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NON-LETHAL WEAPONS: THE KEY TO A
MORE AGGRESSIVE STRATEGY TO COMBAT TERRORISM

by

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Biography

Colonel Scott E. Sonsalla entered the Army as an enlisted combat engineer in the Army Reserves in 1988. In 1993 he graduated from the University of Houston Army ROTC as a Distinguished Military Graduate and commissioned as an Infantry Officer. He has served as an Infantry Platoon leader in the Republic of Korea, a company commander in Kosovo and a Basic Combat Training Battalion Commander. Other previous assignments include Junior Military Aide to the Deputy Secretary of Defense, Rotational Planner at the Joint Readiness Training Center, Professor of Military Science at the University of Texas at San Antonio, and Deputy Brigade Commander, 1st Brigade, 1st Cavalry Division. COL Sonsalla's deployments include Kosovo, Afghanistan and Korea. He is currently a student at the Air War College at Maxwell Air Force Base, Alabama.



Abstract

Over the last 75 years the battlefield has transitioned from a conventional state versus state conflict to a more complex environment. This new battlefield involves non-state actors and takes place not in standard force-on-force battles, but among the populace. Organizations have turned to terror as a means of impacting political decisions. This transition has contributed directly to the destruction of civilian infrastructure and perhaps more importantly, to the unintentional deaths of civilians. The presence of violent extremist organizations has increased exponentially over the past two decades. These groups not only live among the local population, they directly target the population through activities designed to instill fear through exceptionally violent acts.

The proximity of these organizations to noncombatant civilians often adds a degree of complexity that causes responding forces to hesitate while attempting to intervene and rescue hostages or to engage terrorists while they live among the populace. Advances in technology have progressed to the point the United States must consider adapting its National Strategy for engaging terrorists in order to allow select organizations to utilize non-lethal weapons to engage terrorists. This change in strategy is necessary because it facilitates a more proactive capacity to engage terrorists while minimizing the threat to civilians. By engaging earlier, either through a pre-emptive strike or through direct intervention in an incident, US forces can deny terrorists the ability to complete their terrorist acts thus denying them the most critical weapon in their arsenal – fear.

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*The 'intent of non-lethality' is the true enabling aspect of these weapons. The 'intent of non-lethality' may enable political and military strategies that are impossible with conventional munitions. This feature of non-lethal weapons will enable many advantages: a greater flexibility to attack politically sensitive and broad area targets without risking extensive collateral damage; a 'reversibility' of material damage for rapid reconstruction of economic infrastructure; and an answer to moral imperatives to minimize combat casualties."*¹

Introduction

During the three decades from 1968-1997, terrorists were responsible for an average of 267 deaths a year. In the following decade the number jumped more than tenfold to an average of 2869 deaths per year.² US Presidents have expressed their intent to address the rise in terrorism through direct action on multiple occasions. However, their actions have not measured up to their words. The problematic intermingling of terrorists among civilians, whether they are hostages or simply bystanders, increases the complexity of a proactive response by US forces unwilling to risk the loss of innocent lives and collateral damage. Breakthroughs in non-lethal weapons (NLW) technology provide an opportunity for the US to adopt a more aggressive strategy to engage terrorists, regardless of the type of incident or the location. Indeed, NLWs allow forces to directly impact critical points on a terrorist's timeline, denying them the terror narrative critical to their operations. Furthermore, NLWs have the ability to reduce the risk of collateral damage and the death or injury of noncombatants.

To support this theory, a framework of how and where a more aggressive, NLW augmented counterterrorism (CT) approach could be utilized will be established followed by a historical assessment of the evolution of terror over the past two decades to include an overview of past and current US counterterrorism policy and its shortfalls. Once the argument has been

¹ Joseph Sinischalchi, "Non-Lethal Technologies: Implications for Military Strategy," Occasional Paper No. 3, Center for Strategy and Technology, Air War College, Maxwell AFB, AL, March 1998, 12.

² Our World in Data, <https://ourworldindata.org/terrorism/>.

made for a more aggressive strategy, a brief examination of the legal and operational arguments for and against the use of NLWs as well as the laws restricting them will be provided. Next, an analysis of the impact of a nation's sovereignty on our ability to conduct more aggressive CT operations around the globe and then a conclusion, using the July 2016 siege at Dhaka, Bangladesh, to provide a practical application of how a more aggressive strategy could be applied.

