

Bring on the Flamethrower

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Subject Area General

BRING ON THE FLAMETHROWER

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*Victory smiles upon those who anticipate changes in the character of war, not upon those who wait to adapt themselves after the changes occur.*

- as quoted by  
*John W. Mountcastle*

## **INTRODUCTION**

Currently, U.S. Forces are encountering an even more formidable threat than that of the Germans and Japanese of WWII. The Taliban is an enemy that is willing to die for its cause. As the Global War on Terrorism wages on, one promising U.S. weapon seems to be missing in Iraq for uprooting the insurgents from their cave dwellings and other fortified positions underground or within built-up areas such as Fallujah. Hence, the U.S. military should re-introduce the tactical employment of the flamethrower in the current asymmetrical battlefield in order to enhance U.S. military personnel capabilities for clearing insurgents from enclosed defensive positions, like those currently encountered in the urban environment.

## **BACKGROUND**

Bring on the flamethrower, and fire it up! The field manual used by the Army and Marines, *FM 20-33, Combat Flame Operations* states that flame is a valuable close combat weapon that can be used to demoralize troops and reduce positions that have resisted other forms of attack.<sup>1</sup> Once a formidable weapon, the Vietnam War tainted the use of napalm (fuel source for flamethrowers) and in 1978, the Department of Defense issued a directive that ceased the tactical use and further development

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<sup>1</sup> FM 20-33, *Combat Flame Operations*, 16 July 1970, 1-1.

of flamethrowers.<sup>2</sup> Twelve years later, *FM 20-33* was superseded by *FM 3-11, Flame Field Expedients*, while the highly useful flamethrower was relegated to war stock for retirement.<sup>3</sup> Over the recent decades, the U.S. military has seen the nature of war change drastically from the Cold War era to that of Fourth Generation Warfare (terrorism, insurgency, and unconventional forces) as the U.S. military increases operations in the asymmetrical environment.

### **HISTORICAL USE OF FIRE AS A WEAPON**

The use of flame weaponry dates back to ancient times when man first discovered fire. In fact, its ability to cause harm was first witnessed when a careless caveman burned himself while cooking over a flame.<sup>4</sup> Soon after, humans learned to fear fire because of its pain producing effects. Such fear of fire greatly enhanced the psychological impact of fire as a casualty-producing weapon. On a grand scale, one of the earlier military uses of fire can be found in the Old Testament Book of Judges (sometime around 1140 BC). Angered by his Philistine neighbors, Samson took three hundred foxes, tied them tail-to-tail placing a firebrand between the tails, and then sent them running

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<sup>2</sup> Scott Shuger, "Fire When Ready: Why We Should Consider Using Flamethrowers in Afghanistan." *Slate*, by, 31 Oct 2001.

<sup>3</sup> William C. Schneck, "Flame On! U.S. Incendiary Weapons, 1918-1945. - Book Review", *Engineer: The Professional Bulletin for Army Engineers*, April 2000. 5 January 2005. <[http://www.findarticles.com/p/articles/mi\\_m0FDF/is\\_2\\_30/ai\\_64732422](http://www.findarticles.com/p/articles/mi_m0FDF/is_2_30/ai_64732422)>

<sup>4</sup> John W. Mountcastle, *Flame On! U.S. Incendiary Weapons, 1918-1945*, White Mane Books, Shippenburg, Pennsylvania, 1999, Chapter 1, pg 1.

through his enemies' wheat fields which were utterly consumed by flames.<sup>5</sup>

#### **HISTORICAL EMPLOYMENT OF THE MODERN FLAMETHROWER**

In 1901, a German chemical engineer, Richard Fiedler invented the first modern flamethrower prototype. The Germans recognized the tactical use of the flamethrower and on 26 February 1915, the Germans mounted the first attack with flamethrowers against the French troops near Verdun. In a panic, the French troops fled the Malancourt Forest. Because of their success, the Germans organized a combat engineer battalion under Captain Redemann. The battalion was the first to use flamethrowers as an integral part of German "storm-troop tactics". However, it was not until World War II that flamethrowers were widely utilized by all; a prime example being the Russians use of the flamethrower during the Battle of Stalingrad. This weapon's particular effectiveness for clearing rooms and buildings made it a key tool in the Russian urban warriors' arsenal. Lessons from Stalingrad for employing the flamethrower in the asymmetrical environment were to be incorporated into the training of Russian forces for future conflicts.

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<sup>5</sup>*Old Testament: Book of Judges*. The Holy Bible, King James Version. (New York: American Bible Society, 1816) Chapter 15, 3-5, 258.

