

Chapter 5 – TRAINING ISSUES FOR NLT

5.1 TOWARDS A POLICY WITH NEW OPTIONS

The continuous presence of the media in theatres of operation has the effect of disciplining the disproportionate use of deadly force because all excesses are immediately witnessed by television viewers around the globe, shocked by the sight of violent death, a “barbarian” concept. In addition, the nature of conflicts has also evolved: there are fewer wars between states in which citizen soldiers face each other and where the enemy soldier merely serves as an instrument in the strategy of a particular state; an instrument which it is legitimate to eliminate within the scope of international law. Modern wars tend to be intrastate affairs in which a minority is pitted against a ruling majority or one ethnic group against another.

In this type of conflict, the adversary is neither the enemy nor a friend, and it is more necessary than ever to avoid causing unnecessary suffering. If, in third generation conflicts, maximum lethality is sought in the employment of weapons, a scenario such as that in Bosnia is now difficult to imagine without the possibility of being able to dose lethality at will and without constant concerns about avoiding fatalities, destruction, or any other forms of unnecessary suffering. The presence of latent violence in zones of civilian and military action, as well as the related effects of strict rules of engagement and the constant presence of the media, imposes increasing constraints of stress and time on today’s soldiers in the response that they can give to a given threat. The soldier is also obliged to think twice before responding. In fact, the mistake of a single person in assessing the situation or taking disproportionate action can result in consequences for the credibility of the troops as a whole and for the operation whatever that may be. Faced with situations that are less and less clear-cut, coupled with an uncertain threat, the soldier must be capable of delivering the right response, decisively and unambiguously. Furthermore, faced with this permanent concern of having to do the right thing, the soldier might see himself restricted to employing less than lethal means. Additional options are therefore needed to fill the void between inaction and the employment of lethal means.

The search for non-lethal means or with reduced lethality is taking the path of providing supplementary options to respond to uncertain problems. NLT are not a particularly new phenomenon: police forces have been using them for several decades, notably in the form of rubber bullets or irritant sprays. More recently, however, armed forces have begun to take a greater interest in them, as the scope of assignments carried out by military contingents has expanded to include policing missions.

With new options at his disposal, the soldier must be trained in a much more refined manner so that his response to a given situation is proportionate, and yet flexible to all kinds of problems. During training it is therefore necessary to ensure a degree of realism so that the soldier is confronted with situations that are as close to reality as possible. It is also essential that the soldier be able to master the diverse facets of the escalation of violence so as to be able to respond to it by using the most appropriate means. Finally, the constraints imposed by having to master additional equipment should be overcome through simple and effective instruction.

5.2 RULES OF ENGAGEMENT

The Rules of Engagement (ROE) provide armed forces involved in an operation with the rules essential for carrying out their task. They have taken on particular importance since the significant increase in the number of peace support missions because they set the limits, not least for the tactical levels, for the recourse to deadly

force. If the ROE are, in general, the legal consequence of political considerations motivating the operation, they are not able to take into account certain cases or cannot be adapted to the situation in the field, either because there is a lack or poor orientation of political will or because the situation on the ground has taken an unexpected turn.

During Military Operations Other Than War (MOOTW), the legal threshold for the lethal use of weapons is often set at that of legitimate self-defence or at situations in which it is impossible to accomplish the mission without resorting to arms. It is acknowledged that ROE also have to be established for the use of NLT so that they may be used in similar conditions to those of usual lethal weapons, that is to say in a well-defined legal framework.

Over the last fifty years, the nature of many military operations has changed radically. Military missions, especially peace support operations, have in their nature come to resemble policing missions. Furthermore, media and popular interest in military actions has also grown enormously. This is also the reason why unnecessary casualties or fatalities inflicted on combatants or enemy civilians are no longer tolerated and why the adoption of NLT is experiencing such growth.

Despite all of that, too many situations arise in which the use of deadly force is disproportionate in relation to the real threat. A crowd of demonstrators, even if it is acting aggressively, does not necessarily have to be dispersed using live rounds. NLT therefore increase the arsenal of possibilities available to the commander and his soldiers to respond to the threat in line with the principle of proportionality.

NLT are developed to enable the prevention of unnecessary fatalities, and that is also one of the aims of international humanitarian law. Setting the legal threshold for the use of NLT at a lower level than that set for lethal weapons would provide the soldier with additional options for his response: NLT provide the possibility of acting before the situation deteriorates; beyond that deadly force remains the only possible alternative. However that does not prevent ROE from being imposed that strictly determine the use of non-lethal force, in a way that is compatible with the principles of force protection and with international humanitarian law.