A Framework for a More Proactive Strategy to Combat Terror

Terrorism has many definitions. However, the common thread is the use terror and fear inducing events to encourage a change within a critical population of the general public or policy makers. Terrorists then exploit the incident to create the greatest amount of publicity possible.³ The violent act communicates multiple messages through social noise. First, it creates awareness of a specific cause the organization seeks to have addressed by society or the government. Second, the event targets audiences in order to fascinate or frighten them. Those who are fascinated by the event see the cause and the organization as legitimate and worthy of their support through either financing or through active participation. Those who are frightened by the act will be reluctant to oppose the terrorist organization out of a fear they could be future targets.⁴

Current strategies focus on targeting the heart of a terrorist organization either through freezing of finances, attacks on senior leaders or even through political negotiations. The intent is to destroy the organization or the cause they are fighting for. While each of these approaches could be considered an offensive strategy to limit or eliminate terrorism, none of them actively

³ Jonathan Matusitz, *Terrorism & Communication: A Critical Introduction* (Los Angeles, CA: Sage Publications, 2013), 38.

⁴ *Ibid.*, 38-39.

targets the one item necessary for a terrorist organization to exist – terror. By adjusting US strategy to focus assets at the micro level rather than the current macro level, US forces can eliminate the ability of a terrorist organization to create the terror narrative through prevention of, or the minimization of an event or by denying the terrorist organization the ability to publicly broadcast their terror message following the incidents completion. It is impossible to instill fear in a broad population without the ability to broadcast terror. As British Lord Chalfont noted, “terrorism would be impotent without publicity.”⁵

The primary goal of terrorism is to generate a fear in the populace and the government so great they are willing to give in to political demands. The secondary goal of a terrorist organization is to carry out the actions that create the fear and terror necessary to complete their primary goal. A more aggressive counterterrorism strategy focuses on the secondary goals. These individual acts of terrorism are designed to have a psychological impact beyond the immediate victim or target.⁶ In order for a terror attack to be successful, it must be witnessed and the terror narrative must then be transmitted to others. If you stop the message from being transmitted, the terrorist loses power. Removing the foundation of a terrorist’s tactical plan defeats his core strategy of conducting an asymmetric battle relying heavily on fear.

While politicians are focused on the overarching concerns of the terrorist organization and how to combat them, US combat forces should be looking to inject themselves into the terrorists plan prior to the creation or distribution of the terror narrative. The three most prominent opportunities to do this are a) during the planning and preparation, b) during the

⁵ Matusitz, 38.

⁶ Russell D. Howard and Reid L. Sawyer, *Terrorism and Counterterrorism: Understanding the New Security Environment* (Guilford, CT: McGraw-Hill/Dushkin, 2004), 23.

execution of the terrorist attack, and c) in the immediate aftermath of the attack, but prior to the distribution of the narrative.

The ability to intervene at any of these three points is greatly hindered by an evolution in terrorism that occurred near simultaneously with the rise of religious violence in the 1990s. Historically terrorism struck at specifically selected targets or persons of meaning. “New” terrorism (discussed in more detail later) was less selective, seeking the maximum amount of casualties while generating the maximum amount of media exposure. New terrorism accepted increased deaths of non-believers as a means to an end. Religious based terrorists attacks rose from 3% of worldwide terrorism in 1980 to 43% in 1995.⁷ This willingness to seek massive death totals provides a secondary reason the US must be willing to adopt an aggressive counterterrorism strategy. A failure to intervene at the earliest juncture of the terrorist act will continue to result in the unacceptable rise in deaths due to terrorism. Furthermore, the increased presence of terrorists among the civilian population puts everyone in their immediate vicinity at risk on a daily basis due to the threat of their discovery and reaction to that discovery.

In order to prepare for an attack, terrorists must secure a staging area near their objective. This site is used for planning, rehearsing and the collection of equipment needed to carry out the attack. In recent months there have been multiple reports of terrorist cells residing among civilians. This tactic was used in both Paris and Brussels. Explosives, weapons, and bomb making materials were found in the homes of the attackers. Targeting the attackers at this stage of the operation obviously prevents any attack. However, if not executed properly, the risk for collateral damage is significant due to the explosives, the weapons, and the civilians in the residences around them. An assault team armed with calmatives to incapacitate, hi-frequency

⁷ Matusitz, 11.

transmitters to disorient and a combination of Tasers, rubber bullets and other non-lethal assault weapons systems could effectively neutralize the terrorist without endangering noncombatants in the immediate area. If noncombatants were unlucky enough to be in too close of a proximity to the assault, the effects of the weapons used would only be short-term. While the temporary impacts of the NLWs are unfortunate, the rule of proportionality would dictate the inconvenience, in relation to the overall good, would justify their use. The presence of terrorists among the civilian population puts everyone in their vicinity at risk due to the threat of their discovery.

