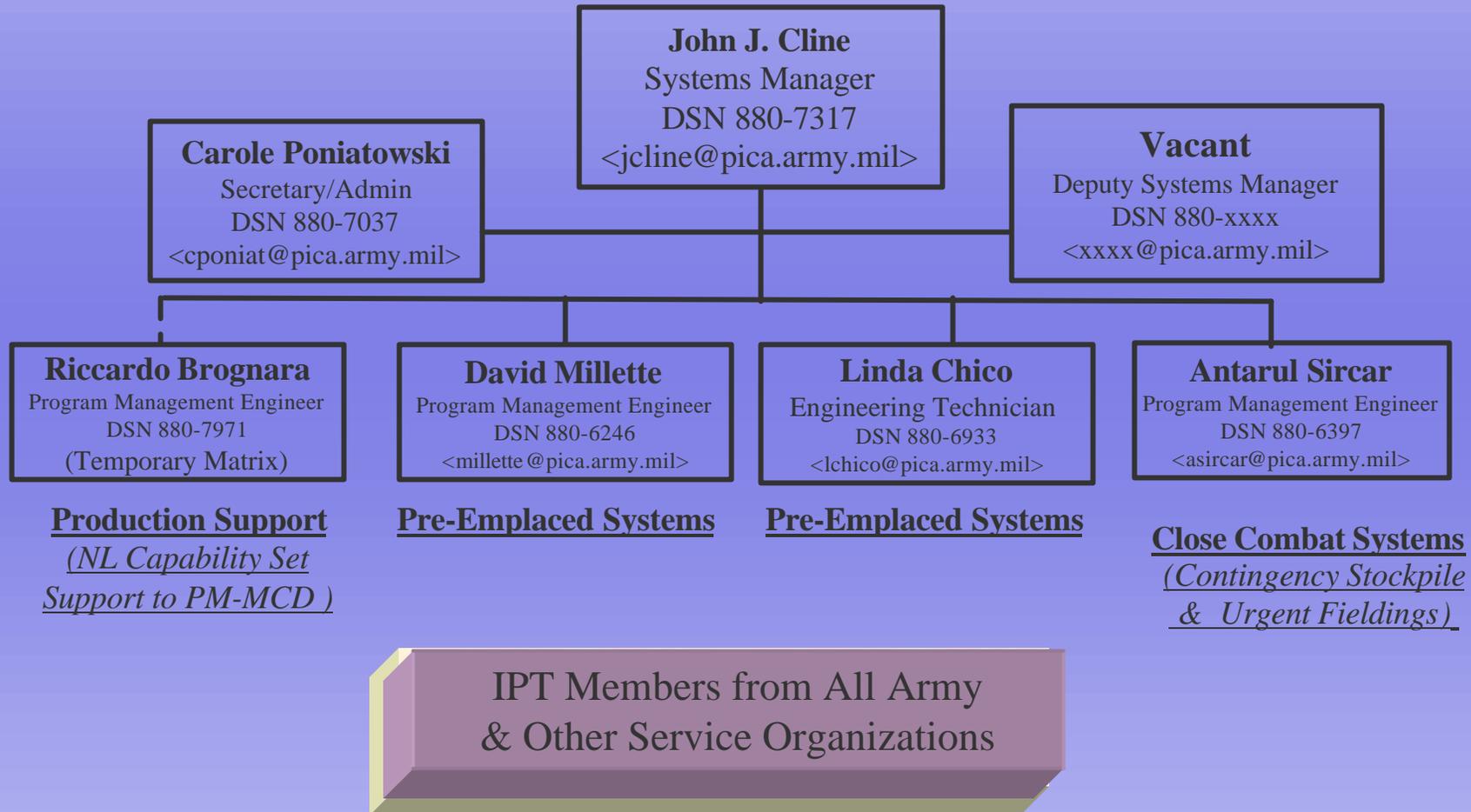
## *Rapid Response to Urgent NLW Requirements*