The principle of continuum in the employment of force is therefore merely a principle of proportionality: in order to prevent access to a military installation, a physical presence is sufficient in the vast majority of cases. If a suspect comes too close to this installation, a verbal warning may largely be sufficient. If the person attempts to get past the guard, use of the weapon without opening fire or neutralisation using an electrical discharge device would seem proportionate. Finally, if the person transforms into an aggressor and threatens the physical integrity of the guard or, despite warnings, attempts to force his way endangering the life of personnel, use of deadly force might be called for. The use of force is thus proportionate to the circumstances, as is illustrated in Figure 3.

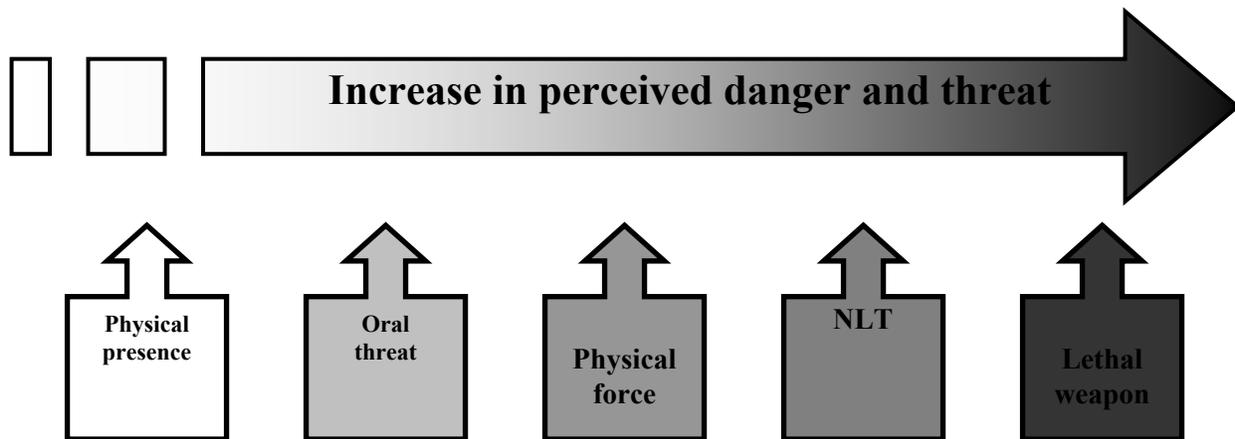


Figure 3: Increase in the Threat Perceived by the Soldier and the Proportionate Response. The intensity of shading indicates the danger posed.

It is of paramount importance that the soldier not only be instructed in ROE, but also, and above all, to understand and assimilate them. The ramifications and possible consequences of each action must be known and mastered. The continuum in the use of force must be mastered and be able to be applied in relation to the level of violence.

Developing ROE is never simple, and where the use of NLT is planned, it is even more complicated. Since the process for preparing the ROE for different types of operations is similar, the drafting of ROE for the use of NLT for a force will also be based on national policy, operational requirements, and the law.

It may seem like a cliché, but properly crafted ROE are essential to the success of all operations. When formulating the ROE for an operation (to include one which will involve the employment of NLT), the objective is to utilize the ROE cell or its equivalent to anticipate and brainstorm as many different foreseeable circumstances as possible and from this group interaction generate clear, unambiguous guidance for those military personnel who will be placed in harm's way. The two primary purposes for the ROE are to "provide implementation guidance on the inherent right and obligation of self-defence and the application of force for mission accomplishment." All commanders must understand these two purposes, and how to utilize the ROE as a risk management tool. A mistake often made by commanders involves blurring the distinction between mission accomplishment and self-defence. This can lead not only to confusion within the command but also place those executing mission taskings at greater risk.

Due to force protection questions, ROE have to be classified. ROE concerning unarmed crowds or unarmed hostile elements must not be known from the public especially if they limit the use of any kind of force to the troop.

Special attention has to be put on the understanding of the ROE both at commander and troop level. ROE must be clear, simple and not subject to interpretation.

5.3 NEED FOR INSTRUCTION

New forms of conflict and the increase in social violence of the last twenty to thirty years must lead, perhaps paradoxically, to an improvement and more systematic approach to training in controlling individuals and crowds as well as in the means to achieve it. The organisations mainly affected by these movements are the armed forces and police on the one hand, and civilian security organisations on the other.