The second opportunity to stop the terror narrative occurs during the event itself (i.e., kidnapping, the taking of hostages, the placement of an explosive device, or a hijacking). A prime example of this is the 2014 kidnapping of American photojournalist Luke Somers. Somers was taken hostage while traveling through Yemen. During an attempted rescue by SEAL Team 6, the kidnappers were alerted and killed Somers.⁸ SEAL Team 6 is the best-trained US counterterrorist unit available. They are highly efficient, yet even they were unable to save Somers with the equipment they had. Access to weapons allowing them to move faster or to force the kidnappers to respond more slowly might have made the difference in saving Somers' life. Provided the opportunity to be rescued alive, subjecting Somers and any other noncombatants in the area to the effects of NLWs is an easy decision.

The third, and final opportunity to prevent the narrative from being distributed is to simply prevent the terrorist from doing so. Combinations of focused electromagnetic pulses (EMP), jamming, and cyber warfare can impede the terrorist's ability to utilize electronic devices

⁸ Kareem Fahim and Eric Schmitt, "2 Hostages Killed in Yemen as U.S. Rescue Effort Fails," *The New York Times*, December 6, 2014.

by rendering them useless or by providing temporary barriers to their use. While this technology is still being developed, it is easy to envision aerial mounted systems providing this support over the desolate mountains of Afghanistan, in the crowded cities of Iraq or anywhere terrorists may be operating.

An Historical Assessment of Terrorism in the 21st Century

Terrorism pre-1990 was a tactic targeting specific individuals as both victims and “recipients” of its messages. The actions of a terrorist or terrorist organization could typically be correlated to a specific cause or message they intended to convey. With the advent of the internet, however, the dynamics changed and terrorism evolved. Terror was no longer directed at specific people or audiences; it was directed at the masses of people connected to each other through the Internet and social media. The shift in focus has led to the development of “New Terrorism.” Russell Howard identifies six key components of “New Terrorism” with the first one being the most critical in understanding why we must take a more aggressive approach to CT. Howards first point states, “The ‘new terrorism’ is more violent. Under the old paradigm, terrorists wanted attention, not mass casualties. Now they want both.”⁹ Wolf V. Heydenbrand foreshadowed this shift in 1989 when he wrote,

“Moreover, netwar agents are poised to benefit from future increases in the speed of communication, dramatic reductions in the costs of communication, increases in bandwidth, vastly expanded connectivity, and integration of communication with computing technologies.”¹⁰

Technologies allowed terror organizations to stay connected and synchronized over extended distances. More importantly, it provided a means of broadcasting messages globally and without the filters of established media or government sensors.¹¹ In 2004, the beheadings of Nick Berg

⁹ Howard et al., 75.

¹⁰ Wolf V. Heydenbrand, “New Operational Forms,” *Work and Occupations*, No. 3, Vol. 16, August 1989, 323-357.

¹¹ Howard et al., 272.

and Paul Johnson, Jr. were two of the most popular searches on Google.¹² Social media has become the critical communications mode for terrorist organizations to spread their messages. It drives four key events:

1. Instills fear on a grander scale
2. It serves as a recruiting tool for the organization
3. It provides a pulpit to brand an organization or send a public message
4. It provides proof of actions, subsequently attracting more financiers

While advances in technology have assisted the growth of terrorist organizations, they have also assisted in the ability to locate terrorists and to gain intelligence on future operations. US forces have the ability to exploit this intelligence gained from electronic devices such as phones, radios and computers in order to conduct direct attacks on terrorists. Global reach capabilities provided by the Air Force and Navy provide special operations elements such as Special Forces, Navy Seals and Delta the ability to rapidly deploy and conduct these attacks, even within sovereign countries, if necessary. However, these operations may be constrained by the threats of collateral damage, the threat of civilian deaths or the fact the soldiers are executing with less than perfect intelligence and do not want to risk collateral damage or deaths on a failed mission. In 2001, US forces had the opportunity to kill Taliban leader, Mullah Omar. However, the attack was terminated at the last minute due to the presence of noncombatants in his immediate vicinity.¹³

Terrorism became a focus for the US during the 1980s as terrorists began an unprecedented run of hijackings, including the cruise ship Achille Lauro and TWA Flight 847,

¹² Matusitz, 44. Matusitz notes that during the month of Berg's death, "Nick Berg was the second most popular Google search behind "American Idol." The following month, "Paul Johnson, Jr." became the number one searched item.

¹³ Innes, Michael A., ed. *Denial of Sanctuary: Understanding Terrorist Safe Havens*. Westport, CT: Praeger Security International, 2007.

the latter drew more than 60 hours of prime time TV coverage.¹⁴ Following the killing of an American passenger on the Achille Lauro, Ronald Reagan ordered the mid-air capture of four Palestinian terrorists by four Navy fighters. When the hijackers were secured, Reagan publicly declared, ““you can run, but you can't hide.”¹⁵ After the 1986 death of a US service member at the bombing of a West Berlin nightclub, President Reagan ordered an air strike of multiple military targets in Tripoli, Libya.¹⁶ The strikes killed 60, but did little to deter terrorism in the following years.