## CURRENT EMPLOYMENT OF THE FLAMETHROWER

Most recently, the Russian's employed flamethrowers against Chechen rebel forces during the Battle of Grozny. According to Vladimir Berezko's article, "Flame Throwers: A Second Birth," flamethrowers appeared to be the weapon of choice for the Russian forces. They found the Shmel flamethrower to be a force multiplier for combat in the urban environment. In interviews with Russian forces, Bererzko further concluded that the flamethrower was chosen as much for its psychological effect as its ability to flush insurgents or snipers out of enclosed fortified positions.<sup>6</sup> One particular lesson learned from employing flamethrowers in Grozny, was that they were under-utilized. Deemed a military blunder, Russian forces improved their training and knowledge for effectively employing the flamethrower in an asymmetrical environment. Although considered a blunder, it is quite plausible, that the knowledge and experience of flame weaponry disappeared with the Red Army during the collapse of the Soviet Union. As a result, Russian troops were initially under trained for the Battle of Grozny.<sup>7</sup> Hopefully the U.S. military and its leaders will recognize the value of the flamethrower in an asymmetrical environment as the Russians did in the Battle of Grozny.

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<sup>6</sup> Vladimir Berezko, "Flame Throwers: A Second Birth." *Krasnaya Zvezda*, 29 December 1995, 2.

<sup>7</sup> Olga Oliker, "Russia's Chechen Wars 1994-2000: Lessons from Urban Combat." *RAND*, 2001, Chapter 2, 6.

## LESSONS FOR THE FUTURE

Since the collapse of the Soviet Union, the days of fighting a conventional superpower are almost non-existent as the U.S military now faces a new threat. The birth of Fourth Generation Warfare (4GW), which gives true meaning to the phrase "one man's terrorist is another man's freedom fighter". Hence, the peacetime soldier's principal task should be to prepare effectively for the next battle. As the face of battle continues to change, the task of preparing becomes more difficult for the U.S Military conducting operations in Iraq and Afghanistan. As German General Franz Uhle-Wettler stated, "At an earlier time, a commander could be certain that a future war would resemble past and present ones. This enabled him to analyze appropriate tactics from past and present. The troop commander of today no longer has this possibility. He knows only that whoever fails to adapt the experiences of the last war will surely lose the next one." Much like the Soviet-Afghan War where an inferior force, like the Mujahideen, applied asymmetrical warfare (a component of 4GW), striking a strategic victory by forcing the Soviet Union to withdraw from Afghanistan, thus defeating the communist government.<sup>8</sup>

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<sup>8</sup> Lester W. Grau, *The Bear Went Over the Mountain: Soviet Tactics in Afghanistan*, National Defense University Press Publications, August 1996, Preface, xix.



## ASYMMETRICAL ENVIRONMENT DEFINED

According to the Marine Corps Anti-Terrorism Force Protection Program, asymmetrical warfare is defined as: "tactics of employing unanticipated or non-traditional approach to leverage inferior tactical or operational strength against a government or a society's vulnerabilities to achieve disproportionate destruction and psychological effect."<sup>9</sup> In other words, unconventional warfare applies the tactics of terrorism, like the suicide bombing of the Khobar Towers in 1993 as well as the current suicide bombers attempting to disrupt Iraq's elections in January 2005. Such tactics may lead U.S. leaders or the American people to conclude that continued conflict in the asymmetrical environment (urban warfare) is too costly and destructive.<sup>10</sup> In fact, unless the U.S. military and its leaders adapt to the emerging style of warfare (counterinsurgency), the enemy, if they have not already, will deem the urban battlefield as a critical vulnerability to the U.S. and a path to achieve a strategic effect that favors insurgency and terrorism. Therefore, the flamethrower must be re-introduced to give U.S. military personnel an edge in the asymmetrical environment of the Global War on Terrorism.

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<sup>9</sup> MCO 3302.1D *Marine Corps Anti-Terrorism Force Protection Program*

<sup>10</sup> Vincent J. Goulding, Jr., "Back to the Future with Asymmetric Warfare." *Parameters*, Winter 2000-01, p 21-30. 5 January 2005 <[http://www.d-n-i.net/fcs/goulding\\_asymmetric.htm](http://www.d-n-i.net/fcs/goulding_asymmetric.htm)>

## **TACTICAL EMPLOYMENT OF THE FLAMETHROWER**

The principle use of the flamethrower in offensive operations is to reduce fortified positions, suppress enemy fires, and produce casualties by exposure to flame or fire from other friendly weapon systems. In defensive operations, the flamethrower is most effective against an enemy's final assault when complemented by other weapon systems in the defensive fire plan. Additionally, the flamethrower is a valuable asset during stability operations much like those in Iraq and Afghanistan. It can be employed to destroy buildings and to destroy confiscated enemy equipment. It may also be used to clear tunnels (caves and sewers) and vegetation.

