



NonLethal Munitions Update

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TACOM

Lethality, Survivability, Mobility and Sustainment for America's Army



STARS AND STRIPES

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Not your average weapon



Kosovo showdown led to historic use of nonlethal ammunition in field **Page 3**

NL in the News

In the military



Seattle's largest book store is a major source of nonlethal weapons for the military.

A military policeman in the field is seen with a nonlethal weapon.

It is a new way of thinking about the use of force in the field.

The use of nonlethal weapons is a new way of thinking about the use of force in the field.

In the military

Nonlethal weapons pack powerful punch

BY JON K. ANDERSON
Stars and Stripes

SEVCE Reserve — When Sgt. Dave Brown, a military policeman, threw a foam grenade at a group of angry Kosovo rebels, he knew it was going to be a long day.

What he didn't know is that he would be using the first U.S. troops in history to use nonlethal weapons in combat.

"They started pounding us with rocks as soon as we hit the ground," said Brown, describing the scene in Sevice on Tuesday afternoon.

A military policeman by training, Brown was escorting Lt. Col. Jim Brown into the quickly growing firestorm in southern Kosovo, where hundreds of Serbs had trapped a squad of MPs earlier that morning.

Brown, the top U.S. MP in Kosovo, was going in to get his troops out of Sevice. He had the daunting task of serving as his bodyguard, as the situation went from bad to worse, it didn't take long for Brown to authorize the use of new 40 mm ammunition his troops had been issued when they arrived in Kosovo last year.

Unlike the "flash grenades" and "tear gas" used in military circles, the ammunition is designed not to hit, only irritate and irritate. At one point in the Sevice showdown, a Serb with a large stick was winding up on Brown's head. Sgt. Steve Clark in front of a food box pitcher.

"I hit him with the food box pitcher," Brown said, "and that was the end of that." Clark said the incident didn't have any serious consequences. "He can live with his hands in his face, and we never saw him again," Brown said. "In all, 91 of our nonlethal rounds would be fired from the MP's 40mm grenade launcher."

These different types of rounds were used:

- Rubber Sting Ball: Like a Taser-sized "00" buckshot bullet, but instead of lots of little metal pellets, one big hand rubber ball delivers a punch that delivers a shock to the target.

With the increasing frequency of peacekeeping missions being handed to troops these days, the military has had to come up with alternatives like this for years.

In fact, when Gen. Tony Zinni, now commander of the U.S. Central Command, led a Marine task force into Somalia in 1995 to cover the retreat of forces out of the troubled African war zone, he was the first to bring nonlethal weapons into a hot spot. His kit bag included rubber bullets, sting balls and sleepers (gas).

He used the sleepers to keep crowds at bay, but the rest of it remained unused in his sea bag of nonlethal weapons. A lot of troops have been equipped with them since then, so far there's plenty more where they've stayed.

That is, until Tuesday.

"To the best of my knowledge, this is the first time in U.S. history that we've used nonlethal weapons in combat," Brown said.

Brown knows that a situation where U.S. troops' only option is to fire the more traditional lethal variety of ammunition on a crowd only armed with sticks and stones — and full of women and children — could prove disastrous for U.S. policy.

"Still, he said, he intentionally kept his options limited. In fact, he had the option of getting smaller rubber bullets for his troops' 40mm rifles, but declined without a moment's hesitation.

"I want it kept simple. I want to be able to get the best of both worlds. Moving his finger to the weapon barrel of the grenade launcher, he said, "Yes, we'll use for the nonlethals."

With only foam and so-called loudness-equipped MP-40s, he added, that ensured only separation.



Sgt. Brian Furman, a military policeman who was among those who used nonlethal munitions in a daylong redee against Serb hard-core Tuesday, patrols the same village Friday.

nonlethal munitions in a daylong redee against Serb hard-core Tuesday, patrols the same village Friday.

Instead, he said, he made a point to grab one of the newer versions from a friendly soldier who was in his way out.

"Pulling out a round, he said, "That's a lesson learned right there, but we're all carrying these now."