A decade later, President Clinton had multiple opportunities to make a statement against terrorism through US action. During his tenure he experienced the attempted bombing of the World Trade Center (1993), the destruction of the Khobar Towers (1996), the simultaneous bombing of the Kenyan and Tanzania Embassies (1998), and the bombing of the USS Cole (1998). Clinton was full of strong talk, but little action. Following the Khobar towers incident he stated, ““We will pursue this. America takes care of our own. Those who did it must not go unpunished.”¹⁷ Clinton’s tough talk resulted in little more than missile strikes against a factory in Sudan.

It was not until the aftermath of September 11, 2001, that a president sanctioned the active engagement of terrorists across the globe. Addressing the nation, President Bush declared:

“The search is underway for those who are behind these evil acts. I've directed the full resources of our intelligence and law enforcement communities to find those

¹⁴ Thomas R. Raynor, *Terrorism: Past, Present, Future* (New York, NY: Franklin Watts, 1987), 149.

¹⁵ Los Angeles Times, *You Can Run but Not Hide, Reagan Warns Terrorists : Calls Case for Action 'Clear Cut'*, October 11, 1985, http://articles.latimes.com/1985-10-11/news/mn-17021_1_clear-cut-case

¹⁶ Raynor, 141-142.

¹⁷ Byron York, “The Facts About Clinton and Terrorism,” *National Review* (September 11, 2006), <http://www.nationalreview.com/article/218683/facts-about-clinton-and-terrorism-byron-york>

responsible and to bring them to justice. We will make no distinction between the terrorists who committed these acts and those who harbor them.”¹⁸

Bush held true to his commitment taking the fight to terrorists in Iraq and Afghanistan, seeking out those who planned the operations and the training camps where the terrorists prepared their soldiers to execute them. However, Bush’s actions have not solved the problem. Terrorists have increased the volume and violence of their attacks both at home and in countries supporting the US in the War on Terror, including Spain, France and Germany. In Afghanistan and Iraq, this has manifested itself in the kidnapping of non-combatant foreigners such as journalists and members of non-governmental organizations providing aid. The Islamic State has perfected the art of kidnapping, distributing photos of its hostages, and then killing them in a video which is then distributed globally with the intent of creating fear or inspiring support. While the capability to track every terrorist down or to intervene in every situation is nearly impossible, opportunities do exist. When they present themselves, our forces must be able to respond quickly and without fear of excessive collateral damage or casualties.

Regrettably, the US is still unwilling to openly commit to an aggressive counterterrorism strategy seeking to engage terrorists worldwide, attacking them in their homes or wherever they present themselves. In 2011, President Obama signed an updated version of the National Strategy for Counterterrorism.¹⁹ The document specifically addressed US actions towards Al Qaida as well as general policies towards terrorists worldwide. The strategy advocates for global vigilance but prioritizes rule of law, justice and the elimination of safehavens in politically unstable countries. Though each of these objectives is essential in building a multilateral

¹⁸ Statement by the President in his Address to the Nation, September 11, 2001, <https://georgewbush-whitehouse.archives.gov/news/releases/2001/09/20010911-16.html>

¹⁹ Barack Obama, *National Strategy for Counterterrorism*, June 2011, https://obamawhitehouse.archives.gov/sites/default/files/counterterrorism_strategy.pdf

approach to defeating terrorism, it fails to address the willingness to pursue terrorists worldwide it's strong on ideas, but weak on decisive action.

Legal and Operational Arguments for and Against the Use of Non-Lethal Weapons

The battlefield of the 21st century has changed significantly with the advent of asymmetric warfare. Terrorists live and move freely among everyday citizens who have little idea of their neighbor's misguided intentions. Joseph F. Coates recognized this pending transformation in 1970. Coates theorized, "there will be both more intermingling of aggressors and civilians and a greater blurring of the distinction between the two in many anticipated types of conflict. These points all argue for less profligate killing and less wanton destruction of property."²⁰ Regrettably, the average combat arms soldier has few options when engaging enemies. Armed with only a rifle and fragmentation grenades, soldiers are left with two options on the force continuum. They can either SHOUT at an enemy to stop or they can SHOOT at them. Left with two extremes and no options in the middle, soldiers, many in the 18-25 year old range, are required to immediately classify targets and take action. This process leads to an increased risk for any civilians within the effective range of a weapon.

To counter this risk, weapons providing options along the force continuum must be developed and approved for use. Soldiers need to be able to engage with something more forceful than, "STOP" and less destructive than the use of deadly force.²¹ This option should either reduce the risk of death if used, or it should provide a delaying affect allowing forces the time needed to secure a site and then subsequently determine which targets are classified as

²⁰ Joseph F. Coates, *Nonlethal and Nondestructive Combat in Cities Overseas*, Institute for Defense Analyses, May 1970, 1.