The common denominator between all these organisations is that the work of security boils down to the level of those who execute it, and regardless of the context, to relations with the public, be it during vehicle searches, trivial encounters, guard duty or other types of patrol.

In a modern democratic society, any institution dealing with security is closely monitored by political authorities – and the media. This should have the effect of constantly spurring decision-makers in the direction of progress and of putting certainties in question.

In the future, instruction with NLT may be considered routine, but at this time it presents a unique challenge. A part of this challenge is reaching the same level of proficiency with NLT systems that exists for lethal weapon systems. To accomplish this training goal will be one of the commander's most difficult responsibilities. Proper instruction and practice are the cornerstones to operational success, and commanders must work their way through the training process. There is no short cut. Unit readiness requires the unit which will use a NLT to train with that system.

The training aspect of the NLT equation can be lengthy and costly. In most cases, both the military units and the instructors will have, at best, only limited experience with the system. Furthermore, developing the appropriate training package will take time. In fact, most training packages will be the result of trial and error to discover what works well and what does not. Commanders can expect the overall training time for their units to increase in direct proportion to the time needed to train for the use of the NLT system. This increase simply reflects the reality that the unit must go through the standard lethal weapon system training as well as the new NLT system training.

5.4 CODIFICATION OF VIOLENCE AND PROPORTIONALITY

One legend firmly rooted in the field of those with recourse to the use of arms is fortunately starting to disappear: that of a “bolt of lightning out of the blue”. In this figurative case, the basic soldier suddenly finds himself in a life threatening situation in which an on the spot decision to fire a shot or use an instantaneous defensive technique makes the difference between life and death. However, reality shows that confrontations do not generally arise in an instant, just as they do not come to an end immediately after the application of a means of defence, but instead they ensue from a process, from a continuum of communication between the intervener and the suspect, between the soldier and his “adversary”.

In other words, it is a matter of finding a system which permits proportional interaction and continues from the highest to the lowest level of the suspect's or adversary's resistance. This should lead to the creation of a so-called table “of proportionality”, where each action by the suspect corresponds to a reaction on the part of the soldier. This system codifies the suspect's levels of resistance, and the main fluid levels of response, adapted to the situation and offers numerous possibilities for de-escalation.

5.5 KEEP IT SIMPLE

The need to create a range of response options must, paradoxically, lead to a simplification and a complementarity of various techniques. Basic conditions for effective instruction in this field are as follows:

- **Respect for the laws**, procedures, principle of proportionality and minimum use of force.
- **Adaptation to adults**: the technique must be convincing, based on the experiences of the students, and is justifiable.
- **Simplicity of learning**, for reasons of time, cost and subsequent training. It is basically unrealistic to use techniques that require more than several minutes instruction because they will be forgotten. Instead it is preferable to insist on complementarity.
- **Realism**: the techniques must work quickly and well so as to avoid aggravating the situation.
- **Coherence**: each technique should be seen as a block aimed at erecting a wall of defence around the user. If the blocks are cracked (not realistic) or do not fit, there is a risk that the instruction will not make sense: the different instructors of the various means of defence (lethal and non-lethal) must teach exactly the same principles from the point of view, for example, of safety distances, of ROE or of proportionality.

It clearly seems that demands placed on the instructors with this method are considerable, but as an experienced instructor noted “the time when one learned how to shoot but not when have passed.”

5.6 GENERALIST INSTRUCTORS

The global approach to the problem of training in NLT has in recent years led certain organisations to create posts as instructors in defence techniques, or even, in techniques to control aggressive behaviour, capable of instructing the full range of behaviour and above all the appropriate responses to deal with it.

Such instructors are exceptional because the need for realism necessary in their training requires a certain degree of specialisation. The minimum requirement, in our opinion, is that each instructor be able to teach two main fields, and be trained as an advanced user in the others so as to guarantee the comprehension and coherence of instruction.

In the case of small organisations (less than 100 persons), it is still possible to operate a more traditional system based around pedagogical capacities of a limited number of instructors.

5.7 VARIOUS PHASES OF LEARNING

The problem becomes more pronounced in larger organisations such as an army, where the turnover of personnel is greater and where it is more difficult to keep an overview.

It is also crucial to understand, in a big organisation like an army, that not everybody needs the same level of training with NLT. According to the complexity of the apparatus or simply to the kind of mission, an operator or a troop will need more instruction on a certain type of NLT. This has to be accessed.

