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# Non-Lethal Force: The Slippery Slope to War?

F. M. LORENZ

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From *Parameters*, Autumn 1996, pp. 52-62. [↗](#)

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In preparation for Operation United Shield, the US-led evacuation of UN forces from Somalia, Lieutenant General A. C. Zinni, USMC, asked his staff to pursue "less lethal" alternatives in dealing with unarmed hostile elements in Mogadishu. The intent was to use every practical and available means to deal with hostile crowds, with the goal of saving lives and reducing confrontation.

As a result of these efforts, the I Marine Expeditionary Force became a test bed for the employment of new technology designed to fill the gap between verbal warnings and deadly force. In January 1995 the deployment of Combined Task Force United Shield fueled the debate in the United States over the need for less-lethal weapons. Some feared that the Marines, our premier amphibious combat assault force, would be sending the message that they were too squeamish to hurt even their enemies.[1] Others were concerned that the proliferation of less-lethal technologies would inadvertently bridge the gap between peace and war, leading us down the "slippery slope" to deadly force (and war) with little forethought and no debate.[2] Did Operation United Shield give birth to a new element of national power, in addition to the traditional elements of political, diplomatic, and military? Should the United States continue to develop less-lethal weapons as an instrument of national policy? What lessons were learned from the deployment of less-lethal weapons in Operation United Shield? This article will attempt to answer these questions based upon the experience of the I Marine Expeditionary Force.

## Background

Operation Restore Hope, an international effort to restore order to Somalia and ensure the safe delivery of relief supplies to the starving population, began in December 1992 with great optimism. In May 1993 leadership of the operation was turned over to the United Nations, which undertook a much more ambitious program of nation-building and disarmament, with a much less capable force.[3] By the end of 1994 more than 130 peacekeepers had died trying to carry out the UN mandate, on which the international community had spent more than two billion dollars. The UN mission to Somalia was judged a failure, and the UN ordered the withdrawal of the remaining peacekeepers by the end of March 1995. In late 1994 renewed fighting in the city of Mogadishu presented an increased danger to the departing peacekeepers, and the UN called for US assistance to provide security to the withdrawal. The I Marine Expeditionary Force, which had been the nucleus of the command element of Restore Hope two years earlier, was directed by US Central Command to return to Somalia and command the US forces that supported the withdrawal.

As preparations began for the operation, it became clear that unarmed hostile elements could pose a substantial threat to US forces. During the final days of the deployment, large bands of looters and thieves would be competing for the booty left behind by the UN. Although Marines regularly train in crowd control, this type of training is only one part of an intense training cycle that must occur before deployment. The I MEF took the lead in obtaining the best available equipment that could protect lives and reduce the possibility of confrontation with unarmed groups.

The use of less-lethal weapons is a rapidly developing area for military operations, and there is still much confusion on terminology and doctrine. The term non-lethal is currently in use by the Department of Defense. During United Shield the terms "non-lethal," "less-lethal," and "less-than-lethal" were used interchangeably.[4] These materials will be referred to in the balance of this article as "non-lethal" to conform to current DOD terminology. Some authors have included information warfare, electronic warfare, psychological operations, and "enhanced sanctions" such as interrupted power grids, transportation, credit and computer systems as non-lethal forms of war. Such is not the intent of this article.[5] Here the concept is limited to materiel developed and employed to reduce or eliminate casualties at the tactical or operational levels. Objectives cited above belong in a different matrix, one that concerns itself with

strategic, rather than tactical, matters.

Because of time constraints, one of the key factors in selection of non-lethal systems for United Shield was availability. Virtually all of the munitions and weapons were required to have a two-week guaranteed delivery date to ensure that the material would be available in Somalia when US forces needed it. Quantity was another primary concern, as many manufacturers and distributors of non-lethal equipment do not maintain large inventories. Two additional factors were identified in the selection and purchase of the essential equipment and munitions. The first was performance in the field, and the second was the time required to train individuals with no previous experience in their employment.