²¹ Soldiers do not fire warning shots nor do the shoot with the intent to injure. All weapons are fired with the intent to kill the target.

friends or enemies, and which are innocent noncombatants. The temporary effects of NLWs provide the asset needed to lower risk of a more aggressive counterterrorism action.

In addition to providing soldiers an option along the force continuum, the ability of NLWs to either subdue or incapacitate provides five very distinct benefits over lethal weapons:

1. An incapacitated terrorist may be secured as a prisoner and possible source of intelligence.
2. An incapacitated terrorist is denied the opportunity to become a martyr for their cause.
3. Forces conducting the assaults against the terrorists can move more quickly and be more aggressive knowing even if they unintentionally engage a noncombatant, the effects will be temporary.
4. In a volatile situation, US forces would have the potential to incapacitate all individuals within on an objective. By subduing all individuals, an opportunity is provided to properly establish the identity and involvement of all individuals present. US forces would not need to make an immediate life or death decision.
5. The lack of casualties immediately reduces the CNN effect that serves as a catalyst for the rapid distribution of photos, files, and narratives from the event.²²

While non-lethal weapons have been available to the military for a number of years, they have not gained significant support from leaders. One of the primary concerns is over the legality of their use. There are a number of significant conventions, accords and treaties bearing on the legitimate use of weapons in combat. Of primary concern for NLWs are the Geneva Convention, the Biological Weapons Convention (1972) Convention, the Chemical Weapons Convention and the Non-Lethal Weapons Convention. Many of these documents find their roots in post-WWI era when countries tried to bring measures of civility to war. In addition, they were

²² Harold Kennedy, "US Troops Find New Uses for Non-Lethal Weaponry." *National Defense*, March 2002, 26-27.

written to describe intent, not to specifically ban certain weapons.²³ Concerns focus on three primary areas:

1. Just War and Proportionality
2. Introduction of Chemicals and Toxins capable of altering life processes
3. Non-Lethal Weapons are not 100% non-lethal

Proponents of the Just War Theory and Proportionality argue that when NLWs are used, specifically chemical malodorants or calmatives, it will affect all non-combatants as well the combatants. These proponents argue the legality of indiscriminately targeting civilians despite the fact this would allow for the incapacitation of enemy combatants, rendering them harmless. Defendants of NLWs argue the effects of NLWs are 100% recoverable in nearly all incidents. They further argue if these same troops were to utilize conventional weapons, the potential for collateral and nonrecoverable injuries (i.e. death or injury due to gunshot wounds) is a much worse scenario than the use of NLWs. In instances where hostages are present, a lack of action against the hostage taker may ultimately end in death, similar to what we have witnessed from ISIL over the past few years. In short, they agree noncombatants might be targeted; but, they believe the outcome is far more desirable than the alternatives.

The Chemical Weapons Convention provides a similar argument. A key component of this convention is the restriction of the use of any chemical affecting “life processes.” The generality of the term “life processes” provides such a broad spectrum of possibilities it essentially prohibits the use of *any* chemical.

The third argument, no NLW is truly 100% non-lethal, is factual and cannot be argued.²⁴ Age, health, personal resiliency and a number of other factors affect how each individual reacts

²³ Eve Massingham, “Conflict Without Casualties . . . a Note of Caution: Non-Lethal Weapons and International Humanitarian Law,” *International Review of the Red Cross*, June 2012, 673-685.

²⁴ *DODD 3000., Policy for Non-Lethal Weapons* (July 9, 1996) specifically states that, “Non-lethal weapons shall not be required to have a zero probability of producing fatalities or permanent injuries.”

to a non-lethal weapon. However, when presented with only two other options (Shout or Shoot), a high survival rate is much more likely to be embraced by US leadership.

Revising the multitude of documents binding the use of NLWs with their ambiguity may be too difficult a task. In fact, Lewer and Schofield recommend scrapping current policy completely, opting for a new comprehensive document incorporating the technological breakthroughs unavailable at the time the Geneva Convention was written:

“With rapid technological advances making a new generation of NLWs available to police and military forces, and with the blurring of military and police ‘missions’, states must stop being satisfied with tinkering with the language of existing treaties and conventions and instead must negotiate new documents.”²⁵

In addition to revisions to international laws, conventions and regulations, new rules of engagement must be developed for the use of NLWs. These rules must remain flexible and must force a high degree of decision making to soldiers on the ground. Furthermore, we must ensure troops are not required to use NLWs simply because they are available. Soldiers should not be slowed by complexity and indecision that will make them ineffective and potentially endanger lives due to inaction.