Varied "CS" in red, green, the can is compressed tear gas. "We're breathing this out the next time."

Brown says his troops did not make the tear gas during the Sevice showdown. "That's a lesson learned right there, but we're all carrying these now."

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NonLethal Munitions:

“To Stop, Confuse, Disorient and/or Momentarily Deter Targeted Individual(s)”

“Provides friendly forces the capability to maintain a standoff distance from hostile forces without using deadly force while maintaining the capability to quickly change to more lethal combat products as the situation warrants.”

“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.”

- DoD Directive 3000.3 Policy for Non-Lethal Weapons



USA Army NL Materiel Fielding Plan

Interim Solution (FY95-FY99)

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



Long Term Solution (FY00->)

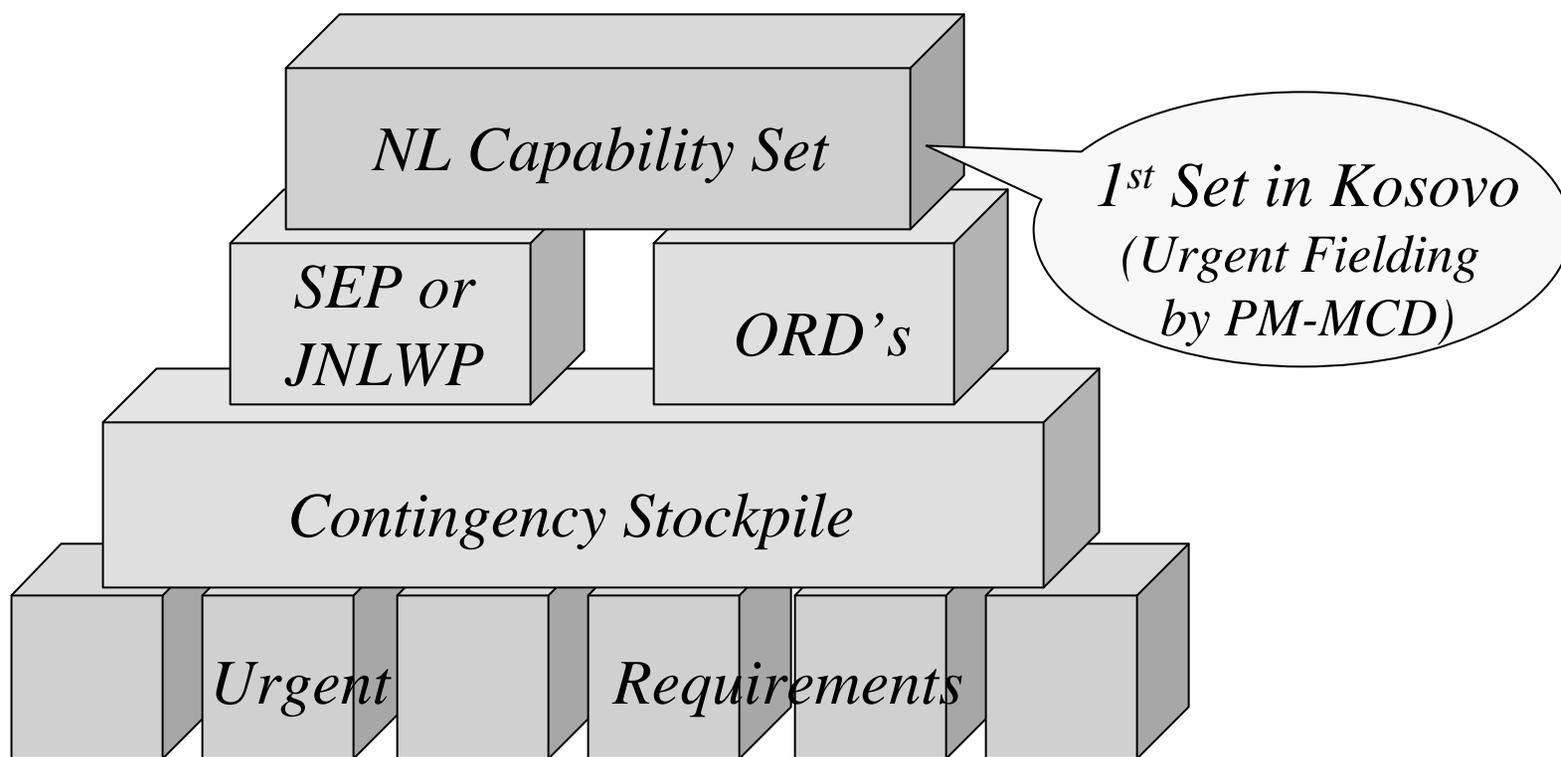
Field NLW Capability Sets (Type Classified)