# Outline

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- The USA Army Non-Lethal (NL) Fielding Plan
  - US Army Urgent Operational Requirements
  - US Army Soldier Enhancement Programs
  - Army NL Contingency Stockpile
  - Lessons Learned
  - Health Hazard Assessment
  - Training
  - US Army NL Capability Sets
  - DoD Joint NLW Programs - US Army Led
  - Conclusion

## *Rapid Response to Urgent NLW Requirements*

# TACOM-ARDEC NL Core Team



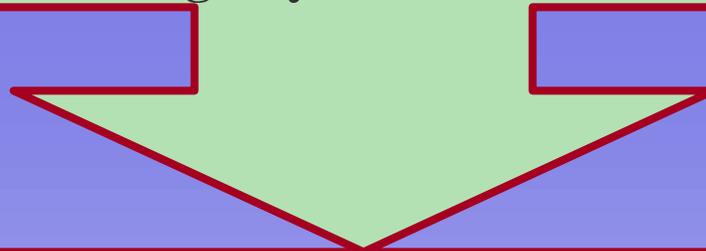
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# USA Army NL Materiel Fielding Plan

## Interim Solution (FY95-FY99)

- Satisfy Urgent Operational Requirements
  - Leverage COTS/NDI
- Develop and Type Classify NL Materiel
  - Army Soldier Enhancement Program (SEP)
  - DoD Joint Non-Lethal Weapons (NLW) Program
- Build Interim Contingency Stock



## Long Term Solution (FY00->)

### Field NL Capability Sets (Type Classified Std)

- Non-Lethal Munitions
- Soldier Protection Items
- Training Items

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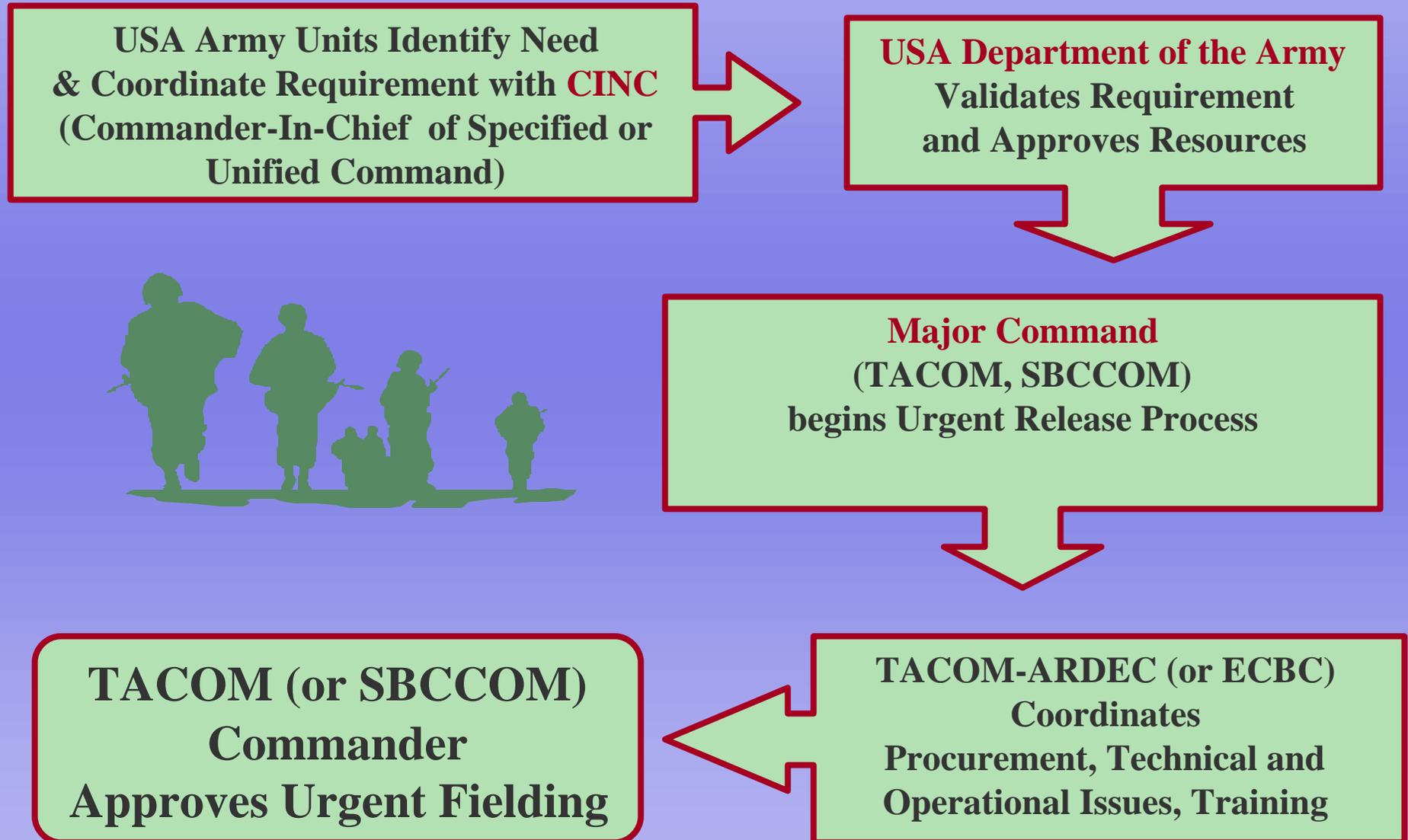
# Urgent Operational Requirements