Opponents of NLWs need look no further than the terrorist attacks at the Moscow theater hostage crisis of October 2002 or by the use of NLWs, specifically the use of rubber bullets in Ireland during the early 1970s to find examples highlighting the dangers and deficiencies of NLWs. On October 23, 2002, 40-50 terrorists entered a Moscow theater and took more than 850 cast members and spectators hostage. Following more than two days of negotiations, Russian forces used a caltivate to incapacitate everyone in the theater. Russian forces then stormed the theater killing all of the terrorists. On the surface, it appears to be a success story for the use of

²⁵ Nick Lewer and Steven Schofield, *Non-Lethal Weapons: A Fatal Attraction?* (Atlantic Highlands, NJ: Zed Books, 1997), 99.

NLWs. However, in the days following the raid, at least 118 of the hostages died from exposure to the calmative. A week after the event, nearly 200 former hostages were still in intensive or critical condition.

Though Russian forces had attempted to preserve lives, they may have inadvertently ended more than 120 of them through their use of the calmative. The gas used, fentanyl, was a derivative of opium and potentially 100 times more potent than morphine.²⁶ Its effects have a narrow window of treatment with the counteragent naloxone;²⁷ however, Russian forces did not have doctors, ambulances or antidotes on standby. They were ill prepared for the after effects of the gas. For many, this is the perfect example of how NLWs are used in a manner directly attacking both combatants and noncombatants, thus causing unnecessary suffering for the hostages.

While the death of more than 100 noncombatants is far from acceptable, proponents of the use of NLWs in a hostage scenario such as this can find many positives to build upon. First, they can reinforce the fact that more than 650 hostages were saved from a situation where the terrorists openly declared they were willing to die in order to have their demands met. Second, though not available in sufficient quantities, naloxone was capable of counteracting the calmative. In a future situation such as this one, forces must ensure adequate supplies of the counteragent, ambulances, and doctors are on standby and prepared to respond. In addition, the doctors should be briefed on the composition of the calmative in order to better facilitate treatment. In Moscow, doctors were not informed of the composition of the gas used and were left guessing during their treatment of the former hostages.

²⁶ Artem Krechetnikov, "Moscow Theater Siege: Questions Remain Unanswered." *BBC News*, October 24, 2012. <http://www.bbc.com/news/world-europe-20067384>

²⁷ "Moscow Theater Hostage Crisis," *Crime Scene Database*, December 7, 2015, <http://crimescenedb.com/moscow-theater-hostage-crisis/>

While Moscow may be the most highly visible use of NLWs, the British army's use of plastic and rubber bullets in Northern Ireland represents the first attempt of a government agency to employ NLW capabilities on a regular basis. From 1970-1976, more than 62,500 rubber bullets were fired. One out of every 16,500 bullets caused a death. One out of every 1900 resulted in a permanent disability and one out of every 800 produced a serious injury.²⁸ Some described the rubber bullets as, "the most controversial weapon ever used by the British Army."²⁹ Despite a non-injury rate of more than 99.8%, their system was deemed to be unacceptable due to the "high" rate of injury death.

Utilizing the effectiveness of rubber bullets in Northern Ireland as a comparison to the proposed use of NLWs in combatting terrorism is similar to comparing apples and oranges. In Northern Ireland the British were using rubber bullets to counter riots. It was not a life or death scenario. Consequently, a serious injury or the loss of a life would be deemed unacceptable. In contrast, most terrorist activities are executed with the specific purpose of killing as many people as possible or at the minimum, killing them in a spectacular fashion. Death is acceptable to today's "new" terrorism. A success rate of 99.8% may be unacceptable for a civilian disturbance; but, it is more than acceptable when confronting terrorist and events where the likely outcome is multiple civilian deaths. Second, the technology used to build the plastic and rubber bullets of the British army is now more than 40 years old. Deficiencies in the weapon design made them inaccurate³⁰ and sometimes insufficient for their intended purpose based on the effects of the projectile once it was fired (i.e., skipping off the ground, splintering, etc.).

²⁸ Lewer et al., 61.

²⁹ Lewer et al., 60.

³⁰ Lewer et al, 60-61.

Today's technology is vastly improved and continues to evolve on a daily basis. While Moscow and Northern Ireland provide a sample of what has occurred in the past, they do not necessarily define what would occur in the future. By capturing the lessons learned from these and other incidents from the past, our forces can adapt their tactics and refine their weapons capabilities, further reducing unintended collateral damages or death.