- Non-Lethal Materiel
- Soldier Protection Items
- Training Items





NL Fielding Plan – Another View





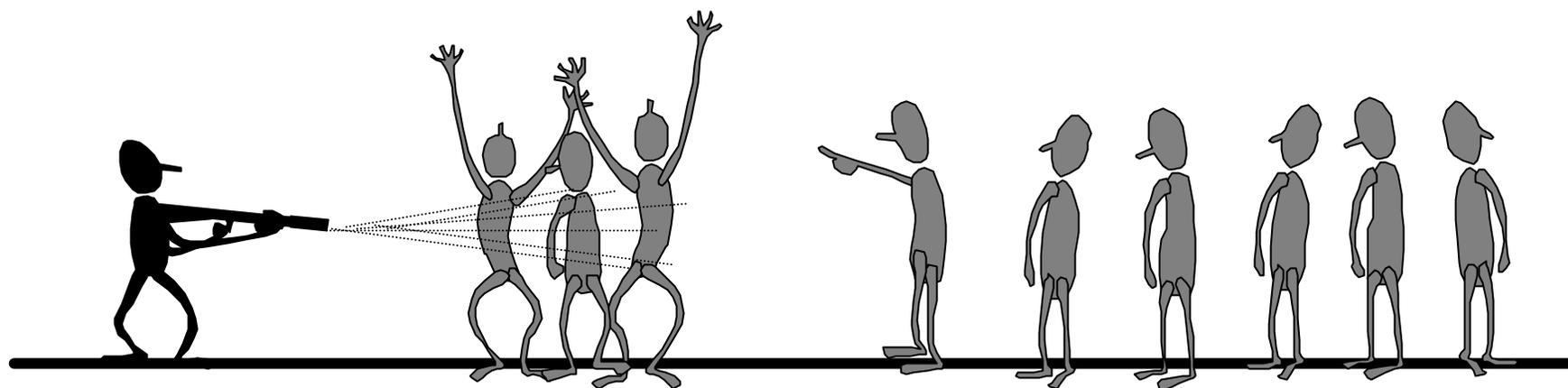
Army NonLethal Munition Formal Acquisition Programs:

- *12 gage Point & Area Fire*
- *40mm Point & Area Fire*
- *5.56mm Muzzle Launched Area Fire*

*Legacy Weapon Fired Munitions
Kinetic Blunt Trauma
Non-Developmental / Commercial off-the-Shelf*



12 gage NonLethal Munitions: *10 - 20m Engagement Ranges*



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Army 12ga NonLethal Munitions Evolution:

**Urgent Releases
&
Contingency Stockpile**

**Formal
Acquisition
Programs**

**PM-MCD
NonLethal
Capability Set**

Crowd Dispersal  (X)M1013 Crowd Dispersal

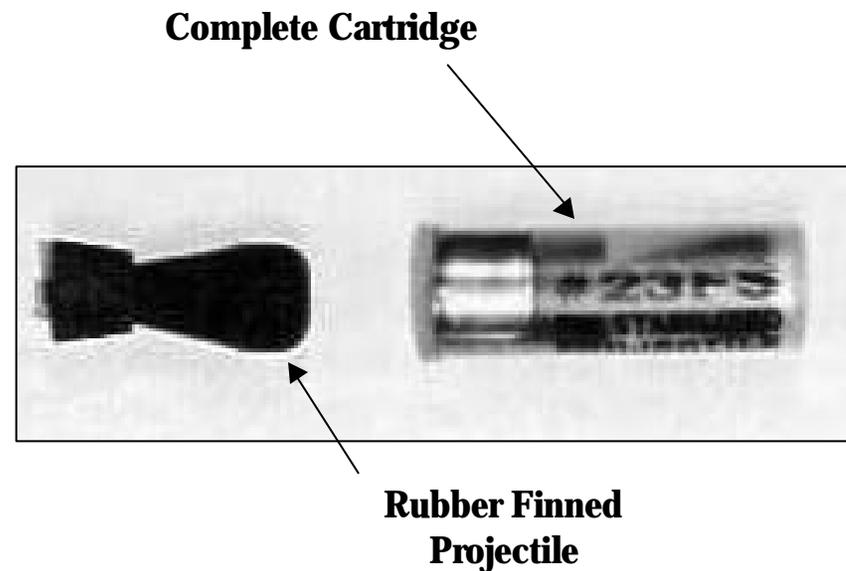
Point Control  (X)M1012 Point Control

Beanbag 
Point Fire ORD met by XM1012



12 Gage XM1012 Point Control Ctg.

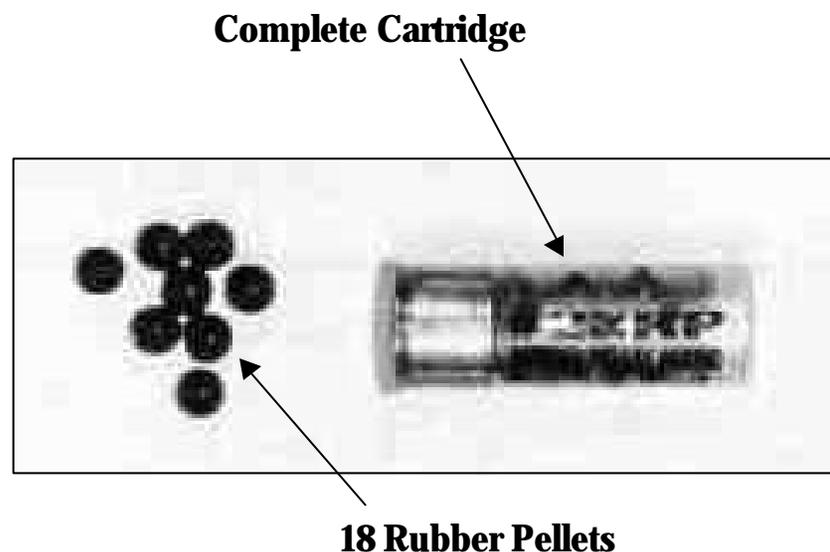
- Fired from 2.75" or 3" shotguns
- Single Projectile - - Point Fire
- 10m-20m Effective Range
 - $P(h) \geq .80$ vs. man-sized target at 15m
- TC Std: 4Q00





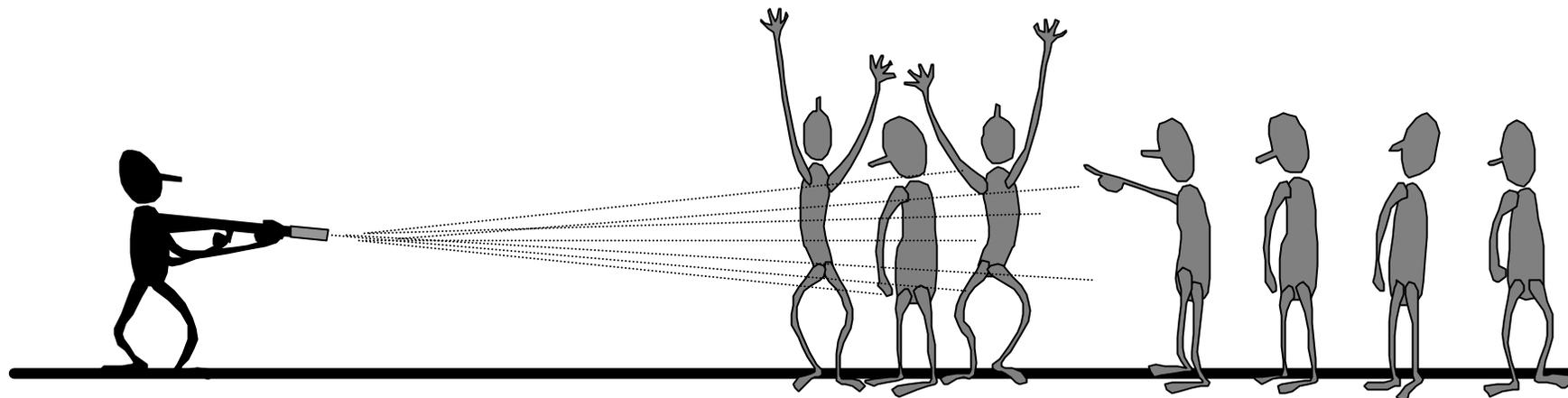
12 Gage XM1013 Crowd Dispersal Ctg.