- **Urgent Fielding Procedures** were established by the USA Army Materiel Command (AMC) in 1990 to support Operation Desert Storm.
- **AMC Policy Requires:**
  - Written requirement validated by Department of the Army
  - A safety assessment of the item/system.
  - Acceptance of issues/limitations and restrictions for use by the gaining command.
- AMC leverages from **commercial-off-the-shelf** NL technologies used by law enforcement



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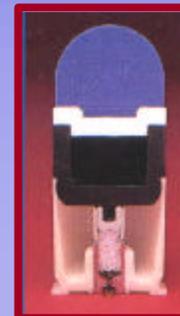
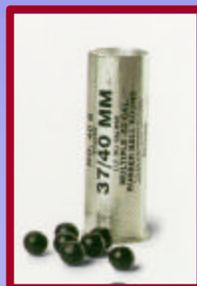
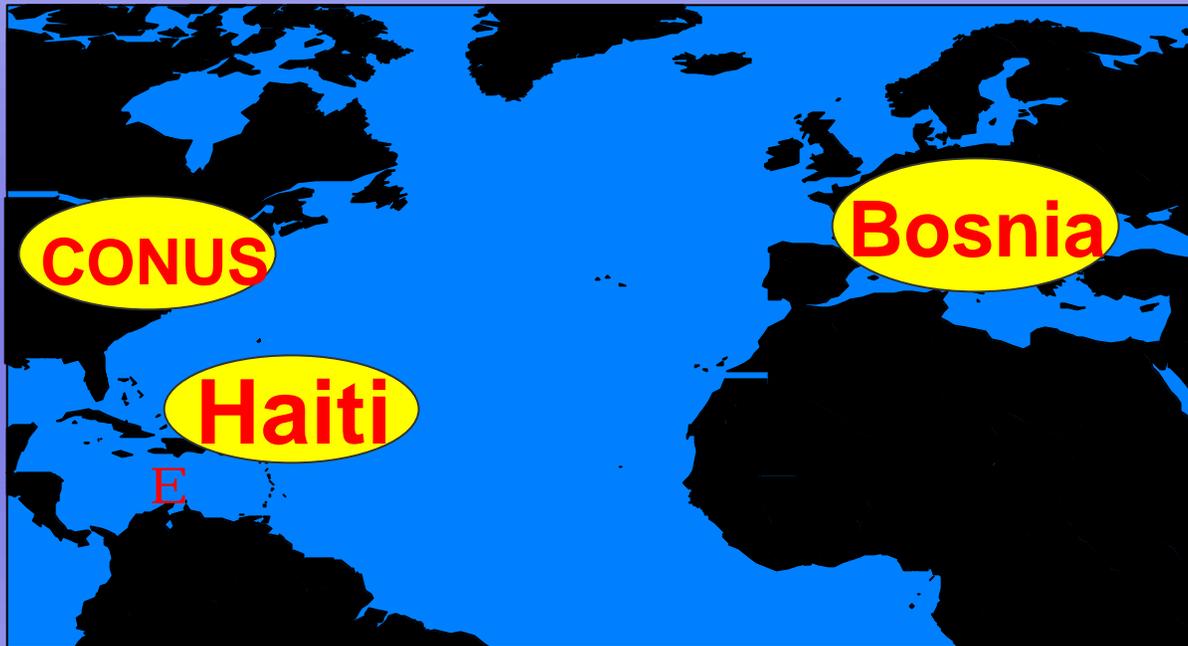
## Urgent Fielding Procedure