The training program for each NLT should consist of two parts, one part for general training matters (such as important safety information, including any special first aid or emergency medical care for accidents

involving the relevant NLT) for all members of the troop and the second part for the specific members who will employ the system. The instruction contained within this second part should include the following:

- The function and inner workings of NLT;
- Tactics, techniques and planning considerations for NLT;
- Special equipment, transportation or support required for its use;
- Training directed toward a specific mission capability;
- Actual practice using the NLT;
- The normal malfunctions or break points for the NLT; and
- Maintenance, repair procedures for the NLT.

For the second part of the training, as the table below shows, the first didactic phases of learning these techniques are possible in groups in a decentralised manner, and relatively inexpensively once the initial investment has been made.

Table 4: The Phases of Learning as Applied to NLW

Didactic phase	Stimulation	Aim	Instruction
Learning	Artificial/command	No time limits, no faults	Group
Training	Simple situation, known in advance	Intensive work, memorisation	Group
Drill	Simple situation, unknown	Mastering technique	Group and/or Individual
Application	Simulator	Select level of response suited to the situation	Group and/or Individual
Integration	“Real” through role play	Control ability to resist stress	Individual

Didactic phase	Non-verbal communication	Verbal communication	Techniques of defence	Non-lethal weapon	Lethal weapon
Learning	Body positions	Learning set phrases	Elementary drills	Manipulations	Standard behaviour
Training	Utilisation	Questions/ responses	Application with means of simulation	Application with means of simulation	Figures/colours/ Cut-outs → reflection
Drill	Utilisation		Utilisation with means of protection and/or simulation		Humanoid graphic targets
Application	Interactivity with instructor			Simulation (laser)	Simulation (laser)
Integration	Role play with protection and means of simulation				

If we take the example of shooting, the learning phase involves performance norms and standard behaviour when confronted with one or several targets, presenting weapons from the starting position, changing the magazine, etc. They are nevertheless trained by simulating reality as far as possible, even when faced with paper targets. The stimulus to open fire is artificial (whistle or command).

After this phase, a memorisation test is conducted in which students are made to shoot after reflection at numbered targets, or according to a colour code, or geometric shapes, or even a combination of all three. The idea is to force the marksman to make a decision before opening fire. The end of this phase of instruction can be marked by spraying the shapes of inoffensive objects or weapons on the target with the aid of outlines to get him used to identifying threats and looking at the suspect's hands. In order to arrange a surprise effect, the marksman or marksmen turn their backs to the targets, which will already have been shuffled.

The following phase requires the use of realistic graphic humanoid targets in order to train the marksman to identify the content of the suspect's hands. A certain degree of additional realism can be achieved by making the targets "talk" through the instructor. It does not take the marksmen long to recognise all of the possible target combinations and be able to predict the exercises due to the layout of the shooting facility.

It is therefore time to progress to the next level which aims at training the full range of possible reactions based on the use of target simulators.

The first generation, of the diaporama or video projector type that stop on the image the moment the shot is fired have the advantage of allowing a number of people to be trained quickly, while still subjecting the marksman to an appreciable level of stress. However, they are not truly interactive, and tend to reduce scenarios to "ambushes" (typically, a young man approaches to show his papers and rapidly draws ... his wallet) thereby drilling an overreaction.

On the other hand, the activities that immediately follow the shot, such as taking cover, communicating with the suspect, colleagues or reinforcements are difficult to act out after the image has been stopped.

The alternative that has been used for a long time is the role play. The recent emergence of equipment able to absorb baton blows (ASP, PR-24, etc.), freshly accepted defence techniques, as well as the development of guns that can fire cartridges made from soap (Simunition FX) in service weapons has made it possible to integrate the full range of possible reactions. We consider this form of training to bear the closest resemblance to reality, and this is not only because the blows and impacts generate a certain amount of pain, and have the effect of providing instantaneous recognition of poor performance. There is no better teacher than experience.

5.8 CREATING REALISM IN THE SCENARIOS

The major problem with role plays is that the learning effect depends on the quality of the instructor. The danger lies in seeking to convince the students of their poor standards by making them fail in unsurvivable scenarios, which greatly reduces the didactic effect.