The final critical factor in selection of non-lethal systems was the need to be able to deliver the munitions using the organic weapon systems in the Marine rifle company's table of equipment. Learning new delivery systems would require additional training time and increase the combat load of the individual Marine. The decision was to require that new material could be fired from the M203, a combination of grenade launcher and rifle, and the standard 12-gauge shotgun. The M203 grenade launching system was compatible with the 37mm non-lethal munitions procured for Operation United Shield and was the preferred delivery system for these munitions. The M203 includes the M-16 and can provide lethality promptly when required. The infantry's familiarity with the M203 contributed to accuracy in non-lethal systems as well. The 12-gauge shotgun also provides versatility, and can easily be employed as a lethal weapon by quick selection of munitions.

The reason for the procurement of non-lethal technologies was to fill the gap between verbal warnings and deadly force when dealing with unarmed hostile elements. Historically, the accomplishment of military objectives has required killing the enemy. Military force has been developed over the centuries to meet and exceed the lethality of the force available to the adversary. The intensity of the force was never at issue, since any force was deadly and was judged only on the outcomes: death or relative levels of destruction required to achieve an objective. But the nature and complexity of military operations is changing. Soldiers and Marines today are much more likely to encounter unarmed hostile elements in peacekeeping missions and other armed interventions.

In traditional land force doctrine, a gap exists between "low end" capabilities such as warnings and riot control formations, and the conventional use of deadly force. For many military planners, this has produced a model in which force is viewed much like a toggle switch: it's either on or off. The relatively recent availability of reliable, state-of-the-art non-lethal weapons which undermine, weaken, or debilitate an adversary's ability to defy the will of a commander has created opportunities unknown even a few years ago. These non-lethal alternatives could have profound significance in operations that involve support for peace operations or humanitarian programs.

### **Approval of Non-Lethal Systems**

Before the non-lethal systems identified by I MEF could be acquired and used in the field, detailed review and formal approval for their use had to be obtained in Washington. A safety review was required for all systems, and Marine Corps Systems Command issued a limited safety release for the selected systems, as well as procurement authorization, on 14 January. Before the systems could be employed, each had to be reviewed for compliance with international law.[6] Review was conducted by the Judge Advocate General of the Navy for systems that had received preliminary approval. The Judge Advocate General determined that employment of the systems would be consistent with the Law of Armed Conflict and that their use would not violate US treaty obligations.

The draft DOD directive related to non-lethal systems states the policy for their employment.[7] Oversight authority for development and acquisition programs for these weapons is vested in the Senior Steering Committee. The committee is cochaired by Office of the Undersecretary of Defense for Acquisition and Technology, and the Office of the Undersecretary of Defense for Special Operations and Low Intensity Conflict. The Office of the Undersecretary of Defense for Policy ensures that the use of non-lethal weapons is given due consideration. DOD representatives played a significant role in the fast-track approval process for the non-lethal weapons deployed in United Shield. There was, however, some concern on the United Shield staff that the DOD representatives were too far removed from the field to properly evaluate the need for the non-lethal weapons. For example, the caution expressed in the approval process for using "sticky foam" seemed to focus on the training aspects and the dangers of suffocating a demonstrator. These

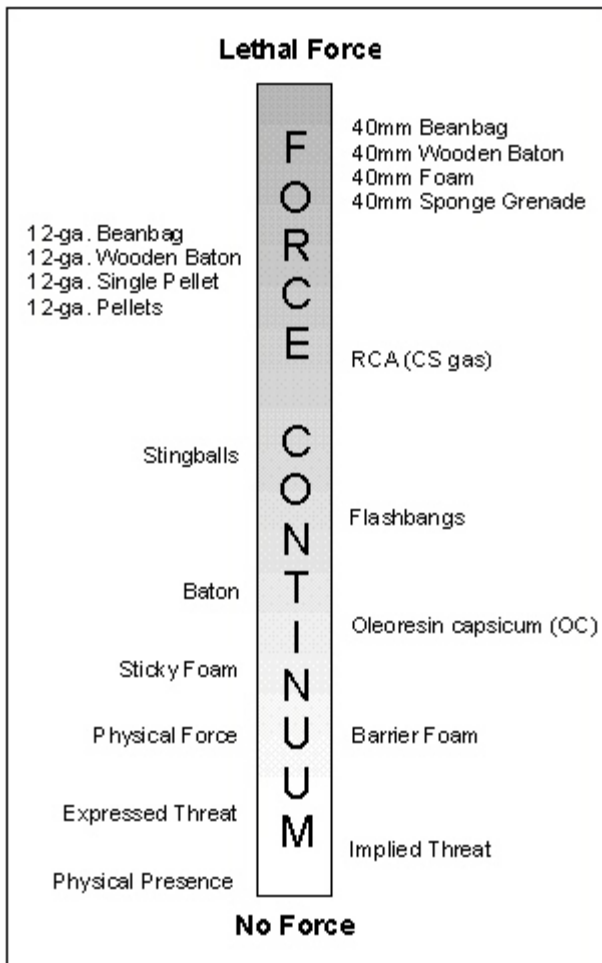
matters are more properly left to the field commander once the item is approved.