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Multiple Urgent Fieldings

1995 to 2000



## *Rapid Response to Urgent NLW Requirements*

### Conditions of Release

- **Location and expiration date**
- **USA trained soldiers only**
- **Designated weapons and sighting procedures**
- **Engagement ranges**
- **Packaging, Storage and Handling**
- **Environmental restrictions**
- **Cleaning procedures**
- **User and target health hazards**

**Gaining command is required to accept all conditions  
before munitions are delivered**

# Rapid Response to Urgent NLW Requirements

## Army SEP\* Programs



40mm M1006  
Non-Lethal Cartridge  
(Sponge Grenade)



*Army's 1st  
TC-Std NL  
Point Target  
Ctg*



M84 Stun Grenade

5.56mm XM95  
Rifle Launched  
Non-Lethal Munition



12 Gauge  
Non-Lethal Munitions  
XM1012, XM1013



M37 Mid Size  
Riot Control Dispenser

\* SEP - Soldier Enhancement Program



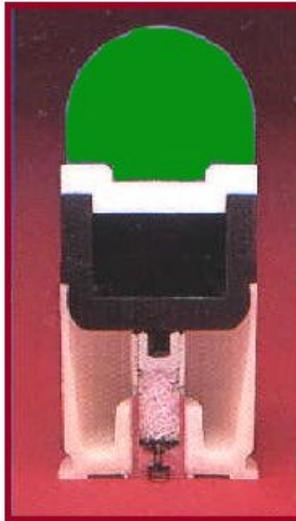
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**NL Contingency Stockpile**

- **Procure and certify one stock of munitions**
- **Eliminate the need to re-certify individual lots from manufacturers**
- **USA soil based to support training prior to deployment**
- **Support continuing operational requirements until NL materiel items have been Type Classified Standard (FY98-00), and Full Materiel Released**

# Army NL Contingency Stockpile

40mm Rounds  
(M203 Grenade Launcher)



Foam Batons  
(Re-Supply  
2QFY00)

Multiple Rubber Balls  
(Re-Supply 2QFY00)

Sponge Grenade  
(In-production)



Flash/Bang

Bean Bag

12 Gauge Rounds  
(Standard Shotguns)

Hand Thrown  
(Developed by ERDEC)



Dye Marker

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DoD Directive 3000.3

Policy for Non-Lethal Weapons

“ Non-lethal weapons shall not be required to have zero probability of producing fatalities or permanent injuries. However, while complete avoidance of these effects is not guaranteed or expected, **when properly employed**, non-lethal weapons should significantly reduce them as compared with physically destroying the same target ”

**- Training is Essential ! -**

## *Rapid Response to Urgent NLW Requirements*

# Training



### Intensive training required

Soldiers must pass both theoretical and qualification tests (by Mobile Training Team or New Equipment Training Team)