Moreover, return on investment is also a major problem with this method. Not only is it necessary to have the time required playing out a scenario with a hundred students, but above all it is difficult for the instructor to act out a given role in a perfectly identical way more than a dozen times. These two constraints alone in practice limit the use of role plays to the training of small groups of specialists, where the instructor/student ratio is more favourable.

For more important stages of training, an intermediate solution (not intended to replace role plays), that creates a bridge between technical drill and decision-making drill is obtained through a simulator (e.g. simulator of the type “Range 2000”, see <http://www.caswells.com/range2000.html>). This tool is based on three elements:

- A laser simulator inserted in the barrel of the service weapon;
- A PC loaded with the software connected to a projector; and
- An ordinary screen.

The principle is simple. The shooting instructor creates a scenario containing all the possible issues and films it using an ordinary video camera. The sequence filmed is then cut according to the scenario, assigning zones of effectiveness following the impact of projectiles (laser simulator) or the employment of NLT (weapons with laser simulator or other simulation system) with the help of a few mouse clicks. Each of the possible cases is assigned a connection, for example with an impact to the leg: fall to your knee, etc. It is thus possible to create complete and precise scenarios, and respect the organisation’s doctrine of engagement and /or ROE. It is of course possible to establish a manual connection according to the reactions of the person trained. The student is confronted with a scenario that he can resolve as he sees fit. The wealth of connections is limited only by the imagination of the instructor and the time available to prepare the situations. Connection to a database allows the results and behaviour of the student to be recorded. The advantage of the system is that it allows identical training to be carried out with a large number of people using the full range of possible reactions from the table of proportionality, and not just involving shooting.

5.9 CONTINUAL TRAINING IS ESSENTIAL

The modern instructor therefore no longer has to be a specialist in a particular materiel or technique, but instead needs to be more of a generalist. If the majority of confrontations in the real world are – fortunately – able to be resolved without the need to open fire, training should reflect this reality. The development of modern techniques in instruction and in the simulation of confrontations is an important step in this direction. From this perspective, it is in our view essential for all professionals and people concerned to attend a course offering basic training of this type.

It is easy to understand from reading this that what is primarily at stake is the concept of training instructors. As a general rule, the training of users and instructors is an internal matter for the organisation. However, it is advisable to confer the running of training and refresher courses for instructors to a third party with a view to broadening their field of vision.

If the field of vision is not broadened, this could lead to the emergence of a “submarine effect”. That is to say that an instructor no longer has contact with other systems or other forms of training. This can lead to absurd deviances arising in training that loses sight of its real objective.

“Mixed” courses made up of various bodies (armed forces, police, etc.) are extremely beneficial so as to avoid ill-fated effects. Moreover, the function of instructor/supervisor should be limited in time. A “burn-out” effect generally becomes noticeable after five or six years. Development as an instructor, or basically the learning of a specialisation is beneficial for sustaining motivation and developing synergies.

In addition, a constant update should be established during training by creating a list of “lessons learned” so as to ensure that the structure learns from its own experiences.

5.10 NEED TO RETAIN LESSONS

After each training sessions and/or each involvement of a NLT, lessons learned have to be retained in order to implement continuous improvement. Lessons learned meetings and database have to be implemented in order to be sure that all crucial criteria are detected and retained.

Lessons learned meetings give everyone a chance to freely discuss the good and bad aspects of the training session, material, procedures, etc., so that good practices are repeated and bad practices are eliminated.

Lessons learned database should be based on an “after-action report” model taking into account important parameters such as environmental circumstances, sequence of actions, latency time between engagement and effect and/or zone of impact.

5.11 SUMMARY

The presence of latent violence in zones of civilian and military action, as well as the related effects of strict rules of engagement and the constant presence of the media, imposes increasing constraints of stress and time on today’s soldiers in the response that they can give to a given threat.

The search for non-lethal means or with reduced lethality is therefore important to provide supplementary options to respond to uncertain problems.

A special attention has to be put on the development and understanding of ROE both at commander and troop level. ROE must be clear, simple and not subject to interpretation.

Instruction with NLT may be considered routine, but at this time it presents a unique challenge: reaching the same level of proficiency with NLT systems that exists for lethal weapon systems. Proper instruction and practice are the cornerstones to operational success, and commanders must work their way through the training process.

The global approach to the problem of training in NLT requires creating posts as instructors in defence techniques, or even, in techniques to control aggressive behaviour, capable of instructing the full range of behaviour and above all the appropriate responses to deal with it.

It is crucial to understand, in a big organisation like an army, that not everybody needs the same level of training with NLT.

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