As part of the preparation for Operation United Shield, the following non-lethal systems were acquired, approved, and deployed: 40mm systems with five types of rounds, 12-gauge systems with three types of rounds, pepper sprays, stinger grenades, "flash bangs," and two types of foam, sticky and aqueous.[8] These systems should be distinguished from Riot Control Agent (CS gas), which has been in the US inventory for years, and is used routinely during training. The systems deployed in United Shield were a small sample of a range of materiel sometimes classified as non-lethal.

## Rules of Engagement

Rules of Engagement (ROE) for Operation United Shield were approved and issued by the Joint Chiefs of Staff on 4 February 1995. Most provisions of the ROE were unclassified, including the part concerning unarmed crowds or unarmed hostile elements.[9] This provision was based on the principle of a graduated response, using the minimum force necessary to respond to the threat. The principles of necessity and proportionality apply, and further amplification should not be required.

The entire text of the ROE for United Shield had been delayed more than two weeks awaiting final approval of the special ROE for non-lethal force. When the final copy of the ROE was received, just before the landings, it contained arbitrary restrictions on the use of certain "crowd control" devices. The restrictions were based on the assumption that there is a clear-cut distinction between the use of deadly force and all other means of force. This approach is not consistent with the practice in the civilian law enforcement field, where the use of force is viewed as a continuum of action rather than as a set of distinct alternatives. The materiel developed and approved for use was based on just such a continuum, which was intended to provide a range of practical choices to troops on the ground in contact with potentially hostile "civilians" (see Figure 1). Despite the ROE restrictions, most of the non-lethal means could be properly employed in the sequence described in Figure 1, in the manner in which the Marines had been trained.



**Figure 1. The Force Continuum**

## **Publicity and Media Relations**

The Task Force staff monitored media reports during the operation, and most were not helpful to the mission. On 16 February a "Pentagon official" gave detailed information about the non-lethal means that had been approved for the operation. Even the expected length, width, and depth of the barrier foam was described. Perhaps the "official" did not know that the Somalis follow the news and have an extraordinary ability to defeat barriers. This also put the Task Force at a disadvantage, now that the world was anxiously waiting for "the first large-scale employment of non-lethal weapons by US armed forces." By describing the inventory of means, but not the limits, the "official" may have raised expectations that the Task Force could easily immobilize hostile crowds soon after the landings.

Although it was true that the Task Force had available a variety of items that were designed to save lives and reduce the violence of confrontation, media reports sometimes focused on the new technology to the exclusion of the other capabilities. The publicity did not mention that the systems would be used only to control unarmed crowds and that they would never be used as a substitute for deadly force when the latter was justified. Soldiers and Marines always have the right and responsibility to defend themselves and their units. This point was often lost on the reporters who focused on the sensational aspects of the story. As an example, some evening news broadcasts in America ran footage of the *Ghost Busters* movie, showing Bill Murray immobilized by "slime," in their reports on the non-lethal measures. Such coverage tended to call attention to the new technology without explaining its limitations.

## **Training and Employment**

All the systems deployed were the subject of extensive training limited only by the time and shipboard space available. The intensive training was well received and enthusiastically supported. A high confidence level was essential for two reasons. First, the situation in Mogadishu could promptly turn into a large-scale civil disturbance, conditions never before encountered by these troops. Second, the fundamental concepts of employment are more critical than the technology itself, requiring quick decisions in stressful situations.