The Impact of Sovereignty on a More Aggressive Strategy

The adoption of a more aggressive strategy to combat terrorism is appealing. It demonstrates to the average US citizen and our allies the willingness of our government to protect our citizens and to prosecute those attempting to harm them. In September 2016, the House Homeland Security Committee conducted an independent review of our current national strategy to win the war against Islamist terror and asserted, "America must take the fight to the enemy so that our homeland does not become the primary battleground."³¹ The committee then expressed their discontent at what they believe is our current passive approach noting, "Unfortunately, in recent years we have failed to keep the pressure on the broad array of Islamist terrorists that threaten us. To defeat these fanatics, we must strike the enemy where they are, eliminate their sanctuaries, and prevent them from passing the torch to a new generation."³²

Though the support to conduct more aggressive operations overseas is available, there are multiple pitfalls. First, the majority of all operations will take place on foreign soil. If it is a country friendly to the US, then care must be taken to incorporate their forces or to work with their government. A failure to do so has the potential to discredit their government's capabilities in the eyes of their citizens. Likewise, if US forces conduct an operation in a sovereign country

³¹ House Homeland Security Committee, *A National Strategy to Win the War Against Islamist Terror*, September, 2016, 19.

³² *Ibid.*, 19.

not friendly with the US, we risk damaging our reputation as a global leader by infringing upon or disrespecting the laws of that country. As Colin Flint notes in *Denial of Sanctuary*, “Counterterrorism that is cavalier with sovereign political spaces breeds resentment and further terrorism. One side’s ‘global reach’ is another side’s ‘occupation’.”³³

Conclusion

While NLWs would be beneficial in aggressively engaging terrorists in a civilian neighborhood in order to terminate an operation before it even begins, it is a little more difficult to provide an example of how an aggressive CT strategy might be used to provide positive results in a terrorist operation that is already underway. However, the July 2016 bakery siege in Dhaka, Bangladesh, provides a historical example.

At 9:20 pm on July 1, 2016, five terrorists entered the Holey Artisan Bakery in Dhaka, Bangladesh taking the staff and guests hostage. Throughout the night they repelled a police counterattack while periodically killing guests. Photos of the attack were released by pro-ISIL accounts while the attack was still in progress. At 7:40 am, the 1st Bangladesh Para-commando Battalion stormed the bakery, killing the 5 terrorists. In the end, 29 civilians and police officers were killed and another 50 were wounded while a captivated global audience monitored the situation on news channels and social media sites. In the following weeks, the Bangladesh government arrested three additional conspirators and killed nine more in a residential neighborhood.^{34, 35}

³³ Colin Flint, “Netwar, the Modern Geopolitical Imagination, and the Death of the Civilian,” in *Denial of sanctuary: Understanding Terrorist Safe Havens* ed. Michael Innes (Westport, CT: Praeger Security International, 2007), 41.

³⁴ Julfikar Ali Manik, Geeta Anand and Eric Schmitt, “Bangladesh attack suggests shift by ISIS as it loses territory”, *The New York Times*, July 2, 2016.

³⁵ Ishaan Tharoor, Three American students among 20 people hacked to death in Bangladesh by ISIS terrorists - who only spared those who could recite the Koran - before armored troops moved in, *Daily Mail.com*, July 2, 2016, <http://www.dailymail.co.uk/news/article-3671369/American-student-20-people-hacked-death-Bangladesh-ISIS->

Assuming trained US assets were in the area and could reach the site, an active CT operation would likely unfold as follows:

At 10 pm a US SEAL team located on a carrier group on rotation in the Indian Ocean receives notification of the incident. The team conducts hasty planning and loads a helicopter at approximately 11 pm. As the team moves toward their objective, US Air Force aircraft are launched and use a series of electronic NLWs to isolate the site by restricting radio traffic in the immediate vicinity (pro-ISIS tweets prevented). At midnight, the SEAL team moves towards the objective and attempts to incapacitate the terrorists by using a caltivate gas. Because the bakery is relatively open, the caltivate does not work and the team moves to their alternate plan, high frequency radio transmissions directed at the bakery by the AC-130 gunship that is overhead. The high frequency waves induce disorientation and vomiting in the terrorists and the hostages, providing an opportunity for the SEAL team to aggressively enter the bakery armed with NLWs. During the ensuing fight the SEALs rapidly assault the objective, but struggle to positively identify the terrorists. Ultimately, the five terrorists are shot and subdued by the SEAL team while an additional three non-combatants are accidentally struck by NLWs. Once the bakery is secured, all hostages and terrorists are taken into custody to verify their identity and either innocence or complicity in the attack. Medical attention is provided to all individuals that were struck by the NLWs and all recover. In the end, the SEALs not only saved the majority of hostages, they prevented the terrorists from being killed and can now question them about their connections to ISIS.

Applying a more aggressive CT strategy may not have saved all 29 lives, but it would likely have saved many. At a minimum, it would at least have provided an opportunity to save more lives.

Furthermore, it allows the US and its allies to control the narrative. Instead of 10 hours of intense hostage coverage, the event is resolved within a few hours. Furthermore, the narrative reaching the public is not one of terror, but one highlighting the success of US and Bangladesh forces defeating a terrorist organization. Instead of fear, there is belief in the Bangladesh and US security forces.