- Fired from 2.75" or 3" shotguns
- 18 Projectiles - - Area Fire
- 10m-20m Effective Range
 - P(h): 80% of payload on a 6'h x 10'w target at 15m
- TC Std: 4Q00





40mm NonLethal Munitions: *10-50m Engagement Ranges*



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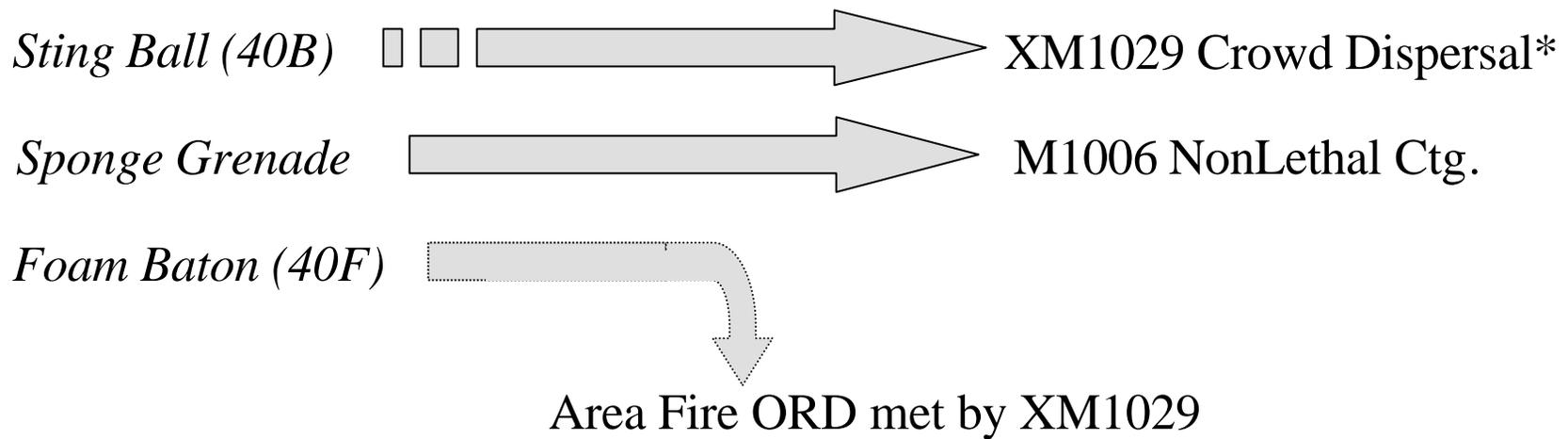


Army 40mm NonLethal Munitions Evolution:

**Urgent Releases
&
Contingency Stockpile**

**Formal
Acquisition
Programs**

**PM-MCD
NonLethal
Capability Set**



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(*) - RDTE funded by JNLWD



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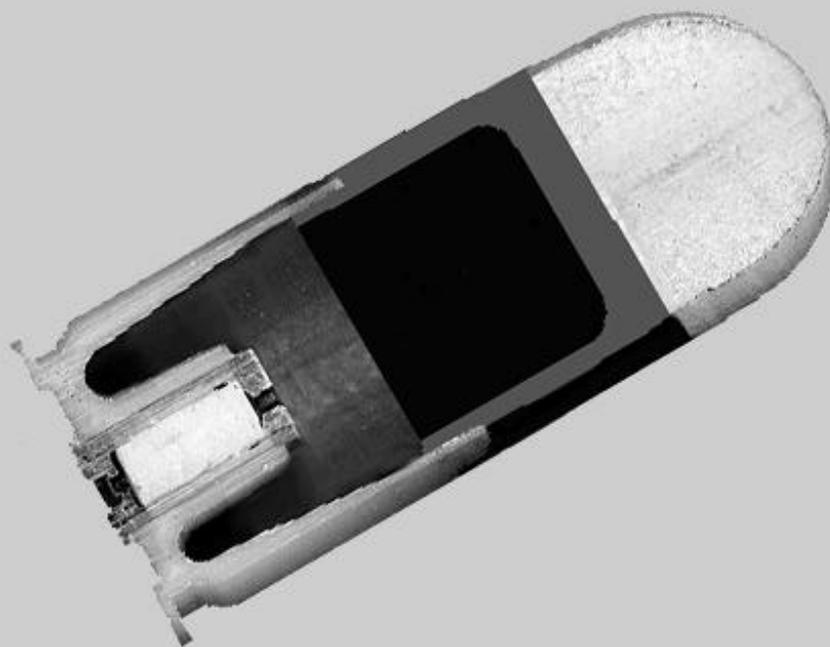


40mm, M1006 NonLethal Ctg. *“Sponge Grenade”*

- Fired in M203 Grenade Launcher
- Single Projectile - - Point Fire

- 10m-50m Effective Range
 - $P(h) \geq .85$ man-sized target at 30m
 - $P(h) \geq .65$ man-sized target at 50m

- TC STD - 3QFY99





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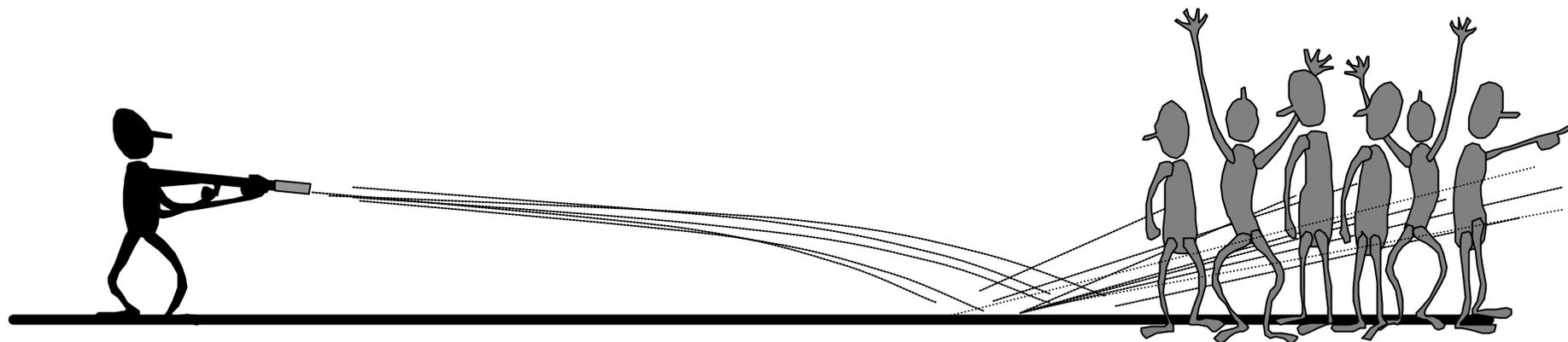
XM1029 Crowd Dispersal Ctg.