## **ADVANTAGES OF THE FLAMETHROWER**

The greatest advantage of the flamethrower is its ability to penetrate small openings and fill fortified positions with both fire and smoke. Thus, the enemy either burns or asphyxiates due to the lack of oxygen available to breathe. In the urban environment, the flamethrower can shoot fire around corners to enhance movement past dead or blind angles. Besides causing death and destruction, the flamethrower can greatly impact an enemy psychologically. According to several historical examples, the enemy normally surrenders before submitting themselves to a flame attack. They would rather be captured

than burned. As expressed in Scott Shuger's article, "*Fire When Ready, Why we should consider using flamethrowers in Afghanistan*", the flamethrower may not only save the lives of U.S. military personnel, but the lives of the insurgents/terrorists, whom could potentially lead U.S. intelligence to finding Osama Bin Laden.<sup>11</sup>

### **DISADVANTAGES OF THE FLAMETHROWER**

Cumbersome, heavy and most uncomfortable is what most veteran flamethrowers remember about the weapon. Despite historical success stories, there are equally as many tragic ones. When employed against enemy fortified positions, the flamethrower is often the priority target. One shot from small arms fire can render the weapon inoperable and useless. Another disadvantage is the extensive maintenance requirement to maintain the weapons operability in various environments. For instance, if not properly maintained in the cold weather operations, hoses, valves, and seals will crack. In wet moist environments, the flamethrower may not ignite the fuel when expended. However, proper weapons maintenance is always a challenge in combat; but with today's advances in technology a solution for maintaining the flamethrower's operability in various conditions could be developed. As for employing the flamethrower without supporting fires, that is like employing

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<sup>11</sup> Scott Shuger, "Fire When Ready: Why We Should Consider Using Flamethrowers in Afghanistan." *Slate*, 31 Oct 2001.

armor without infantry in an urban environment. The application of the proper techniques, tactics, and procedures (TTPs) as outlined in *FM 20-33, Combat Flame Operations*, reinforce the flamethrower's capability as a valuable asset for today's asymmetrical warrior.

#### **LEGAL OR ETHICAL ISSUE**

The use of incendiary weapons, like the flamethrower are not banned by the generally accepted rules of warfare. According to the *Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III)* "it is prohibited in all circumstances to make the civilian population as such, individual civilians or civilian objects the object of attack by incendiary weapons."<sup>12</sup> Therefore, it is not a violation of international law to use flamethrowers against military objectives such as terrorists or insurgents. However, the ethical argument is that the flamethrower is non-discriminatory in nature. Since its use in Vietnam, the flamethrower has fostered an image for inflicting tremendous suffering, like that of the young screaming girl running naked down the road. Such casualties, civilian or military would require extremely expensive medical treatments. As Machiavelli said, "does the means, justify the ends", a question that many moral leaders

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<sup>12</sup> International Committee of the Red Cross Online. "Humanitarian Law," *Weapons Category*, 2 February 2005 <[http://www.icrc.org/web/eng/siteeng0.nsf/iwpList2/Humanitarian\\_law:Weapons?OpenDocument](http://www.icrc.org/web/eng/siteeng0.nsf/iwpList2/Humanitarian_law:Weapons?OpenDocument)>

have debated over since the introduction of the flamethrower. Yet, solid training of the TTPs as already outlined in *FM 20-33, Combat Flame Operations* would aid in overcoming the non-discriminatory nature of the flamethrower.

## **CONCLUSION**

The demand for developing weapons to meet the needs of the urban warrior for defeating the threat in the asymmetrical environment has never been so high. According to George J. Mordica II, Military Analyst for the CALL, three questions must be answered to justify a weapons existence: Will the flamethrower be effective? Is the flamethrower safe for troops to use? Will the flamethrower have the desired effect?<sup>13</sup> Again, with proper training of the TTPs as outlined in *FM 20-33, Combat Flame Operations*, the flamethrower is a most formidable weapon that history has demonstrated it to be extremely effective in the asymmetrical environment. As for safety, a weapon is only as safe as the operator that employs it. Every means to gain an edge to win the GWOT should be exhausted and made available to U.S. military personnel to ensure that the price paid is not American blood, because we failed to recognize the value that the flamethrower brings to the asymmetrical environment.

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<sup>13</sup> George J. Mordica II, "It's a dirty business, but somebody has to do it (Urban Combat)", *CALL Newsletter No 99-16*. Urban Combat Operation; Chapter 1: Introduction. 5 January 2005. < <http://www.globalsecurity.org/military/library/report/1999/99-16/99-16toc.htm>>

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