The main landings in United Shield occurred on 28 February 1995 when over 2000 US and Italian marines came ashore to establish a secure perimeter for the withdrawal of Pakistani and Bangladeshi soldiers. The morning of 2 March saw the most critical part of the operation: the passage of lines and the abandonment of most of the airport to looters and Somali militias. The final withdrawal was conducted by amphibious vehicles in the early morning hours of 3 March. The operation was a success; all troops and equipment were withdrawn without suffering a single Task Force casualty.

Because the operation was carefully planned and executed, with advance effort in the areas of diplomatic initiative and public awareness, there were no significant problems with crowd control or rioters during United Shield. The 40mm and shotgun-delivered non-lethal means of force were not employed, and there was limited use of sticky foam and "caltrops" to supplement key barrier systems at night during the final hours of the withdrawal. The non-lethal systems will have to await another conflict to undergo a full-scale test by the US military. Nevertheless, some important lessons came of the Somali experience that will aid in future deployments.

## **Lessons Learned**

### *Capabilities and Acquisition*

Operation United Shield revealed shortcomings in the US capability to identify and deploy non-lethal military systems. Planning must begin as early as possible when a need is identified for the use of force against unarmed hostile elements. The choice of each non-lethal system should be based on the following factors. First, is the system available and can it be delivered to the field in a timely manner? Second, is it compatible with, and does it complement, existing weapons and training? Third, are there clear and unambiguous guidelines and ROE for its employment? Finally, can the system be employed effectively to save lives and contribute to mission accomplishment?

Meanwhile, others in the services should be attending to the practical issues associated with the non-lethal family of materiel. As late as December 1994, there were few systems available, and virtually no related doctrine. The systems need to be developed, the necessary legal review obtained, doctrine developed and tested, and the systems acquired in

sufficient quantities to deploy with future task forces. Cost will become an increasingly important factor in a time of decreasing defense budgets. A single 40mm wood baton round costs \$25. But non-lethal technology has the same advantages as the highly touted "smart munitions"; non-lethal systems deliver the most effective force in a precise manner, ultimately saving money, resources, and lives. A Joint Task Force Commander should have a wide range of alternatives in the control of unarmed hostile elements.

### *Force Continuum*

Current US military rules for the use of force make an arbitrary and unnecessary distinction between deadly force and lesser means. This situation caused problems during the preparation of the ROE for United Shield, when certain non-lethal systems were restricted to situations where deadly force was authorized. The limitations imposed by the ROE made no sense to the trainers and operators. If a soldier or Marine has to wait until deadly force is authorized--implying that his own life is at risk--before he can shoot a hostile with a bean bag or rubber baton, why would he or she resort to non-lethal means at all?

The limitations on the employment of sticky foam were also unreasonable. There was apparent concern in Washington that the foam would be used to suffocate a hostile subject. There was an erroneous assumption that the sticky foam would be used as an anti-personnel weapon, and visions of an agitator with his head covered with a blob of foam prevented a more careful analysis of the intended use of the foam. For Operation United Shield the substance would have proved most useful for area denial, and then only when used in conjunction with other barrier systems such as barricades or barbed wire. Spraying an individual demonstrator would be difficult--and unnecessary in light of the other non-lethal items, such as rubber baton rounds, that could be directed at individuals. By limiting sticky foam to "deadly force" situations, the ROE effectively precluded its use.

### *Training*

Peace operations and armed interventions short of war are, by and large, characterized by restraint in the use of firepower and violence. This stands in contrast to the wartime environment, which places a premium on aggressiveness once the enemy has been identified. In training for these operations, traditional wartime skills, such as the return of a high volume of fire immediately when fired upon, must be modified. Non-lethal weapons training can be viewed as a component of training for peace operations and armed interventions. Still, we need to remember that non-lethal systems also can have wartime applications. The next major conflict could easily involve large numbers of civilian refugees or displaced persons, and they may not always be docile or amenable to military control.

Training for non-lethal operations must receive the same emphasis as training for war. Conventional infantry tactics can never be abandoned, because the non-lethal tactics can never be used in isolation. With the luxury of additional time, a land-based training site, improved doctrine, and sensible rules of engagement, soldiers and Marines will reach a high level of proficiency in the use of non-lethal materiel.