### Joint NLW Program

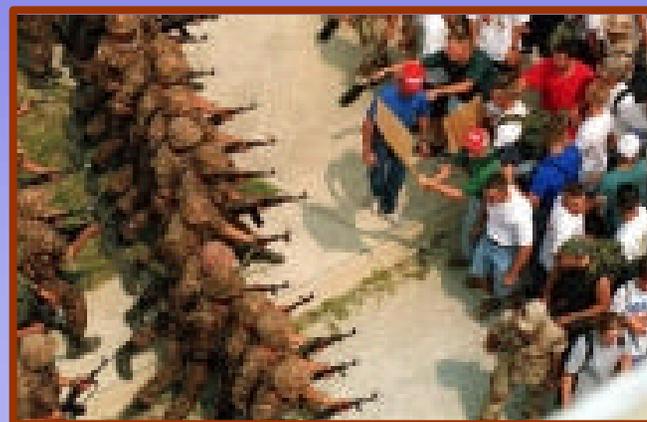
Non-Lethal Individual Weapons  
Instructor Course (NIWIC)

**Safe and Effective Ranges**

**Sighting**

**Cleaning**

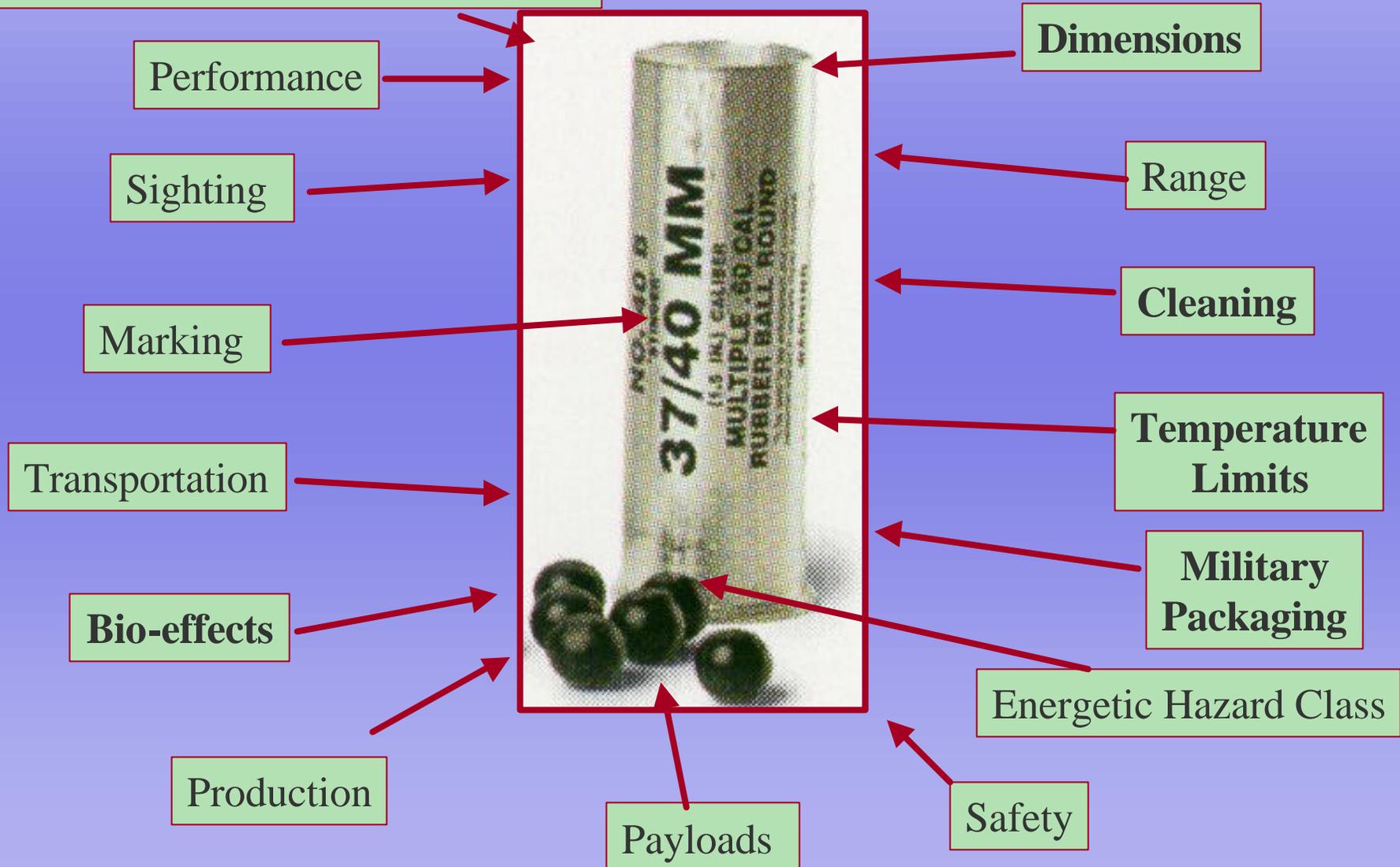
**Environmental Conditions**



# *Rapid Response to Urgent NLW Requirements*

## Lessons Learned

### Inventory & Configuration Control



# *Rapid Response to Urgent NLW Requirements*

## **Existing Non-Lethal Munitions Shortfalls**

- **Limited Effective Range**  
*< 100 meters*
- **Narrow Effectiveness Band**  
*Potential Injury in Close, Ineffective Farther Out*
- **Limited Accuracy**
- **Primarily Single Shot Devices**
- **High Impulse / Recoil of Muzzle Launched Devices**



**Small Arms  
Munitions**



# Non-Lethal Capability Set (NLCS)



PM-Mines, Countermine and Demolitions assigned responsibility for fielding Army NL Capability Sets; APM-NLCS established.



## DESCRIPTION

- 57 types of items, packaged in 4 modules:
  - 1 - Individual Protective Equipment
  - 2 - Weapons and Ammunition
  - 3 - Enhancement Devices
  - 4 - Training Devices

*30 Sets, FY00-05*



# Rapid Response to Urgent NLW Requirements



## DoD Joint NLW Program - Army Lead Materiel Programs

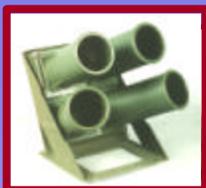


M5, Modular Crowd Control Munition (MCCM)

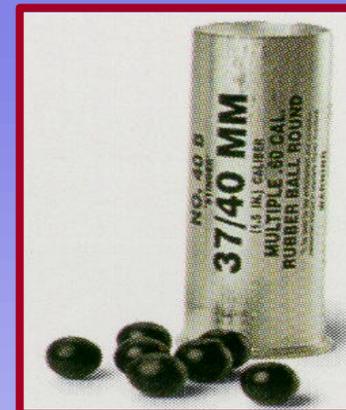
Army's 1st "TC-Std" NL Area Target Munition



XM1, Portable Vehicle Arresting Barrier (PVAB)



66mm Vehicle Launched NL Grenades (XM98 Distraction, XM99 Blunt Trauma)



40mm NL Crowd Dispersal Cartridge (CDC)



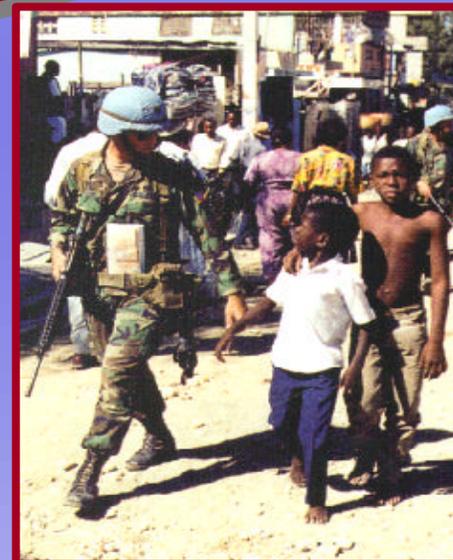
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# Conclusion

Near-term, interim solutions using COTS/NDI NL munitions, offer technical challenges for military environments



Soldier Safety, Training & Human Effects are a priority



Type Classified-Standard military items are entering production for pre-positioning in NL Capability Sets