Current counterterrorism strategies are deficient. The exponential growth of social media and the evolution of “new terrorism” have increased the ability of terrorists to spread fear near instantaneously and often without regard to the loss of life. The stated US policy of not

[terrorists-spared-recite-Koran-armored-troops-moved-in.html#ixzz4ZIIwIjN8](https://www.foxnews.com/terrorism/isis-terrorists-spared-recite-Koran-armored-troops-moved-in.html#ixzz4ZIIwIjN8)

negotiating with terrorists does nothing to prevent terrorist organizations from carrying out their heinous actions. In fact, taking no action plays into the terrorist's hands as it allows them to determine the details of how they will execute their terrorist activity. By allowing them to set the conditions, the US allows them to obtain the maximum benefits from their actions through the proper staging of cameramen and the US of a set script. Nothing is left to chance as the terrorists control the type of event, the location and the timing. With the freedom to execute, terrorists will continue to execute bigger and more extravagant actions to draw the eyes of the world to them. Allowing them to continue to operate unimpeded is unacceptable and actions must be taken to allow US forces to confront them, to disrupt their decision making, and to make them reactive rather than allowing them to be proactive in their ability to set their own conditions.

A more aggressive strategy will allow us this capability. It is a true statement that NLWs will never be 100% guaranteed not to cause a death or serious injury. However, technology has progressed to a level where the proper use of these weapons, in conjunction with risk mitigation measures (i.e. alerted medical personnel, antidotes on site, etc) makes this a viable option. We must pursue the adoption of new documents that clarify the new roll that NLWs will occupy in combat. The content of overarching documents such as the Geneva Convention are still sound as no government wants to cause unnecessary pain or suffering to any combatant or noncombatant. However, these concepts can be successfully integrated into new doctrine or international standards. This effort must become a priority for the US government. A failure to pursue it is a failure to pursue better methods to bring a measure of civility to war that is not currently present.

Non-Lethal Weapons provide options for our forces. They are an evolution in weaponry, not a revolution. They provide a capability to reduce suffering or death in combat. Our forces

have progressed beyond the capability to provide precision fires. They can now produce precision fires with a specific desired effect.

A more aggressive strategy will undoubtedly result in more US operations in sovereign nations across the globe. Many of these nations will speak out against these US operations. However, an effective operation, coupled with NLWs that minimize collateral damage and noncombatant casualties will go a long way to assuaging their concerns. Successful operations will prove to be key to executing CT in other nations. As such, the operations must be carried out by our best forces, who have the best training, and who are supported by the best intelligence available. These operations must be approved at the highest levels due to the implications.

A more aggressive CT strategy is a must to defeat “New Terrorism”. Passively attempting to negotiate with the leaders of terrorists organizations does little to curtail the terror narrative that is vital to their success. While not all US leaders may be willing to accept NLWs as an alternative to conventional weapons systems, it is undeniable they provide new and creative options for our forces. The increased flexibility allows for the adoption of political and military strategies not possible with conventional weapons.³⁶

An aggressive US counterterrorism strategy willing to engage terrorists at any time and any location on the globe is essential to our national strategy. Terrorists must know there is no sanctuary preventing the US from pursuing them. This strategy, once implemented, will deny terrorists of their fear inducing narratives while limiting collateral damage as US forces maneuver among intermingled combatants and noncombatants around the globe. Aggressive counterterrorism actions designed to limit the successful operations of the terrorists while

³⁶ Sinischalchi, 12.

destroying their terror narratives, will combine to slowly deprive the terrorists of the things they need most: fear, resources, and recruits.

The terrorist attack in Dhaka provides a sterling example of how this strategy can save lives and impact the fight against terrorism. The passive approach by the government forces resulted in 79 dead or wounded civilians and policemen. The government appeared weak and non-responsive. Had they reacted more quickly, using current NLWs to engage in close quarters with the civilians, it is likely that the casualty count would have been significantly lower. More importantly, the government would have sent a direct message to all terrorists that their actions would be met by an equal action during any future incident. The government would have controlled the narrative received by the public.

Terror and fear have been part of the social dynamic of groups for centuries. As long as there are perceptions of injustice or inequalities in the world, we will continue to see some form of asymmetric warfare in which a smaller group attempts to use fear to create change. Managing the demands of those groups is the job of politicians. Limiting the instances and events creating terror and threatening the wellbeing of average citizens is the job of government and military personnel. Terrorism can only be ended at the political level, but it can be minimized and deterred through direct action. The United States government must implement a more aggressive strategy in taking such action.

Non-Lethal weapons provide the options US forces need to adopt a more aggressive response.

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