### *Media and Public Perception*

The media reports of United Shield's non-lethal planning posed a potential threat to mission accomplishment. Key information that could be useful to the Somali factions was revealed, and the attention of the public was focused on a few items of presumed magical capability. For future operations it may be necessary to classify certain non-lethal systems to avoid the development of countermeasures by our adversaries. In any event, all involved in their development and prospective use should avoid the release of detailed specifications of such systems.

Commands that employ non-lethal systems must develop a media plan to correctly describe the employment of non-lethal force. Capability demonstrations can be useful, but always in the context of conventional systems. A press release may be helpful, one that makes the following points:

- Soldiers and Marines will have at their disposal a variety of items that are designed to save lives and reduce confrontation. Non-lethal means will be used only to control unarmed crowds. They will never be used as a substitute for deadly force when such force is justified.
- If crowd control items are used, the means to employ deadly force will always be available to troops on the

ground. The rules of engagement provide that US forces may always use deadly force in response to a hostile act or hostile intent.

### *Concept of Employment*

Although there was minimal use of non-lethal systems during United Shield, the systems were readied for use. The realistic training completed prior to the operation revealed some deficiencies. For example, testing and training with sticky foam revealed its inadequacy as a system to be aimed and fired directly at unarmed hostile elements. The spray applicator systems are expensive, fragile, and have a limited capacity. Due to the small numbers of applicators available, only a few key agitators could be sprayed. Once an agitator was sprayed, trying to apprehend him would pose additional problems--the foam would likely entangle any US personnel who approached. The experience of United Shield indicates that sticky foam, if used at all, should be limited to use in area denial, and then in connection with other barriers.

The use of sticky foam as an area denial method could present additional problems in an area like Somalia. In Mogadishu there was a serious problem with youthful unarmed thieves and trespassers penetrating the US perimeter at night. If the sticky foam had been used to cover unattended portions of barbed wire during the night, in the morning we could have found a dozen Somali youths stuck to the wire, entangled in a bloody trap. Removing the trespassers from the wire would have been difficult, and it would not have played well on CNN. If sticky foam is to be used at all, well thought-out precautions need to be taken.

The decision to employ non-lethal options must be made at the lowest possible level. Operations that intend to use non-lethal alternatives to achieve military objectives must recognize the fluidity of the situations in which they are likely to be employed. The decisionmaking cycle is short and stressful, and action in the force continuum can move in both directions. Warning shots could be followed by a decision to employ a sniper to respond to a hostile act, and this might be quickly followed by the return to non-lethal means in response to unarmed hostile elements. This approach is consistent with concepts of the nonlinear battlefield and the commander's responsibility to make sense of chaos.

### **Recent Developments**

The DOD Advanced Research Projects Agency (ARPA) has an ongoing program to develop new technology for unconventional missions and law enforcement. The program is based on an April 1994 memorandum of understanding between the Departments of Defense and Justice. Over a 36-month period the program is to design and demonstrate Limited Effects Technologies as an alternative to traditional military and law enforcement methods. These technologies will be designed to "minimize personal injury or unintended damage, be environmentally benign, and [be] socially and legally acceptable." That is a tall order, particularly in light of the extreme caution and sensitivity demonstrated in the approval process for non-lethal systems in the run-up to United Shield.

ARPA is developing a number of technologies designed to deal with individual, crowd, riot, and mob control, as well as "fleeing felon" and fleeing vehicles in the law enforcement context. Many of the products that emerge from this project could have both military and civilian applications. A broad agency announcement was issued for projects in the following areas, and the following projects are among those being funded.

- Acoustics--high-intensity sound below 100hz (USAF; Armstrong Lab).
- Lasers--man portable and vehicle mounted eye-safe personnel flashers (USAF; Phillips Lab).
- Electrical shockers--stand off, hand-launched, electric shock projectile (JAYCOR).
- Pyrotechnics--rapid bloom smoke grenades and enhanced smoke grenades (ERDEC).

These selections were made by a government board with representatives from Department of Justice, Army Training and Doctrine Command, the Military Police School, the Marine Corps Combat Development Command, the Naval Surface Warfare Center, and the USAF development labs. Several controversial technology programs are intended to comply with DOD policy. For example, the laser development programs are designed to minimize any chance of permanent sight loss through unintentional or incorrect use.[10] Other types of laser systems are absolutely vital to the modern military; they are regularly used for detection, targeting, range-finding, and communications.