- Fired in M203 Grenade Launcher
- 48 Projectiles - - Area Fire
- 15m-30m Effective Range
 - P(h): 90% probability of hitting
4 out of 5 man-sized targets at 30m
- TC Std: 2Q01





5.5mm NonLethal Munitions: *30-80m Engagement Ranges*



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Army 5.56mm NonLethal Munitions Evolution:

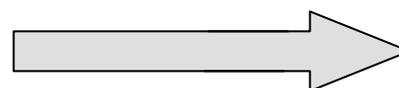
**Urgent Releases
&
Contingency Stockpile**

**Formal
Acquisition
Programs**

**PM-MCD
NonLethal
Capability Set**

N/A

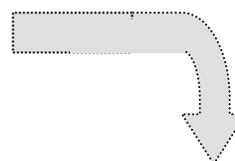
MA/RA-88



XM95 Area Fire

N/A

XM96 Point Fire



No COTS Solution to ORD



5.56mm, XM95, Area Fire Non-Lethal Munition

- Fired in M16/M4 series rifles with M195 Grenade Cartridge
- 15 Projectiles - - Area Fire
- 30m-80m Effective Range
 - P(h): 80% of payload on a 8'h x 32'w target at 50m (skip fire)
- TC LRP: 4Q99 TC Std: 1Q01



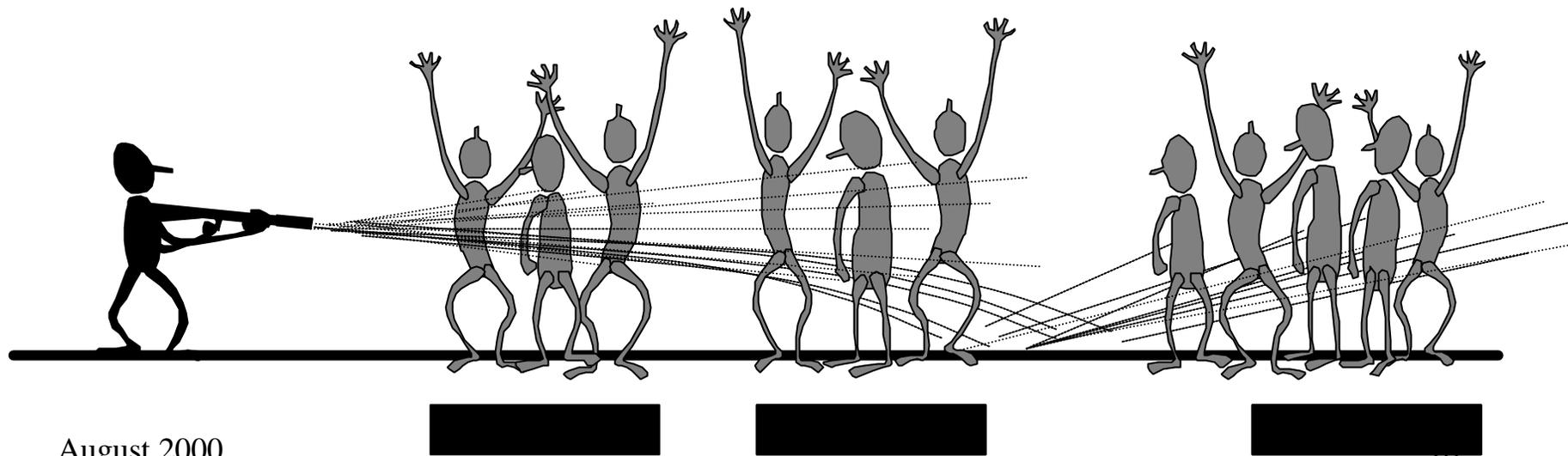


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Family of Army Kinetic NonLethal Munitions:

10 - 80m Engagement Ranges



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SUMMARY:

- **NL Munitions have now been employed in the field**
- **NDI/COTS Acquisition Approach nominally successful; ongoing synergy between Design & Employment Concepts**
- **Trends:**
 - 1st Generation COTS Designs → Urgent Fieldings & Contingency Stockpile**
 - 2nd Generation Militarized Designs → TC & NL Capability Set**