## Conclusion

The experience in Operation United Shield provides a number of insights into the use of new technology to complement traditional concepts of military force. Non-lethal weapons do not provide a new element of national power, as some have suggested. They are merely an extension of military force to fill the gap between warnings and deadly force. Non-lethal weapons will never become a substitute for deadly force; the right of self-defense remains paramount and lethal means will always be available. The use of the force continuum model is preferable to the toggle-switch approach that reduces the options of a soldier, Marine, or law enforcement officer to either deadly or non-deadly force.

When properly employed, non-lethal weapons will save lives and avoid confrontations, and they will not lead us down the slippery slope to war. There is little danger in "sending the wrong message" by merely developing and fielding non-lethal systems. The real message will come from their employment at the tactical level. Unarmed hostile elements will be met by the appropriate level of force, not an excessive response that causes an unintended escalation of violence. Remember that non-lethal weapons are designed only for use against *unarmed* hostile elements. The threat may be small scale, such as a thief in the night inside the wire, or a full-blown riot. The threat may be a well-organized mob, but it could just as easily be a crowd of people motivated only by fear or hunger.

The basic assumptions related to employing military forces remain unchanged. Field the best systems available to protect our personnel and accomplish the mission. Technology is important, but useless without effective training. Doctrine needs to be developed, without complex rules and restrictions. We have not given birth to a magical contrivance. Commanders in peacekeeping missions and other armed interventions short of war could, as a result of current interest in non-lethal technologies, acquire an array of new tools to help them accomplish their missions. When properly used, non-lethal weapons will reinforce deterrence and better protect our forces when they confront unarmed hostile elements.

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## NOTES

The current article is a revised version of the author's article "'Less-Lethal' Force in Operation UNITED SHIELD," published in the September 1995 issue of *Marine Corps Gazette*, pp. 68-76, © 1995 the Marine Corps Association. Portions of the original article reproduced in this article are reprinted by permission.

1. Martin L. Stanton, "What Price Sticky Foam?" *Proceedings*, January 1996, p. 58; reprinted in this issue of *Parameters*, pp. 63-68.
2. Council on Foreign Relations, *Non-Lethal Technologies, Military Options and Implications* (New York: Council on Foreign Relations, 1995), p. 8.
3. Special Feature: Somalia and Operations other than War, *Parameters*, Winter 1993-94.
4. If training doctrine, rules of engagement, and essential procedures are to be clear and precise, common terminology becomes essential. Consistency is perhaps more important than accuracy. The term "non-lethal" is technically inaccurate because virtually any item, even a baton or night stick, can be deadly if improperly employed. The term "less than lethal" implies that the system cannot be employed in a lethal manner. The term "limited effects technology" has also been used to describe the systems currently under development in the United States. The term "non-lethal" is currently used in the draft DOD instruction.
5. Report of the Council on Foreign Relations, p. 2.
6. See DOD INSTR: 5500.15 providing for the review of the legality of weapons. One system that failed to make the grade was a powerful sonic crowd control device that would have required a robot to maintain a safe distance between the sound source and friendly troops.
7. Final Draft, DOD Directive "Policy for Non-lethal Weapons," 16 April 1996.



8. A more detailed description of the items available, as well as the training, can be found in "Less-Lethal Force in Operation UNITED SHIELD," *Marine Corps Gazette*, September 1995, pp. 68-76.

9. "When US forces are attacked by unarmed hostile elements, mobs, and/or rioters, US forces should use the minimum force necessary under the circumstances and proportional to the threat." JTF United Shield, Rules of Engagement, Unclassified ROE Card Ser #1, 11 January 1995.

10. Current DOD policy "prohibits the use of lasers specifically designed to cause blindness of unenhanced vision." This ban presumably would not extend to the use of lasers to attack enemy targeting, rangefinding, or sighting devices. DOD press release, "Policy on Blinding Lasers," 1 September 1995, available on DefenseLINK, the DOD Internet Web site.

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Reviewed 21 August 1996. Please send comments or corrections to [carl\\_Parameters@conus.army.mil](mailto:carl_Parameters@conus.army.mil).